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ADDRESS IN SURGERY.*

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Mr. President and Gentlemen,—The honor of being chosen to deliver the address in Surgery, at the meeting of this Association is one I had not expected. After looking over the names of the distinguished gentlemen who have filled this honorable position, I feel any words of mine quite inadequate to express my gratitude to you, and it is with mingled feelings of pleasure and anxiety that I attempt to speak of the advances which surgery has made during the last few years. Not having had the extensive clinical experience of many of the gentlemen who have addressed you in the last few years, I shall only attempt to draw your attention to some of the most important work which has been done in different countries.

In surgery, especially, has the English-speaking people contributed more than their share of good work, and America, particularly, should be proud to be favored by the visits of distinguished surgeons from abroad.

Great advances have been made in the surgical treatment of diseases, yet in many instances our hopes have not been realized. Thus, when the tetanus bacillus was isolated and a serum prepared, it was thought a treatment had been found that would ward off the usual fatal termination of this disease. This has now been found to be erroneous, and, in fact, the use of anti-tetanic serum has almost been abandoned in the treatment of

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cases of tetanus. Fortunately, however, the serum is almost a certain preventative of the disease. Thus, in 1903, in the United States, there were 406 cases of tetanus reported, following accidents received during the Fourth of July. In the present year only 73 cases were reported. This marked improvement is attributed to more careful treatment of the wounds, and the administration of the antitoxin. In a recent discussion of this disease before the Surgical Society of Paris, Berger stated that during the last seven years all patients, with one exception, entering his wards with wounds in which there was a possible infection with the tetanus bacillus, received a small dose of anti-tetanic serum. The one patient who had not received the serum was the only one that developed tetanus.

It is now the rule in many hospitals in America to give the serum in all cases having wounds which could have become soiled by dirt, manure, or other foreign substance. The serum should be repeated, as a single dose will not always prevent the disease. Suter and James Bell have each reported a case where tetanus developed forty-seven days after a single prophylactic dose of the serum had been given.

Although hemophilia is a comparatively rare condition, it comes to our attention at times in a very realistic manner. It is very disagreeable for a surgeon to be called to operate on some acute surgical condition when the patient is affected with this interesting blood state. The use of calcium chloride and subcutaneous injections of gelatine, although at times very useful, fail to check the copious oozing in subjects of this disease.

Hemophilia is presented in two distinct etiological conditions, first accidental, and second hereditary. In the accidental variety there is no history of heredity, or injury, or previous serious disease. Its course is more or less benign, and occurs at less frequent intervals, and requires a more serious injury for its production. In the hereditary variety, on the contrary, the tendency to hemorrhage follows the slightest wound, owing to the fact that coagulation is very much retarded. Emile Weil has shown that fresh human or animal serum introduced into the system of patients affected with hemophilia produces a marked increased coagulability of the blood in the hereditary variety, and in the accidental variety the coagulation becomes normal. This followed the intravenous injection of 20 cubic centimetres of animal blood serum. The change in the blood occurs about twenty-four hours after the introduction of the serum. Locally the serum has much the same action.

It appears that in the accidental form of hemophilia there is an absence or diminution of the ferment which causes coagulation, while in the hereditary form there seems to be some anti-

coagulating substance. If the antidiphtheritic serum be used, and this is the most easily obtained, it should be fresh. Numerous observers have confirmed the beneficial effects of this method of treatment, and it certainly should be given a trial. If the serum be given subcutaneously, 20 or 30 c.cm. should be used.

With our present methods, the brain may be examined with comparative safety, yet there is still much to be desired. The unfortunate results which have formerly followed cerebral hemorrhage in the newborn, can, by the intermusculo-temporal operation, be frequently relieved. In most of these cases the labor is protracted, and the child is asphyxiated as a rule when born. Even the most desperate cases should be given a chance. There are usually localizing symptoms, yet one should not hesitate to open both sides of the skull if necessary. This is also indicated in fracture of the base. Undoubtedly many cases have died from compression, which would have been saved had the skull been opened. The convalescence is much quicker, and the recovery better. I can recall several cases of fracture of the base with extensive hemorrhage that were relieved by this means.

In case of papillary edema due to cerebral compression, a decompression operation will ward off the symptoms. In one case operated on for Dr. Osborne, the sight, which was rapidly failing, made rapid improvement after the operation. An early interference is necessary in order to forestall atrophic changes in the nerve, and a large sized disk should be removed.

For severe cases of tic douloureux, the evulsion of the sensory root of the ciliary ganglion removes the pain, and leaves no bad after effects. Cushing has operated on fifty-four cases of this disease with only two deaths. This operation is simpler than removing the ganglion, and the results are really better. Where the attacks of pain are not so severe, Charles H. Mayo exposes the nerves at the points of exit from the foramina, extracts them by slow evulsion, cuts them off, and then plugs the bony openings by driving in small silver nails. This is an operation devoid of danger and easy to perform.

The injection of 70 per cent. alcohol into the nerves is also very effectual in many cases of intractable neuralgia. In spasmodic tic, the facial nerve may be resected and anastomosed with the spinal accessory. The result in a case I saw, which Cushing had operated on, was extremely satisfactory.

Since operations on the thyroid have become frequent during the last few years, attention has been drawn to the importance of the parathyroid bodies. Although these structures were first accurately described by Sandstrom in 1800, their function remained a secret for many years. It was then found that when these bodies were removed a true tetany developed, which led

often to a fatal termination. These parathyroid bodies are often difficult to distinguish during the removal of the thyroid, being situated usually where the thyroid vessels enter the gland. They get their blood supply apparently from the thyroid vessels, and hence, if a complete thyroidectomy be made, the main trunk of the vessel should not be ligated, but rather the branches as they enter the gland. Halsted usually leaves the upper pole of the thyroid where the superior thyroid enters. One of the dangers of this procedure is the liability of secondary hemorrhage. Dr. Charles H. Mayo leaves the posterior capsule of the gland, believing by this procedure that the parathyroids will be uninjured. Halsted, who has had an unfortunate experience in one of his cases, does not think that Mayo's procedure will preserve the integrity of these important bodies. He has successfully transplanted parathyroids in the spleen of a dog, and also into the opposite half of the gland. Von Eiselberg had two cases of grave tetany following thyroidectomy during the past four years, and in both cases the administration of the dry parathyroids successfully relieved the condition. In one case of tetany of long standing, he transplanted into the abdominal wall a parathyroid gland taken from a patient operated on for goitre. The result was very good indeed, as the tetanic symptoms were very much improved. The rectus muscle and spleen are eminently suitable structures for such transplantation.

If only one-half of the gland be removed, together with the isthmus, the destruction of the parathyroids on this side of the body will not influence the health of the patient, yet in this operation I believe these bodies should be preserved if possible, otherwise it would be dangerous to operate later on the other half, a condition, however, which fortunately seldom occurs. Partial thyroidectomy has been very successful in the treatment of exophthalmic goitre or Graves' disease, yet it is an operation difficult of execution, and quite dangerous.

The treatment of the gland with X-rays for some weeks before operation will, it is said, toughen the tissues, thereby lessening the danger of hemorrhage, and perhaps also that of acute thyroidism. This latter danger is, I believe, the greater of the two, and for this reason the gland should be freely exposed before attempting its removal, and free drainage should be provided.

The treatment of essential epilepsy by resection of the cervical sympathetics has not been attended by sufficient success to warrant the belief that much amelioration will result from it. The reports of cases operated on vary so much, that one unconsciously feels that the reporters in many cases are not unbiased. In the cases that have been followed for years after the opera-

tion, a return of the attacks has been the rule, just, in fact, what one would expect where the procedure is lacking in the pathogenic basis.

The excellent experimental work of Carroll has given rise to great advances in surgery of the arteries and veins. Many investigators have now been able to transplant kidneys, thyroids, etc., and it is difficult to say to what extent these experiments may benefit the human being. Arteries are now sutured when injured, and it is found that they heal quite readily. In January, 1903, I closed a small transverse wound of the femoral artery with fine silk sutures, and it healed perfectly, with apparently no thrombus, as the tibials pulsated normally afterwards. The patient, a farmer, lived for about two and a half years, doing his ordinary work, and died from a lightning stroke.

The improved method of treating aneurism by opening the sack, removing the fibrin and clots, closing the vessel openings by sutures, and then obliterating the sack, is now generally employed by surgeons. The sacciform aneurism may be cured by this, the Matas operation, without destroying the usefulness of the vessel. In fusiform aneurism, Halsted has devised a silver band with which he contracts the lumen of the vessel, without completely cutting off the circulation. His experience with this method has been encouraging.

For many years only the simplest operations were attempted in the thoracic cavity. Now, however, if there is a wound of the heart or lungs, the injured part is exposed and the wound sutured.

We have learned that these tissues heal readily, provided that there be no infection, or infection of a mild grade only. During the last few years numerous cases have been reported where the heart has been successfully sutured, and indeed in many of these cases the patient was in a very dangerous state before the operation.

With Sauerbruch's pneumatic chamber the chest may be opened without shock due to collapse of the lung, and I believe the time is not far distant when every well regulated hospital will be provided with a special room for operating on lung cases. Even at the present time many cases of gangrene and abscess of the lung are cured by an early operation. It is difficult to distinguish between abscess and gangrene of the lung, yet for all practical purposes the diagnosis is unimportant as the treatment is the same in both conditions. The main point is to open early, before extensive changes have taken place. If one waits until the abscess wall becomes very thick, with infiltration and induration of the surrounding parts, or where, through aspiration, other parts of the lung become involved, the prognosis is not nearly so good. An

X-ray examination will aid very much in the localization of the disease. The aspirating needle is a dangerous instrument in such cases, as its employment subjects the patient to increased risks of infection.

In the early operation, simple, thorough drainage will usually be followed by recovery, otherwise free resection of the ribs becomes necessary. Where a fistula is left after an abscess has been drained, the lung may be resected. Even the whole lobe has been successfully removed, with cure of the patient. When Sauerbruch's chamber is not available, the careful application of sutures, which attach the pulmonary to the parietal pleura, should be made. Where further security be desired, and the condition of the patient permits, a weak iodoform gauze tampon may be applied to the pleura, and allowed to remain for one or two days before opening the diseased focus.

An interesting point in connection with the anesthetic is that it is only needed at the beginning and end of the operation, as the lung and pulmonary pleura are not sensitive to pain.

Diseases of the stomach and duodenum have been discussed so much during the last few years that it seems superfluous to say anything about them, yet many of the cases of cancer come too late for a radical operation. Hoffman in an analysis of 665 cases received in the Mikulicz clinic, found that the patients were referred to the surgeon on an average of 10.3 months after the beginning of the disease, and usually they were treated by the physician three months before surgical aid was sought. This should not be. Unless an early diagnosis be made, the result must be unsatisfactory. Take a middle-aged patient with good previous history, or history of old digestive derangements, who begins to complain of stomach trouble, which is not relieved by the usual remedies, an exploratory incision should be made, and if a suspicious growth be found, a radical operation should be done. A palpable tumor cannot be felt often where the growth has advanced to such an extent that a radical operation is impossible. Frequently, when all of the enlarged hardened lymphatic glands cannot be removed, the operation should still be performed, since in many cases these enlarged glands are not carcinomatous.

In careful hands the results are very good, and as a rule the shock is not great. The general practitioner must realize the gravity of these cases and the necessity of consulting a surgeon before the symptoms are so marked that the diagnosis is evident. The successes of Kocher, Kronelein, von Mikulicz, Terrier, Hartman, Robson, Mayo, Armstrong, and many others, warrant, yes, I may say, demand, an operation. When a small tumor is felt in a breast, the patient is almost invariably referred to a surgeon

for advice, and why should a doubtful stomach case be left until a positive diagnosis be made?

There are some points in connection with surgery of the stomach in which the surgeons are not in unison. It appears to me wise to excise an indurated ulcer, for in these cases, a small cicatrix, as left by an excision, will give less chance for the subsequent development of carcinoma. In one case operated on several years ago by the Y method, there was a return of the symptoms, with hemorrhage, three years after the operation. The stomach was not enlarged, hence it may be deduced that the anastomotic opening remained sufficiently patent for its purpose. In a second case, operated on for perforated gastric ulcer, the ulcer was inverted. About two years later this patient also had some return of his symptoms. In cases where I excised the ulcer, there has been no return of symptoms. Where a gastro-enterostomy is required in greatly debilitated patients, local anesthesia will, I believe, greatly increase the chances of recovery. Four of my cases of cancer were bed-ridden and were much emaciated; excision was impossible. A posterior gastro-enterostomy was done under cocaine infiltration; all recovered and gained flesh.

Hemorrhage from the stomach occasionally occurs after appendicitis. This seems to indicate that toxins formed in the appendix reach the stomach and cause glandular degeneration with perhaps the formation of an ulcer. Where there is catarrhal appendicitis hyperchloxydria is frequently present; and thus, when an operation is being undertaken for gastric ulcer, the appendix should be examined if possible.

The treatment of disease of the gall-bladder is now on a firm basis, and as time goes on I feel sure that we will meet with fewer cases of common duct stones, for the cases will be operated on before the stones get into the common duct, though, of course, there will be some cases where the stones form in the hepatic or common duct.

In cirrhosis of the liver the Thalm operation has been found of great value. In at least 50 per cent. of cases operated on the symptoms are either entirely relieved or markedly improved. With a mortality of 35 per cent., great judgment should be shown in the selection of the patients. If this be done, the death rate will undoubtedly be diminished. I believe it is wiser not to employ drainage, as the danger of infection is thereby lessened. Where it is necessary to excise portions of the liver for neoplasms, the hemorrhage is usually effectually checked by sutures of catgut carefully applied with large blunt needles. Only the largest vessels need be ligated. The liver heals quickly.

During the last year exception has been taken by many of the

English surgeons to the removal of an apparently normal appendix during an abdominal operation, and I was amused to see opposite views expressed on this point by the editors of the *London Lancet* and the *Edinburgh Medical Journal*. I agree with the Scot, and would be very much disappointed if a surgeon closed my abdomen without removing the appendix. That some of the Germans favor this view may be gathered from an article of Pankow's, who in referring to the work of Kronig's clinic, says, "Wir bei unseren operationen die appendektomie nicht nur für erlaubt, sondern auch für geboten halten." Of course the appendix is useful in cases of mucous and ulcerative colitis. When brought through the abdominal wall it provides an excellent means of irrigating the colon. I have used it also as a safety valve in a case of obstruction of the transverse colon due to a band where the cecum and ascending colon were tremendously distended.

A number of cases of chronic sigmoiditis, causing symptoms of obstruction, and closely resembling carcinoma, have been reported. Mayo considers his cases due to an acquired diverticulitis.

Last spring I operated on a case of acute obstruction due to an acute streptococcal infection of a segment of the sigmoid. An excision of the part with an end to end anastomosis six weeks later, gave a perfect result. This case is, as far as I can find, unique. There have been eight cases of phlegmonous uteritis reported, but none of phlegmonous colitis that I can find in the literature.

FEEDING IN TYPHOID FEVER.

BY J. A. OILLE, M.D.

THOSE who attended or read the reports of the British Medical Association, which met here in August, 1906, or those who have followed the literature on Typhoid Diet, must have had it impressed upon them that this hackneyed, though all-important subject, is still undergoing a process of evolution. Since the time of Hippocrates, Galen and Celsus, who allowed only barley water and the like for the acute stages of fevers, until the present, the diet has gradually become more liberal. In the latter half of the seventeenth century Sydenham added water gruel, barley gruel and a few spoonfuls of broth. From 1840 to 1850 Graves, of Dublin, contributed his well-known principles of feeding fever cases. In the latter third of the last century milk came into favor for typhoid, and to-day is the basis of the orthodox diet. However, as early as 1886, F. C. Shattuck, of Massachusetts General Hospital, and Bushuyev, of the Kief Military Hospital, Russia, began to use what to many may appear an extraordinary liberal diet.

It is not the purpose of this paper to discuss all the plans of feeding typhoid in use at the present time. It is the intention to limit the discussion to the restricted fluid *versus* the mixed soft and solid diet.

When such men as Sir Thomas Barlow, Smith of the London Hospital, Marsden of the Monsall Fever Hospital, Manchester, F. P. Kinnicutt, Professor of Medicine at Columbia, Ware, J. B. Nichols and Thomas A. Clayton, of Washington, and many others, are advocating in principle and practice more liberal feeding, and if by so doing we can shorten the patient's period of disability by ten or twelve days, add greatly to his comfort, perhaps even lower the death-rate, without increasing his danger of complications—indeed, perhaps lessening it—should we not pause a moment and consider whether we are doing the best we might by our patients when we restrict them to a liquid diet for so long as we have been doing. Our chief reasons for doing this have been: (a) the fear that too liberal or improper feeding might cause a relapse, hemorrhage or perforation; (b) the idea that the patient could not digest soft or solid foods satisfactorily and that gastro-intestinal complications might follow.

The essentials of a typhoid diet are these: (1) Its nutritive value shall be sufficient, (2) it shall be as easily digested as pos-

sible, (3) it shall be palatable, (4) it shall do no harm to the patient.

(1) *As to Nutritive Value.*—The rational treatment of typhoid fever is to hasten the immunity reaction. It is a blood and lymphatic infection and in the absence of any direct means to reach the germ, such as by some drug that might be absorbed into the circulation in sufficient quantities to kill the germ or neutralize its action, or by some method such as Dr. Wright's promises to be, the best remedial measure at the hand of the general practitioner to-day is to preserve the patient's strength as much as possible, in order to assist nature to complete this immunity reaction. At the present time the best antiseptic available to combat the bacilli lies in the patient's own blood, whether it be immune body or complement, leucocyte or opsonin, or all combined. If we except diphtheria, smallpox and syphilis, each an example of a rational method, how else are any of the specific fevers (pneumonia, scarlet fever, tuberculosis, measles, etc.) cured? Pneumonia is the best example of this immunity reaction in which consists the cure. At the crisis the pneumococci are not all killed or expelled from the system. They are there and are still living, but through some wise provision of nature they are tolerated as defeated invaders, without harming the patient. This state of comparative peace and safety is called immunity. Such is the case in typhoid, only the conflict to bring about the reaction is longer drawn out. It is finished when the fever ceases. But the bacilli are still present and often remain for months in the patient's bowel, gall or urinary bladder. However, on account of some fortifying anti-bacterial substance, they cannot live and multiply in the blood. Is it not reasonable to suppose that the patient's system is best able to manufacture these fortifying agents when the general strength and nutrition are at their highest state of perfection? We know such is the case in tuberculosis. One does not need to be a physician to know that a person weakened by disease, starvation or exposure is an easier victim to bacterial invasion than one strong and robust. We know that a tubercular individual often succumbs to influenza from which a healthy man would escape altogether, or be scarcely ill enough to stop work.

We are greatly concerned about the healing of the ulcer and the same principle holds with regard to this also. We know that the typhoid patient's bed-sore or boil does not heal well until he begins to gain in strength and weight. Sometimes after a severe burn an area heals slowly or not at all. Give the patient a tonic mixture and improve his general nutrition, and it heals rapidly. Therefore, is it not rational—yes, all important—to maintain the

strength and nutrition at the highest point to promote the resistant and healing powers of the patient to the limit of efficiency, if we can do so without harmful effects?

Typhoid is a long and wasting disease. It is impossible to prevent loss of weight under any diet. The typhoid toxins destroy the proteids of the body cells faster than they can be built up under the most favorable of metabolic conditions. It is therefore necessary to do our best to maintain nutrition and reduce the loss to a minimum. From the analysis of the causes of 580 deaths in Notnagel's Encyclopedia, 46.9 per cent. die from the severity of the infection. Hence, nearly one-half the danger is the inability of the strength of the patient to bear the infection.

Without going into figures of the daily nitrogen loss, the number of calories required, etc., according to Forstheimer, three quarts of milk per day is the amount necessary to furnish the required nutrition. It is almost impossible to give for any length of time to a typhoid patient any more than two quarts. This is a strong objection to milk or fluid diet. As much as can be ordinarily given is inadequate and this, too, at a time when it is so important to maintain strength and nutrition.

(2) *As to Digestibility.*—The following references concerning the patient's ability to digest are taken from Digest of Metabolism Experiments, Bulletin 45, Revised Edition, U. S. Department of Agriculture. Atwater and Langworthy fed fifteen cases of typhoid on a mixed diet, consisting of proteids, 180 grams; fat, 60-90 grs; and carbohydrates, 300 grams, without a complication. They found that 79-82 per cent. of the nitrogen was absorbed during the febrile period and 85.6-90 per cent. after defervescence. The proteid digestion was increased by plenty of water.

Khadgi, of St. Petersburg (Page 209 of Atwater's Digest), from 17 cases found 83.8 per cent. of the nitrogen absorbed during the fever and 87.5 per cent. afterwards. J. B. Nichols, of Washington, found it to be 83.4 per cent. during and 87-90 per cent. afterwards. Authorities, therefore, agree quite closely that the power of proteid digestion during the febrile period is lessened about 5-10 per cent. Fats and carbohydrates are easily digested, and therefore the same or less is true of them. Then the fear of a fairly liberal diet, on the grounds of the patient's inability to digest it, is groundless in cases of average severity.

However, considering the importance of maintaining the nutrition, we must tax the digestive functions as little as possible, by giving the most nourishing and easily digested foods in an absolutely fine state of division, with all undigestible parts (such as seeds, skins, etc.), excluded. The following table is from J.

B. Nichols' paper on this subject in *American Medicine*, May 6th, 1905:

Name of Food	Per. cent, Digested and Absorbed	Nitrogen Loss
Eggs—White	93.4 .....	.6
Eggs—Yolk	92.3	5.2
Cream, Eggs, Milk Gruel, Wine.	92.8	6.2
Meat Extract.....	92.0	8.8
Ham	91.3	1.4
Porridge.....	89.1 .....	.9
Milk	86.8	7.9
Milk and Bread	81.5	11.0
Milk, Broth, Bouillon, Tea..	59.5	9.7

The table needs no comment. However, notice the low percentage of the combination of milk and broth.

(3) *As to Palatability.*—Variety of food adds to the comfort of the patient. They take more nourishment. Pawlow has shown that relish initiates the reflex for the secretion of the digestive fluids. Therefore, by giving foods a patient relishes one is aiding his digestive functions.

(4) *The Food Must Do No Harm.*—In typhoid the dangers that one has to consider in association with food, are: (a) Distention, (b) Continuous peristalsis or diarrhea, (c) Pressure or irritation of solid or bulky fecal residue on the ulcer, (d) Increase of fever or relapse.

(a) Distention *occurs* in those severe toxic cases, with a semi-paralysis of peristalsis, whereby bacterial growth is encouraged, resulting in putrefaction, fermentation and gas formation. In such cases there is depression of gastric and intestinal secretions and soft or solid food should not be given. At the same time, milk would favor the production of this condition, just as any solid food.

(b) Continuous peristalsis, by its mechanical effect, would tend to hinder the healing of the ulcers and perhaps dislodge clots in the ends of vessels in the ulcer, giving rise to hemorrhage. This, no doubt, partly explains the association of hemorrhage with diarrhoea. Peristaltic movements, caused by food, are apt to be greater than those caused by purgatives which are so commonly given. The danger from solid food is no greater than from liquid because, if properly selected and given, the solid food is a pasty semi-fluid mass in the stomach and is a milky fluid in the small bowel before it gets to the ulcer area. In fact, most of it is absorbed before it reaches this region. Broths are more dangerous in this respect than soft or solid foods.

(c) Pressure or irritation of solid or bulky fecal residue on the ulcer. This possibility gives rise to more fear than all the others combined. From the following table, also from Dr.

Nichols' paper, it will be seen that certain solids are not so dangerous after all. In health:

Food	Absorbed	Residue
Beef.....	95.6	4.4
Fish.....	95.1	4.9
Eggs, hard boiled.....	94.8	5.2
Milk.....	92.0	8.0
White Bread and Butter.....	95.2	4.8
Potatoes and Bread.....	90.6	9.4

These percentages correspond pretty closely to those of the febrile period. Now it has been shown that in average cases the digestive function is only 5-10 per cent. below normal. It has also been shown that even such solids as are mentioned in the table are as fluid as milk by the time they reach the lower part of the ileum; in fact, meat, fish, eggs and bread and butter have less residue than milk. Then, with proper precautions, are not these foods as safe as milk? If meat and hard-boiled eggs are safely disposed of, then what can be the objection to such articles of diet as are termed soft, *e.g.*, custards, jellies, gruels, porridge, raw or soft poached eggs, bread or crackers in milk, rice, corn-starch and tapioca puddings, etc. Now it follows that the only solid masses that pass the ulcers are indigestible bits of food. It is nearly completely in our power to exclude these. By second nature we exclude fruits with seeds or skins. Scraped beef is better than minced, for one avoids tough strings of fascia, bits of gristle, etc. Many allow their patients to chew their meat, but one can never tell who can be trusted to masticate it sufficiently fine. Crusts of bread or toast should not be allowed, for parts of them are nearly carbon.

(d) *Relapse*.—Much disagreement exists over whether food causes a relapse or not. The concensus of opinion seems to be that a true relapse is re-infection and occurs because the immunity is not complete. If such be the case, one would expect fewest relapses in best nourished cases. If it be due to food, it is not due to any special kind or amount, but rather to any sudden change in the kind or increase in the amount. A quantity of food given abruptly that would cause trouble, would not do so if it had been brought to that amount gradually.

Dr. Osler gives the percentage of relapses as ranging from 3 to 18 under fluid diet. With such a wide variation, statistics to be of value should cover cases in the same institution for the same period of time, which should be several years at least. Shattuck's and Bushuyev's figures show nearly an equal percentage of relapses under the two diets. Kinnicutt had, however, 5 per cent. fewer relapses under a liberal diet, but these cases may have been selected. Others report varying percentages, from 3 to 17

or 18. The evidence is incomplete and inconclusive, and one must not place too much confidence in statistics. Different epidemics vary in complications. Some have many relapses, some many hemorrhages and some perforations. For instance, at Johns Hopkins Hospital during the last year, there occurred 11 perforations in 115 cases. Had that occurred under a liberal diet, how misleading would have been the conclusions.

There is no doubt, however, but that food can cause a temporary elevation of temperature. All must have seen a temperature go up two or three degrees after giving the first egg-nogg or poached egg. Possibly had the patient been given half an egg-nogg or half an egg the first day the temperature would not have gone up. True food fever is due to sudden changes in variety or amount of diet, and only lasts a few days. The advocates of a liberal diet say it may be disregarded, and should not be considered a contra-indication to feeding, in the absence of any other symptoms. Changes in diet should be made very gradually and very cautiously. A true appetite and moist, clean tongue are indications for increasing the diet. If the tongue is dry only fluids can be given. Every case must be fed on its merits. The condition of the abdomen and the character of the stools should be watched daily.

Now to briefly discuss a few individual foods:

Milk, when badly borne, should be discarded or modified. When well borne, it is one of the best of foods. It should be given diluted with lime water or barley water, partly peptonized, or given as junket to avoid curds.

Notice again that the combination of milk and soups is bad. Soups are not very valuable, but thickened with flour, cornstarch or oatmeal, are good.

Jellies (fruit, chicken, wine or oatmeal) are palatable and nourishing, with the additional advantage of increasing the coagulability of the blood. Milk, being rich in calcium salts, should do this, too, but Boggs, of Baltimore, found lessened coagulability under a milk diet. *For fat* it is best to depend on cream and butter. Some give an ounce of cream a day. Fats of vegetable origin are much more indigestible. *Vegetables* have serious disadvantages. Many are gas-producing and all have a coarse, bulky residue. Proteids of vegetable origin are from 15 to 20 per cent. less digestible than those from eggs or meat.

Sugars, syrup and honey are theoretically good, as they have no residue, but they ferment readily and may favor distention. If they agree, they are certainly safe and valuable. Some give three or four ounces of sugar daily. One often notices a great craving for sugar towards the end of the attack. In our hospital here a pound or two of common taffy was often made

and was in great demand. We might have been more liberal with it.

White Wheat Bread is as digestible as milk and leaves less residue. It may be given with butter, as toast, milk toast, bread and milk or bread pudding. The crusts should be removed. Bread or toast or crackers given dry are often preferred and in this way good mastication stimulates the salivary secretion and gives it a better opportunity to act. The various baby-foods should be good, if liked. *Fruits* are good to add relish, but only the juice should be allowed. The pulp is largely cellulose. Some allow the pulp of a baked apple. *Tea and coffee* are stimulants and cocoa has a fair nutrition value. *Meat* put through a fine chopper, after having the fat and fascial portions removed, or, better still, scraped to insure fine division, should be safe. Beef, lamb, chicken and fish are best. Pork and veal should be avoided.

Even if one were convinced that some additions might safely and advantageously be made to his present plan of feeding, one must admit that to make such a step requires considerable courage. Not only does he run the risk of being criticized by his fellow-practitioners (and losing what little professional reputation he may have), but he faces the great danger of losing his patients, for the public knows full well the generally accepted essentials of typhoid diet. Then, too, realizing the uncertainty of the occurrence of hemorrhage and perforation, the latter, according to Dr. Osler, having little relation to the severity of the disease, one has a vision of the criticism that would result from such an accident happening to a case under a liberal diet. We all know how much ill-deserved praise as well as blame we get from the laity, for in their minds the sequence of cause and effect is clearer than in our own.

However, as far as the profession goes, we have good men to follow. Sir Thomas Barlow says:

"Milk, unmixed with barley water, will be found in the intestines in large craggy masses, which certainly prove serious cause of irritation to the typhoid ulcers. On the other hand, finely minced meat will become thoroughly fluid under normal conditions of digestion. In normal circumstances only indigestible food remains in a solid condition as low down as the terminal portion of the ileum. It would seem advisable, then, to feed patients much more liberally both as regards quantity and variety than has been the custom, first, in order to shorten the stay in the hospital, and second, in order to prevent the sequelæ of typhoid fever, such as abscesses and thromboses, which were shown by statistics to be much more frequent after typhoid fever treated with an exclusive milk diet, than when treated with a more generous and varied diet."

Hare is fully impressed from physiologic facts, as well as personal experience, with the utter inadequacy of the pure milk diet. He gives all patients, after the first week, one or two soft-boiled eggs a day with the ordinary allowance of milk and varies their diet with curds, whey, rice boiled to a pulp, barley, wheat and oatmeal gruel and a cup of cornstarch flavored with vanilla.

To quote also from Bushuyev:

"Under this regimen, the general condition of the patient is much better than when kept upon an exclusive fluid diet. The common complaints are scarcely ever heard. At breakfast, dinner and supper, the patients are uncommonly wide awake. Even those who are very ill sit up in bed, beg for food and eat with much satisfaction. Only a few have to be fed by nurses. If one observes these patients' meal times, he wholly forgets that these individuals are seriously ill, with temperature above 39 deg. C. During the first hours in the ward the patient lies in a motionless condition, failing to answer questions and refusing food. But if one succeeds in some way or other in persuading him to eat a bit of meat or cutlet or an egg, he immediately begins to show some interest in his surroundings."

He gives as important points: (1) To stimulate the appetite, (2) to avoid disgusting the patient with food brought before him he cannot eat.

The following is Bushuyev's daily menu: At 7 a.m. A cup of tea and a roll. 8 a.m. 400c.c. of liquid oatmeal, wheat or barley gruel, with butter. 9 a.m. One or two eggs boiled to suit patient. 10-11 a.m. A glass of milk (200-220c.c.), half a cutlet and 160 grs. of boiled meat. 12-12.30 p.m. 200-220c.c. of soup, a cup of jelly, rarely preserves. 3 p.m. Cup of tea and a roll. 6 p.m. Cup of chicken or beef soup, semolina pudding or milk and a bit of chicken. 8 p.m. A glass of milk and a roll. At night. Cup of tea or coffee, with milk, from 2 to 4 times, with from one to three ounces of wine or coffee, and brandy in the morning.

This is F. J. Shattuck's diet:

(a) Milk diluted with soda or lime water, appolinaris or Vichy or peptonized cream and water, koumiss. (b) Soups strained, thickened with powdered rice or arrowroot, flour, cream, milk, eggs or barley. (c) Malted milks. (d) Beef juice. (e) Gruel, made of cornmeal, crackers or flour, barley water, toast water, albumin water flavored with lemon juice. (f) Ice cream. (g) Eggs, soft cooked or raw or as egg-nogg. (h) Scraped beef, minced meat, soft part of raw oysters. (i) Soft crackers, with milk or water, soft puddings, toast (no crust), blanc-mange, wine, jelly, apple sauce.

All the statistics possible of cases fed under the two plans have been collected for comparison and are shown below. The record of relapses is incomplete under the liberal diet, but comparing Shattuck's and Bushuyev's cases under each diet, their percentages were about equal. However, those of hemorrhages, perforation and deaths are most favorable under the liberal.

Kinnicutt, of Columbia, collected 1,000 cases fed under a liberal diet, with 77 deaths and no more complications than the average of the fluid. It was the intention to get figures which included not selected cases, but cases as they came. However, some were not clear on this point.

LIBERAL DIET.

Place	Time	Cases	Relapses	Hmhgs	Perfor	Death
Kief Military Hospital, Russia (Bushuyev)	1886-96	733	11.38	4.77	1.36	9.47
			(in 325 cases)			
	1897	300	....	1.17	.33	8.2
Mass. General (Shattuck)	14 years	288	14.8	8.3	3.1	10.7
Dr. Kinnicutt, N.Y.	1900-06	398	....	1.	.25	....
Lakeside Hospital, Cleveland.....	....	1,070	....	5.8	2.7	7.9
Average for total.....		2,789	13.	4.6	1.8	8.77
			(on 613 cases)			

FLUID DIET.

Kief Military. (Bushuyev).....	1886-96	4,654	10.89	8.83	2.4	10.55
Johns Hopkins Hospital....	Since beginning	1,500	11.4	7.8	2.4	9.1
Presbyterian, N.Y.....	1891-06	1,230	13.3	12.11	2.8	11.8
Mass. General (Shattuck).....	18 years	231	15.1	6.4	.4	10.8
Mass. General (others).....	18 years	366	11.7	8.2	1.9	15.8
Average for total.....		7,981	11.6	9.05	2.45	10.73

On commencing to practise in Byng Inlet in the autumn of 1905 there were here then about thirty cases of typhoid fever. The first idea that occurred to me was that their diet was insufficient. The interval between feedings was shortened one hour. Next, the ordinary period of eight days normal temperature after defervescence before adding to the fluid diet was shortened to three. A few selected cases were allowed a poached egg or a small dish of custard as soon as their temperature reached normal. Five or six cases with long defervescence were allowed soft diet before the afternoon temperature was normal, and this put a speedy end to the P.M. rise. Fourteen private cases were fed soft diet all through the attack. They were given eggs, gruels, porridge, crackers, bread and milk and the like. In these cases there were no deaths, perforations, hemorrhages or relapses.

Since the fall of 1905 there have been a total of 108 cases treated here, 98 in 1905 and 10 in 1906. There were five relapses, fourteen hemorrhages, one perforation and ten deaths, one from perforation, one from pneumonia, two from hemorrhage plus severe toxemia, one from severe typhoid with advanced phthisis, and three from the severity of the infection. All of the complications occurred before the diet was increased, except one relapse.

It might be argued that no patients have an appetite or sufficiently clean, moist tongue until convalescence. But Bushuyev says that few are too ill to sit up in bed and beg for food at meal times. After the first week, when the acute symptoms, such as headache or a possible diarrhea, have passed off, the appetite often returns, and an increase in diet would do away with much of the depression of secretions and the accompanying sordes, dry tongue and tympanites, much of the delirium and the danger of over-eating or bolting food during early convalescence. During the epidemic here, it was noticed that a few patients, put on an acid tonic mixture or strychnine alone, had a pretty clean tongue and a distressing appetite throughout, or at least developed an appetite and clean tongue much earlier than other cases, apparently more severe on the start.

The plan recommended is to keep them on fluids for the first few days and to add to the diet such articles as were previously mentioned in a cautious, gradual and watchful manner, according to indications, the main one being the patient's appetite. This latter idea is no new one. It is as old as Hippocrates. He says: "Such food as is most grateful though not so wholesome is to be preferred to that which is better, though distasteful." To quote also from Sydenham: "More importance is to be attached to the desires and feelings of the patient than to doubtful and fallacious rules of medical art."

Let me conclude with the words of Heberden: "Physicians appear to be too strict and particular in their rules of diet and regimen. Too anxious adherence to those rules hath often hurt those who were well and added unnecessarily to the distress of the sick."

Byng Inlet, Ont.

DISCUSSION.

Dr. Cruickshank, of Windsor: The readers of this paper deserve the gratitude of this Association for selecting this subject, as well as for the able manner of discussing it. Five minutes is too short to attempt a comment upon it. That typhoid fever is a toxemia where something is developed in the blood that in favorable cases overcomes the bacteria, similar to the toxemia of tuberculosis, is granted, yet I venture to say if we attempted forced feeding in typhoid as we do in tubercle, the mortality would be frightful. In ulcer of the stomach the process of repair would be promoted by well-nourished blood, yet our best results ensue from a temporary abstention from food; a similar condition occurs in the intestine of some typhoid and a similar diet is useful. The time will soon come when the diet of typhoid will be worked out like a mathematical problem, so many calories for so many kilograms, with proteins and carbohydrates according to

temperature and blood counts, and I venture to say when this time comes that we will prefer to depend upon the appetite of the patient rather than physiological mathematics. In my practice a patient in one bed may be kept upon water for weeks; in the next bed a patient at the same stage of the disease is receiving one or two quarts of milk and other foods. A faithful, honest consideration of a patient's appetite is the safest guide at present. I have kept patients for four weeks on water and orange juice, and I have known one patient with a high fever who sat at the table three times a day and ate everything she wanted, and made a good recovery.

With the water diet there will be no more diarrhea, tympanites, brown tongue or sodid teeth. When the appetite does come our troubles begin and nothing has prevented me but lack of courage to advise a liberal diet. This, I hope, will soon be worked out satisfactorily. It is not a matter of milk versus solids.

Dr. Thistle, in discussing the paper, agreed with the writer that each case should be considered by itself. The digestive capacity of the patient at the time should be estimated and suitable diet arranged.

The use of the terms "liberal diet and "fluid diet" was criticized. It did not follow that fluid diet must be considered as restricted diet. A fluid diet could be arranged so as to provide adequately for the needs of the body. Various additions in the way of farinaceous and proteid materials could be made. For example, beginning with plenty of water and, say, peptonized milk or buttermilk in cases where toxemia was very marked and the digestive secretions much restricted, one could go on enlarging the scope of the dietary by adding tea, coffee, cocoa, with the addition of milk and sugar; milk broths made with tomato, potato, celery, etc. In other cases, or later, a certain amount of starchy material might be added, such as well-boiled oatmeal, crushed wheat, tapioca, rice, etc.; or, on suitable cases, custard or egg, with small quantity of bread, might be given. In this way a nutritious diet could be arranged, suitable to patient's digestive capacity at the time. With the dietary arranged in this way, there did not seem to be any necessity for taxing the patient's weakened digestion with solid food, using the term in the ordinary sense.

Dr. Thistle referred to the report of Dr. Smith, of the London Hospital, read at the British Medical meeting of last year, advocating solid food. Dr. Smith reported 113 cases, with a mortality of 23.

Proceedings of Societies.

CANADIAN MEDICAL ASSOCIATION—THE NEW CONSTITUTION AND BY-LAWS AS ADOPTED AT THE MONTRÉAL MEETING, SEPTEMBER 11th TO 13th, 1907.

ARTICLE I.—TITLE.

This society shall be known as the Canadian Medical Association.

ARTICLE II.—OBJECTS.

The objects for which the Association is established are the promotion of the medical and allied sciences, and the maintenance of the honor and the interests of the medical profession by the aid of all or any of the following:

(a) Periodical meetings of the members of the Association, and of the medical profession generally, in different parts of the country.

(b) By the publication of such information as may be thought desirable in the form of a periodical journal, which shall be the Journal of the Association.

(c) By the occasional publication of transactions or other papers.

(d) By the grant of sums of money out of the funds of the Association for the promotion of the medical and allied sciences in such manner as may from time to time be determined.

(e) And such other lawful things as are incidental or conducive to the attainment of the above objects.

ARTICLE III.—MEMBERSHIP.

The Association shall be composed of ordinary and honorary members. Ordinary members must be: (a) Regularly qualified medical practitioners, who do not subscribe to any special dogma; (b) those engaged in teaching or research work in medicine or the allied sciences, in some province of the Dominion of Canada. Honorary members must be persons who have distinguished themselves and risen to pre-eminence in medicine, the allied sciences, in literature or in statesmanship.

ARTICLE IV.—AFFILIATED SOCIETIES OR ASSOCIATIONS AND
BRANCH ASSOCIATIONS.

All Provincial, Inter-Provincial Medical Associations or Societies, at present existing in the Dominion of Canada, or which hereafter may be organized in the Dominion of Canada, may, by special resolution of said Medical Society or Association, become branches of or affiliated with the Canadian Medical Association, by subscribing to its Constitution, By-laws, Code of Ethics, and by securing the approval of the Executive Council. Where such organization does not exist, intra-provincial societies or individuals may unite directly with the Canadian Medical Association, until such provincial or inter-provincial associations or societies are formed and affiliate, when their membership will be continued only through such local organization.

ARTICLE V.—EXECUTIVE COUNCIL.

The Executive Council shall be the business body of this Association. It shall consist of delegates elected by the affiliated societies, associations or branches, by the Provincial Medical Councils, and by the Canadian Medical Association as hereinafter provided for in the By-laws. It shall elect by ballot all the officers for the Association, except the President, Vice-Presidents and Local Secretaries, and transact all the general business of the Association. The President, Vice-Presidents, General Secretary and Treasurer shall be members of the Executive Council.

ARTICLE VI.—SECTIONS.

Sections may be provided for by the Executive Council, or as hereinafter provided for in the By-laws.

ARTICLE VII.—MEETINGS.

The meetings of the Association shall be held annually, at such time and place as may be determined by the Executive Council, the branch or affiliated organization within whose boundaries the meeting is to take place withdrawing its regular meeting and holding simply an executive session, such session to be held at the same time and place as the meeting of the Canadian Medical Association.

ARTICLE VIII.—OFFICERS.

Sec. 1.—The offices of General Secretary and Treasurer may be held by one and the same person.

Sec. 2.—These officers, excepting the President, shall be elected annually by the Executive Council to serve for one year or until their successors are elected and installed in office.

Sec. 3.—The Treasurer shall give a bond to the Finance Committee for the safe-keeping of all funds in his possession and for their proper use and disposal.

ARTICLE IX.—FINANCE COMMITTEE.

The Executive Council shall annually appoint five of its members as a Finance Committee, which shall also be a Publishing Committee, and whose duties will hereinafter be provided for in the By-laws.

ARTICLE X.—FUNDS.

Funds for the purposes of the Association shall be raised by an equal annual assessment upon each Ordinary member; from the Association's publications, and in any other manner approved of by the Finance Committee. These funds, from whatever source derived, are to be transferred to the Treasurer, by him deposited in some responsible banking institution, and only paid out by him on the order of the General Secretary and the Finance Committee, through its chairman.

ARTICLE XI.—AMENDMENTS.

No amendments to any of the foregoing articles or sections thereof shall be made, unless due notice has been given in writing to the General Secretary at least one month before the annual meeting. Any such notice of motion must be laid by that officer before the Executive Council and sanctioned by a three-fourths of that body present and voting, before it is submitted to the Association.

BY-LAWS.

ARTICLE I.—MEMBERSHIP.

Sec. 1.—Membership—How Obtained.—A member in good standing of an affiliated medical society or association may become a member of the Canadian Medical Association by presenting to the General Secretary: (1) A certificate of membership in good standing in an affiliated or branch society or association, signed by the president and secretary thereof; (2) written application for membership on the approved form; (3) payment of the annual subscription. In the absence of membership in a local association or branch a candidate may be elected to membership by the Council on the nomination of two members from personal knowledge.

Sec. 2.—Membership—How Retained.—So long as a member conforms to the By-laws of the Canadian Medical Association, he

retains his membership therein. Any member who fails to conform to the By-laws and whose subscription shall not have been paid on or before the 31st December of the current Association year shall, without prejudice to his liability to the Association, be suspended from all privileges of membership, and at the end of the succeeding year, if the arrears be still unpaid; he shall, *ipso facto*, cease to be a member. No member shall (except in case of his death or expulsion or of his ceasing to be a member under the previous provisions of this article) cease to be a member without having given previous notice, in writing, on or before the 1st December in the current year to the Secretary of the Association, of his intention in that behalf, and having paid all arrears of subscription (if any) due by him.

Sec. 3.—Membership—How Restored.—Any delinquent member having once failed to comply with the sections of this article, unless absent from the country, shall have his name erased from the Register of Members of the Canadian Medical Association, and shall not be restored to membership until all such dues, as may be determined by the Executive Council, have been paid, and satisfactory evidence produced that he retains his membership in an affiliated society or association, if admitted through such channel.

ARTICLE II.—REGISTRATION OF MEMBERS.

No member shall take part in the proceedings of the Association, nor in the proceedings of any of the sections thereof until he has properly registered his name and paid his annual dues for that and previous years.

ARTICLE III.—GUESTS AND VISITORS.

Sec. 1.—Medical practitioners residing outside of Canada and other men of science of good standing may be received by invitation of the Canadian Medical Association, the Executive Council, the President, or any one of the sections, or at the discretion of any of these on a letter of introduction from an absent member of the Association. They may, after proper introduction, be allowed to participate in the discussions of a purely scientific nature.

Sec. 2.—Medical students may be admitted to either the general meetings or to the meetings of any of the sections thereof, but shall not be allowed to take part in any of the proceedings. They shall be vouched for as such students by some member of the Association to either the General Secretary or Treasurer.

ARTICLE IV.—HONORARY MEMBERS.

Honorary members shall be elected unanimously by the Executive Council.

ARTICLE V.—ASSOCIATION YEAR.

The Association year shall be the Calendar.

*EXECUTIVE COUNCIL.*ARTICLE I.—QUALIFICATIONS FOR REPRESENTATIVES ON
EXECUTIVE COUNCIL.

Sec. 1.—No one shall serve as a member of the Executive Council who has not been a member of the Canadian Medical Association for at least two years.

Sec. 2.—Members of the Executive Council shall be elected for one year.

Sec. 3.—Every affiliated Branch, Society, or Association shall be entitled to elect in addition to its President, who becomes an *ex-officio* member, one delegate to serve on the Executive Council for its membership from fifteen to fifty; two delegates for its membership from fifty-one to one hundred and fifty; three delegates for its membership from one hundred and fifty-one to three hundred; and thereafter one delegate for every three hundred of a membership above three hundred; provided that no one delegate shall represent more than one affiliated society or association to which he may belong.

Sec. 4.—At the first general session of each and every annual meeting of the Canadian Medical Association, fifteen members thereof, who shall be present at that annual meeting, shall be elected by ballot to act on the Executive Council for one year; provided that any one already elected a delegate by an affiliated society or association shall not be at that meeting elected a member of the Executive Council. The President of the Association shall name three tellers to conduct this ballot. The fifteen having the greatest number of votes shall be declared elected.

Sec. 5.—Every three years the Executive Council shall appoint a committee of five to examine the registers of membership of all affiliated societies or associations and so apportion the number of delegates entitled to be elected by each society.

Sec. 6.—Every delegate from an affiliated society or association shall be required, before acting on the Executive Council, to have entered his name on the Annual Register of the Canadian Medical Association, paid his annual subscription to the Association, and deposited a certificate with the General Secretary of the Association, duly signed by the President and Secretary of the affiliated society or association, from which he has been elected a delegate.

ARTICLE II.—ORDER OF BUSINESS.

Sec. 1.—The following shall be the order of business in the Executive Council, which can only be changed or departed from by an unanimous vote of that body:

- I. Calling the meeting to order by the President.
- II. Reading the minutes of the previous session.
- III. Reports of officers.
- IV. Reports of Committees.
- V. Unfinished business.
- VI. New business.

Sec. 2.—The Rules of Order which govern the proceedings of the House of Commons of Canada shall be the guide for conducting the sessions of the Executive Council.

Sec. 3.—Ten members of the Executive Council shall constitute a quorum for the transaction of business.

Sec. 4.—It shall be the privilege of chairmen of committees and members of the Executive Council, to report to the Executive Council, and they shall have the right to discuss their own reports.

ARTICLE III.—MEETINGS OF THE EXECUTIVE COUNCIL.

Sec. 1.—The meetings of the Executive Council shall be held on the dates of the annual meeting of the Canadian Medical Association, but not until after the first general meeting of the Association, and then not at the time of any general meeting of the Association, and shall report at each business session.

Sec. 2.—The Executive Council shall elect its own Chairman, annually, from amongst its members. He shall be eligible for re-election.

Sec. 3.—Special meetings of the Executive Council shall be called by the Chairman of Council, upon a written requisition, stating the objects of such meetings, and signed by twenty members of the Executive Council.

ARTICLE IV.—NOMINATIONS, ELECTIONS AND INSTALLATION OF OFFICERS.

Sec. 1.—(a) The general officers of the Association shall be a President, a Vice-President, and a Local Secretary, for each of the Provinces of the Dominion of Canada, who shall be the Presidents and Secretaries of the provincial organizations; a General Secretary and a Treasurer. The President shall be nominated by the Council and elected by the Association in General Session.

(b) Nominations.—Any five members of the Association may hand to the General Secretary, in writing, the name of.

any member of the Association whom they may wish to nominate for any office, except in the case of the Finance Committee, which shall, in all cases, be elected by and from the members of the Executive Council, or any member of the Executive Council may nominate any member of the Association for any office.

Sec. 2.—(a) The President of the Provincial Association, within whose boundaries the Canadian Medical Association is to be held, shall be *ex-officio* 1st Vice-President of the Canadian Medical Association; and the Executive Council shall elect annually the General Secretary and the Treasurer. These officers shall serve for one year or until such time as their successors are elected and installed in office.

(b) All elections shall be by ballot and a majority of the votes cast shall be necessary to elect a candidate. Should there be more than two nominees for any position, the one having the lowest number of votes shall be dropped and a new ballot proceeded with. This procedure shall be continued until one of the nominees receives a majority of all votes cast, when he shall be declared elected.

Sec. 3.—The election of officers shall take place at any meeting of the Executive Council, and the exact time for same shall be fixed by the Executive Council.

Sec. 4.—The President shall appoint three tellers to conduct the ballot.

Sec. 5.—The Executive Council shall annually decide on the number of general addresses to be given at the succeeding annual meeting and shall elect the readers to deliver same. In default thereof on the part of the Executive Council, this duty shall be discharged by the President.

Sec. 6. Installation.—The President-elect shall be installed by the retiring President, at the first general session of the annual meeting of the Association succeeding the one at which he was elected.

OFFICERS AND COMMITTEES.

ARTICLE I.—DUTIES OF OFFICERS.

Sec. I. President.—The President shall preside at general meetings of the Association and at meetings of the Executive Council. He shall deliver the annual Presidential Address at either the first or second general session of the annual meeting, held under his presidency, as he may decide. In the absence of the President, the Vice-President for the Province in which the meeting is held shall perform the duties, or, in his absence, the meeting shall select a Vice-President. The President shall appoint annually a Committee of Arrangements consisting of five

members who shall reside in the place at which the Association is to hold its annual meeting. He shall also name the chairman of this committee.

Sec. 2.—The President shall be an *ex-officio* member of all committees.

Sec. 3.—In case of the death or resignation of the President the Vice-President for the Province in which the annual meeting is to be held shall become the President.

ARTICLE II.—VICE-PRESIDENTS.

The Vice-Presidents shall assist the President in the discharge of his duties at his request.

ARTICLE III.—GENERAL SECRETARY.

Sec. 1.—The General Secretary shall also be the Secretary of the Executive Council of the Association. He shall give due notice of the time and place of all annual and special meetings, by publishing the same in the official journal of the Association, or if necessary, in the opinion of the Finance Committee, by postal card to each member. He shall keep the minutes of the General Sessions of the annual meetings of the Association, and the minutes of each meeting of the Executive Council, in separate books, and shall provide minute books for the secretaries of the different sections, which he shall see are properly attested by both chairmen and secretaries thereof. He shall notify members of committees of their duties in connection therewith. Where necessary or deemed advisable by the President, he shall conduct correspondence with other organized medical associations or societies, domestic or foreign. He shall preserve the archives, the published transactions, essays, papers and addresses of the Association. He shall see that the official programme of each annual meeting is properly published, and shall perform such other duties as may be required of him by the President or Finance Committee.

Sec. 2.—The General Secretary shall be *ex-officio* a member of all committees.

Sec. 3.—For his services the General Secretary shall receive a salary which shall be fixed by the Finance Committee.

Sec. 4.—The General Secretary may also be elected to the office of Treasurer.

Sec. 5.—All his legitimate travelling expenses to and from the annual meetings and other places ordered by the Finance Committee shall be paid for him out of the funds of the Association.

ARTICLE IV.—LOCAL SECRETARIES.

The Local Secretaries shall assist the General Secretary at the annual and special meetings and shall perform the duties of corresponding secretaries for the respective provinces they are elected to represent; these duties shall be performed under the direction of the General Secretary.

ARTICLE V.—TREASURER.

Sec. 1.—The Treasurer shall receive and collect the annual fees and demands of the Association from the members. He shall be the custodian of all moneys, securities and deeds belonging to the Association, and shall only pay out moneys on an order drawn by the General Secretary and approved by the Finance Committee, whose chairman shall also sign all such orders.

Sec. 2.—The Treasurer shall give to the Finance Committee a suitable bond for the faithful discharge of his duties, and shall receive for his services a salary to be fixed by the Finance Committee.

Sec. 3.—The Treasurer may also be elected to the position of General Secretary.

Sec. 4.—When the offices of General Secretary and Treasurer are filled by one and the same person, it shall be the duty of the Finance Committee to appoint a collector of dues and subscriptions at each annual meeting, who shall be responsible to the Finance Committee.

ARTICLE VI.

All the officers shall discharge the duties of their respective positions until the completion of the business and scientific proceedings of each meeting.

FINANCE COMMITTEE.

ARTICLE I.—APPOINTMENT AND DUTIES OF THE FINANCE COMMITTEE.

Sec. 1.—The Finance Committee, as set forth in the constitution, shall consist of five members annually appointed or elected from the members of the Executive Council. This Finance Committee shall have charge of all the properties of the Association and of all the financial affairs of the Association. It shall elect its own chairman. The chairman may then appoint any sub-committees that may be necessary or desirable in connection with the finances of the Association. This Committee shall have charge of the publication of the official journal of the

Association, and of all published proceedings, transactions, memoirs, addresses, essays, papers, programmes, etc., of the Association. It shall have power to omit, in part or in whole, any paper or address that may be referred to it for publication in the official journal of the Association, by the general meeting, the Executive Council or any of the sections. It shall appoint an editor and a managing editor of the official journal, who may be one and the same person if by them deemed advisable, and shall define the respective duties and responsibilities of each. They shall also appoint such assistants as may be deemed necessary for the proper conduct of this official journal, and shall determine their salaries and the terms and conditions of their employment. The Finance Committee shall have the accounts of the Treasurer audited annually or oftener if desirable, and shall make an annual report on the same to the Executive Council. The Finance Committee may meet when and where they may determine, and the chairman shall call a meeting on the request of three members in writing, and three members of the Finance Committee shall constitute a quorum for the transaction of the business of the Finance Committee.

Sec. 2.—The President and General Secretary shall be *ex-officio* members of the Finance Committee, and the General Secretary shall act as the Secretary of the Finance Committee.

Sec. 3.—Any donations recommended by the Executive Council shall be paid only with the approval of the Finance Committee.

Sec. 4.—The Finance Committee shall fix the annual assessment, and where feasible make equitable arrangements for commutation with provincial societies according to circumstances.

COMMITTEES.

ARTICLE I.—CLASSIFICATION OF COMMITTEES.

Sec. 1.—There shall be (a) Standing, (b) Special and (c) Reference Committees.

Sec. 2. Standing Committees.—The Standing Committees shall be the following: A Finance Committee, a Committee of Arrangements.

Sec. 3.—The Finance Committee shall be appointed by the Executive Council and its members shall always be appointed or elected from amongst the members of the Executive Council.

Sec. 4.—The Committee of Arrangements shall be appointed by the President. They shall be residents in the place in which the annual meeting is to be held, and the chairman thereof shall be named by the President.

Sec. 5.—The Committee of Arrangements shall be required to undertake to provide for transportation; a hall or halls for meeting purposes; a hall for Executive Council meetings; halls for section work; rooms for committees; rooms for general secretary, and other secretaries; room for registration; room or rooms or halls for exhibition purposes.

Sec. 6.—The General Secretary shall act in an advisory capacity to the Committee of Arrangements.

Sec. 7.—The Committee of Arrangements shall have power to add to its numbers and shall name all the Reference Committees as well as the chairmen thereof.

ARTICLE II.—SPECIAL COMMITTEES.

Special Committees may from time to time be appointed by the Executive Council; they may be named by the President on the authority of the Executive Council. They shall perform the duties for which they were called into existence, and shall in all cases report direct to the Executive Council as hereinbefore provided.

ARTICLE III.—REFERENCE COMMITTEES.

Sec. 1.—The Executive Council shall at its first meeting appoint all the Reference Committees and name the chairmen thereof. Their titles shall be as follows: (1) A Committee on Sections and Section Work; (2) A Committee on Medical Legislation; (3) A Committee on Medical Education; (4) A Committee on Hygiene and Public Health; (5) A Committee on Amendments to the Constitution and By-laws; (6) A Committee on Reports of Officers; (7) A Committee on Credentials; (8) A Committee on Necrology.

Sec. 2.—The General Secretary shall notify each member of these committees, so appointed, of his duties.

Sec. 3. Committee on Sections and Section Work.—The Committee on Sections and Section Work shall secure papers for the sections. It shall report to the President or to the Executive Council when required.

Sec. 4. Committee on Legislation.—To the Committee on Legislation shall be referred all matters pertaining to local and federal Medical Acts. It shall report to the President or the Executive Council when required.

Sec. 5. Committee on Reports of Officers.—To the Committee on Medical Education shall be referred all matters pertaining to medical colleges and medical education. It shall report to the President and Executive Council when required.

Sec. 6. Committee on Hygiene and Public Health.—To the Committee on Hygiene and Public Health shall be referred all

matters relating to hygiene, public health, etc. It shall report to the President or to the Executive Council when required.

Sec. 7. Committee on Amendments to the Constitution and By-laws.—To the Committee on Amendments to the Constitution and By-laws shall be referred all matters relating to the subject, before action thereon by the Executive Council. It shall report to the Executive Council when required.

Sec. 8. Committee on Reports of Officers.—To the Committee on Reports of Officers shall be referred the President's address, the report of the General Secretary and the report of the Finance Committee before submission to the Executive Council.

Sec. 9. Committee on Credentials.—To the Committee on Credentials shall be referred all questions regarding the registration and credentials of delegates, before submission to the Executive Council.

Sec. 10. Committee on Necrology.—To the Committee on Necrology shall be assigned the duty of collecting, as far as possible, the obituaries of members dying since the last annual meeting. These shall be duly filed by the General Secretary. The committee shall report on the call of the President at the last general session of each annual meeting.

Sec. 11.—Three members shall constitute a quorum of any Reference Committee, and all reports shall be made as hereinbefore provided.

SCIENTIFIC WORK.

ARTICLE I.—GENERAL MEETINGS.

Sec. 1. Date of Meetings.—The date of each annual meeting shall be fixed by the President on the advice of the Committee of Arrangements.

Sec. 2. Time of Meetings.—The general meetings or sessions shall be held at 10.30 a.m. and 7.30 p.m. of the first day of any annual session, and at 7.30 p.m. on the subsequent days. The President shall preside at all general meetings, and in his absence, or at his request, one of the Vice-Presidents.

Sec. 3.—The President shall deliver his annual address at one of the general meetings of the first day, as he may determine. The time of the deliverance of all other general addresses shall be arranged for by the Committee of Arrangements.

Sec. 4.—The order of business of the first general session of each annual meeting shall be as follows:

1. Calling the meeting to order by the President.

2. Prayer; by some one designated by the President.
3. Addresses of welcome and response.
4. The report of the Committee of Arrangements.
5. Reading the minutes of the last general session.
6. The report of the General Secretary of the last annual meeting.
7. Election of the Association's members to the Executive Council.
8. Presidential or other addresses, if decided on by the President and Committee of Arrangements.

Sec. 5.—The order of business for all subsequent general sessions shall be the same as that for the Executive Council.

Sec. 6.—All addresses delivered at any annual meeting shall immediately become the property of the Association, to be published or not, in whole or in part, as deemed advisable, in the official journal of the Association. They must, as soon as they have been delivered, be handed to the General Secretary, who shall refer them to the Finance Committee. Any other arrangement for their publication must have the consent of the author or of the reader of same and of the Finance Committee.

ARTICLE II.—SECTIONS AND SECTION WORK.

Sec. 1.—The sections to be held at any annual meeting shall be determined by the Executive Council. In default of their so determining the duty shall be discharged by the Committee of Arrangements, who shall also appoint or elect the chairmen thereof and the vice-chairmen and secretaries. These section officers shall serve for such meeting only, but any of them, if deemed advisable by the Committee of Arrangements, may be appointed for the following meeting in proper course.

Sec. 2. Duties of the Officers of Sections.—The chairman shall preside at each meeting of any section, or in his absence or at his request, the vice-chairman shall preside. The secretary of each section shall keep a correct account of the transactions, and shall record them in a special section minute book provided by the General Secretary. The chairman and secretary of each section must verify and sign the minutes.

Sec. 3.—Each section shall hold its first annual meeting at 2 p.m. on the first day of each annual meeting; and each subsequent day of the annual meeting at 9 a.m. and 2 p.m. until the programme of that section is completed. No section shall hold a meeting that will in any way conflict with a general meeting of the association.

Sec. 4.—Honorary members of this Association shall have the privilege of presenting papers before any section and taking part in any of the scientific discussions.

Sec. 5.—All papers, essays, photographs, diagrams, etc., presented in any section, shall become the property of the Association, to be published in the official journal of the Association or not, as determined by the Finance Committee, and they shall not be otherwise published except with the consent of the author and of the Finance Committee.

Sec. 6.—Each author of a paper read before any section shall, as soon as it has been read, hand it with any accompanying diagrams, photographs, etc., to the secretary of the section before which it has been presented, who shall endorse thereon the fact that it has been read in that section, and shall then hand it to the General Secretary to lay before the Finance Committee for publication, in whole or in part, or otherwise disposed of as may be deemed advisable by that committee.

Sec. 7.—The order of procedure in any section shall be:

1. Calling the section to order.
2. Remarks by the chairman.
3. Reading minutes of previous meeting.
4. Reading of papers and discussions thereon.
5. Nomination of honorary members of the Association.

Sec. 8.—No paper shall be "Read by Title," except by unanimous vote of the section before which it was to have been read.

Sec. 9.—No business of any description shall be introduced at any meeting of any section except as hereinbefore provided. The time allotted for each paper shall not exceed fifteen minutes, and that for the discussion of such paper, five minutes.

AMENDMENTS.

ARTICLE I.

The Executive Council at any annual meeting may instruct the Finance Committee to make or to have made any changes in the articles of incorporation which may appear desirable, or which may be made necessary by any change or amendment in the constitution and by-laws of the Canadian Medical Association.

ARTICLE II.—AMENDMENTS TO BY-LAWS.

No amendments to by-laws shall be made except on a three-fourths vote of the Executive Council; provided that no amendment shall be acted on until the day of meeting following that on which the amendment was introduced and approved by the Association.



DR. TULPIUS' LESSON ON ANATOMY. BY REMBRANDT, 1632.

The Canadian Journal of Medicine and Surgery

J. J. CASSIDY, M.D.,
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Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited. Contributors must kindly remember that all papers, reports, correspondence, etc., must be in our hands by the first of the month previous to publication.

Advertisements to insure insertion in the issue of any month, should be sent not later than the fifth of the preceding month. London, Eng. Representatives, W. Hamilton Mill, Thurst House, 231 Strand, W.C. Agents for Germany, Saarbach's News Exchange, Mainz, Germany.

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No. 6.

Editorials.

MODES OF STATEMENT OF THE CAUSE OF DEATH AND DURATION OF ILLNESS UPON CERTIFICATES OF DEATH.

THE Bureau of the Census (United States), S. A. D. North, Director Department of Commerce and Labor, has issued a pamphlet of 81 pages, in which useful information is given of the modes of statement of the cause of death and duration of illness upon certificates of death, as used in different States and countries. Conclusions and recommendations are likewise given, with a proposed new form of medical certificate of death, together with



PHYSICIAN IN HIS STUDY. BY DAVID TENIERS THE YOUNGER.

the reasons for adopting it as a uniform method of registering deaths. The United States Census Bureau has no authority except to suggest the desirability of certain measures and bring them to the consideration of the American Association of Registrars of Vital Statistics, organized as a section of the American Public Health Association. This latter section, which has members from the United States of America, the Dominion of Canada, the Republic of Mexico and the Republic of Cuba, met at Atlantic City, September 30—October 4, 1907. An amended form of Medical Certificate of Death was submitted and referred for consideration to the next meeting, which is to be held at Winnipeg, August, 1908. The proposed form of statement is as follows:

<h2>Medical Certificate of Death</h2>	
DATE OF DEATH.	
.....190..... (Month) (Day) (Year)	
I attended Deceased from .....19..... to	
19..... I last saw h..... alive on.....19.....	
and I hereby certify that death occurred on the	
date above, at.....m.	
The Disease causing death { or Means of Death } was:	
	Duration in years, months, days or hours.
.....	
.....	
Resulting in:.....	
Or aided by:.....	
.....	
Signed.....	M.D.
.....190 Address.....	
*State how injury occurred and whether:	
	(Accidental ?) (Suicidal ?) (Homicidal ?)

To a practising physician the principal interest in a certificate of this kind naturally attaches to the statement of the cause of death and the duration of illness. In the form used in France information on these points is given under one head:

No. 7. Disease or accident cause of death. Acute. Chronic.



THE CHIEFS OF THE SURGEONS' GUILD. BY NICOLAES MAES, AMSTERDAM, 1680.

In Germany the following form is in use:

No. 9. Cause of death. (Nature of accident.)

The forms supplied by the Registrars-General of England and Wales and Ireland are identical in the arrangement and wording of this part of the blank:

<p>[44]</p> <h2 style="text-align: center; margin: 0;">England and Wales; Ireland</h2> <hr style="width: 20%; margin: 10px auto;"/> <p style="text-align: center; margin: 0;">The cause of h..... death was as hereunder written:</p>	
	Duration of disease in Calendar Yrs Mths D's H's
CAUSE OF DEATH	
Primary .....Enteric Fever	21
Secondary .....Broncho Pneumonia.....	3
.....

The Swiss form of certificate of death is fuller and more complete than that of any other nation. As it will be of interest to physicians in Canada, we give a translation of the medical part of the Swiss certificate:

- 8. Medical statement of the cause of death—
- (a) Primitive disease or primary cause.
- In violent deaths state kind and cause, date of accident, of suicide, etc.
- (b) Consecutive disease and immediate cause of death.
- (c) Concomitant or circumstantial diseases worthy of being mentioned.

9. Autopsy: Yes.* No.*

10. Observations:

(Sanitary conditions of habitations, etc., see other side.)

The physician attending* called after death.*

Signed..... of.....

*UnderSCORE the words which apply to the case.

This certificate, which contains other information, viz., as to the civil state, profession, etc., of the deceased, is mailed to the local Registrar in a *sealed envelope* especially supplied for this purpose. This is a "penalty envelope," which goes post free in the mails. It bears the inscription "Statistique de décès" in the upper right-hand corner in lieu of a stamp, and in the left corner above the words "Contrôle No.— of the Register of Deaths," with the physician's signature in the corner below. This enables



AT THE VILLAGE BARBER-SURGEON'S. BY DAVID RYCKERT.

the local Registrar to identify the return of cause of death as being made without opening the envelope, which he is forbidden to do. He sends it intact to the Federal Bureau of Statistics at Berne at the end of each month, where it is used solely for statistical purposes and thus the confidential statement of the physician as to the cause of death is absolutely guarded.

As an indispensable aid in securing brief and precise statements of cause of death, Swiss physicians are supplied with a "Nomenclature of the Causes of Death," similar to those issued by the Governments of Sweden, Holland, Germany and other countries, and to the pamphlet "Relation of Physicians to Mortality Statistics," distributed by the United States Bureau of the Census, some years ago, to every physician in the United States. In this list are indicated by single asterisk (*) diseases frequently *secondary* and by double asterisks (**) diseases usually or exclusively *secondary*, so that the Swiss physician has a practical guide to aid him in filling out the form correctly. Here are some of the examples:

Acute bronchitis and broncho-pneumonia.*	Aneurysm.*
Pleurisy.*	Convulsions.**
Endocarditis.*	Suppurative Nephritis.**
Meningeal Apoplexy.*	Empyema.**

Not only is there a very precise blank provided for the statement of cause of death by the Swiss physician, together with explicit instructions, a detailed nomenclature showing the relations of individual diseases and a system of post-free confidential communication, assured against violation of secrecy and professional confidence; but the central office also carries out a "follow-up system," which assures that the occasional cases of ignorance or neglect of the proper form of statement are promptly corrected. Here is the form:

Federal Bureau of Statistics,
Berne, 190.....

DR. _____

DEAR DOCTOR,—You have delivered a certificate of death for a person of male _____, female _____, sex, occupation _____, born _____, died _____, at _____, St. _____, No. _____, from _____.

The disease indicated as a cause of death being regarded as a secondary affection, I will ask you to kindly inform me of the *primary* cause of the death, which it is important to know from the point of view of statistics, as well as from the point of view of public and private hygiene of the sanitary administration. Thanking you, in advance, I remain,

Very respectfully,
The Director,
Federal Bureau of Statistics,
DR. GUILLAUME



DR. EGBERT'S LESSON ON ANATOMY. BY THOMAS DE KEYSER, AMSTERDAM, 1619.

(On the opposite page of the death certificate are the questions.)

What are the sanitary conditions of the habitation?

(Question 10 of the card report of the death.)

Hereditary predisposition?

Mode of infection?

Accident, suicide, homicide?

In what way did the accident occur?

Probable or certain mode of suicide?

On the Ontario certificate of death the cause of death and duration of illness are put as follows:

Cause of Death	{ Primary
	{ Immediate
Length of illness	

A filled certificate of this form vised by the Medical Health Officer is registered with the Division Registrar, who issues a certificate of registration of death. According to law, this last certificate must be forthcoming before burial takes place. The original card certificates of death are sent to the Registrar-General's Office each month. The publicity given to the cause of death by this system of card registration assists local boards of health in controlling infectious diseases; but is inimical to the truthful reporting of deaths due to diseases of the genital organs. For accuracy and fullness of detail, the Swiss form of certificate of death bears away the palm and ought to serve as a model should a system of reporting annually the cause of death in Canada ever be adopted by the Federal Government of Canada.

J. J. C.

RECIPROCAL MEDICAL EDUCATION IN CANADA.

THE newly-elected College of Physicians and Surgeons of Manitoba discussed the question of reciprocity in medical registration between Great Britain and Manitoba at their inaugural meeting in October, 1907 (see *Winnipeg Telegram*, October 11, 1907). From this report we learn that nothing definite was decided, nor will it be possible to do anything until the meeting of the Legislature of Manitoba takes place. Hopes were, however, expressed that reciprocity will be accomplished through the Manitoba Government.

Saskatchewan and Alberta are very agreeably disposed towards the scheme; British Columbia is ripe for it; Ontario, New Brunswick, Nova Scotia and Prince Edward Island favor it. It is feared, however, that reciprocal registration with Quebec is out



THE ANEMIC. BY SAMUEL VAN HOOGSTRAATEN, 1626 TO 1678.

of the question, as that Province will not allow any alteration of its educational system, such as would be entailed by the passing of legislation to effect the desired end.

As the meaning of the last sentence may not be apparent to all readers, we propose to put it in a clearer light. At present Laval University, where nearly all the French-Canadian physicians receive their education, grants to her medical graduates the right to practise in Quebec. The professional examination is supervised by the representatives of the College of Physicians and Surgeons of Quebec; but, as a matter of fact, is held by Laval University, the representatives of the College being present to see that all is conducted in order.

If the Roddick bill were to become law some French-Canadian undergraduates in medicine would neglect to become graduates of Laval University and would prefer to pass the qualifying examination of the Canadian Medical Council, thus obtaining the right to practise in any Province of Canada, outside of Quebec. Laval would, therefore, lose some men who had received their medical training at her Medical School; but who would not think it worth their efforts to obtain her M.D. qualification.

Incidentally, it may be stated that McGill University and Bishop's College in Quebec would be placed in an identical position with regard to their medical undergraduates. In fact, any Canadian university at which medical degrees are granted would be exposed to the same loss. The general route to be followed by prospective Canadian physicians would be—one qualification obtained from the Canadian Medical Council and no compulsory examination in medicine by any other body in Canada.

As the active opposition or inertia of Laval University is likely to prevent the passage of the Roddick bill, even if the other Canadian universities should favor it, would it not be advisable to secure the adhesion of the French-Canadian University in another way? Make it compulsory on every candidate for the examination of the Canadian Medical Council that he shall previously be a graduate in medicine of a university of the Province or country to which he belongs. Were this provision made obligatory, a graduate in medicine of a Canadian university would, if desirous of obtaining the national and the imperial medical qualification, pass the examination of the Canadian Medical Council.

If satisfied to practise in one Province of the Dominion, he would simply have to conform to the existing medical laws of that Province.

It seems, however, on the face of things, that a movement in favor of medical reciprocity in Canada, as well as the other advantages to be obtained after the Roddick bill becomes law, should be made by Laval University. That University and the French-Canadian people have medical interests involved which at present are not looked after. There are numerous settlements of French-Canadians in Ontario, particularly in the newer parts of this Province, and in these settlements the services of a French-speaking physician are often required. Recently two French-Canadian physicians obtained, by special act, the privilege of practising in this Province, owing to the fact that the majority of their patients were French-speaking people. Now, the passing of a special act of this kind—giving an outsider the right to practise in a Province in which he is not qualified by examination, should only be allowed for extraordinary reasons.

In other Provinces there are settlements where a French-speaking physician would be welcomed by the inhabitants. Evidently, the reason why a demand for a French-speaking physician, outside of Quebec, is not answered is, that a medical graduate of Laval University does not wish to take the onus of passing an examination before the qualifying medical body of the English-speaking Province he may wish to practise in.

It may be contended that a French-speaking graduate of Laval University, if anxious to practise in Ontario, could pass the qualifying examination of the Ontario Medical Council as easily as that of the proposed Canadian Medical Council. The cases are not similar. The College of Physicians and Surgeons of Ontario does not provide for the reading of papers written in the French language—the proposed Canadian Medical Council, to be established under the provisions of the Roddick bill, would be obliged to make such a provision, if Quebec supported the bill.

In the interests of the medical graduates of Laval University and, in response to the demands of French-Canadian emigrés living in Ontario, and other parts of the Dominion, where French is not spoken, Laval University should be especially active in calling for the national medical qualification. If, while obtaining from

the Government of Canada a favorable answer to her quest, Laval University is enabled, by the operation of the provision suggested above, to conserve the loyal support and adhesion of her medical graduates, no lover of higher medical education in Canada should object.

J. J. C.

A LONG LIFE'S WORK IN MEDICAL EDUCATION IN ONTARIO.

DR. WALTER B. GEIKIE, of Toronto, founder of Trinity Medical College, and its Dean for twenty-five years, was honored by Queen's University, at the Convocation held in October in Kingston, conferring upon him the degree of LL.D., in recognition of his long and faithful services in medical education.

His many years of laborious and successful discharge of his duties as a medical professor, and his having co-operated in founding one of the best known medical colleges in Ontario, lead his many friends to feel that this honor has been worthily bestowed. Prior to 1871, when Dr. Geikie suggested the establishment of Trinity Medical College, he had been busily engaged in Victoria University's Medical Faculty, and successively filled the Professorships of Obstetrics and Diseases of Women and Children, *Materia Medica* and Therapeutics; Anatomy, Descriptive and Practical, Surgery, and Clinical Surgery, Medicine, and Clinical Medicine in that institution.

He resigned his position there in 1870, at the same time that the late Hon. Dr. John Rolph sent in his resignation, as his sympathies were all with Dr. Rolph, who was Dean of the Faculty. By special request of the late Dr. W. T. Aikins, Dr. Geikie lectured during session 1870-1871 on Clinical Medicine in Toronto General Hospital. The suggestion above mentioned, regarding the formation of a Trinity Medical Faculty on the basis pointed out in his memorandum having been adopted, this was at once fully carried out. A good new building was erected near the General Hospital, and was ready for occupation by October 1s., 1871. The new Faculty announced, as soon as it was formed, that in April, 1871, primary and final examinations would be held. Large numbers of candidates had requested that this should be done.

These examinations, the very first work of the Faculty, were

held, the graduating class alone, numbering thirty; the primary class was correspondingly large. The latter included Dr. Wm. Osler, now Regius Professor of Medicine, Oxford, England. Dr. Peter MacDonald, Deputy Speaker of the House of Commons, Ottawa, and Dr. Angus MacKay, ex-M.P.P., of Ingersoll, Ont. According to notice in the Calendar, the first session opened with a good class and was a complete success. This Medical Faculty was well received from the beginning by the public and by the profession. All the Royal Colleges of Physicians and Surgeons in Great Britain and Ireland recognized the College at once, and gave it as high a recognition as any college in the various British colonies had ever received. This was found to be a great advantage, and large numbers of the graduates of Trinity Medical College took British diplomas every year; and not a few, went on to the Fellowship examinations in the British Royal College and created a very good impression of Trinity Medical College by the high standing they took at the examinations.

The late Dr. Hodder, of Toronto, a professor in a former Trinity Medical Faculty begun in 1850, but which, through no fault of its faculty, was short-lived, but successful while it lasted, was on motion of Dr. Geikie unanimously appointed Dean, which position he held till his death in 1878. The other professors of the principal subjects at first, were Dr. Beaumont, Surgery; Dr. N. Bethune, Anatomy; Dr. Hallowell, *Materia Medica*; Dr. W. B. Geikie, *Medicine, General and Clinical*; Dr. Fulton, *Physiology*; Dr. C. W. Covernton, *Pathology*; Dr. Temple, assistant to Dr. Hodder. The remainder of the subjects were given to others, who were in due course appointed.

Dr. Geikie having had the advantage of being associated for many years with Dr. Rolph in the building up and management of a prosperous medical college, was put in charge of the College Register, and was appointed secretary and treasurer, and was expected also, to act as the executive officer of the Faculty, to look specially after the interests and welfare of the College in every matter where these were involved.

This newly-founded College had a course of ever-increasing prosperity during the thirty-two years it was in active operation. The curriculum was yearly carefully gone over, and was based on that of the best British universities and medical colleges. No

subject of practical value was omitted. The great importance of laboratory work, was never lost sight of, and improved and extended constantly. Minor subjects, *i.e.*, those of less importance in a practical medical education, were not allowed to encroach upon the more essential and indispensable subjects, by giving too much time to their study.

The special desire was, to send out no man who was not well grounded in the work essential at the bedside, *viz.*, the diagnosis, prognosis and treatment of such cases as the general practitioner is most certain to meet with in practice. The results of this policy are seen to-day everywhere these men have settled, by the good impression they make on the public, by their success and the great demand there is for them, which increased every year the College lasted. In this article we are freely using an address on the work of Trinity Medical College, delivered by Dr. Geikie last spring at a largely-attended reunion of his old graduates, which is very earnest, and deals with the subject of practical medical education as carried on in the College. In that address he says:

“Trinity Medical College always had ‘the practical’ in view, and made this her chief business in every part of the course, *i.e.*, to have the men they sent out well informed on all subjects, which were certain to be useful to them at the bedside in future life. Fifty-one consecutive years in connection with medical education have confirmed him in the view that on this basis, and on no other, can a good medical college rest—*i.e.*, a medical college which will prove fully successful and be a credit to the country and do full justice to all its students.”

In regard to Trinity Medical College itself, he said “that at her own cost she had been able to occupy good buildings, to add largely to them more than once, to equip the College well, for every practical purpose, to add to her equipment every year, to provide large and good lecture rooms and laboratories as well, convenient and furnished with all needed appliances, and constantly adding to and improving these; and had an excellent and ever-enlarging museum, creditable to any medical college. Dr. Allbutt, of Cambridge, England, a very distinguished professor in that university, was, during a visit some years ago, taken over the College, and expressed his pleasure and surprise

at seeing 'the building and all the appliances so excellent,' to use his own words.

"Trinity Medical College educated entirely some 2,000 graduates, the peers of any in Canada. It had a list of 190 gold and silver medallists, besides the very large number of scholarships won in several years, all of these the gifts of the College, and all competed for and deservedly bestowed. Then it had its special Act of incorporation given it by the unanimous vote of the Legislature of the Province. Mr. Biggar, son-in-law of the late Sir Oliver Mowat, drew it up for the College in 1877, with what help Dr. Geikie was able to give him, and Mr. Biggar (for some years the Professor of Botany, and an eminent lawyer) said he considered it the most complete Act incorporating a medical college which he knew of, and this was emphatically the case.

"Up to 1903 the College had been prospering year by year, sometimes more, sometimes less. The last two sessions of the College were amongst the best, and the very best, so far as the amount and quality of the teaching done during these sessions is concerned. Financially the College was in a good state, 'able to pay everyone very fairly indeed for the work done.'" He said that "the payments made to teachers were a good deal larger than in some other medical colleges at present. Now, although Trinity Medical College is, since July, 1903, but a memory, it is, in view of the great and splendid work she did, and the many years she kept it up, a very grand one."

Dr. Geikie said in closing: "With his intense devotion to her interests for thirty-two years of the best of his life, having been Dean for the last twenty-five years of her existence, and her chief executive officer, so far as doing all the exacting work it required, for thirty-two years; having represented her on the Medical Council from her incorporation in 1877 till 1902, twenty-five years, duties involving great responsibility, and being the person who was the means of setting her agoing in 1871, it would have been quite impossible for him to have been a consenting party to the changes of 1903, by which her name and her autonomy were blotted out. He had fondly hoped that a college having so fine a record would continue to exist as a famous medical teaching body long after he had been gathered to his fathers, as it should have done."

“ To him the loss of her autonomy was a very great and unexpected disappointment. He is thankful, however, that she existed long enough to do all she has done for medical education. No wonder her name should be dear to him, when he thinks of the many years of teaching he did within her walls, and the great amount of time spent otherwise, and always willingly, working for her prosperity, and of the many large classes of good students who for so many years filled her class-rooms, and by whom her extinction, as a college, is deeply regretted. No graduate worthy the name, or student, who was privileged to attend her teachings can or will ever forget the dear old College. The deserved eminence which many of her sons have attained, and the love of all her true sons, will, he trusts, for many years to come throw very bright halos round her much-loved name, which they will ever cherish when it is mentioned, as it is sure to be very often, as they recall how much she did for them, in their never-to-be-forgotten student days.”

Dr. Geikie adds “ that throughout his long career as a medical teacher he has lived for his College and her students and with all the energy he possessed, has striven to promote their best interests. He says he feels that he still lives in the hearts of many of his old graduates, who show this by their letters. His whole desire has always been to do the best in his power for every student of his College, in order to enable him to be a blessing to the neighborhood in which he might settle, and reflect credit upon his College by doing good work in his profession.”

EDITORIAL NOTES

Eating and Overeating.—At the annual conference of the Sanitary Inspectors' Association, held at Llandudno last September (see *Medical Times and Hospital Gazette*, September 28, 1907), Sir J. Crichton-Browne vigorously condemned vegetarianism and especially the latest cult, which sought to promote health and happiness by starvation. He said that on all hands the cry was that we ate too much and overloaded our stomachs. He inculcated temperance and not prohibition and he gave no countenance to vegetarianism, being a firm believer in the virtues of a

mutton chop. He would be glad to see a sirloin of beef regularly on the Sunday dinner-table of every family in the land. Sir J. Crichton-Browne's good wishes for a plenteous supply of meat on the tables of poor men are creditable to his kindness of heart; but sirloins of beef do not materialize from good wishes. The people to whom his remarks on overeating are addressed—the well-to-do classes of England, as sane as any similar classes in the world, see physicians to give them dietetic advice, which they sometimes follow. However, a great many of them have learned, by sad experience, that gormandizing ruins health and they use their intelligence to regulate the quantity and quality of their daily food. Dives need not become bilious or gouty because he is rich—simple, even vegetarian fare, may suit his system better than mutton chops or sirloins of beef. The banquets given the delegates of the International Peace Congress at the Hague last summer, though doubtless intended as the expression of kindly feeling, were disastrous to the health of some of the guests. These results of hospitality may have been due in part to the peculiar toothsome-ness of Dutch cookery; but the guests themselves were responsible for gormandizing, in a way which recalls what Roman history tells of the banquets of Nero. Should men of high intellectual attainments injure their chief capital—their wits—with gluttonous feeding? Better, by long odds, be an underfed workman, glad to get meat once a week, than be an overfed diplomat, who is forced to take emetics and purgatives to rid his body of the perilous stuff he has eaten, in order that Herr Van This or Frau Van That might be able to boast that he or she had entertained some members of the International Peace Congress.

Should Tea be Drunk at a Meal When Meat is Eaten?—

“When there is mechanical embarrassment of the heart by a distended and dilated stomach, there is danger of an attack of heart failure in elderly people in whom the heart has undergone degenerative changes.” A case illustrative of Broadbent's view, which we quote above, was reported in the press of London, Eng., last October. W. M. A., aged 62, a window-cleaner, who had been a teetotaller for thirty years, and an inveterate tea-drinker, ate a supper of boiled beef and afterwards had some tea (October 18, 1907). Early next morning he was taken ill and died before a doctor could be procured. An autopsy showed some thickening

of the mitral valve and that the heart was weak and flabby. The stomach contained undigested food and was distended. A verdict of death from syncope, weak heart and indigestion from excessive tea-drinking was returned by the coroner's jury. It is a wonder that the brand of tea was not mentioned. The impression left by this verdict is that the tannin in tea, acting on the meat in the stomach of the deceased, was largely responsible for his death. It is true that the tannin in tea (12.88-17.80 per cent.) toughens meat and makes its digestion slow; but this chemical reaction does not produce sudden death in the millions of people who drink tea and eat meat at the same meal in Europe and America, not to speak of other continents. The fatal result in the case of the London window-cleaner was mainly due to a distended and dilated stomach, causing mechanical embarrassment to a weak and flabby heart, which was provided with a thickened mitral valve. In an elderly person with such cardiac characteristics, flatulent distention of the stomach from the eating of turnips or cabbage would be dangerous to life. Had the window-cleaner's heart been sound he might have gone on eating boiled beef and drinking tea at the same meal for many a year.

The Treatment of Alcoholism in Psychiatric Hospitals.—

The beer-drinking Bavarians are much beholden to Dr. Kraepelin, who in the psychiatric hospital at Munich treats a large number of cases of alcoholic addiction. In a printed abstract of a report recently presented to the Ontario Government, it is said that 39.1-2 per cent. of all the patients treated at the Munich psychiatric hospital in 1905 were alcoholics. These unfortunates are taken directly to that hospital by the police and this applies to "ordinary drunks," as well as victims of chronic alcoholic poisoning. The practical results are said to be satisfactory; but, before recognizing any novel force in Dr. Kraepelin's treatment of alcoholism, one should learn the percentage of relapses. Every physician knows that alcoholic patients can be much improved, at least for a time, many of them abstaining rigidly for a short period, only to return with increased zest to the old addiction. In private practice a physician is hampered in his efforts to control a case of confirmed alcoholism. If an alcoholic patient is anxious to be cured of his bad habit, if his table is well

provided for, a physician, at the patient's home or at his own office, may use strychnine, atropine and f. ext. cinchona with advantage. Cures of such cases are occasionally recorded in the medical press. In many instances, however, the patient is unable to keep a firm resolution to avoid drink, and it would be pure charlatanism, if the physician were to maintain that he could prevent the patient from drinking to excess, if the patient were so minded. In the treatment of many and varied cases of alcoholic addiction, each of which may present peculiar features of its own, remedial measures should be selected from the entire arsenal of therapeutics, just as the conditions of the individual patient may demand. Such therapeutic conditions are best found in a psychiatric hospital. Absence from old associates may also be a feature, though it is difficult to see how that can be the case at the Munich Psychiatric Hospital. Control of vicious inclinations probably answers as a preventive of drinking, even though old cronies are met with. Drug-therapy has its uses; electro-therapy, balneo-therapy (including thermo-therapy and hydro-therapy), mechanical vibratory stimulation and massage are also useful. And any one of these agencies is more potent for good if it is employed by one who has confidence in his own powers and who can impress his own will on others. But not one of these curative agencies can take the place of an unalterable resolution to avoid the sources of temptation.

Some Views on the Treatment of Alcoholism.—Thirst for alcohol seems to be a morbid mental phenomenon, more insistent in its demands than hunger, while its force, by overbalancing the reasoning faculties, lowers man to the mental level of a child, then of a beast and eventually renders him thoughtless, sexual and a profligate. When a man sinks so low, his inebriety or habitual drug narcosis results in moral insanity and is, therefore, a disease of the mind as well as of the body. Among the psychic influences which help to pull alcoholic men out of the mire and place them again on their feet is the total abstinence pledge, made in a church association or a teetotal abstinence society—auto-suggestive and suggestive also. Very suggestive is the influence, silent or spoken, of cheerful men and women, who show, by their behavior, that true joy and unadulterated happiness are not expressed in the good feeling of a toper over his glass.

The Control of Certain Diseases by Hygiene.—In cities governed by sanitary law permanent and marked reductions of mortality are confined to causes of death resulting from diseases over which sanitary administration and preventive measures have most direct control. Thus an enforced vaccination act prevents deaths from smallpox diphtheria antitoxin, used betimes, jugulates diphtheria in the sick and protects the well from it. A pure water supply is synchronous with a vanishing mortality from typhoid fever. Even if the Toronto water supply were filtered, cases of typhoid fever would occur in this city. Strangers and citizens who had caught the infection abroad would sicken with it here; constant residents might catch it through infected milk or other food. It is conceded, however, that a filtered water supply would minimize our typhoid mortality. The actual typhoid mortality of Toronto is 24 per 100,000 of population, a figure somewhat higher than that of Greater New York (15 per 100,000), where the supply is guarded by the police; and also higher than that of Chicago (18 per 100,000), where, in spite of the dearly-bought advantages of the drainage canal, pure water is not yet available. It is not a daring thing to prophesy that the water supply of Toronto will improve when it is transported through an impervious tunnel. Too much reliance, however, should not be placed on a water-tunnel. To get pure water, precipitation of the supply in large reservoirs, or its filtration through sand, should be obtained.

J. J. C.

**DEATH OF DR. J. H. COLLINS, FORMER HOUSE SURGEON
TORONTO GENERAL HOSPITAL.**

THE death is announced in Chicago of Dr. J. H. Collins, a former resident and practitioner of this city. Dr. Collins was an honor man and medallist of Toronto University, having obtained his degree of M.B. in 1889. He was afterwards a house surgeon at the Toronto General Hospital. For several years he has been practising in Chicago as an eye and ear specialist. Dr. Collins a short time ago attended the funeral of his mother in Toronto and since his return to Chicago has been suffering from severe nervous collapse. His friends knew nothing of his illness until they were advised by telegram a short time before his death. His brother, Mr. J. H. Collins, of Berlin, Ont., was with him at the time of his death.

News of the Month.

MEETING OF 11th TERRITORIAL DIVISION OF THE COLLEGE OF PHYSICIANS AND SURGEONS.

THE inaugural meeting of this Association, composed of all medical practitioners practising in the City of Toronto west of Yonge Street, took place on October 29th, and was fairly well attended. Of this Association, Dr. J. S. Hart is President and Dr. F. A. Clarkson is Secretary-Treasurer. The objects are to improve the conditions of the profession, fight against quacks, fix a minimum fee and amend lodge terms.

A motion was unanimously passed fixing the lowest fee for medical examination for fraternal societies at \$2.00. At present the examinations for many of these societies range from 50 cents to \$1.00. Other fees were also fixed. For instance, the minimum fee for the fracture of the arm is now \$20.00, for the fracture of the forearm, one bone, \$20.00, both bones, \$30.00; and for fracture of the nose, \$5.00. These, of course, include the necessary visits.

The minimum fees to be charged for minor operations are \$10.00, and for major operations, \$50.00. The rates for visiting patients have also been increased. Hereafter a visit will cost \$2.00 for the first and \$1.00 for each subsequent visit. Rates for night visits have also been increased and \$3.00 will be the chargeable fee. An office visit is \$1.00, including prescription, and to give anesthetics a fee of \$5.00 is charged. Urinalysis will cost, chemical, \$2.00; microscopic, \$2.00, or both, \$3.00.

We trust that members of this Association will stand shoulder to shoulder in the aims herein set forth. It is most unfortunate that some of the newspapers in reporting this meeting stated that the doctors were "now forming a union," thus putting the profession on a par with the various trades. It is hardly necessary to state that such is not the case, the ideas being wholly and solely the raising of the standard of the profession by combating quackery, if possible doing away with lodge practice, or in any event raising it up from its present low ebb, and improving the conditions of the profession generally. The matter of amending medical fees is but incidental to the meeting, and we think most will admit that, if there is any class who are underpaid, leaving out of consideration the vast amount of charity work he does every day, it is the family doctor.

GRADUATING EXERCISES AT GRACE HOSPITAL.

The annual graduation exercises took place at Grace Hospital on November 5th, when seven talented young ladies were handed their diplomas. They are heartily recommended by the Lady Superintendent, who speaks highly of their faithfulness and efficiency.

The interest taken in the good work which the institution is doing was shown by the large attendance. Hon. Senator Cox occupied the chair and presented the diplomas. A number of addresses were delivered, reports were read, and many facts of general interest were adduced.

The opinion seemed to prevail that Toronto needs more hospital accommodation. Grace Hospital is preparing for enlargement, and \$50,000 is already promised. At the same time it is felt that the present demands, especially for free or partially free treatment, are overtaxing the resources of existing institutions. This hospital gave nearly 2,000 free treatments during the past year.

The institution has graduated 117 nurses to date, and is now in a position to give a far more thorough training than formerly. Friends have been generous in their gifts, and the apparatus available is of an up-to-date nature. The X-Ray department has been doing work along lines which would have been thought impossible a few years ago.

Mr. Frank Roper, Treasurer, read the financial report for the year. The hospital books show a gross deficit for the year of \$815. The total income was \$33,472.01. The cost per diem per patient had been 99 cents, as against 93 cents in the year previous. The hospital had admitted 1,433 patients during the year, but had refused 300 owing to lack of accommodation.

Addresses were made by the Chairman, Judge Winchester, Mr. J. E. Atkinson, and a number of physicians interested in the hospital. Miss Barnes read the valedictory of the graduating class. Miss Barwick reported for the Central Registry. Dr. Bruce Smith addressed the graduating class.

The graduating nurses numbered seven, as follows: Maude Elizabeth Tindale, of Arthur, Ont.; Margaret Eleanor Coulter, Bethany; Rose Elizabeth Monnery, Reading, Eng.; Margaret Alice Thompson, Orkney, Ont.; Lillian May Wixon, Toronto; Carrie Elizabeth Gibson, London, Ont.; Clara Louise Barnes, Georgetown, Ont.

The presentations were made as follows: Vandersmissen Medal, won by Miss Thompson, presented by Miss Vandersmissen; Wismer Medal, won by Miss Gibson, presented by Mr. Atkinson; prize for tidy room, won by Miss Barnes, presented

by Mrs. R. B. Hamilton; pins for massage, presented by Miss Campbell; diplomas, presented by Senator Cox; school pins, presented by Miss Patton, Lady Superintendent.

Miss Barwick's report as to the Central Registry was of general interest to the profession. The Registry, inaugurated in June, 1905, is designed to direct the nursing supply into its proper channels. The first year there were 554 calls received. The second saw an increase of nearly 1,000.

The board which has charge of the Registry is made up of two representatives elected by the alumni of each city hospital. There are fifteen members in all, including an American, to look after the interests of graduates from across the line, and a Canadian to represent graduates from outside of Toronto. Of the 240 graduates on the books 27 are from Grace Hospital.

The Lady Superintendent, Miss E. Patton, submitted the Sixteenth Annual Report of the Hospital and Training School for Nurses. Between two and three hundred applications for admission to the Training School had been received during the year. Of the twenty young ladies received on probation, nine were accepted, five not accepted and six did not remain. Two nurses resigned, one of whom has since been re-admitted; one was suspended and since reinstated, and three were advised to give up their training on account of ill-health. Graduates now number one hundred and seventeen.

During the year the lectures given were as follows: Eye and Ear, Dr. L. L. Palmer; Surgical Nursing, Dr. G. P. Sylvester; Obstetrics, Dr. C. J. Hastings, Dr. J. M. Cotton; Anatomy, Dr. C. J. Currie; Gynaecological Nursing, Dr. W. J. H. Emory; Infectious Diseases, Dr. A. O. Hastings; Physiology, Dr. D. W. McPherson; First Aid, Dr. W. Nattress; Diagnosis, Dr. L. H. Evans; Minor Surgery, Dr. W. Harris; First Aid, Dr. B. L. Riordan; Anesthesia, Dr. R. A. Stevenson.

ST. CATHARINES MEDICAL MEN STAND FIRM.

THE Medical Association of St. Catharines and district have taken a forward move in the matter of life insurance fees, which is meeting with the general approval of the profession throughout the Province. The life insurance companies were notified that after the first of July last the minimum fee for life insurance examinations would be \$5.00, to which some of the companies entered a protest. At a recent meeting the Association unanimously reaffirmed its decision to make no examinations for less than a five-dollar fee. All the leading companies of the United States, with one exception, have agreed to pay the fee. Several Canadian companies have, and it is expected the others will soon fall in line.

ASSISTANTS AT VARSITY.

SEASONAL appointments to the University staff were made on the 10th ult. by the Board of Governors. Greater attendance in nearly all the faculties made a greater number of assistants necessary. The appointments are as follows:

FACULTY OF MEDICINE.

Department of Anatomy—Demonstrator, Dr. C. B. Shuttleworth; assistant demonstrators, Dr. R. E. Hooper, Dr. A. J. MacKenzie, Dr. W. W. Jones, Dr. A. W. Caulfield, Dr. O. T. Dinnick.

Department of Surgery—Demonstrators in clinical surgery, Dr. W. J. O. Malloch, Dr. G. Silverthorn, Dr. E. Stanley Ryerson, Dr. S. H. Westman, Dr. Samuel Johnston, Dr. W. A. Scott, Dr. W. W. Jones.

Department of Medicine—Assistants in clinical medicine, Dr. E. C. Burson, Dr. B. O'Reilly, Dr. C. J. Wagner, Dr. H. S. Hutchison; demonstrators in medicine, Dr. T. D. Archibald, Dr. G. W. Howland, Dr. W. J. McCollom, Dr. D. McGillivray.

Department of Pharmacy and Pharmacology—Class assistants, F. C. Harrison, B.A., A. W. M. Ellis, B.A., W. J. M. Marcy; clinical laboratory assistants, M. H. V. Cameron, M.B., J. H. McPhedran, M.B.; demonstrator in obstetrics, Dr. J. A. Kinnear; laboratory assistant in bacteriology, Dr. T. D. Archibald; demonstrator in pathology and assistant curator pathological museum, Dr. E. S. Ryerson; demonstrators in pathology, Dr. G. Silverthorn, Dr. C. J. Wagner, Dr. W. H. Pepler, Dr. H. C. Parsons, Dr. F. A. Clarkson, Dr. G. W. Howland, Dr. C. B. O'Reilly, Dr. H. S. Hutchison, Dr. Joseph Graham.

TEACHERS TO BE MEDICAL EXAMINERS.

THE principals and teachers in the city schools are to be given a course of instructions which will enable them to detect symptoms of diseases of the eyes, ears, nose and teeth, and such other physical defects as would be likely to pass unobserved in school children.

This is following the system of medical examination which prevails in New York, and was decided on at a conference recently between Dr. Sheard, Trustees Henry Simpson, Dr. Ogden and Dr. Hunter, Inspector James L. Hughes, and Secretary W. E. Wilkinson.

Any defects discovered by the teachers will be reported, and in cases where the family can afford it, a medical examination will be made by the family physician, while the Medical Health

Department will conduct the examination where the parents of the children are unable to bear the expense.

Dr. Sheard will give the teachers the instructions necessary to enable them to make proper examinations.

The system is to be tried as an experiment for a year, when the result will be reported to the Board of Education.

In New York separate schools are provided for children afflicted with various diseases, tubercular-patients are housed together, and those suffering from other diseases are also kept in separate schools. This system is not necessary in Toronto, as there would not be a sufficient number of children affected to warrant the expense.

EX-HOUSE STAFF ASSOCIATION OF THE TORONTO GENERAL HOSPITAL.

THE following members of the Ex-House-Staff Association of the Toronto General Hospital assembled at the first of their clinics on October 24th, 1907: Doctors Parsons, Shuttleworth, W. P. Caven (President '07), G. W. Ross; Walter Wright, Samuel Johnston, J. F. W. Ross, Winnett, Caulfield, C. Temple, Trow, Hendry, Robinson, Nevitt, G. B. Smith, Stark, Rolph, H. B. Anderson, Campbell, Bruce, Honeywell, and the following members of the House Staff: Doctors Strathy, Lewis, MacMillan, Dickson, Burwell, Boddington, Rolph, Kinnear, Henderson, Graham and Fox.

Dr. W. P. Caven, the President, occupied the chair.

It was moved by Dr. J. F. W. Ross, and seconded by Dr. H. B. Anderson, that the last Thursday in each month be the date on which the clinics should be held.

It was also resolved that members of the Association might be allowed to bring in guests and that these guests might be permitted to show cases.

Dr. Caven then presented a patient suffering from mitral disease, associated with pulmonary tuberculosis. This case was discussed by Doctors G. W. Ross, H. B. Anderson, Robinson and J. F. W. Ross.

Dr. Caven presented a second case. This patient was suffering from the classical symptoms of cerebral tumor. This was discussed by Doctors C. Temple, Campbell, H. B. Anderson, Robinson, G. W. Ross, Shuttleworth, Smith and Trow.

Dr. Strathy, Senior House Surgeon and Assistant Registrar, presented a patient suffering from what had been diagnosed as obstruction of the interior vena cava. This case was discussed by Doctors Nevitt, Parsons, Caven and Anderson.

Dr. J. A. Kinnear presented a patient suffering from chronic

gout, reading the history of the case. It was discussed by Doctors Parsons, Nevitt, Caven and Robinson.

The Chairman then introduced to the meeting Dr. Wm. Honeywell, who was on the staff in the year 1877-78. Dr. Honeywell gave a brief address, contrasting conditions as he found them now in the hospital, around which he had been a good deal during the past few weeks by reason of the illness of his wife, with the conditions as they were when he was a house surgeon.

The meeting then adjourned.

TORONTO GENERAL HOSPITAL TUBERCULOSIS CLINIC.

(1) The nurse is required to attend the clinic at the Toronto General Hospital on Tuesday morning at 10 o'clock.

Each patient is to be supplied with a cloth or paper handkerchief into which to cough at once on entering.

The temperature, pulse, respiration and weight of each patient is to be recorded and the record brought into the examining-room with the patient's history.

(2) All new cases are to be visited during the following week and a report of their surroundings and any other necessary information made at the next clinic.

(3) All patients under observation should be visited at their homes at least once in two weeks.

(4) Patients confined to bed should be visited twice a week, or more frequently, as occasion requires.

(5) In cases of emergency the nurse is to be sent for, who will report to the physician-in-charge or an assistant, who will direct her as to measures to be carried out. If necessary the nurse will remain with the patient, or nearby, as long as is necessary, or until the patient is removed to the hospital.

(6) The nurse will direct the patients as to the disposal of sputa, and see that these directions are carefully carried out. In the event of negligence in this regard she will report the same to the Medical Health Officer and to the physician in charge of the clinic.

(7) Request for disinfection of house is to be made to the Medical Health Department after the death of a patient, or when a dwelling is vacated by a patient, or when in an unsanitary condition and negligence of precaution is evident.

(8) In cases of absolute want, milk and eggs may be supplied, the means of such supply to be directed by Dr. Brown. A report of this is to be made to Dr. Brown each week.

(9) A weekly report is to be made to the physician-in-charge as to the patients visited, the total number of visits made, the disinfection of houses, and any other matter worthy of note.

The Physician's Library.

A Manual of Diseases of the Nose, Throat, and Ear. By E. BALDWIN GLEASON, M.D., Clinical Professor of Otology at the Medico-Chirurgical College, Philadelphia. 12mo of 556 pages, profusely illustrated. Philadelphia and London: W. B. Saunders Company. 1907. Flexible leather, \$2.50 net. Canadian agents: J. A. Carveth & Co., Ltd.

This book is called a manual, and was written for students and general practitioners. It is really more than a manual, and if not written for specialists, may with very great profit be read by them. The arrangement of the subject-matter and the selection of the illustrations enhances very materially the pleasure one derives from reading this book.

In discussing mycosis of the pharynx the author, after discussing rather fully methods of treatment, says, "Occasionally the growths disappear spontaneously." As these masses of lepto-thrix cause no symptoms and always get well themselves, one cannot argue that caustery punctures and caustics are necessary. In the illustration on page 218 the line of incision should be higher. In discussing the etiology of subacute laryngitis attention is drawn to the necessity of seeing that the furnace is so fixed that no escape of carbon-dioxide gas takes place into the hot-air chamber. This measure alone, Gleason says, sometimes prevents many members of a household from having repeated attacks of sore throat. In cases of chronic laryngitis the author says that orthoform sometimes quickly relieves pain, congestion and hoarseness. As orthoform only acts where the mucous membrane is destroyed, he must mean chronic laryngitis with ulceration.

The portion of the book devoted to the ear is larger than usual in small books. It is thoroughly up-to-date and splendidly illustrated. At the end of the book are found forty-two pages devoted to formulae.

In addition to the prescription is given a full account of the methods of use and the action of the various remedies. This feature is of decided advantage and one sure to be very much appreciated by general practitioners. The book is a very neat, compact volume and a credit both to the author and publishers.