

The Canada Lancet

VOL. XLVI. TORONTO, DECEMBER, 1912 No. 4

EDITORIAL

INSTANCES OF DISGRACEFUL OVERCROWDING.

In all large cities there is a marked tendency for the poor to congregate in small rooms. This should be rigidly suppressed. There is no use allowing sentiment to run away with reason. In Toronto a short time ago a most remarkable example of this occurred.

Such instances of over-crowding are most dangerous to health and morals. On a number of occasions we have seen reports of similar instances in Montreal and Winnipeg. The Canadian cities must make up their minds to put a stop to this.

There is a steady inflow of the lower classes from Europe and these people must be given to understand that when they come to this country they must conform to Canadian customs and usages. They must be compelled to have their children educated in English. Their European manners and methods of living abandoned. Nothing but stern measures will do. There are more than 40,000 foreigners now in Toronto.

THE FEEBLE MINDED.

After much discussion and effort there is now being put forth an effort to improve the condition of the feeble-minded. An association has been formed to aid these unfortunate persons.

This movement should take on a wide tendency. It should do what is possible to improve the condition of the feeble-minded. It should also take active steps to prevent the propagation of this class by doing what can be done to restrain the marriage of defectives.

These children ought to be segregated from normal children and placed under proper tuition. This comes to the necessity of establishing a proper school for these children. It makes practically no

difference whether the city or the Government, or both, furnish such an institution. It is the results that we are concerned in.

Marriages must be regulated. Certain criminals should be so treated that they cannot propagate their kind. We are decided advocates of sterilization. There is much to be done, but opinion is now being aroused and the rest will come.

LAKE POLLUTION.

Pure water for drinking and domestic purposes for the cities of both the United States and Canada was discussed at the meeting of the Great Lakes International Pure Water Association and the National Association for the prevention of pollution of Rivers and Harbors, held in Cleveland on 22nd October.

Dr. Charles J. Hastings, Health Officer of Toronto, spoke in opposition to the practice of making the great lakes the depository of municipal sewage. He favored some plan of concerted action between Canada and the United States, holding such action indispensable to the prevention of typhoid and a reduction in the mortality rates.

DOCTOR WOULD NOT GO.

On two occasions recently there has been much newspaper discussion over the fact that doctors who were sent for refused to answer the call and attend the patient.

We think that in all cases where possible the doctor should make one call at least. If the people cannot or will not pay, and this is sufficient reason in his judgment for refusing to continue with the case, he can then have the patient removed to a hospital or assigned to some one to take charge of the case.

We think it does not redound to the credit of the medical profession to think that the life of a person may be placed in peril for the sake of a single fee. There are limits that should not be overstepped. A doctor should not be expected to keep on in attendance on a charity patient, unless he does it of his own good will. But it is, perhaps, not the wisest thing to do to refuse first aid to one in great need because a fee will not be forthcoming. We trust that it will be the rule for members of the medical profession to give the benefit of the doubt to the humanitarian side.

PAY FOR REPORTS.

It has long been unfair that doctors have been called upon to make returns to the Government and municipalities on deaths and contagious diseases without remuneration.

The payment of a fee would have the excellent effect of securing fuller and more accurate returns. This would be of the utmost value to the municipalities and the Government of each province. It would be a good investment.

In England a fee of 62 cents is paid for each report of an infectious disease. We press this upon the attention of the Provincial Governments.

DOMINION MEDICAL COUNCIL.

The members of the Dominion Medical Council met in Ottawa on 8th November, and organized for work. The officers appointed are as follows: President, Dr. Roddick, Montreal; vice-president, Dr. Thornton, Deloraine, Man.; registrar, Dr. R. W. Powell, Ottawa; executive committee, Drs. McKechnie, Victoria; Hardy, Toronto; Stewart, Halifax; Brett, Banff; Spankie, Wolfe Island, and Normand, Montreal. Doctors from all over Canada were present, and were in session for two days.

We have given every support in our power to the creation of a National Medical Council. Now that it has been brought into existence, we wish for it a long life and a prosperous career. The possibilities are almost unlimited. In the words of Ovid—*Felix faustumque sit.*

ROWDYISM AMONG STUDENTS.

We have often voiced the opinion that students in a body should not do what any one would be ashamed to do by himself. There is no excuse for several hundred students forming themselves into a mob, and doing such acts as disturb the peace or comfort of other people; or, worse, endanger their safety.

Take any student and submit such a case as this to him: A few young ladies are peacefully walking along a country road. They are met by a body of young men, who act rudely, throw snow over them, crowd up against them and make them give way on the road, and indulge in loud and boisterous language and singing. The answer would be prompt that such actions could not be condemned in too severe words.

This very thing has occurred in the past on the streets of Toronto, Montreal, Glasgow, Edinburgh, Paris and Dublin. Why? Because the students *en masse* forget the grand rule of chivalry, *nobless oblige*. The student should uphold the dignity of his college.

CAPITAL PUNISHMENT.

Some time ago an Indian in the western part of Ontario was placed on trial on a charge of murder. He was found guilty and sentenced to be hanged.

A reverend gentleman of the locality felt that there had been a miscarriage of justice and took active steps to bring to light such facts as would secure a second trial.

At a second trial where the Indian was charged with killing another person, he was acquitted. The second person must have been killed by the same person and at the same time. Perjury was proven.

Had this minister not done what he did the Indian would have, almost without a doubt, been hanged. The day after the execution the press would have contained something like this: The Indian, named _____ expiated for his crime by being hanged and the death of _____ was avenged.

There have been innocent persons hanged in the past, and will be again. Witnesses will lie, and some lawyers are abler than others and can secure convictions on rather meagre circumstantial evidence.

The remedy for this is not to put to death. Where the guilt is clear and the crime is foul, there should be no sparing of punishment. If it should turn out that the person has not been guilty, he can be liberated when he has not been executed.

Further, many frankly insane people have been hanged, and still more who were in the incipient stage of mental breakdown. Just think of capital punishment for one who is not responsible for his acts!

PREVENTION OF TYPHOID FEVER.

During four years in the United States there were 1,250,000 cases of typhoid fever. In one year there were 16,500 deaths. In 1909 there were more persons ill with typhoid fever in the States than with the plague in India. Typhoid fever is admittedly caused by sewage-contaminated water, which infects the consumer in foods he uses.

ORIGINAL CONTRIBUTIONS

CHRONIC INTESTINAL STASIS.*

BY W. ARBUTHNOT LANE, M.S.

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MR. PRESIDENT AND GENTLEMEN,—I appreciate very much the honor you have done me in asking me to open this debate. I accepted the invitation very reluctantly, as I felt I had nothing particularly new to add and that my opinions on the subject had been already stated clearly on several occasions.

I undertook to do it, however, recognizing that while I would not detain you very long, I would afford an opportunity to many who have been devoting much time and attention to this subject of expressing their views and experience. I trust that the subsequent discussion will throw much light on the causation, symptoms, and treatment of chronic intestinal stasis and of the many diseases which result from it.

I employ the term "chronic intestinal stasis" in indicate such an abnormal delay in the passage of the intestinal contents through a portion or portions of the gastro-intestinal tract as results in the absorption into the circulation of a greater quantity of toxic or poisonous materials than can be treated effectually by the organs whose function it is to convert them into products as innocuous as possible to the tissues of the body.

When these poisons and their products of conversion exist in excess in the circulation they produce degenerative changes in every tissue and in every organ in the body. It is probable that the textures of those organs whose business it is to convert, carry and eliminate them suffer more than do the other tissues of the body, which are merely permeated by them. In proportion as the stasis is prolonged so under the influence of a progressive strain greater than they are able to bear these several organs undergo a degeneration which proceeds with increasing rapidity as the condition advances. What the organs are which convert and excrete these poisons, what share each takes in the process, and how any organ is affected in its physiology, is very difficult to define accurately, especially as far as the ductless glands are concerned. We believe that the liver is the most important converter of the poisons and that the kidneys and skin are the chief excretors of the products of conversion.

*Delivered before the Toronto Academy of Medicine, 5th November, 1912.

As to the part taken by the thyroid gland, the pituitary body and the suprarenals we possess little precise information.

Our observations in this direction are purely experimental and if our several operations on the drainage scheme have done nothing more than demonstrate the damage done by these poisons, the remarkable power of repair which the several tissues of the body exhibit on being freed from their malign influence, and the extraordinary improvement in the functioning of the organs of the body after operation, they have been fully justified. They have, however, done more than this, since they have thrown a light upon intestinal conditions which has simplified their treatment most materially, and has put them upon a definite mechanical basis replacing what was previously little more than a nomenclature.

Let us consider the matter of pigmentation of the skin which becomes a very marked feature in advanced cases of stasis, especially in patients with dark hair. These cases have on many occasions been diagnosed as Addison's disease by very competent physicians, and I have no doubt would have gone to the post-mortem room as such except for operative interference.

On eliminating the supply of poison the color of the skin changes with a remarkable rapidity. The deep brown or coppery tint disappears and is replaced by the warm red color indicative of health. Has this unmistakable change come about by a restoration of the suprarenal to its normal condition or to what is it due?

Following almost immediately on the exclusion of the large bowel the cold blue clammy hand is replaced by a nice warm pinkish dry one. Nothing can be more obvious than this change. Is this remarkably rapid alteration due to an improved cardiac condition alone, or does the adrenal or the pituitary body exert any influence upon it? It is not a matter of food, as the patient may be having nothing but normal saline. In the case of a young man with fingers that had been blue for some years, on asking him what was the first change he noticed within a day of the operation, he said: "My blue fingers have gone," and the blueness never recurred.

We know very little of the action of the ductless glands except from physiological experiment, and perhaps nothing in the operative treatment of chronic intestinal stasis strikes one as more disappointing than the helplessness of the physiologists to supply us with useful information that can be applied to our practice.

Again in the case of the kidney affected by so-called Bright's disease, which is merely a product of chronic intestinal stasis, the exclusion of the large bowel is followed by an improvement in functioning

which is as extraordinary as it is rapid, and a patient who has been face to face with death is quickly restored more or less completely to health, usefulness, and activity.

The great difficulty in the treatment of chronic intestinal stasis and its results is to recognize when it is too late to interfere, in other words, when the end result has assumed such proportions that the removal of the primary cause does little or no good.

As an extreme instance take cancer of the breast, or of the ducts of the liver, or of the pancreas, all products of chronic intestinal stasis in the first instance. What would be gained by eliminating the absorption of toxic material at this stage? In the antecedent phases, however, the hopeless conditions which form the last chapter in the story of chronic intestinal stasis may be readily avoided.

Take the breast while it is indurated and nobby as it is in marked chronic intestinal stasis, eliminate the supply of toxins, and a soft healthy organ results which need cause the patient no anxiety in the future.

As far as I know, a healthy breast in a subject showing no evidence of stasis does not become cancerous.

Again as regards the influence of these toxins or poisons on the nervous system, I have seen a patient who had been confined to bed for many months having neither the capacity nor desire to stand or walk, and whose mental condition was such that she was regarded by many as an imbecile, become a happy active intelligent woman within a few weeks of the removal of the large bowel. Since that operation she has been leading a useful life and earning her living.

A woman was sent to me from South America in order that I might remove the Gasserian ganglion for epileptiform neuralgia of the right fifth nerve. She had suffered constant pain with exacerbations of great severity for about nine years. During the last two years her condition had become intolerable. She was definitely static and her nervous system varied with her toxicity.

She was short-circuited. After the operation she had pain in the face, slowly diminishing for a week. On the eighth day it disappeared. She had no exacerbation during that week. She made a remarkable recovery, interrupted only by a short slight attack at the end of the fifth week. Her general health and weight have improved rapidly and a happy, smiling face has replaced an expression of hopeless misery.

In another patient, a man, headaches were intense and associated with vomiting, that one of the most distinguished of our nerve physicians considered them to be due to a tumor in the frontal lobe and advised operation, which was, however, refused. The intense pain in the head disappeared abruptly after an ileo-colostomy.

These cases are caricatures or extreme conditions, but it is from the extreme conditions one learns most. The same or similar symptoms exist in a lesser degree in most advanced cases of stasis.

In the case of the thyroid I have seen a large adenoma of this organ subside with great rapidity after removal of the large bowel, and typical symptoms of exophthalmic goitre of long standing associated with intestinal stasis have also rapidly and permanently disappeared in other cases.

Such, then, are the results of absorption from the alimentary tract. What is the source from which these poisonous products are obtained

They may be absorbed from any portion of the gastro-intestinal tract is a primary absorption from the intestine. This supply may be supplemented by absorption of poisonous products from secondary results of their absorption, such as from suppurating gums or from any secondary infective process communicating or not with the gastro-intestinal tract.

The absorption from the secondary result of auto-intoxication may in some cases be very considerable and the removal of the absorption from the secondary focus may result in great improvement in the patient's condition, though the source of absorption from the intestine may be uninfluenced by its treatment. The primary absorption from the intestine varies in importance not with the degree of stasis, but rather with the unfitness of that portion of the bowel to deal with organisms, etc., to which it is unaccustomed.

For instance, solid material may remain in the sigmoid flexure or pelvic colon for a considerable time and produce but a moderate amount of auto-intoxication. On the other hand, the infection of the contents consequent on a very moderate stasis in the small intestine may bring about a very severe condition of auto-intoxication, while at the same time the mechanical symptoms resulting from it are also much more conspicuous.

I wish particularly to call your attention to the situation of the sites of the sources of excessive absorption of toxins from the gastro-intestinal tract. Since the profession has begun to study the subject of auto-intoxication in chronic intestinal stasis it has been inclined to assume that the large bowel is the sole source from which these toxins are derived, and it has got into the habit of looking on stasis as merely colonic. In consequence of this operations have been conceived chiefly with the object of facilitating the effluent in the colon and in this manner the chief site of absorption has been overlooked and left untreated.

This is largely due to Metchnikoff's views on the subject. He considers that if we had no large bowel we would live longer. This is per-

fectly true, as evidenced by the fact that the removal of the large bowel results in a marvellous improvement in the health and appearance of the individual and in the duration of life. But I would point out that the benefit which results from the removal of the large bowel does not show that the colon is the chief source from which toxins are absorbed in excess.

Indeed, in a considerable proportion of cases I believe the bulk of the absorption takes place from the small intestine.

Stasis of the small intestine with the associated infection of its contents by organisms to which it is unaccustomed is not primary, but is secondary to a stasis in the large bowel.

In other words, if it were not for the presence of the large bowel the conditions producing stasis in the small intestine would not arise. If the caecum did not become overloaded the obstruction to the ileal effluent either by an acquired mesentery, an appendix hitching it up, or by simple stasis would not develop. Consequently the contents of the small intestine would not become infected by organisms, the duodenum would not be blocked by the drag of the small intestines obstructed at the end of the ileum, the mucous membrane of the duodenum would not inflame and ulcerate, the biliary and pancreatic ducts would not be infected and the obstructed outflow from the stomach, with all its associated sequelæ, would not occur.

Now I wish to show that the extraordinary improvement that results from short-circuiting and the disconnection or removal of the large bowel is due largely to the fact that the evacuation of the small intestine is facilitated by its introduction into the pelvic colon and that the infection of its contents by organisms which grow in the stagnating matter in the large intestine ceases abruptly. I do not wish to suggest that all absorption of toxins takes place from the stomach and small intestine, but I do maintain that the tract other than the colon plays a very important part and I believe by far the most important part in the process of absorption. It appears to me that the point of greatest difficulty in the passage of material along the gastro-intestinal tract is through the last few inches of the ileum. This is particularly the case when the caecum has been securely fixed by acquired adhesions in the iliac fossa. In such cases the delay of the effluent at the pelvic brim may be very great; indeed, in one of my cases which Dr. Jordan has examined with bismuth and the X-rays, the material remained in the terminal coil of the ileum for as long as eighty-five hours* without there being found at the operation any evidence of interference with the effluent by an acquired peritoneal band or by an appendix fixed in such a position behind the small bowel as to control the passage of material through it in certain positions. Now this form of simple

obstruction which cannot be recognized at the time of the operation, and can only be determined by bismuth and X-rays, I call the "simple static variety." I use this term as opposed to the more obvious variety in which the bowel is controlled by an acquired band or by an appendix, either of which is readily recognized when the abdomen is opened, though the extent of its effect on the effluent can only be gauged by bismuth and X-rays.

Since with an apparently uncontrolled ileal termination the delay in the effluent may be very considerable one can readily see how a structure which by strain or pressure exerts apparently but a comparatively slight constricting influence on the lumen of the bowel may affect very materially the passage of material through it.

In early life the duodenum ends vertically in such a manner that its effluent can be controlled by the exercise of a vertical downward traction upon the jejunum.

I believe that to obviate this mechanical disability the commencement of the jejunum becomes attached progressively to the posterior abdominal wall by its evolutionary process, so that, in the highest state of development, having become attached to the under surface of the transverse meso-colon in a direction from left to right this portion of bowel is fixed in the form of a semi-circle.

Between the normal condition at birth and this high evolutionary type all grades are found, each presenting a varying degree of disability. I have indicated diagrammatically what I believe to be the normal condition at birth; then we have the condition commonly present in advanced duodenal obstruction in chronic intestinal stasis. We must note the acquired ligament, which represents the crystallization of lines of force, which is frequently present and which is evolved to take strain off the termination of the fixed bowel; and in the fully developed fixation of the jejunum to the under surface of the transverse meso-colon. Then there are acquired mesenteric bands which are evolved to fix the bowel in this situation in order to obviate angulation at its termination and consequent interference with the effluent. The advantageous mechanical arrangement afforded by this last type may be imitated by suturing the jejunum to the under surface of the transverse meso-colon after the division of any such bands should they exist. It would seem impossible to eradicate from some minds the idea that these acquired bands and mesenteries are inflammatory in origin.

I do not propose to discuss here the details of the several operative procedures which I employ, as I have done so on very many occasions.

We may differ widely in our opinions as to the causation of the

several conditions which produce mechanical changes in the intestine, as to the mode of absorption of poisonous products, and as to the best modes of treating the several troubles as they arise, but I trust that the discussion, which, I feel sure, will be a very full one, will help up to materialize our views on a subject which I believe to be one of the biggest and most important which we have handled recently.

ACUTE POST-OPERATIVE DILATATION OF THE STOMACH.

By A. C. HENDRICK, M.A., M.B. (Tor.) F.R.C.S. (Edin.)

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THIS rare but very serious complication of operation, especially upon the abdominal or the pelvic viscera, has a number of probable explanations. Of these the following are the chief:

1. Nerve lesions and circulatory disturbances, e.g., section of the vagus nerves experimentally in animals has produced acute dilatation in the stomach.

Injury to the stomach wall may also produce it; also reflex disturbances of the circulatory system, e.g., too long in the extreme Trendelenburg posture, which impairs the heart action and *à priori*, the circulation in the gut wall. When seeming to arise from such causes, i. e., when the cause is *not* inflammatory, eserine sulphole gr. 1-60—q—6 hrs. may do good.

2. Paresis of the stomach or intestinal wall due to the circulation of toxins from the alimentary tract, or else some acute infection.

We are only now just beginning to realize the great frequency of blood infections—i. e., the presence of the germ in the blood-stream at a very early period of the infection, hence the extreme value of blood-cultures.

For example, the infection of the gall-bladder and bile-ducts is very probably through its bacteria being carried to the liver in the portal blood-stream, and then being excreted in the bile and thus infects the ducts.

According to Lennander, distension of the stomach or intestines is due chiefly to the action of the toxins upon the plexuses of Auerbach and Meisner, thus paralyzing the stomach walls and allowing the toxins to pass through by diffusion, owing to the stomach wall becoming "water-logged" with lymph—also the infiltrated and œdematous stomach wall fails to transmit the peristaltic wave.

As to the source of the toxins: it has been determined that in

consequence of purgation the bacteria in the intestine are increased, and diminution only occurs when the bowel is thoroughly emptied; hence purgation immediately before operation, e.g., the day before, is a mistake. The purgative should be given two days in advance, on the evening before operation an enema is given and this may be followed by repeated small doses of magnesium salicylate gr. 5—q.—4 hrs. The value of this procedure has been shown in its lowering of the mortality in excision of the rectum for carcinoma, when, of course, the great danger is infection.

3. Mechanical obstruction to the outflow from the duodenum.

In some cases the duodenum participates in the dilatation, apparently owing to pressure of the superior mesenteric vessels on the third part of the duodenum, which they cross transversely.

It is in such cases that the prone posture may afford some relief.

In all cases of ileus after operation the use of the stomach tube should not be neglected, and if repeated lavage, the prone posture, and general treatment fail to bring about relief, Mayo Robson₁ suggests that the question of gastro-enterostomy should be considered, *provided* that the intestines do not participate in the paralysis.

Besides the prone posture, etc., it has been found that sitting the patients up in bed and allowing them to bend forward upon a test and giving plenty of fluids by mouth, i. e., water, will also greatly relieve when the condition seems due to mechanical obstruction of the duodenum.

Another explanation of this mechanical obstruction of the duodenum is that of Albrecht₂, who states that mechanical obstruction by the root of the mesentery, and the mesenteric vessels occurs, due to the sinking of the empty intestines into the empty pelvis—thus causing some obstruction of the duodenum and consequent filling of the stomach. Enteroptosis is often observed to be present.

The opposite view is that the dilated stomach forces the intestines into the pelvis and thus completes the vicious circle.

The putting of the patient in the Trendelenburg posture is suggested to relieve the condition here.

Still another explanation of the mechanical obstruction is a shifting of the pylorus, as shown by Bismuth X-rays photographs, this shifting producing a kink, as suggested by Stiles₃.

4. Fear of operation, the anaesthetic, etc., have been suggested as possible causes, but no definite observations have been made.

5. Finally, it has been suggested that sluggishness of contraction of the intestinal walls was due to the too great exposure during operation, and that aeration of the intestines caused too great a loss of Co_2 . Hence the suggestion of Yandel Henderson, to inject washed Co_2 -gas

into the closed peritoneal cavity after operation to prevent dynamic ileus.

Interesting experiments have been performed by Woodyat and Graham in an attempt to produce experimental acute dilatation of the stomach, i.e., gas in its lumen plus oedema of its walls, by tying a certain number of the arteries to the stomach.

From a number of experiments the theory was deduced that the condition was one due to the lack of oxygen, whether due to disturbance of the circulation or bacterial poisons, since the characteristic symptoms, e.g., epigastric pain, splashing sounds, and vomiting of large quantities of dark greenish material consisting chiefly of gastric secretions, minus blood, with absence of bile or faecal matter, etc., could be experimentally produced by partial cutting out of the aeration of the stomach wall. In conclusion, the scanty observations one has been able to make rather tends to suggest two probable causes of this condition: (1) Sepsis, and (2) the mechanical obstruction theory.

Treatment: After diagnosis, the best treatment is lavage of stomach, postural treatment, prone or upright, and small doses of strychnine gr. 1-30, eserine, gr. 1-60, apomorphia, gr. 1-10, and eleterium, gr. $\frac{1}{2}$, as the occasion indicates.

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1. System of Treatment. Latham and English, Vol. II., p. 311.
2. Diseases of the Stomach (Aaron) 1911, page 211.
3. Stiles, H. J., *B. M. J.*, Sept. 28, 1912, p. 779.
4. Woodyat and Graham. Travis, Chicago, Path, Soc., Vol. VIII., Aug. 1, 1912

SOME PRACTICAL POINTS IN THE TREATMENT OF ECZEMA* (Selected.)

BY G. S. STOPFORD-TAYLOR, M.D., M.R.C.S., ETC.

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GENTLEMEN,—I am sure that you will agree with me when I say that the most attractive branch of general medicine is that of the study of cutaneous disorders, and it has always been a source of regret to me that the General Medical Council has not made a higher standard of education obligatory in this most important subject.

Various reasons may be assigned for this apparent apathy.

Firstly, because common affections of the skin are rarely fatal, and secondly, because the student of to-day is already over-burdened with work.

* Reprinted from the Medical Press and Circular.

Reform is necessary in medical education as in many other things, and, personally, I cannot see how this is to be effected unless the curriculum is extended. Fortunately, there are post-graduate classes in most centres of medical education for those who wish to learn, and general practitioners are always welcome at any clinic, but, unfortunately, these are of little value to those who live at a distance. Still, if men are desirous of learning, the difficulties of distance can be overcome. What is to prevent a country doctor from taking his annual holiday in a hospital city, such as London, Liverpool, Manchester, Birmingham, etc., and studying not only dermatology, but ophthalmology, gynaecology, and other branches of medicine?

We do not pretend to say that holiday studies will make a specialist of the general practitioner, but we can train him to use his powers of observation and other senses, and so avoid making glaring errors of diagnosis as in cases of itch and ringworm.

Which of us has not seen numerous cases of the former treated for "disorders of the blood," and the latter for dandruff?

A school attendance medical officer informed me that 95 per cent. of the certificates given by the general practitioner in a large city as to the fitness of children to return to school, from which they had been excluded because of ringworm, were incorrect.

If the general practitioner wishes to hold his own in the struggle for existence, he must, in the words of His Majesty the King, "Wake up."

I believe that the successful doctor of the future is the good all-round man. He must know how to use his microscope, ophthalmoscope, laryngoscope, otoscope, and other instruments of precision, and then he need have no fear of Mr. Lloyd George. Remember that pools of corn, cotton, iron and coal, and other products of the earth may be possible, but it is impossible to make a pool in brains, and by cultivating his brains the well-trained doctor will succeed.

Consider for a moment the advantage the British doctor has over his colonial and American cousin, who leaves his country, say, every third or fourth year for the purpose of studying in Europe. Does he lose anything by so doing? No; he gains, because his patients know where he has been, and conclude that he returns home brushed up and, consequently, a better doctor than he who has stayed at home.

Dermatology concerns the diseases which affect the largest organ of the body; an organ that stands in relationship to every organ within, and yet greater ignorance exists in the profession with regard to it than in any other department of medicine. It has been said, however, and with some degree of truth, that the ignorance displayed by the general practitioner is on a level with the dermatologist's knowledge

of medicine. How is dermatology taught in the majority of schools? As if the skin were a dead thing, affording a home for myriads of organisms to be destroyed by germ hunters with sulphur or other germicides.

I remember well a lady who had been so treated with sulphur that she was unable to sleep, and when she complained to the dermatologist who had prescribed for her, he replied that she was suffering from "nerve storms."

This brings me to the association of dermatology with general medicine.

No man should aim at being a specialist unless he has had a long and varied experience in general medicine. He should stand in relationship to the physician and surgeon as the royal marine, who is trained to fight on both sea and land, does to the sailor and soldier.

The definition and nomenclature of skin affections appears at first sight to be somewhat complicated, but it is really not so if common sense and patience be exercised. All that is required for the successful study of cutaneous maladies is, as in other branches of medicine, a practical knowledge of anatomy, physiology, and pathology. One great charm that the study of skin diseases possesses is, that the signs and symptoms are for the most part objective, and, consequently, their clinical course can be observed throughout.

Despite this, no two authors are agreed upon the definition of the commonest inflammation of the skin, viz., eczema; and it is a reflection upon the teaching of the day that such a disease should be indefinable.

Let us take the opinions of the late Radcliffe Crocker and of Malcolm Morris, which, on reference to their text books, are antagonistic.

Malcolm Morris says that "the artificial dermatitis excited by mechanical or physical agents is identical anatomically with the eczematous process, and gives rise to lesions indistinguishable from those of eczema," but I join issue with him here when he says, "but it is not eczema."

I would like to ask Morris the following questions: First, did he ever see an outbreak of eczema of the face, forearms, and genitals suddenly occur whilst a patient was suffering from varicose eczema of the leg? Or, did he ever see a dermatitis caused by a scald on the legs, an injury complicated by an outbreak of eczema, on parts far distant from the original injury. And such attacks proving most intractable to treatment, and in some cases, recurring at intervals for years, long after the injury had healed. I venture to say that such cases are to be found in London, as they are in Liverpool, if only looked for. Are they not cause and effect?

Morris's position is this. Briefly, eczema, arising from an invisible cause, according to Morris, is the only true or *idiopathic* eczema. (The italics are my own.) Now traumata are a common cause of dermatitis admitted by him to be indistinguishable from eczema. Therefore, his argument, followed out to its logical conclusion, is untenable, because it may arise from a microscopical found or one so small as to be overlooked.

Crocker's position, on the other hand, I regard as more easily maintained. He says, "I believe it is more logical and practical not to draw such arbitrary distinctions, and to consider all cases as eczema which correspond in their morphology and general behaviour irrespective of the cause being tangible or intangible, external or internal."

I have found the best working definition of eczema to be a catarrh of the skin which arises in response either to an external cause, or in consequence of some unknown or constitutional dyscrasia.

I am firmly convinced that a large proportion of cases of eczema originate from wounds, and in the past few months I have notes of typical outbreaks of eczema following a wound of the thumb due to a cut from a knife used for slicing tobacco; a burn on the wrist caused by some boiling fat, and an injury of the sole of the foot produced by a badly fitting shoe. In each of these cases the attack of eczema which followed was clinically indistinguishable from ordinary eczema, and I cannot see any reason, except a foolish desire to make confusion worse confounded, why these cases should be excluded from the category of eczema, and relegated into that of dermatitis. It is absurdities of this kind which bring dermatology into unmerited disrepute; and in our work as clinical teachers we should set our faces sternly against their further propagation.

From whatever cause arising, an eczema, once started, rapidly becomes septic, as the skin teems with micro-organisms, and as soon as the protective layer of the epidermis is destroyed, or damaged and loosened by the inflammatory process, the products of sepsis are readily absorbed by the exposed corium, and we get outbreaks of eczema occurring at a distance from the original lesion.

In the *British Medical Journal* of September, 1897, I published a series of cases of skin eruptions of various types arising in patients suffering from infected wounds. It has been one of my hobbies to collect the records of cases illustrating this point, and I should like briefly to quote a few of them here.

Case 1. A young lady, suffering from a moist occupation eczema of the hand, while under treatment suddenly developed an acute erythematous eczema of the face.

Case 2. A man applied several plasters to his left shin. Three

days after the application of the second plaster there was an outbreak of typical eczema on the face and genitals.

Case 3. A woman sustained an injury on the back of the right arm. A fortnight before she came to hospital, the sore had dried up, and presented a scaly appearance. A doctor painted it with linimentum iodi under the impression that it was a ringworm. She was advised to repeat the application for three successive days. On attending at hospital the wound was found to be septic; the face was covered with an impetiginous eczema, and the shoulders, breasts, trunk, buttocks, and legs were covered with vesicopustules. There was a space over the dorsal vertebræ free from disease.

Case 4. A woman rubbed some liniment on her left arm for rheumatism. The liniment produced a blister. As this was healing there was a sudden outbreak of a symmetrical papular eruption along the front of both thighs and legs.

Case 5. A young woman, while suffering from an impetiginous eruption of the scalp, developed a papulo-vesicular eczema on the outer surface of both arms.

Case 6. A man, suffering from an eczematous eruption over the right knee joint, applied starch and boracic poultices at the suggestion of a friend. Unfortunately, he was not careful to cover the poultice completely with gutta-percha tissue, so it became very dry and adhered to the skin. In forcibly removing it he did further damage to an already inflamed skin, and the following day he had a typical outbreak of papulo-vesicular eczema on the forearms, sides of neck and face.

Such cases might be multiplied indefinitely, and I am confident that if you will ransack your memories you will all be able to recall similar occurrences in your own practices. I do not know in what terms modern pathology would describe or explain these phenomena, but I am of opinion that our forefathers had more than an inkling of the truth, when they spoke of a humoral and neural pathology, and I consider that these cases can be explained by the assumption that we have to do with an absorption of morbid products into the blood or lymph stream, and the determination of an outbreak at some other part of the body through the influence of the nervous system. That the nervous system is a factor in the localization of these secondary outbreaks is, I think, proved by the constancy with which the secondary eruption is symmetrical in distribution; and by the fact that clinical experience enables us to foretell the site at which these secondary rashes are likely to occur.

There is a certain attractiveness about these speculations, but I am essentially a practical man, and with your kind permission I pro-

pose to devote the remainder of this lecture to a consideration of some of the principles to be followed in the treatment of skin affections.

REST. One of the most instructive and inspiring books I ever read was Hilton on "Rest and Pain," and I would enter a most urgent plea for the observance of the elementary principle of rest for inflamed skins. For a generalized inflammation of the skin absolute rest in bed is a first essential for successful treatment. But even when the inflammatory condition is a local one, rest for the inflamed part is a necessity. Take, for example, an ordinary outbreak of eczema on such exposed parts of the body as the face, the hands, or other parts that have been exposed to the friction of clothing or other sources of irritation. The hands and face are continually being irritated by the atmosphere; the unrestrained play of the facial muscles keeps the skin of the face in a perpetual state of movement, while coarse and unsuitable clothing, in contact with an inflamed skin, gives it as little rest as a foreign body does to the ocular conjunctiva. Such eczemas will rapidly get well if the skin is protected from irritation by a suitable dressing. The movements of the skin of the face can be to some extent controlled, and its inflamed surface protected by means of a dressing and mask, the preparation of which I shall shortly describe to you.

I am a strong advocate for the dressing of skin affections by nurses specially trained in the work who carry out certain instructions. I am convinced that success in treatment is achieved by this means more rapidly than by the haphazard distribution to patients of pots of ointment or bottles of lotion, and in my clinic at the Liverpool Skin Hospital several hundred dressings are applied each week.

Let us take, for example, a case of acute moist eczema. In the first place, all morbid products are removed with boric, carbolic, bichloride, or cyllin lotions or baths, and this is followed up by the application of boric and starch poultices. These poultices, which consist of boric acid 1 part and starch 7 parts, are used in all cases to remove crusts and clean up septic surfaces. They are clean, cool, and anti-phlogistic applications, and are often beneficial when ointments are contraindicated. To painful varicose ulcers they are very comforting, and often healing.

In dealing with most cases of acute eczema, a time comes when starch and boric poultices must give way to other remedies. It is impossible to lay down any hard and fast rule for one's guidance as to when to make the change. This knowledge can only come from experience; but I think that these poultices may often be continued with advantage for a considerable period when they are used in conjunction with a dusting powder. The dusting powder I specially favor is der-

matol, which, as you know, is the subgallate of bismuth. When dusted on a moist surface, all drying powders have the same defect, viz., they form crusts under which sero-pus accumulates. In order to obviate this, poultices are applied as well; and we get a combination of mutual advantages, the dermatol acting as a drying agent, the poultices preventing it adhering too intimately and damming up secretion; while the film of dermatol protects the skin from becoming too macerated by the poultices.

This method of combining a powder and poultice is an excellent manner of treating coccogenic folliculitis. When I judge that the time has come to change from poultices to ointments or pastes, the procedure is as follows. And here, I may say, that I consider as much depends upon the method in which the remedy is applied as upon the remedy itself; and the dressing I am about to describe has been gradually evolved after much practical experiment:

A piece of ordinary lint, cut to the shape and size of the part to be dressed, is soaked in cold water, wrung out, still leaving a fair proportion of moisture, and laid flat upon a table. The ointment or paste to be used is then spread thinly and evenly with a spatula on the smooth side of the lint. As the lint is wet, it does not absorb much of the grease, and being wet it keeps cool and prevents the grease melting with the heat of the body, and finding the path of least resistance, viz., outwardly. Pastes and ointments after being spread, are always faced with butter-muslin, and this is of the greatest importance. I sometimes say to my students and colleagues that any fool can spread a paste on the skin, but it takes a wise man to remove it without damaging the delicate, newly-formed epidermis.

But the muslin face enables one to peel off the dressing like a banana-skin, and prevents too much of the paste adhering to the integument. Further, it facilitates surface drainage. In virtue of the water they contain, these dressings keep cool for several hours, and as the paste contains starch this tends to set in a slight degree, and thus the dressing acts as a splint, and helps to keep the inflamed parts at rest. This form of dressing, while applicable to all parts of the body, is particularly useful when applied to the face, where it is kept in place by specially knitted nets.

The pastes which I find give the best results are, Lassar's paste, boric paste, or a paste containing from 5 to 10 per cent. of sulphur.

Under such a dressing as I have described, a case of acute eczema progresses rapidly to a cure, and though the dressings are somewhat more expensive than simply giving a box of ointment to the patient

for faulty application at home, the extra expense is well compensated for by seeing the satisfactory results of treatment. It is unwise to give up the application of this dressing too soon. One may, as an adjuvant to the ingredients of the paste, paint the skin, before the dressing is applied, with a 2 per cent, solution of ichthyol in water. This helps to brace up the blood-vessels. Before the dressing is finally abandoned one may, with advantage, intermit its application, leaving the skin exposed, except for a thin smear of paste, or coating of lotion, during the day, and covering it up at night with the complete dressing as before.

You are all sufficiently acquainted with the innate and rebellious tendency of eczema to relapse; indeed, I think we may safely say that no case of eczema ever proceeds uninterruptedly to a cure. We know how the cutting of a tooth, or the onset of menstruation will determine a recrudescence, and if the dressing is suspended too soon, and the irritating effects of the atmosphere or other noxious influence allowed to operate again too early, we have a recrudescence. When it has been found that the dressing may safely be stopped, the skin should be protected either by the application of a little calamine lotion, or ichthyol, 2 per cent. in linimentum calcis, or by smearing on a little paste. One is chary about allowing a patient who has had an acute eczema of the face to resume washing with soap and water, as the dilute solution of caustic alkali, which even the best soaps form, is very prejudicial to the skin, and may precipitate a relapse.

But there are types of eczema in which washing, even with strongly alkaline soaps, is of advantage. This was long ago pointed out by Hebra. I recently had under my care a very rebellious case of eczema of the scalp in a little girl. I succeeded in getting it well on several occasions, but it invariably relapsed, and the relapses were characterized by the copious out-pouring of foul-smelling sero-pus. Not even bichloride compresses sufficed to control the discharge, and destroy the odor but the following combination rapidly cleaned up the scalp and effected a cure.

I had the head rubbed all over with an ointment consisting of equal parts of unguentum sulphuris and sapo mollis; a few minutes afterwards it was thoroughly washed with spiritus saponis kalini, and it was then dressed with a sulphur paste as already described. The result was most gratifying, the odor and discharge speedily cleared up, and the child's scalp is now well. I am inclined to think that sulphur is more potent for the destruction of some forms of micro-organisms which infest the skin than even bichloride of mercury. I have carried out the same method of treatment in other forms of

eczema of a chronic nature, with discharge, and have been equally well pleased with the results. In one case especially, that of an old man with several obstinate patches of eczema over the shin bone, this combination of treatments acted like a charm.

In acute eczema, as you have seen, the line of treatment I would advocate is that of rest and soothing applications. But chronic eczema requires a different course of procedure. For the sclerosed and thickened patches of eczema to which our forefathers used to apply liquor epispasticus, I have found that there is nothing like solid carbon dioxide snow. I shall quote two cases to illustrate the point.

A middle-aged lady had a persistent verrucose and lichenified eczema of the back of the right hand. It had resisted all the remedies which had been tried, ung. picis liquidum, ung. hydrarg. nitratis dilutum, and salicylic plasters among others, but it yielded to four applications of solid CO₂, and the resulting skin was soft, smooth and pliable. Another lady had two chronic patches of psoriasiform eczema over the knee-caps, which were intensely pruriginous. The pruritus disappeared, and the sclerosed tissues melted down after two applications of CO₂ of a minute's duration each. In patches of eczema which have undergone lichenification, you will find CO₂ invaluable alike for subduing the itching and bringing about the resolution of the patch.

It has this specially to commend it, viz., it is infinitely cheaper and more easily procurable than radium, which was recently extolled so highly for this purpose by an eminent dermatologist. It is not always necessary to make a prolonged application of CO₂.

Sometimes merely rubbing the patch over for 10-20 seconds with the cone of snow will suffice; but in this you must be guided by the individual case.

Dermatology was practically an unstudied department of medicine when the first edition of the "British Pharmacopœia" was issued, and in subsequent editions I do not consider that much has been done to elaborate suitable formulæ for the treatment of skin diseases. As a result, dermatologists have had to work out their own. I am an advocate of simplicity in pharmacy. I do not consider anything is to be gained by the poly-pharmacy to which some dermatologists are addicted. To me it savors of drawing the bow at a venture, and shooting in the dark. I ask only for simple remedies; but I stipulate that they shall be properly applied.

There is one ointment in the "British Pharmacopœia" which I have found very valuable, and which I do not think is as generally used as it ought to be. I refer to the Unguentum resinæ. Combined with

sulphur it is an excellent remedy for use in cases of chronic scaling eczema between the toes; and combined with unguentum hydrarg. it is very valuable as an application to ulcers, and to thickened patches of skin that require stimulating treatment. It is a tenacious and adhesive ointment, which I would venture to recommend to those of you who are not acquainted with it.

In bringing my remarks to a close I would thank you for the honor you have done me in inviting me to open your session. I trust that the session before us will be productive of much good work, and that many interesting cases will be shown at the meetings. Such a society as this is of great educational value, for, after all, we are all students still, and in dermatology there are yet vast fields of knowledge to be explored. To me it has been a matter of great regret that those who claim to be in the forefront in the dermatological world have so often obstructed progress by "darkening counsel with words," by absurdities in the nomenclature, and by an assumption of superiority and exclusiveness to which they have no title. Let us never forget that as Newton said of himself, we are only children playing on the beach, and picking up here a pebble and there a pebble, while the great unfathomable ocean of knowledge rolls before us.

ONTARIO MEDICAL LICENTIATES.

The following named candidates have passed the final examination of the College of Physicians and Surgeons of Ontario: Fred Beheimer Bowman, Hamilton; Donald Robert Cameron, Lancaster; Charles William Lloyd Clark, Toronto; James Daniel Collins, London; Andrew Pritchard Davies, Hull, Quebec; Edwin Elliott, Chesaning, Mich.; Susie L. Fotheringham, Toronto; James Douglas Galbraith, Iona Station; Herbert Clegg George, Port Hope; Richard Emerson Guyatt, Binbrook; William Thomas Hand, Bying Inlet; Frank Russell Hassard, Toronto; Joseph Austin Keeley, Arthur; Walter James Kirby, Toronto; John Gagen Lee, Toronto; Arthur Lipman, Kingston; Lily Falardeau Boyington, Mathieson, Port Rowan; Albert Franklin Mavety, Toronto; John Le Roy Mavety, Ottawa; Robert Walter Munro, Uxbridge; John Fleming McCracken, Brussels; Laura Merriam McLaren, Guelph; Russell Leonard Parr, Toronto; John Spurgeon Schram, London; Louis Joseph Sebert, Brooklin, Ont.; Herbert Leo Sims, Ottawa; William Wallace Smith, Guelph; James Douglas Struthers, Port Elgin; Edward Roy Tyrer, Toronto; Benjamin Philip Watson, Toronto; Clarence Randolph Young, Guelph.

CURRENT MEDICAL LITERATURE

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MEDICINE.Under the charge of A. J. MACKENZIE, B.A., M.B., Toronto.
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TREATMENT OF EPILEPSY WITH A SALT FREE DIET.

Ulrich (*Munich Med. Wochenschrift*, Sept. 3) calls attention to the fact established by many experiments of the antagonistic relation of bromide and chloride in the human economy. Deficiency of the chloride increases the action of the bromide. He carried out a bromide cure with salt reduced, or salt free diet, in fifteen epileptics for five years continuously. He gives a complete history of each case with diagrams, etc. He noticed an improvement immediately upon withdrawal of sodium chloride from the diet. In six cases the seizures ceased completely; in the nine others there was marked improvement. Not only did the convulsions disappear, but the psychic condition of the patients became much better. Thus it is shown that individually chosen and methodically applied bromide treatment with salt reduced diet is worth more than all other methods of treatment, and is certainly more satisfactory than bromide treatment with ordinary diet. The reasons for the slow application of this method have been: 1. The diet is so monotonous that after a time it is refused by the patients; 2, the preparation of a salt free diet was so difficult that the culinary art was taxed to its utmost; 3, many physicians have interrupted the cure upon the appearance of symptoms of bromidism. The author describes in detail his experience of fourteen years with acute and chronic bromidism. Sedotablets, containing sodium bromide and chloride simplify the administration of bromide with a reduced salt diet. They give to the food a palatable and stimulating taste. In the past eight months the author has used hundreds of these tablets in 200 cases with excellent results. The tablets together with the bromides are added to the soup. Over a period of three months 100 epileptics were given the same bromide doses and same salt doses and kept under the same external conditions. With the ordinary salt diet these 100 epileptics in three months had 2,184 convulsions. With salt free soup and bromides given in watery solution the number of convulsions was reduced to 1,533. With the use of the tablets and the same doses of bromides the number dropped to 1,000. Judging from his numerous and long applied experiments the author says that a salt free diet covering a period of years is

practicable. The technical difficulties are relieved by the use of sedo-tablets. The fare, usually so monotonous and distasteful, becomes palatable and tasty.—*N. Y. Med. Jour.*

TREATMENT OF GALL STONES.

Ludwig V. Aldor (*Wien. klin. Wochs.*, No. 18, 1912) deals with the treatment of cholelithiasis in the light of the recent investigations as to the cause of the condition. The experimental and pathological investigations of Aschoff and Backmeister have awakened widespread interest. These workers, while they agree with Naunyn in the view that infection of the gall passages is a necessary factor in the production of symptoms of gall stones, differ from him in that they hold that in the majority of cases a non-inflammatory stone formation precedes the inflammatory process. They find also that gall stones may be formed in different ways according to their different composition, and that while the pigmented stones of salts of lime are the result of an infectious inflammatory process, the radiating cholesterin stone which always appears as a solitary stone, is the result exclusively of stagnation of bile without any bacterial infection. They show conclusively that cholesterin may crystalize out of stagnant bile in the absence of bacteria, and that the chief mass of the cholesterin which goes to make up the stone is formed from the bile itself and not from the epithelium of the gall bladder. While prophylactic treatment appears to be more of a hopeful possibility on Aschoff and Backmeister's theory than on Naunyn's, the fact remains that at present we have no successful prophylactic treatment. The present author does not believe that the well-known caustic factors in the production of gall stones act in virtue of their tendency to cause stagnation of bile. In all his large experience he does not know of a case in which he could determine that a sedentary way of life had given rise to stagnation of bile, and he has met with gall stone disease in a strikingly large number of men and women most active in sports. Moreover, he has repeatedly seen cases in which an attack of acute cholecystitis has followed immediately upon active bodily movements. The two main causes which appear to predispose to a first attack are pregnancy and acute infectious diseases, especially gastric and intestinal catarrh. Pregnancy has been usually considered to lead to stagnation of bile from the pressure of the growing uterus, but the author points out that in more than half of his cases the attacks during pregnancy occurred during the first three or four months when pressure on the abdominal organs was insignificant, while conditions

such as high-grade ascites and compression of the gall bladder by tumours do not as a rule give rise to gall stone formation, and therefore mechanical pressure of the growing uterus as a cause of stagnation of bile and the formation of gall stones cannot be accepted. Aschoff and Backmeister's view appears to be the most plausible—namely, that during pregnancy the increased fat metabolism leads to an increased formation and output of cholesterin; and, further, it is probable that during pregnancy the resistance of the gall bladder to infections is diminished. The author has for many years been accustomed to forbid conceptions in women suffering from cholelithiasis until they have been free from symptoms for at least two years. The question of interruption of frequency can only arise in obstinate repeated attacks, when accompanying persistent vomiting prevents not only treatment but feeding. The different forms of acute and chronic gastric and intestinal catarrh play a specially important part in the causation of gall stone disease and of the chronic relapsing course often run by the cases; apart from obvious cases of such catarrh, systematic examination, as by Schmidt's method, shows that objective signs of catarrh are present in more than half the cases, and systematic tests should never be omitted in order that prophylactic treatment directed towards the catarrh may be always undertaken if required. In treatment of the developed disease, the principle to be observed is to aim, not at the removal of the stones, but at bringing about retrogression of the inflammatory processes and latency of the disease. In the treatment of an acute attack, the author gives morphine as early as possible in doses of 0.02 to 0.03 gram combined with 0.001 gram of atropine. The atropine helps to allay the pain and to remove the side-effects of the morphine. For milder attacks suppositories of 0.02 gram pantopon and 0.02 of ext. belladonna are the most convenient remedy. With the removal of the acute symptoms treatment of the underlying inflammatory processes becomes imperative, and neglect of this is, in the author's opinion, the most usual cause of chronicity of the disease. The author has no faith in the action of the so-called cholagogues, and points out that recent knowledge tends to support the view that increased secretion of bile may cause increased stagnation of bile in the gall bladder. Winogradow's investigations show that Carlsbad waters lead to a diminished secretion of bile, and the necessity for complete rest so long as manifest cholelithiasis is present is now a recognized principle at Carlsbad, where its adoption has been followed by diminution in the number of attacks of colic occurring there. A second principle of treatment at Carlsbad is the administration of large amounts of warm fluid, which, whether or not it causes increased secretion, must lead to dilution of bile and practically almost to a washing through of the bile passages.

The author also employs with excellent results injections into the intestines of large quantities of Carlsbad water at a temperature of 45 deg. to 55 deg. C. (113 deg. to 131 deg. F.). If after the injection the patient remains lying down and has warm applications to the abdomen, the injection can be retained without difficulty for as long as from one and a half to two hours, and much is absorbed. The advantages of this treatment are that per rectum a larger quantity of water can be administered than per os, more especially where the gastric condition is unsatisfactory; the tolerance of the intestinal mucous membrane to heat makes it possible to administer the water at a higher temperature per rectum, and a direct attack is made upon the intestinal catarrh. Of drugs, the author considers sodium salicylate the most useful, and also suggests borovertin (hexamethylene tetramine triborate) and ovogal. With regard to diet, the author's opinion is that of Kolisch, that it should be one which "spares" stomach, intestine, and liver. Treatment of cholelithiasis on such lines has proved very successful. The author's opinion as to surgical treatment is that the detailed enumeration of groups of indications for operation are completely illusory, and that the clinical picture in each case is the proper guide. Obstinate pain, resistance of all treatment, jaundice, fever with rigors are, in his opinion, more conclusive as to the need for operation than the special localization in the individual case.—*B. M. J.*, Oct. 12.

SOME CLINICAL OBSERVATIONS ON THE DRUG TREATMENT OF EDEMA.

Miller, in the *Am. Jour. of Med. Sciences*, reports observations on the actions of certain diuretic drugs, digitalis, strophanthin intravenously, theophyllin, and Fischer's solution of crystalline sodium bicarbonate 8 grams and sodium chloride 15 grams to a liter of water, in cases with edema, which he divides into two classes, first cases of chronic interstitial nephritis with edema chiefly cardiac, and, second, cases of renal edema due to acute or chronic nephritis. In the first group the diuretic effects of digitalis and of strophanthin were neither constant nor striking, although relief of dyspnoea was frequently obtained; in cases of this group the diuretic action of theophyllin was marked. In the cases with renal edema digitalis, strophanthin, and the alkaline diuretics were without effect; theophyllin produced diuresis in but two out of five cases; in four of these to which Fischer's solution was given by rectum no diuresis resulted, but in two of these which were given Fischer's solution intravenously the daily output of urine was markedly increased, although no improvement in the general condition could be detected.

THE SOCIAL VALUE OF MEDICINE.

The sociological value of the science and art of medicine are both receiving most attention of late and it is good augury for the future. Profound changes in civilization have resulted from scientific medical discoveries since the middle of the nineteenth century. Their practical application has made it possible for people to live in health and comfort where death was formerly the penalty. Modern cities would melt away in six months were we suddenly to deprive them of improved sanitation. This is not realized by many laymen. The whole framework of modern life is built up of sanitation. The profession's duties are now semi-public, though still primarily concerned with personal service to the patient. It is to be hoped that sociologists and economists the world over will take up the crusade started by Professor Fisher, of Yale University, and emphasized recently by Professor Bardeen for the conservation of life and health—the best of our national resources. There must be no lukewarmness toward a great movement for the betterment of society in medical lines. Public callousness as to human life is slowly melting. They who make public opinion should demand to have all diseases cleared up by organized effort instead of the haphazard work of self-sacrificing private investigators. This is not paternalism or oppression, and does not seriously threaten loss of personal liberty, but merely a common-sense proposition to keep alive as long as life is worth living. What we most want—health—is least considered by governmental agencies. The increasing demand for a governmental department devoted to all public health matters should soon be strong enough to show results, but no action will be taken until the voters are overwhelmingly in its favor. It is a time for talk.—*Interstate Medical Journal*, September, 1912.)

PROBLEMS IN THE TREATMENT OF EXOPHTHALMIC GOITRE

Musser, in the *American Journal of the Medical Sciences* for June, 1912, reached these conclusions:

1. Endemic goitre should not be treated surgically until proper general treatment has been employed for a long period.
2. Surgical intervention should not be advised in cases of goitre associated with functional or organic disturbances of other secretory organs until the associated disorders are removed or relieved.
3. If relapse occurs in spite of general treatment, or in spite of treatment directed against the disorders of other organs, a goitre should then be treated surgically.

4. Medical treatment should be continued for six to twenty-four months. Favorable results should not be promised unless the patient is under the absolute control of a physician, so that treatment by rest, diet, bathing, physical therapy, and so forth may be carried out with precision and continuity.

5. Surgical intervention requires the same rigid and prolonged after-treatment to give permanent results.

Finally, Musser's conviction is that the surgeon does too much and the internist too little in the treatment of goitre.

THE BLOOD PRESSURE IN SCARLET FEVER.

J. D. Rolleston, in the *British Jour. of Children's Diseases*, Oct., 1912, gives the following summary at the conclusion of an article on this subject:

1. In a series of cases of scarlet fever the blood-pressure was found to be subnormal in 25 per cent., the extent and duration of the depression being as a rule in direct relation to the severity of the initial attack.

2. In the great majority the highest readings were found in the first week; there was also a predominance of the lowest readings in the same week, but in a large minority the lowest readings were found in the second week. The normal tension was usually re-established by the fourth week.

3. In the majority of cases the blood-pressure was lower in convalescence than in the acute stage.

4. In 48.4 per cent. of the convalescent cases the readings in the recumbent and erect positions were the same, or the recumbent was higher than the vertical record until convalescence was firmly established (hypotension of effort).

5. With the exception of nephritis complications had little, if any, effect upon the blood-pressure.

6. In only a minority of the nephritis cases—12 out of 33—was the blood-pressure above normal, and the hypertension was never extreme nor of long duration.

7. Sphygmomanometry in scarlet fever, as in most of the other acute diseases, is of little practical importance in the acute stage, but in convalescence may give some indication of the severity of the renal lesion which may be of value in subsequent treatment of the patient.

8. Pronounced arterial hypotension, especially if accompanied by other signs of acute suprarenal insufficiency, should be treated by adrenalin or suprarenal extract.

MODIFIED COW'S MILK AS A SUBSTITUTE FOOD IN INFANT FEEDING.

The subject of modified milk as a substitute food for infant feeding has been studied from many points of view, but two facts are being recognized, more and more, as of prime importance, first, that cow's milk is the most practicable substitute food for infants, and second, that it is just as important that the physical characteristics of cow's milk be modified, as to the proportions of its food elements.

It is along these lines that First Lieut. W. E. Fitch, of the Medical Reserve Corps, United States Army, has written a most practical paper upon the subject of "Modified Cow's Milk as a Substitute Food in Infant Feeding," published in *Pediatrics*, (October, 1912). He studies the comparative chemical composition of healthy woman's milk and cow's milk, the general availability of cow's milk as a substitute food, the physical and chemical differences between cow's milk and woman's milk, and the modification of cow's milk with cereal decoctions.

He emphasizes the necessity of using pure cow's milk, not milk that has been pasteurized or sterilized, but fresh, wholesome milk from a healthy herd. We all recognize the fact that the milk offered for sale in the large cities is not as pure as it should be, but under the active work of the Boards of Health and the medical profession, it is rapidly improving in quality. When procurable, certified milk should always be used.

Dr. Fitch points out the fact that the modification of cow's milk with a cereal is a mechanical one, due to the gelatinized starch, which changes the hard curdling cow's milk into a soft curdling milk like human milk. The casein of cow's milk clots in hard lumpy masses in the infant stomach, the digestive enzymes cannot get at it, and any means whereby we can break up the clot and make it more flocculent will increase the digestibility of the milk; and this can be done by the use of a properly prepared cereal decoction.

Not only do cereals modify the casein of cow's milk, but they, also, through their gelatinized starch, facilitate the digestion of fats, by emulsifying the fats after proteid digestion in the stomach. This is important because, as Holt shows, the tendency to-day is to give a large percentage of fat, and the fats of cow's milk are more difficult to digest than the fats of human milk. With many infants it is often necessary to begin with an amount less than two per cent. of fat, and rarely is it necessary to exceed four per cent. There are numerous healthy infants who cannot even digest four per cent. of fat at any time, and many during the hot weather do better on a reduction to 3 or 3.5 per cent.

Theoretically, the child under six months, because of the deficiency of salivary and pancreatic secretions, is said to be incapable of digesting starches. Practically, this is not true. Nearly every fluid in the human economy has a diastatic ferment and as a matter of fact the very young infant does digest starch. We have seen, too, many babies successfully fed on arrow root to deny this fact. The author quotes Finkelstein, in Berlin, whose experience and general sound judgment are respected by the leading pediatricians of the world, who is emphatic that very young children are capable of digesting starches, and quotes favorable published opinions of Jacobi, Epstein, Schmid, Minard, Keller, Newman, Heubner and others, while our own Kerley has conclusively shown by his experiments at the New York Infant Asylum, that "There is no age limit for cooked starch feeding."

The addition of cereals to cow's milk is not only allowable, but is to be most warmly recommended, not only in older, but also, in very young infants. The advantages of cereal modification, in addition to the readier digestion and gain in weight, are to be found in the finer subdivision of the casein in the stomach, in the emulsification of the fat, in the disappearance of soapy and dyspeptic stools, in the proteid-sparing power afforded by the cereals, and, finally, in the general increment of growth.

This is the experience of the leading pediatricists of the world. Not every infant, by any means, can take cow's milk, or ass's milk, or goat's milk; but starch foods may be added with benefit to cow's milk in the majority of cases, is established beyond all question, experimentally, chemically and clinically.

Dr. Fitch then considers the practical details of cereal modification, and gives formulas for milk mixtures, based on years of successful use. He gives, also, clinical reports upon a number of cases had with these formulas.

The article is an exceedingly clear and practical consideration of the much be-fuddled question of the modification of cow's milk for infant use; and best of all it contains usable information.

PYELITIS IN INFANCY AND CHILDHOOD.

An extremely good account of this affection is given by Still, in a paper printed in the *North of England Clinical Journal* for January, 1912. He remarks that unrecognized acute pyelitis in infancy gives rise to prolonged fever of most severe degree, with profound constitutional disturbance, which may end in death. Recognized and treated

with appropriate drugs, it often subsides in a few days, and, even if symptoms persist for a time, they quickly become less severe, yielding to treatment before long. After reference to the acute cases, with peculiar and almost sudden onset by rigor or convulsion, the extremely misleading cases in which the disease has become chronic are discussed, as when a child is brought to the doctor solely for wasting and fretfulness. Finally, the virtually specific treatment with potassium citrate is described, and emphasis is laid on the paramount necessity of maintaining the constant alkalinity of the urine for at least a week or ten days. A child of three may require 20 grains or more of potassium salt every two hours; an infant, 10 grains every two hours.—*Universal Medical Record*.

SURGERY

UNDER THE CHARGE OF A. H. PERFECT, M.B., SURGEON TO THE
TORONTO WESTERN HOSPITAL

TREATMENT OF INTESTINAL PARESIS AFTER ABDOMINAL SECTION.

Bishop, in the *Practitioner* for July, 1912, after referring to the value of pituitary extract and continuous saline proctoclysis, both in overcoming shock or collapse and in exciting peristalsis, states that, in addition to these, he relies chiefly upon calomel and turpentine in the treatment of intestinal paresis. He gives calomel in one grain doses every hour for six hours by the mouth, followed by a simple soap and water enema, and this is ordinarily sufficient. Should there be no result, however, such as the passage of flatus, which affords evidence of peristalsis, an enema of the following composition is given two hours later:

R Turpentine ½ ounce
Magnesium sulphate 1 ounce
Glycerin 1 ounce
Soap and water, enough to make 1½ pints

M.

It is always well to try the simple enema first, since, in simple cases, the turpentine enema may produce diarrhoea.

INDICATIONS FOR OPERATION IN ACUTE APPENDICITIS.

W. G. Richardson in the *B. M. J.*, Sept. 28, lays down the following rules that should guide one in deciding whether or not to operate

in a given case of appendicitis: If all the symptoms have not improved, or if any one of them has become more marked, the inflammation is not subsiding, and it is necessary to remove the appendix. (1) The patient may look well, the local tenderness may be slight, the temperature may be normal, but if the pulse-rate continues to rise (a fact to be ascertained by repeated countings) the appendix should be removed. (2) The patient may look well, the local tenderness may be slight, the pulse-rate may be slow, but if the temperature has risen the appendix should be removed. (3) The patient may look well and the temperature and pulse may both be normal, but if the local tenderness has increased the appendix should be removed. (4) The local tenderness may be slight, the temperature and pulse may both be normal, but if the patient looks worse the appendix should be removed.

TRUE DENTAL STIGMATA OF SYPHILIS.

These become more easily understood when we remember that hereditary syphilis is a disease already present in utero, and that its malign influence is at hand, as a rule, during the entire developmental period of the unborn infant. This explains why teeth not appearing till the fifth year when perhaps the child has been for several years cured to all intents and purposes of the initial rashes, mucous patches, or what not, may yet show a fundamental defect.

In the order of their diagnostic importance we may mention these changes in the second teeth as follows:

1. Irregular decay—cupping or hollowing, or general “collapse.” This may be suspicious but is too often seen elsewhere to be of great value.
2. Furrows (dents rayes). Certain of these may be cause for serious consideration; the “sulciform erosion” of Parrot belongs in this class.
3. Microdontism. This is emphasized by Fournier. He attributes greatest significance to the “dwarfism” of the incisors. If these be “doll-teeth,” the diagnosis of syphilis is nearly certain to be confirmed by signs of lues elsewhere. In the same class may be placed tuberosities and projections, “Amorphism” of the teeth in the stricter sense (e. g., incisor for canine), and genuine monstrosities fall (though with less certainty of specific relation) under the same heading.
4. Atrophy of the crown. This may occur as far back as the first molar, giving the top of the tooth a shrunken and wrinkled look, comparable to a small tobacco pouch with the strings pulled tight. The

same tooth in the region of the incisors is apt on first emergence to have a narrow, brittle, cutting edge, from which two or more fine spines project. The spines soon break, the cutting edge of the tooth decays somewhat more at the centre than the margins, and we thus finally get the tapering tooth with concave "half-moon" cutting edge, which was first described by Jonathan Hutchinson and which, when occurring in the upper middle incisors is practically pathognomonic of hereditary syphilis.

5. Chalk lines (*sillons blancs*). These are equally characteristic though far more rare. They are described by Fournier as "milky" or "chalky" in color, being, in fact, discolorations and not erosions. They should be found on the two upper front permanent teeth and are as permanent as the teeth themselves. They are horizontal, symmetrical, about 1 mm. in width, and occur about midway between the gum and the crown. Their rarity detracts, unfortunately, from their semeiological value.—*Pediatrics*, Oct., 1912.

THE ABORTIVE TREATMENT OF ACUTE GONORRHEA OF THE MALE URETHRA.

Bodenheimer, in the *New Orleans Medical and Surgical Journal* for June, 1912, reminds us that in November, 1909, E. G. Ballenger, of Atlanta, published an article in the *Therapeutic Gazette* on "A Method of Curing Quickly Beginning Gonorrhoea by Sealing Argyrol in the Urethra." Previous to this, various attempts had been made toward the abortive treatment of this disease. Hume, of New Orleans, has described a treatment with solutions of varying strength of silver nitrate held in the urethra by closing the meatus with the fingers for one, two, and three minutes. While this treatment has no doubt proven efficacious in aborting gonorrhoea, still a very disastrous result, balanitis, etc., with the concomitant suffering, led Bodenheimer to abandon this method very early. Argyrol in strong solutions, when freshly prepared (mark the words *freshly* prepared), seems to possess the gratifying properties of acting (contrary to laboratory experiment) as a gonococicide in acute cases without tissue destruction. Of course, it is not claimed that all cases of gonorrhoea are cured by its use, but a sufficient number of successful results warrants its trial in all cases. Even if the cure is not effected by a few treatments, we have done no injury to the urethra, nor have we retarded the final results, but, on the contrary, the discharge is lessened and the patient is thereby the more encouraged.

The method of Ballenger is as follows: The glans penis and prepuce are well washed with soap and water. The patient then reclines upon an operating table or chair and a clean towel is placed around the penis to protect the clothing. A piece of cotton saturated with ten per cent. cocaine solution is placed on the meatus for a few minutes to prevent the pain following the application of collodion. About twenty drops of 5 to 8 per cent, argyrol are injected into the urethra with a blunt-pointed syringe. The thumb and forefingers holding the end of the penis, the syringe is withdrawn and the meatus closed by pressing the lips together. The parts are then dried, and a small amount of collodion is applied over the meatus as its sides are pressed together. The patient is instructed not to remove the collodion until it is necessary to urinate. Two treatments are recommended daily for two or three days, and one treatment daily for one or more days according to the condition.

Bodenheimer has departed somewhat from the original idea. He first examines the discharge under the microscope, and if no cells from the deeper layers of the mucous membrane are present, or, better still, if the discharge is less than forty-eight hours old, showing an absence of deep infiltration, he is assured of success. The anterior urethra is irrigated with a large quantity of warm sterile water or a solution of bicarbonate of soda, the bladder being previously emptied. A half-drachm of 20 per cent. solution of argyrol is injected into the urethra, the meatus is sealed with collodion and a small piece of cotton, or by means of small adhesive strips. The patient is instructed to retain the solution for two hours, or longer if possible. Four hours later a second treatment is made with solution of argyrol of the same strength. The next morning, in a majority of cases that are aborted, there is only a thin mucous discharge, which may or may not contain gonococci. For safety, a 10 per cent. solution is now injected. After the third treatment, if the gonococci can still be demonstrated in the secretion from the urethra, it is useless to continue the same treatment. If the gonococci cannot be demonstrated, we may feel assured that the object is accomplished, although a slight mucoid secretion may continue. It is best to leave that alone, as continued treatment may produce irritation, and if left alone the discharge will cease of its own accord. Sometimes, to satisfy the patient, a mild bicarbonate irrigation of the anterior urethra can do no harm.

Bodenheimer has treated thirty-four cases by this method. Two cases were given only one injection, with prompt results; the remainder were given two and three. He has experienced untoward effects in only two cases. The one had been previously treated by this method successfully about eight months previously. The second time that he

presented himself for treatment he suffered from retention of urine, which necessitated catheterization, and which was followed by a posterior urethritis, requiring a number of weeks of treatment. The other case presented himself with a history of thirty-six hours' discharge; intracellular gonococci and cells of the deeper structure of the mucous membrane present. No gonococci demonstrated after two treatments; no secretion after the fourth day; developed orchitis on fifth day. Subsequent history developed the fact that the case was an exacerbation of an old chronic condition.—*Therapeutic Gazette*, Oct. 15th.

CARCINOMA OF THE GASTROINTESTINAL TRACT.

William J. Mayo (*The Journal-Lancet*, Jan. 15, 1912) states that from October 1, 1897, to November 1, 1911, 1,264 cases of carcinoma of the gastrointestinal tract were operated on at St. Mary's Hospital. Of this number, 863 involved the stomach, 14 the small intestine, 219 the large intestine, and 168 the rectum. These statistics show that carcinomata of the stomach form more than two-thirds of all the carcinomata of the gastrointestinal tract. Carcinomata of the large intestine come next in relative order, and the rectum follows with three-fourths as many as the colon.

In the total number (863) of carcinomata of the stomach, it was possible to do the radical operation in only 307, or 35.5 per cent. of the cases. In the group of carcinomata of the small intestine, five, or 35.7 per cent., of the patients were submitted to radical operation; in carcinomata of the large intestine and rectum, nearly three-fourths of the patients were operated on radically.

These data would indicate that the stomach is the organ most frequently affected with cancer, and that only one-third of the patients submitted to operation are operated on with any prospect of cure. The remainder are subjected to palliative operations, such as gastrojejunostomy and gastrostomy, or to explorations.

The number of carcinomata of the small intestine is curiously small in comparison with the associated organs. The small intestine is the most primitive part of the gastrointestinal tract, and it is reasonable to suppose that its longer heredity makes it more resistant to malignancy than the stomach and large intestine, which organs were added later in the course of development.

In studying the question of permanent cures following resections of the gastrointestinal tract, we find that of the total number of cases of cancer of the stomach submitted to radical operation, more than 23 per

cent. of the patients who recovered from the operation and whose present condition has been ascertained are alive and well over five years. Fifty per cent. of patients submitted to radical operation for cancer of the large intestine, and 30 per cent. with cancer of the rectum who recovered from operation and who have been traced, are alive and well over five years. Every case dying within the five-year period is counted as a death from the disease, which is not fair to the statistics, as the normal death-rate during the five-year period would approximate 8 per cent.

Taken as a whole, these statistics indicate that carcinomata of the gastrointestinal tract which are sufficiently localized to justify radical operation give results fully as good as carcinomata in other parts of the body. The pessimism of the medical profession regarding malignant disease of the gastrointestinal tract is not justified by the facts. It is the failure to make diagnosis during the stage when the disease is still localized, and not any peculiar malignant tendencies of the process itself, which accounts for the fatal character of cancer in this region.

The most important question in connection with the radical cure of carcinomata concerns the lymphatics, and the proof of this assertion cannot be better shown than in the results as to permanent cure after resection of the various organs of the gastrointestinal tract. The stomach is highly supplied with lymphatics and gives the smallest percentage of radical cures. The large intestine, having the least lymphatics, gives the highest percentage of radical cures, and the rectum, with a moderate supply of lymphatics, gives better results than the stomach, but less favorable results than the large intestine.

If one were to drop a line vertically from the cardiac orifice across the greater curvature, the stomach would be divided into two unequal parts; the larger part, composed of the dome and fundus, has but a scanty supply of lymphatics, which pass to the left to the glands lying in the splenic area, and to the cardiac glands about the esophagus. The smaller pyloric segment has nine-tenths of all the lymphatics of the stomach. They are divided into four groups:

The glands along the lesser curvature lying in the wall of the stomach itself and draining into the glands about the celiac axis.

Those along the greater curvature which lie with the gastropiploic vessels. In this region the lymphatic current passes from left to right toward the pylorus.

That important group lying about the pylorus, the first portion of the duodenum, and the head of the pancreas.

A few glands which pass with the superior pyloric vessels.

The situation of these four groups of glands is definitely deter-

mined by the four blood-vessels, so that early ligation of the gastric, gastroduodenal, superior pyloric, and gastroepiploic vessels not only permits bloodless operation, but enables radical removal of the tributary lymphatics. Unfortunately, this glandular scheme of lymphatic drainage may be disturbed, first, because of the fact that lymphatic drainage may be irregular, passing by some glands and emptying into more distant ones; or, secondly, by blockage of a main lymphatic trunk, and the lymph flow may be turned into by-paths leading into the preaortic glands. When the disease is advanced, both of these conditions may be found to exist.

The mortality following resections of the stomach is steadily diminishing. It is now from five to eight per cent., and depends more upon the patient's condition as the time of operation than upon the operation itself. Taking into consideration that, at the present time, the initial recoveries are well above 90 per cent., and that the patients who recover get a chance of cure somewhat better than 25 per cent., it certainly seems incumbent upon the medical profession to make a more determined effort toward an early diagnosis.

It may be stated as an axiom that cancer as cancer in the stomach does not produce symptoms upon which an early diagnosis can be made. Only when its situation makes a palpable tumor-mass or produces obstruction can a probable diagnosis be established.

Primary carcinomata of the small intestine are exceedingly rare, and but few cases have come under their observation. Of the 14 cases reported in this series, five were in the duodenum, and none of them were operable. In two cases, the duodenojejunal angle was involved, and both were inoperable. Of the remaining nine cases, four involved the jejunum, and five the ileum. In two of the five cases submitted to excision, the disease had begun in a pedunculated adenoma or papilloma, and in both intussusception was present.

The large intestine is a most interesting field for study. Morphologically, it begins at the ileocecal orifice, and ends at the rectum. Embryologically and physiologically, it is composed of two entirely separate organs. Taking the gastrointestinal tract as a whole, we find that the celiac axis supplies those organs derived from the foregut—that is, the stomach, liver, pancreas, and duodenum, down to the common duct. The superior mesenteric artery supplies all of these organs which are derived from the midgut and which are instrumental in assimilation and absorption. They are composed of the duodenum beyond the common duct, the jejunum, ileum, cecum, and ascending and transverse colon as far as the splenic flexure. In these organs which receive their blood-supply from the superior mesenteric artery, the normal peristalsis is onward. Ninety per cent. of the solids are picked

up in the small intestines, while 50 per cent. of the liquids and 10 per cent. of the solids are absorbed in the cecum and colon proximal to the splenic flexure. The inferior mesenteric artery supplies the derivatives of the hindgut, and the normal movement, excepting during defecation, is antiperistaltic. By means of mucous currents, the distal colon is intermittently engaged in passing material for further elaboration and assimilation backward into the area of midgut absorption. Under normal conditions the contents of the large intestine, as far as the splenic flexure, are fluid or semisolid. The descending colon is usually empty, acting as a passageway only into the sigmoid, where the feces become more solid in character.

Tumors of the caecum and colon proximal to the splenic flexure are sometimes accompanied by changes in metabolism; the nutrition of the patient often suffers, and profound anaemia may result. Tumors of the descending colon and sigmoid are seldom accompanied by changes in nutrition, and it is the mechanical effects of the tumor which first call attention to the patient's condition.

The surgical treatment of tumors of the large intestine is greatly simplified by the study of its embryology and anatomy. The large intestine is formed on the left side of the abdomen. The head of the colon begins to rotate at about the eleventh week. As the rotation progresses the colon carries with it its blood-vessels, lymphatics, and sympathetic ganglia; and when its normal situation is finally reached, the outer layer of mesenteric attachment is merely a peritoneal adhesion, the division of which, at any situation, enables that part of the colon to be turned upon its long inner mesenteric leaf, which contains all of the important structures.

Generally speaking, malignant disease in any part of the large intestine proximal to the middle of the transverse colon is treated best by removal of all the large intestine up to and including the growth, doing lateral ileocolostomy. Beyond this point resection of the colon in one or two stages is preferred.

The lymphatics of the large intestine lie with the blood-vessels, and usually are easily removed. Many times when the lymphatics are enlarged, microscopic examination shows it to be the result of infection, and not of carcinomata. In the early stage of the disease proper mobilization of the large intestine, permitting one to secure the blood-supply with careful and accurate removal of the glands, gives a prospect of cure which justifies the most extensive operations. It sometimes happens that one or more loops of the small intestine may have become adherent and involved secondarily with the tumor mass. As a rule this takes place along the periphery of the bowel. On a number of occasions Mayo has first resected a loop of the small intestine; twice he has

removed two separate loops, and in one instance three loops, removing the primary growth in the colon with the portions of the small intestine attached. In four cases he removed a portion of the bladder, and in three cases the uterus was coincidentally removed. The ultimate results in these cases of multiple resections have been surprisingly good; several such patients are alive and well more than five years.

The radical cure for carcinomata of the rectum has a bad name in surgery, which is due more to inefficient methods of operation and purely sentimental attempts to conserve function than to the character and location of the disease. A permanent colostomy in the middle of the left rectus muscle should be made as the primary operation in the majority of cases of carcinomata of the ampulla of the rectum, and at a second operation, after the lower segment has been properly cleansed, the entire rectum should be removed from behind. This method offers the patient moderate control, with the best chance of a permanent cure.

High rectal and rectosigmoid growths will often be best approached through the abdomen or by the combined method. The perineal operation should be reserved for growths in the anal region.

The frequency with which secondary carcinomata of the liver, peritoneum, or inoperable glandular involvement occur makes it imperative in all cases of carcinomata of the rectum and rectosigmoid to first open and thoroughly explore the abdomen to see whether the case is one which should be submitted to operation; and if advisable a permanent colostomy can be made at this time.

The diagnosis of cancer of the rectum is so easy that one wonders why so many patients come for consultation without diagnosis, and why nearly 15 per cent. of them have been recently operated on for supposed hemorrhoids. It is a simple matter to examine the rectum digitally, and it requires but little skill to use a proctoscope or sigmoidoscope. Neglect of these simple methods of examination causes not only disaster to the patient, but injury to the practitioner's reputation.

Lack of examination, rather than lack of knowledge, is responsible for most mistakes in diagnosis.

COLLES' FRACTURE.

A very valuable point emphasized by J. B. Murphy in the treatment of Colles' fracture is that before attempting reduction pressure should be applied *in the direction in which the original force acted in producing the fracture*. This helps to unlock any impaction that may be present and the reduction may then be carried out by the usual method.

SURGICAL TREATMENT OF POLIOMYELITIS.

In an article read before the German Society of Orthopedic Surgery, April, 1912, Professor Lange (*Munch. med. Wochensch.*, No. 17, 1912) advises the application of a plaster-of-Paris bandage during the first stage, which is often followed by subsidence of pain. To promote regeneration of the paralyzed muscles electricity and massage, as well as heat, were found useful, while for the prevention of contractures Lange prefers a light celluloid gauze splint. If contractures have resulted they are removed by tenotomy and redressement. Later tendon transplantation is usually necessary, but nerve transplantation is not indicated in this disease. In general, tendon transplantation is not to be undertaken before the fourth year. If possible, the entire muscle is transplanted, the periosteal method being most advantageous because securing better fixation. Early resot to movements is important, except in cases where fixation is necessary. Professor Vulpius, who also reported his experiences at the same meeting, stated that the minimum time at which tendon transplantation can be performed is the first year. In the shoulder-joint more is to be expected from arthrodesis than from tendon transplantation, while conditions are reversed in the elbow-joint. Plastic work is desirable in the hip-joint, and at the knee transplantation gives good results. Though the social state of the patient should be the deciding factor in considering the mode of operation on the foot—whether tendon transplantation or arthrodesis—the latter is often preferable because requiring less time. Unlike Lange, Vulpius considers the periosteal method the exceptional one.

ON THE LATE RESULTS OF OPERATIONS FOR PERFORATION OF GASTRIC OR DUODENAL ULCER.

Gustav Petren, Lund, Sweden, *Surgery, Gynecology and Obstetrics*, June, 1912, reports the results of operation for perforated gastric or duodenal ulcer with acute peritonitis in 135 cases. These are classified into two groups, viz., 1. Cases with suture of the perforation, and 2, cases without suture of the perforation. The results in the first group of cases were the most favorable, as two-thirds of the cases were cured. After investigations show about half of this number in good health, free from gastric symptoms. Where the history has been of a long standing ulcer, operation for the perforation gives a dubious prognosis for the future. In cases with acute perforation and no previous ulcer symptoms the operation gives a more permanent cure. Gastro-enteros-

tomy is not an essential help in the cure of perforated gastric abdominal ulcer. The suture of the perforation is the most important step. Patients thus operated upon should, however, continue to be treated like other cases of ulcer after a successful operation for the perforation, i. e., gastro-enterostomy and resection can be done in proper indications at some later period.—*American Journal of Surgery*.

EXPERIMENTAL RESEARCH IN SYPHILIS.

H. Noguchi New York (*Journal A. M. A.*, April 20), reviews the history of the researches for the discovery of the casual organisms of in the *pallida* fixation test a gauge of the defensive activity of the infected host." The article concludes with a record of cases used in a demonstration of the *pallida* test in Chicago, and a bibliography. syphilis and the work which has been done with the *Spirochaeta pallida* since its discovery by Schaudinn and Hoffmann. He claims that so far he alone has obtained pure cultures of this germ and points out how those claimed by Mühlens and Hoffman differ from the true *pallida*. He describes his method of obtaining it from the orchitis material of rabbits and from human syphilitic lesions and describes the points of difference between it and the other spirochetes that more or less closely resemble it. In identifying a cultivated spirochete with *Spirochaeta pallida* he says the following conditions must be fulfilled: 1. The spirochete must be morphologically correct. 2. It must not produce a putrefactive odor. 3. It must not grow without the addition of fresh tissue. 4. It must bind complement with the immune serum (rabbit is preferred) produced by means of repeated injections of the tissue *pallida* (to be obtained from syphilitic orchitis). 5. It must give an allergic reaction in certain cases of syphilis. 6. It must be pathogenic. This last is highly important, but we cannot exclude the possibility of an attenuated, non-pathogenic *pallida*. Each of these points is taken up and discussed and Noguchi goes at some length into the question of the allergic reaction. This has been sought by a number of investigators, but they have been much handicapped by the lack of a pure *pallida* extract. After obtaining the pure cultures of several strains of the *pallida* in 1910 and 1911 he commenced experimental work on rabbits to ascertain if they could not be made allergic to the extract of pure *pallida*. By repeated intravenous injections of the *pallida* antigen into rabbits for several months, and then giving them a month's rest, he tested them with the extract which he calls "luetin," given intradermally. A proper control was provided. They all reacted with marked inflammation, some leading to pustulation in several days. No normal

rabbit reacted. At the suggestion of Professor Welch he also tested human individuals, and gives a tabulated statement of the results. The luetin has been recently distributed to certain hospitals in this country and Europe, and the first report is by Cohen, who is applying it to ophthalmologic conditions, and the second by Orienman-Robinson, who applied the reaction to dermatologic conditions. Both confirm the specificity of the test. The reactions are described in detail. The final estimation of the test awaits future investigations by a larger number of investigators, but in the meanwhile Noguchi considers it fairly accurate to say that we have in it a specific test for syphilis. It appears that the allergic condition of the skin persists as long as the infecting agent still survives somewhere in the body and it requires a most energetic treatment to remove it. It will be of great importance, he thinks, if it can be found of use in determining a cure. The question as to the role of *Spirochaeta pallida* in the Wasserman reaction is taken up and his experiments are described. He thinks it has been decided that the Wassermann reaction is caused by the lipotropic substances but not by the antibodies which combine specifically with a *pallida* antigen; that the fixation produced by the culture *pallida* antigen with certain syphilitic serums is caused by the specific antibodies contained in the latter and may constitute a specific diagnostic method for syphilis; that the fixation caused by the testicular extracts behaves like the culture *pallida* extract in the majority of cases, but when the serums (syphilitic or leprous) contain abundant lipotropic substances it may give a Wassermann reaction as well, which is not the case with the culture *pallida* antigen; and, finally, that in the serum of rabbits with active syphilitic orchitis there is no indication of the presence of a sufficient amount of the antibodies for the *pallida antigen*, although it gives a strong Wassermann reaction. It remains to be seen, he says, when and under what conditions the specific antibodies for the *pallida* will be most freely formed in syphilitics. He thinks it not improbable that there may be cases that respaond to the infection with such a production of antibodies as to reduce it to a harmless latency or even to destroy the *pallida*. If this is so it would be of prognostic importance to check a patient from the beginning of infection with the *pallida* antigen and determine his resistance against the disease. "We have in the Wassermann reaction a fair measure of activity of the infecting agent."

Post Office Inspectors and United States marshals in seventy-two leading cities of the country began recently practically simultaneous raids for the arrest of 173 persons charged with using the mails to promote criminal medical practices or the sale of drugs and instruments used for illegal purposes.

GYNÆCOLOGY

UNDER THE CHARGE OF S. M. HAY, M.D., C.M., GYNÆCOLOGIST TO THE
TORONTO WESTERN HOSPITAL.

PUERPERAL TETANUS.

Tetanus in the puerpera furnishes a special opportunity for the study of this still mysterious disease. The difficulties attendant upon infection in many puerperal cases, the differences in findings, the extreme mortality of the type, all demand special consideration. In a paper read recently before a Strassburg medical society (*Deutsche medizinische Wochenschrift*, September 19) Freund reported three fatal cases of puerperal tetanus. One followed manual delivery, the others were abortions induced by introducing familiar objects, one wooden, into the uterine cavity. In none of these cases was there found any trace of a bacillus, either in the uterine secretions, the dust, or garden soil. Animal antitoxin had absolutely no favorable influence, while opiates gave temporary relief. In this connection Freund cited a case of tetanus neonatorum due apparently to the application of wood dust in the umbilical stump. In this case, in contrast to the preceding, the tetanus germ was found in both the secretion of the navel and in the wood dust. The paper gave occasion for considerable comment. One member of the society cited a case of inversion of the rule that prolonged incubation means a more favorable prognosis. In a case of only two days' incubation period, recovery promptly followed antitoxin exhibition. Unusual was the fact that in this case injury of the knee was first succeeded by stiffness of the corresponding leg. Only later did tetanus proper follow. Ledderhose is so impressed with the frequency of splinters and other wooden articles in causing lockjaw that he always insists on a prophylactic injection of antitoxin in wounds of this type.—*Med. Record*, Oct. 19.

VACCINES IN PUERPERAL SEPSIS.

Rowlette (*Journal of Obstetrics and Gynecology of the British Empire*, June, 1912) reports a series of cases of puerperal sepsis treated by vaccines. His method of making a bacteriologic diagnosis, which is first necessary, is that of Döderlein. He introduces into the uterus through a speculum, a sterile bent glass tube and applies suction by means of a syringe. The tube is then withdrawn, sealed, and sent to

the laboratory for diagnosis. Smears are first examined, and if either of staphylococci or streptococci are found, the case is treated as one either of staphylococcal or streptococcal infection. The diagnosis is confirmed by cultures. In many cases only diplococci were found in the smear. This is a great hindrance to diagnosis. However, only cases of streptococcal and staphylococcal infection required vaccine treatment. Cases in which bacilli are found are usually of mild sapremia and clear up after douching.

With the exception of a few early cases, the vaccines employed were obtained from puerperal infections in the hospitals. As soon as bacteriologic diagnosis was made the vaccine was administered. In judging the effect of inoculation, attention is directed to temperature and pulse particularly. In many cases the temperature falls two or three degrees in twelve to twenty-four hours, with a corresponding drop in pulse rate. Other symptoms of sepsis also tend to diminish. If this result is obtained, the vaccine is considered efficient; if not a special vaccine is made, if the material is available. The second dose is given forty-eight hours after the first, and is repeated in similar intervals until one dose is given subsequent to the temperature becoming normal. The treatment, however, should never be routine, and should be guided by the symptoms. The initial dose is five million in streptococcal and twenty or twenty-five million cocci in staphylococcal infections. The injections are given in arm under skin with an ordinary hypodermic needle. The local reaction is mild and consists of a slight redness and swelling. A distinct rise of temperature or feeling of malaise is considered to indicate that the dose has been excessive.

From a series of thirty-one cases of streptococcal infection, eight cases of staphylococcal infection and fifteen cases in which no bacteriological diagnosis was made but the vaccine empirically, he draws the following conclusions:

- (1) Vaccines, given in small doses, do no harm.
 - (2) In the majority of cases they do good.
 - (3) In many cases they produce immediate and remarkable improvement.
 - (4) Autogenous are more trustworthy than stock vaccines, and sometimes succeed rapidly where the latter fail.
 - (5) To get the best results accurate bacteriologic diagnosis is necessary.
 - (6) Antistreptococcal serum given simultaneously increases the effect of the streptococcal vaccine.
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RELATION OF GONORRHEA TO PELVIC DISEASE.

G. W. Kaan (*Boston Med. Surg. Jour.*, 1912, clxvi, 556) says that statements which claim that gonococcus infection in woman is responsible for 60 per cent, or more of the operations for pelvic inflammation are decided exaggerations and should be modified in the interest of truth and proper teaching. The statement that 45 per cent. of the cases of sterility are due to gonorrhoea is also discredited by the reports of Bumm and Erb. The hospital practice of the best gynecologists of Boston indicate that the ratio of all operations upon the Fallopian tubes are only about 5 per cent. to 16 per cent. of all gynecological operations; and a deduction must be made from this to arrive at the proportion which is due to the gonococcus only. The proportion of all operations upon the tubes to all abdominal operations (excluding appendectomies and those not upon the sexual organs) varies from 19 per cent. to 37 per cent. and up to 50 per cent. in the case of the Boston City Hospital. The proportion of gonorrheal to other pelvic inflammatory disease it is not possible to estimate from the hospital reports; but Gebhard's figures of bacterial examinations shows about 22 per cent. of proven gonorrheal infection.—*American Journal of Obs. and Dis. of Women and Child.*, Aug., 1912.

MYOMA AND STERILITY.

Troell has been examining the records in regard to myoma at the gynecologic clinic at Lund, Sweden, and states that in the twenty-two obstetric and 304 other cases of uterine myoma the proportion of nulliparæ was respectively 68.1 and 61.1 per cent. The more childbirths, the less seems to be the tendency to myoma production. He found myomas far more prevalent among the unmarried.

MYOMA IN UTERINE CERVIX.

Balaban gives an illustrated description of four cases and cites fifty-four articles on the subject from the literature. Treatment, he says, can only be operative, and the surgeon must be prepared for hemorrhage from the veins in the wall of the bladder and for complications on the part of the rectum and ureters, cervical myomas requiring greater technical skill for their removal than myomas of the body of the uterus.—*The Journal of the American Medical Assn.*, July 6, 1912.

AN UNFAILING METHOD FOR DIAGNOSING OR EXCLUDING
THE EXISTENCE OF ETOPIC GESTATION.

Samuel W. Bandler, *The Archives of Diagnosis*, April, 1912, resorts to the posterior and preferably to the anterior colpo-cœliotomy to aid him in diagnosing ectopic gestation in difficult and doubtful cases where it is important to exclude such a condition. In five out of thirteen cases of ectopic gestation operated upon by him since last October he employed this method. But in these cases it was not even necessary to open the peritoneal cavity to make the diagnosis, as the dark blue shimmer back of the exposed vesico-uterine fold of peritoneum is very characteristic and as typical as the bluish discoloration seen underneath the peritoneum as exposed by laparotomy. The operation may then be completed by the vaginal route or the opening be closed and the operation concluded by laparotomy according to conditions found.

CORPUS LUTEUM EXTRACT.

C. F. Burman, Baltimore (*Journal A. M. A.*, August 31), after reviewing the function of the internal secretion of the ovaries and the use of the extract, gives his personal experience in experimenting with the extract of the corpus luteum of the pig. Besides the experiments with dogs, which accorded with those of other observers, he tells his experience with the use of the extract in human patients and concludes his paper with the following summary: "1. When given by the mouth corpus luteum tissue of the sow, even in large doses, has little or no toxic effect on women. 2. It affords us a valuable means of controlling the nervous symptoms which occur in so many patients at the time of the natural or artificial menopause, giving relief to most sufferers. 3. It is a valuable remedy in treating patients with insufficient internal ovarian secretion during the menstrual life. This class constitutes a very large number of women. 4. It is an excellent remedy to induce menstruation in young women suffering from functional amenorrhœa. Those who are fat, in addition to regaining menstruation, usually, but not always, lose weight. 5. There would seem to be a possibility of for the use of drug in cases of unexplained sterility and repeated abortions. 6. Extensive use should be made of corpora lutea from the cow, sheep and other animals to determine if these extracts work more successfully than those of the sow. The ideal luteum tissue for any animal is doubtless tissue from its own species, but this cannot be obtained for the woman. 7. So far as it goes, my work strengthens my conviction that Fraenkel is correct in attributing menstruation to

the internal secretion of the corpus luteum. 8. From clinical experiences I am inclined to believe that the corpus luteum possesses different properties due to different chemicals. One of these substances causes hyperemia of the pelvic organs, another relieves nervous symptoms of a toxic character, as at the menopause. It would seem that this product acts as a neutralizer, ince even large doses of the luteum cause no disturbance of a toxic nature. On the other hand, the toxic results of intravenous injections of the luteum extracts, as well as the nervous phenomena of menstruation, show that there must also be some toxic material present which is not absorbed from the stomach or intestines. All of thee various substances may in the future be separated."

THE ROENTGEN RAY TREATMENT OF MYOMA.

Miller states in the *Berliner Klinische Wochenschrift*, as a result of his experience with the X-ray in the treatment of myoma of the uterus he has arrived at the following conclusions: 1. Myomata, which do not cause great flowing and weakness, require no treatment and should not receive the X-ray. They need, however, constant observation as to their growth. 2. Rapid growth of the myoma is a contraindication for the use of the X-ray. Such myomata need, unless there is a demonstrable heart lesion, operation. 3. Sub-mucous myomata are not suited for X-ray treatment. 4. In young women such myomata, which cause considerable flowing, should be operated on, and only in the exceptional case be treated with the X-ray. The aim of the X-ray treatment is to bring about a premature climacteric, and operation permits the preservation of the ovaries. 5. Myomata with a disease of the adnexa should receive the X-ray treatment only with the greatest caution. When severe inflammation is present it is contra-indicated. 6. Favorable indications for the X-ray treatment are the interstitial myomata in women over fifty, where there is no strong indication for operative intervention.

TREATMENT OF PROLAPSUS UTERI.

M. Potocki (*Ann. de Gyn. et d'Obst.*, January, 1912) gives, as the chief cause of prolapsus uteri, child-bearing. Cases in virgins are not regarded as of much importance. There are several factors connected with pregnancy, labor, and the puerperium that cause prolapsus uteri, aside from perineal tears. The relaxation and softening of the tissues tends to allow them to be dragged down during the early months of

pregnancy. At the time of labor if delivery is attempted before dilatation is complete the presenting part tears the unrelaxed cervix and surrounding tissues. Also the anterior portion of the cervix may be pushed down before the head, and tear away from the vesical supports while the posterior lip tears way from the rectum. In order to prevent these occurrences the author advises pushing the soft parts upward between pains and retaining them during a pain, when they will slip up. In operative deliveries the author thinks it well to insure perfect dilatation of the cervix by the previous use of a rubber balloon, which reduces to a minimum the resistance of the soft parts. After delivery all tears should be repaired with deep stitches taking in the torn sphincter muscles, and the author thinks it unwise to allow the patient to be up before the third week, since the large, uninvolved uterus tends to prolapse. Pessaries are not only harmful, but, when properly fitted, are of the greatest service in giving comfort and supporting the uterus when operation is refused.—*Am. Jour. of Obs. and Dis. of Wom. and Child*, May 1, 1912.

OPHTHALMOLOGY

UNDER THE CHARGE OF F. C. TRIBILCOCK, M.D.
Ophthalmologist to the Toronto Western Hospital.

ORBITAL CELLULITIS.

Orbital cellulitis from disease of the superior maxilla in children is the subject of a paper by W. C. Posey, Philadelphia, (*Journal A. M. A.*, September, 21, Part 2), who endeavors to elucidate the various conditions which may act as causes of this affection. He first reports two cases due to inflammation of the superior maxillary bone; an osteomyelitis probably secondary to a general blood infection. He discusses the automatic conditions of the development of the superior maxillary, quoting from Logan Turner and pointing out how easily infection of the alveolar border may take place during the eruption of the teeth and be followed by general inflammation of the entire bone. Orbital cellulitis may also arise from traumatism. A very slight one may be effective in conditions of lowered vitality of the part and this possibility must also be considered. In tuberculous subjects caries is specially liable to follow contusion of the orbit and he does not agree with those who consider the maxillary sinus too small at early ages to be the site of serious inflammatory processes. The recent studies of Onodi and the many clinical observations by trustworthy observers at-

test that such inflammation may occur and be a cause of orbital disease. It has long been matter of clinical experience that orbital cellulitis may follow infectious disease, such as scarlet fever, measles, typhoid, tonsillitis, etc., and there is strong evidence that in many of these cases the primary involvement was in the antrum. Much information may be derived from an X-ray study of sinus conditions in children and in the diagnosis of disease of these cavities in adults. In all suspected cases of primary sinusitis care should be exercised to exclude the presence of a foreign body in the nose and intranasal syphilis. Syphilis of the superior maxillary, however, is rare in children and when syphilitic periostitis does affect the orbit the diagnosis is rendered easy by the evidence of periostitis elsewhere in the body. Other factors causing orbital cellulitis may be found in suppurating dacryocystitis and erysipelas in very young infants from birth wounds. Posey agrees with Birch-Hirschfeld in considering orbital periostitis from all causes comparatively rare in children. Treatment consists in early evacuation of the pus and establishment of proper drainage, through the body of the superior maxilla if it also is the site of disease. In making the incision the position of the globe should be taken into account as well as the limitations of its movements. The point of election for incision is the lower outer angle of the orbit, the knife penetrating the tissue with the blade in a horizontal direction and as near the bone as possible. Following the knife a grooved director should be inserted and moved all around to open up additional pockets of pus and to determine the condition of the periosteum and underlying bone. Where the diagnosis has been made early simple incision may suffice. Later it may be necessary to remove sequestra. Special attention should be directed to the alveolar border and all loose teeth should be removed. If the antrum is involved early trephining should be tried and proper rhinologic treatment be given. After evacuating pus drainage should be established and the dressing changed daily. If desirable to wash the wound with injections it should be done cautiously to avoid infiltrating the orbital tissues. Prompt healing may follow early incision, and even with necrosis the bone will regenerate if the periosteum is saved. If deformities of the lids occur they should be corrected by plastic operations some months after all acute symptoms have subsided. The article is illustrated.

A HOSPITAL SYMPOSIUM.

In the *Journal of the American Medical Association* for 9th November, 1912, there appeared a symposium of papers on several phases of hospital work. The abstracts of these articles, as prepared for the J. A. M. A., are as follows:

THE MODERN HOSPITAL.

W. B. Russ, San Antonio, Texas, speaks of the hospital as it has been in the past and the hospital ideals of the present. With the advances in medicine, he says, there has come a time in which all actually sick persons must be taken to the hospital if they are to receive the care and treatment that the science of medicine is now able to provide. With the perfection of construction and equipment of hospitals there has come into existence a new profession which we have come to call hospital administration, and he reviews the steps which led to this. The hospital administrator must be versed in the principles of the science of medicine "in order that he may co-ordinate the activities of hospital and its varied facilities with the scientific work of the physicians in charge of the patient." There are not many, he says, of the fully equipped and practically trained men for this position, but their number is growing and the demand for their services is great. If the Section on Hospitals of the American Medical Association is to achieve anything, he says, its greatest field of usefulness will be in the forwarding of the true relations between the medical practitioner and the hospital administration.

HOSPITAL WORK.

W. H. Welch, Baltimore, under the heading "The Hospital and Its Sociologic Functions," says that from the point of view of the various fields of hospital activity hospital work may be classified as humanitarian, scientific and educational. The care of the sick and injured is primarily humanitarian, but it is not always easy to convince trustees that the others are also essential functions. Welch points out that the furtherance of scientific medicine is also essential to the public welfare. Medicine of to-day is very different from that of former years—it has become more specialized and the hospital will have to become the laboratory of the clinician. And by such use, scientifically directed, is the possibility of solution of the great question in medicine that are constantly appearing. The use of the hospital for educational purposes is, he says, the great problem of to-day. The theoretical subjects are outstripping the practical ones and the important thing is to bring the clinical subjects up to their level in medical instruction. The most urgent need is to secure teaching hospitals, and it can only be met through hospitals belonging to the universities. It is for the interest of the patient and the public that such relations

SPECIAL DIET.

H. L. Arnold, Boston, says that the average hospital to-day is inadequately equipped to feed patients properly, according to dietetic principles, and the chief fault lies with the medical staff. He justifies this sweeping statement by saying that the older men commonly direct the action of the staff and their conservatism has hindered progress. Of course, there are exceptions to the rule, but he believes it applies to the average hospital. The feeding of patients is an important part of the treatment of all patients and the whole of it in a considerable number. There should be a skilled dietitian and an adequate diet kitchen is also essential. It is now possible to apply our scientific knowledge of dietetics in practice and every progressive hospital will have to establish its dietary arrangements on an up-to-date basis. Such measures will not only benefit patients, but will also be economically profitable.

THE HOSPITAL AND THE HOME.

P. E. Truesdale, Fall River, Mass., noticing the large increase in the number of hospitals in this country within the last decade or so, says that it is evident that the home can no longer compete with the hospital in the care of the sick. While the prejudice against hospital treatment still exists to some extent on account of the great mortality of cases in these institutions prior to the aseptic era, it is certainly diminishing. The modern hospital now serves to safeguard the household not only from loss of life and spread of disease, but from the financial stress involved in the proper care of the sick. Taking as an instance a case of typhoid fever, he says that without the hospital an attack of ordinary severity would cost the working man not less than \$200. Added to this are the difficulties of efficient nursing and the necessary precautions against extension of the disease to other members of the family. Many other diseases also might be mentioned that are communicable and preventable. The home environment is rarely conducive to perfect quietude. While the hospital affords freedom from home and business cares and anxieties, a well-equipped hospital also furnishes the means for laboratory investigation and refinements in diagnosis and treatment, whereas in the home no more investigation is resorted to than is absolutely necessary. The home will answer as a place for the preparation of simple cases and those requiring only internal treatment, but for others the hospital is best. There is also a growing demand for private hospitals and nearly all general hospitals have found it necessary to add private pavilions to their general plan. This

is another fair index to the change of attitude toward hospitals on the part of the public. While there are some model private hospitals, investigations show that the majority are modified apartment-houses operated for profit and lacking the true advantages of a hospital. Some have risen and flourished that in some respects have not compared favorably as regards safety with the home. Truesdale advocates the licensing of all hospitals with a standard that will make them in truth safer than the home for the care of the sick. should exist.

THE PHYSICIAN AND THE HOSPITAL.

The most successful hospitals to-day, says J. B. Murphy, Chicago, are those that are in sympathy with their staff. The essential for the best results is the rendering to the patient the highest type of scientific service, and for this it is most important to find out about him—to obtain a history—before one makes a move, and this is the hardest thing to obtain. The clinical history is more important in many cases than the physical examination or the laboratory findings—and yet who obtains this history? Often the most incompetent man, the newest intern. It should be the senior one; there has been a greater percentage of wrong diagnosis from imperfect case histories than from anything else. A longer term of internship than the present one is also a necessity. We must follow the German custom and the one who is to become junior or senior assistant in the departments of medicine and surgery should remain three or four years to round out his apprenticeship. There will be a radical change in hospitals in the near future; the general cleanliness and asepsis of the whole hospital as well as the operating-room must be looked after. The next thing will be the administration of the therapy, serotherapy and vaccine treatment, and the best trained man from that point of view will be required. Murphy mentions the failure of his inquiries regarding hospital asepsis as a matter to receive the attention of the Section on Hospitals of the American Medical Association. He also recommends the dividing of the section into committees of investigation of hospitals, the work being definitely mapped out and conscientiously performed. It is the sacred obligation on the part of the section to see that all the work within the hospital is conducted to the very best advantage of the patients admitted.

HOSPITAL SERVICES.

The following is the organization suggested by H. M. Hurd, Baltimore: There should be five principal divisions: medicine, surgery, ob-

stetries, psychiatry and pediatry. The medical department should have the care of diseases of the head, chest and abdomen; of the stomach, bladder, the blood and blood-making organs; and systemic diseases, such as rheumatism, gout, rheumatoid arthritis, parasitic diseases, kidney diseases, intestinal diseases and nervous diseases. To the surgical department he assigns general surgery and the specialties of brain surgery, surgery of the nose and throat, chest surgery, orthopedic and genito-urinary surgery and, gynecology. The obstetric department should comprise the lying-in cases and care of infants and nurslings. The psychiatric department should comprise all mental diseases. The pediatric department should care for all diseases of children, including the eruptive diseases of children—scarlet fever, diphtheria, measles, chicken-pox, etc. Many of these specialties are so important and cover so much useful treatment for teaching that subdivisions may be advisable. The plan is offered more as a suggestion than as a definitive arrangement.

THE MEDICAL SUPERINTENDENT.

H. B. Howard, Boston, discusses the qualifications needed for the hospital superintendent and notices the more or less prevalent notion that executive ability rather than medical knowledge and skill are requisite. He does not think that medical education is wasted and points out many ways in which it is useful and even indispensable to the executive head of a hospital, who must also deputize a large part at least of the actual medical treatment to his subordinates. He recognizes the fact that the medical superintendents of insane hospitals are commonly supposed to be at the head of the medical work and to be expert alienists as well as at the head of the business management, and he says it is rather amusing to see the assurance with which some men try to convince you they occupy such a position. We who know the facts, he says, recognize the impossibility, and he believes the time will come when the superintendent of the insane hospital will not actually claim that he is the leading psychiatrist in his institution. General hospitals, on the other hand, have followed the opposite course. They are quite different from what they were a few years ago, and their management will tax the energy and ability of the best-trained man. In the first place the hospital should be a first-class hygienic machine and the superintendent should be a first-class sanitarian. Physicians are sometimes poor business men, but they must necessarily know more than a layman can of the needs of a hospital. If the staff is to give its

best efforts to the treatment of patients it should be relieved from the business details, but it should not have to be over-ridden in medical matters by a lay superintendent. Medical knowledge is essential in keeping the hygiene of the hospital up to the mark. Every hospital is supposed to exist for its patients and a superintendent who knows most about the medical and surgical work has the clearest view of the needs of the institution and the highest incentive therefore to look out for its efficiency as well as its economy. Hence the necessity of a medical man as superintendent in a general hospital.

HOSPITAL ORGANIZATION.

F. A. Washburn and L. H. Burlingham, Boston, discuss the problem of hospital organization, leaving out of consideration the open hospital in which any reputable physician can treat his patients, assuming that no one would claim that such an organization makes for the best care of patients or progress in medicine. The usual type of staff organization is the rotary one, the members of each service taking one shorter or longer term of duty each year. This interests a larger proportion of the profession in the hospital and gives opportunities to a larger number to become proficient. Against these advantages it may be said that the short term of service does not favor continued studies of cases or research, and while many may become proficient, few excel. It does not improve the teaching function of the hospital and appointments on such a staff may be political and otherwise not of the best. Other types of staff organization are that with continuous service, and the mixed type, rotary and continuous. In the continuous type the heads of departments are supposed to be chosen on account of merit and not necessarily from the local profession. This type of organization favors and gives opportunity for research and patients are under careful and continuous observation. Teaching can perhaps be better carried on and it is argued that it is financially more economical. On the other hand, it does not distribute its benefit as widely in the profession or arouse the same interest in the public, and the scientific attitude of the men in charge does not necessarily insure the best care or greatest happiness of the patients. The authors' search through the literature revealed only two articles in which the rotary system was defended and none in which the utilization of the hospital for teaching was considered other than beneficial to the hospitals themselves. Two suggestions are mentioned as of interest. One was to eliminate any routine succession in the hospital staff, and the other to have a continuous service of five years as juniors and five years as seniors and then re-

tirement from active service. The plan followed in the Massachusetts General Hospital, an attempt at combining the advantages of both rotary and continuous types of staff organization, is described in detail. The relation of the hospital to the medical school is discussed. The benefits should be mutual, the hospital profiting from having men of eminence on its visiting staff and from the stimulus afforded for careful study and the medical school, of course, from the clinical facilities afforded. The authors think that the hospital should have something to say in making staff appointments and that it might also well bear some of the expense involved in availing it for medical study. As regards training schools for nurses, they believe small and special hospitals cannot expect to attract the best candidates for such work or furnish the necessary material for their education. They should not attempt it but should go to the expense of employing graduate nurses.

PROPHYLAXIS IN CHILDREN'S HOSPITALS.

I. A. Abt, Chicago, says that there is nothing that so much disturbs the efficiency of a children's department in a hospital as an epidemic of an infectious disease, and such institutions have sometimes had to be closed and abandoned on this account. Besides this it is a serious quarantine, disinfectants, etc., and the loss of patronage that ensues. money loss in case the work is carried on from the expense of the A child may be suffering from the prodromes of measles or scarlet fever or it may carry the germs of diphtheria on admission and visitors are always in peril. He has sometimes thought it would be a wise precaution to ask visitors to remove their outer garments and clothe themselves in white caps and gowns and cloth-covered shoes, though it might be impracticable to carry such measures out. Children's hospitals are the receptacles of the weak and ill-nourished and least resistant members of the community and are specially vulnerable to introduced infection, and a pestilence in the wards is one of the most distressing occurrences that can happen. The management of diphtheria often presents a most difficult problem. The persistence of the germ requires repeated daily examination after recovery and ordinary disinfectant measures are not always successful. When a case of infectious disease occurs it should be removed from the general wards at once, and in case of diphtheria throat cultures should be made from all who have been exposed. Abt has seen measles spread like wildfire in a children's ward with deplorable consequences, but strangely enough he has not seen extensive epidemics of scarlet fever and whooping-cough that are so disastrous sometimes in orphan asylums and infant asylums. Other

diseases which have to be watched out for are the grip infections, pneumonia, dysenteric infections and specific disease. In the light of modern investigation it would seem necessary to isolate patients with cerebrospinal meningitis or with infantile paralysis, but Abt says he does not know of a single instance of the transmission of these diseases in children's hospital wards. This does not hold true of typhoid and certainly not of open tuberculosis. Pyocyaneus and other pus infections occur sometimes in infant wards and may be difficult to control. The exclusion of epidemic and infectious diseases in children's hospitals depends on an accurate knowledge of the course of the disease and routes of introduction and most painstaking technic for their prevention. It requires well-thought-out, unvarying rules of administration and attending physicians, interns and all others should co-operate in their enforcement. One or more of the officials should have authority to enforce the rules. Many of the lapses which occur may be laid to carelessness of nurses, interns and even doctors. Much of the transmission occurs during the night, though the night nurse does the best she can, she is generally overworked and technical errors are liable to be made. Hospital construction should be such as to assist in prophylaxis as much as possible. An observation station with small individual rooms should be provided for and new admissions can be kept under observation until the possibility of introducing infection is past. Abt advises clinical and bacteriologic examination of children on admission. It has frequently aided him in preventing communicable diseases. Each patient should have his own thermometer, bed-pan, dusting powder, basins, wash cloth and tub in case of infection. The nurses, attendants and physicians, everyone having to do with the infectious children, should be scrupulously clean and frequently wash their hands, and he has recently suggested that the nurse maids and nurses should wear rubber gloves, to be changed on passing from one patient to another. Proper provision should be made for quarantine and isolation, and the spirit of thoroughness and the zeal to prevent the epidemics that might occur should pervade everyone in the place.

OUT-PATIENT WORK.

R. C. Cabot, Boston, says that it is obviously the duty of the up-to-date dispensary, when one patient with infectious disease applies for treatment, to send for the rest of the family exposed and have them examined. One case of rickets is a symptom of more cases in the family; one case of vulvovaginitis means a nest of them in the neighborhood. Out-patient work naturally leads us to the beginning of

things, and in this it is different from ward work, which deals mostly with isolated cases of developed disease. It is just in the incipient stages that phthisis, stomach trouble, malnutrition, lead-poisoning, etc., can be most successfully treated. The community profits far more by bud-nipping treatment in dispensaries than by the palliation of advanced disease in hospital wards. The dispensary hits the problem in three most vital points, while the hospital cannot. It can root out foci of disease, check it in its incipiency and keep the chronic patients from lapsing into discouragement. In spite of all this, we still allow the tradition of superficial slovenly work in dispensaries to go on. The remedies for this are two, he says: more science and more Christianity. Hurry, crowding and lack of assistance should be done away with, and we need the Christian spirit to make our treatment effective.

COUNTRY HOSPITALS.

E. E. Munger, Spencer, Iowa, advocates the establishment of rural hospitals, holding that the rural population has not the same opportunity for health conservation as have urban residents. While the mortality rate for most diseases is lower in rural districts than in cities, it is possible that cases requiring hospital treatment are sent to the cities, and in case of death are reported there. One notable exception is typhoid, the mortality from which is higher than in the cities, and in case of perforation the country physician's patient has scarcely any chance of life. Munger gives statistics of other diseases, such as appendicitis, showing how much less a chance of life the country patient has in this disorder, as well as in some of the complications of maternity. He refers to the recent legislation in Iowa enabling the establishment of country hospitals, not to supplant the standard hospitals, but to give every citizen a chance. He believes there should be developed a public hospital system, fashioned somewhat after the public school system, and that our national health should be looked after by a special department of the Government.

OUT-PATIENT WORK.

M. M. Davis, Boston, asks whether in this country has a whole dollar been spent in studying the results of the expenditure of millions of dollars in dispensary treatment by accurate testing methods, and in framing standards by which to estimate achievements in relation to expense. He has taken up the subject of efficiency of out-patient work in our dispensaries and clinics, and this means selecting a group of patients according to any method that does not involve bias and seeing what happens to these patients as the outcome of their visits to the

clinic. Of the two methods proposed for these studies of efficiency, one, the simpler and less intensive, is purely statistical. He gives examples of the use of this method based on the number of visits paid by patients classified according to diagnosis. He finds that it should yield judgment both of absolute and relative efficiency; it should help us to find points of help and weakness, to establish standards of good work and to test methods of improvement. Of course, sufficient numbers should be used to avoid the influence of individual peculiarities and give fair averages. The second method for making an efficiency test he calls the personal or intensive method. It consists in interviewing the patient in the clinic and at home before and after treatment, obtaining facts about his life and family conditions and studying the medical records, thus obtaining a complete history of the case, showing three points: 1. The medical and social problem which the patient brought with him on his first visit. 2. The diagnosis and treatment he received. 3. The outcome of this treatment as judged by the clinical record itself and the observation in the home afterwards. He describes how such a test was conducted in the Boston Dispensary and says that such a study yields an all-around picture of what the clinic does for each patient. The efficiency test in this case indicated briefly that about half of the out-patient work was successful and in about 33 per cent., in the group of patients tested, the work was a dead waste. Davis believes that the general conditions of efficiency in out-patient service are these: 1. The skill and interest of physicians. 2. The technical equipment for medical and surgical work. 3. The character of the medical organization, the arrangement of services and the general administrative system as a whole. 4. The extent to which the clinics are provided with an organized, paid service, including nurses, social workers and clerks. 5. The extent to which the social problems of patients are dealt with in a definite way. Each of these conditions must be studied separately, and, while much attention has been given to the first two and considerable to the third, the fourth and fifth, and particularly the fifth, have been largely neglected. One of the greatest drawbacks to efficiency of an out-patient department is the failure of the patients to return, and to meet this he has had a "follow-up" department. Almost every case of tuberculosis, syphilis and many other diseases is a social as well as a medical problem, and proper conduct of cases in both these regards costs considerable, but Davis thinks it worth while in spite of expense. He has positive testimony from the physicians where it was tried that it was better for them professionally and we may be sure that the patients did not get less benefit. He presents these considerations and the tests described as only a beginning experiment and suggestive of still better methods.

HOSPITALS AND CORPORATIONS.

The relations of corporations to their employees as regards hospital treatment for injuries acquired in their work are discussed by S. C. Plummer, Chicago, who says that the corporation that denies all moral obligations toward its disabled workmen is no worse than the one that refers the hospital to a liability company whose interest it is to cheapen in every way possible the expenses of the settlement of the case. Very little better, if any, is the corporation that regularly pays ward rates but ignores the surgeon's dues. No corporation should shift on the hospital the expense of caring for its injured employees, and the hospital management should see that they do not do so, and the surgeon should not have to treat their injured employees as charity cases. Recent legislation in some states has provided against this. The hospitals should, in their turn, assist the corporations by keeping their records fully written up, especially where employers' liability laws are in force. Interns do not always appreciate the importance of this. The hospital should also see to it that a complete and accurate record of the patient's condition is made on his discharge. Merely "improved" or "cured" will not suffice. As to the visits of claims agents, Plummer sees no impropriety in them when the corporation is a fair dealing one. If not, it is another story. The personal-injury lawyer with his inveighing methods is roundly condemned by him and he asks, "Ought not the hospital to forbid the visits of these self-seeking individuals?" As to access to the hospital records by the representatives of corporations and patient. He does not believe that any hospital management would allow case records to be falsified in the interests of either employer or employee. As to the use of such records by a patient for bringing a suit for malpractice, he does not think it ought in most cases to be at all encouraged. All well-managed hospitals try to exclude incompetent or morally unfit practitioners from attending cases under their roofs. If such a one steps in undiscovered he deserves no protection from the hospital.

HOSPITALS AND CORPORATIONS.

Some general propositions as to the legal aspects of the relations hospitals to corporations are stated by M. L. Bell, general counsel for the C., R. I. & P. Ry., Chicago. First he speaks of the duties of the hospital toward casualty cases and corporations who may be interested in them. If the hospital is operated as a charitable one, not operated for profit or private gain, direct or indirect, its sole duty to the patient with respect to the treatment furnished is to use reasonable care in the selection of the physicians and surgeons, the nurses and employees whom it assigns to attend and treat the patient. In other words, when the

hospital is a charity it is not liable for the negligence of its staff and employees when it has used reasonable care in their selection; it makes no difference if the patient pays something for his accommodation in such a hospital. When the hospital is operated for profit, however, it, like any other business enterprise, is responsible for the negligence of its employees. It assumes such liability, however, only in respect to those things which it contracts to furnish. The duty or absence of duty on the part of the hospital has no bearing on the liability of the physician treating the case. When a hospital is supported by voluntary contributions of a corporation and its employees, it is held to be a charity and comes under the above rules. If it is conducted for profit, the courts hold that it is a mere department of the company concerned. As regards inspection of its records, the hospital owes no legal duty to the patient. There is no difference in principle between a corporation and an individual, an automobile owner, for example, in these regards. In a strict legal sense the corporation whose car or machine injures an individual owes absolutely no duty to the injured one in the way of medical treatment or attention. It is the patient, not the corporation, the hospital must look to for payment. As regards company hospitals, the tendency of the courts is more and more to regard the relief of a hospital department as an agency of the company and to hold it liable for expense or negligence. Hence in absence of special legal provisions to that effect, a company or corporation is not liable to the hospital for treatment given to the patient unless it has contracted expressly or by implication to be responsible therefore. In a state where workman's compensation acts place on the employer the duty of providing treatment, the fact that an employer sends an employee to the hospital and allows him to be treated there, would raise an implied promise on the employer's part to pay for the treatment. The tendency of the courts, however, is to get away from the earlier decisions and hold the corporation liable for services given at the request of whoever of its employees happens to be in charge at the scene of the accident, at least until the surgeon has had an opportunity, after giving emergency treatment, to obtain authority to go farther. Bell thinks that it would be well for the hospital to take the position that the company is liable for services rendered to an injured person at the request of any agent of the corporation or company, and that the latter is responsible until the hospital is notified to the contrary. The hospital has the advantage of holding the records of the case, which are vastly more important to the company in legal proceedings than they are to the injured party, and the hospital can withhold them in advance of the trial if it chooses. The same thing is true in about half our States with reference to the testimony of physicians and surgeons, by virtue of statutes making communications to a physician or surgeon

privileged. The plaintiff, except where the law makes it otherwise, can bar the defendant from putting in medical testimony if he chooses, and it is an excellent feature of workmen's compensation acts in States where this privilege exists that they require medical examination of injured plaintiffs which can be used as evidence. The privilege above referred to does not, as far as Bell knows, extend to hospital records as distinguished from physicians' records, and the law does not forbid their disclosing to the employer what may be of interest to him. Nor does it forbid the hospital to give the employer information concerning the injured party. The question whether the hospital will permit claim agents, adjusters or attorneys to consult the patient in the hospital is one with which the law does not concern itself. The visitors will have to be subjected to the hospital rules, and the only legal question that need trouble the hospital authorities is whether the patient is in fit condition to see the visitors.

THE CIVIL HOSPITAL AND MILITARY SERVICE.

Colonel Charles Richard, Washington, D. C., describes the organization, duties and achievements of the Army medical corps in times of peace and also that of the organized militia. He points out the inadequacy of the present personnel to meet the complex questions of sanitation, etc., and says that we are justified in the belief that this inadequacy can be best relieved by drawing on the civil hospitals for the medical staff trained in hospital methods. Especially will they be invaluable to the military service in case of war in the general and base hospitals. It was with this object in view that the law establishing the medical reserve corps was enacted. This corps is composed of active and inactive members; the former are assigned to duty with troops and supplement the regular corps; at present there are approximately 125 of these officers in active service. The inactive list of this corps numbers over 900, including former volunteer and contract surgeons of the Army and many eminent hospital physicians. In case of emergency when called into active service they would be assigned to the particular duty for which their experience and special qualifications best fit them. Richard believes that the civil hospitals can give valuable aid to the country by stimulating interest in the Army as a career for well-trained and capable graduates. The same class of men is also desirable for the medical reserve corps, and we must appeal to the generosity and patriotism of such should the emergency arise calling them to active service. Their training should not be postponed until the emergency comes; they should be afforded the opportunity of gaining the practical experience with troops essential to their efficiency as military medical officers. Here again much can be accomplished by the civil hospitals through concerted action on the part of their staff, looking to the enactment of the legislation necessary to make such opportunity possible.

PERSONAL AND NEWS ITEMS

Ontario.

Dr. C. W. F. Garrell is the president of the Ottawa Medical Society for the coming year.

Dr. Bruce Hewson, who has practised in Colborne for several years, has now moved to Peterborough.

Dr. M. D. B. Kinsella has returned from North Bay to Mattawa.

Dr. John C. Calhoun, late of the Manhattan Eye, Ear and Throat Hospital, New York, has located at 16 Bloor Street West, Toronto.

Dr. William Oldright has retired from general practice and will devote his time to consulting work. Dr. A. P. MacKenzie will continue the practice formerly cared for by both.

Dr. R. A. Stevenson, of Toronto, who went to London during the summer, was taken ill with gangrene and had to submit to the amputation of his leg near the knee. Dr. Stevenson has very many friends in Toronto who wish to hear of his early recovery.

A writer of a letter in a Toronto newspaper recently said on the subject of vaccination that "the worst thing that can be said against vaccination is that it could prevent smallpox." The writer is evidently of the opinion that it is a good thing to have the disease. His letter is very antagonistic to the efforts to prevent smallpox.

The workers in aid of the Infants' Home in Toronto have succeeded in raising \$112,406. Of this amount \$60,000 will be used in the erection of a new home. This is very encouraging.

A statement has been given out to the effect that the per diem cost of patients in the Toronto General Hospital is \$1.48. This must be regarded as very reasonable when one bears in mind that it is a teaching hospital, a fact that entails much extra expense.

A short time ago, there were one hundred and fifty-two mentally defective children attending the schools in Toronto. A separate institution is needed.

Dr. A. M. Rosebrugh, medical officer of the Ontario Society for the Reformation of Inebriates, has resumed his duties at the Toronto Police Court after an absence of three weeks on account of an attack of bronchial congestion.

Dr. Margaret MacKellar, who has spend 25 years in India in medical missionary work, was in Toronto a short time ago and addressed some meetings. The King conferred on her at the time of the Durbar the Kaisir-i-Hind medal.

Dr. J. W. S. McCullough, secretary of the Ontario Board of

Health, in a recent address condemned the habit of cities dumping their sewage into the lake.

Medical inspection of schools in Toronto has proven a distinct benefit to the people. The need for it came mainly because of the influx of foreign people, but it became a necessity and is doing good work.

The town of Cochrane is to have a hospital. Mayor Carter has taken an active part in securing the funds required. Over \$30,000 have been obtained and there are indications that the balance will soon be forthcoming.

A mild case of smallpox has been reported from Gloucester Street, Toronto, making the seventh at present in the Swiss Cottage.

Sarnia carried the by-law by four to one to spend \$500,000 in an effort to secure pure water. A new water system will be installed. Sarnia has had for some time a very bad typhoid fever record. Sarnia is to be congratulated on the result of the fight for pure water.

Rev. Robert Hall, senior missionary of the Toronto City Mission, presented a report at the monthly meeting of the organization for the prevention of drinking, showing that drunkenness among both men and women was alarmingly on the increase, as evidenced not only by the number of arrests, but by the number of women found in their homes in an intoxicated condition.

Between \$2,500 and \$3,000 was realized for an Orphanage at St. Agatha at the Orphans' Fair held in Berlin during the last week in October in the market building. The bazaar was in progress for three days, and was attended by immense crowds despite the unfavorable weather.

Infantile paralysis is still claiming a comparatively large number of victims. Twelve cases were reported three in Toronto, four at Niagara Falls, where two deaths occurred; Collingwood, Victoria Harbor, Willoughby Township, and York Township had one case each, all with the exception of that at Collingwood resulting in death.

On 16th October Queen's University, Kingston, celebrated the 71st anniversary of the signing of its charter by the late Queen Victoria. During these years "Queen's" has grown and prospered, and done work of which the country is truly proud, and by which many a young man has been greatly benefited.

On Thursday, November 7, a very interesting event took place at Deancroft, the residence of Mrs. Gooderham, Toronto, president of the National Executive of the I.O.D.E., when the Hon. Organizing Secretary, Miss Caroline Chaplin, organized a primary chapter, to be called after his Hon. Sir John Gibson. The Sir John Gibson Chapter starts with a membership of nineteen young girls, all ready to do work for the

new preventorium for tuberculosis children. They intend giving a play about next Friday to raise funds towards this good object.

Quebec.

For many years the death rate among children in Montreal, especially under one year, has been so high that the attention of the people has at last been aroused to give this matter the thought it deserves. Efforts are being made to cut down the very heavy infant death rate in the city. For ten years the average for every 1,000 births has been 250.

Since the dreadful smallpox scourge of 1885 in Montreal the present outbreak is the most serious that has confronted the civic and provincial health officials. Seven new cases were reported to the city health officers in one day, and there were twenty-one cases in the new smallpox hospital a short time ago. Of the patients in the hospital none had been vaccinated. One case was of the malignant type, and fears were felt for the recovery of the victim.

Western Provinces.

Dr. Sunder Singh, of India, who has been in Canada for some time in the interests of the Hindus, is suing Mayor Beckwith, of Vancouver, on a charge of libel for some remarks he made regarding Hindus as a class.

The Vancouver General Hospital had an expenditure last year of \$15,899.85 in excess of its income. The city donates 45 cents per day per patient, and the Provincial Government an equal amount. Notwithstanding this there was a daily deficit on each patient of 74 cents. This brings the per diem cost up to \$1.64. This is due to the very marked increase in the cost of living.

Mrs. Waddell has given \$25,000 for the purpose of erecting a hospital at Conora, Sask. The townspeople have given 10 acres of land and an annual sum for maintenance.

Chief Justice Mathers in the Court of King's Bench, Winnipeg, has granted the application for bail for Dr. George F. Erskine, who was committed for trial at Morden on a charge of manslaughter in connection with the death of Mrs. William McLeod. Bail was fixed at \$4,000, the accused on his own recognition of \$2,000, and two sureties of \$1,000 each.

From Abroad.

Dr. Friedreich F. Friedmann, of Berlin, is advocating the injection of living tubercle bacilli, which have been rendered benevolent, as a cure for tuberculosis. He claims to have treated many cases with invariable success by this method.

On the 1st of October the law in the United States went into operation forbidding the importation or manufacture of liquors containing absinthe. The evil effects of drinking the "green liquor" in France have become so great that the United States has taken a forward step in preventive legislation. She is to be congratulated. Belgium, Brazil and Switzerland have passed prohibitive laws regarding the importation or manufacture of the drug.

On 27th October more than 50,000 pulpits discussed some aspect of tuberculosis. Methods of fighting the white plague were outlined. Special attention was devoted by many of the speakers to the many fraudulent and worthless "cures" that were on the market. Such work as this is bound to have an excellent effect.

The judge in Milwaukee appointed five alienists to report on the mental condition of John Schrank, who shot and wounded Colonel Theodore Roosevelt. Their opinion is to be final on the subject of his sanity or the reverse.

Dr. Odinn, of Paris, claims to have discovered a serum that has been successful in a number of cases of cancer. The Academy of Science, the Academy of Medicine, and the Society of Biology have so far refused to investigate the merits of the treatment. Dr. Odin states that he will keep the preparation a secret until his methods are perfected.

So far France has made little or no effort to restrain the importation and manufacture of absinthe, which has become such a national evil through its widespread consumption.

Dr. W. T. Cocking, honorary physician to the Sheffield Royal Infirmary, and emeritus professor of therapeutics in the Sheffield University, died on 17th October, at the age of 50.

The storm still rages in Britain between the doctors and the Government. The latter has agreed to increase the pay to the medical profession, and the latter appears to be quite determined to reject the new offer as not satisfactory.

In very remote times the Chinese knew of the use of lenses, and a plano-convex rock crystal has been found in the ruins of Nineveh. The use of lenses for eye glasses came in in the 15th century among Oriental races.

Dr. Achard, professor of pathology and therapeutics at the Paris

Faculté de Médecine, has advocated the employment of salvarsan in the treatment of Vincent's angina.

Dr. E. Woakes, a distinguished ear, nose and throat specialist, of London, died recently at the age of 76 years. He took part in the founding of the London Throat Hospital.

OBITUARY

ALICE MCGILLIVRAY.

Alice McGillivray, wife of Dr. L. Shannon McGillivray, of Hamilton, died suddenly on 29th October. While out driving in a motor car with a patient about five o'clock, on John Street South, she was taken suddenly ill. The car she was driving swerved suddenly to the curb and stopped. A. M. Lewis, barrister, who was passing in his car at the time, took Mrs. McGillivray to the home of Mrs. Vosper, 99 Catherine Street South, and her husband and Dr. Rennie were called. She passed away within a few minutes.

Mrs. McGillivray had been suffering from an acute ailment for some considerable time, and uremic poisoning was given as the cause of death.

Deceased was the first woman student to enter the medical department of Queen's University, Kingston. She graduated in medicine and arts, taking honors and medals in both departments. About this time the trouble started over women entering the college, and resulted in the establishing of the Kingston Medical College for Women, of which Mrs. McGillivray was vice-dean for five years. She went to Chicago to practise, and then came to Hamilton, residing there for the past fifteen years. She was considered one of the best educated women in Canada.

Besides her husband she is survived by a daughter, Gladys, her mother, Mrs. Skimmin, Bay Street South, and Dr. George Skimmin, of Kansas City.

WILLIAM HAMLIN.

Dr. William Hamlin, former vice-president of Michigan College of Medicine and Surgery, died at his home in Detroit on 28th October, after an illness of four months. A few days previously he contracted a cold which developed into pneumonia and caused death.

Dr. Hamlen was born in Goderich, Ont., and was 57 years old. He first studied medicine in Detroit College of Medicine, and after graduating from that institution took advanced work in McGill University, Montreal.

THEORON WOOLVERTON.

Theoron Woolverton, Medical Director U. S. Navy, died on the 25th October at the residence of his daughter, Grimsby, Ont., and was buried on the 27th with Masonic and Presbyterian services. Dr. Woolverton was born in Grimsby, May 9th, 1839, and after studying medicine at the University of Buffalo and in a post-graduate course at Harvard, returned to Canada to practise. He served the U. S. navy from July, 1862, till 1891, and again from 1902 till 1907. He was appointed assistant surgeon during the Civil War, and was assistant to the fleet surgeon on Admiral Farragut's flagship the Hartford. During the Spanish-American war he was in the navy recruiting office, New York. He retired, after thirty-four years' active service, in 1907, with the rank of captain and title of medical director.

Dr. Woolverton was an Original Companion of the Military Order of the Loyal Legion of the United States, and belonged to the Harvard Club, New York, and the Army and Navy Clubs, of New York and Washington.

He was the eldest son of the late Dr. Jonathan Woolverton, of Grimsby, and is survived by his son, Francis T., of New York, and daughter, Miss Woolverton, Grimsby, Ont.

JOHN T. DUNCAN.

Dr. John T. Duncan, late of 165 Bloor Street East, Toronto, died suddenly at Mourovia, California, on 4th November. Dr. Duncan was travelling in search of health, having been the subject of bronchial trouble for some time, but the latest reports concerning his condition had been most optimistic, and his death came as a great shock. He was one of the best known members of the medical profession in Toronto, and was a warm personal friend of Sir Oliver Mowat.

Dr. Duncan graduated with honors from the University of Toronto in 1882, and commenced practising immediately in the city. After conducting a general practice for many years he went to England and took a course under a famous eye and ear specialist, practising as an oculist and aurist in Bloor Street East on his return. He retired from active life about six months ago and left Toronto for

the South late in the summer. He was a lecturer in anatomy for many years in Dr. Andrew Smith's Veterinary College, which is now the Ontario Veterinary College, and was an oculist for the Toronto Western Hospital. He was one of the first Ontario Government coroners in Toronto.

Dr. Duncan was prominent in church circles and was one of the founders of St. John's Presbyterian church. During late years, however, he attended Westminster church.

He is survived by a widow and two sons, J. L. Duncan, and J. M. Duncan, both of Toronto. E. J. B. Duncan, of Proudoot, Duncan, Grant and Co., Toronto, and Dr. James H. Duncan, of Chatham, are brothers.

Among his classmates and fellow medical practitioners he was the embodiment of honor. One can fittingly apply to him the words of Addison:

Honor's a sacred tie, the law of kings,
The noble minds distinguishing perfection.

BOOK REVIEWS

SURGICAL TREATMENT.

A Manual of Surgical Treatment. By Sir W. Watson Cheyne, Bart., C.B., D.Sc., LL.D., F.R.C.S., F.R.S., Hon. Surgeon in Ordinary to H. M. the King, Senior Surgeon to King's College Hospital, and F. F. Burghard, M.S., London, F.R.C.S., Surgeon to King's College Hospital, and Senior Surgeon to the Children's Hospital, Paddington Green. New Edition, entirely revised and largely rewritten, with the assistance of T. P. Legg, M.S., London, F.R.C.S., Surgeon to the Royal Free Hospital, Assistant Surgeon to King's College Hospital, and Arthur Edmunds, M.S., London, F.R.C.S., Surgeon to the Great Northern Central Hospital, Surgeon to the Out-patients, the Children's Hospital, Paddington Green. In five volumes. Vol. III. Lea & Febiger. Philadelphia and New York, 1912.

The third volume of this work is now to hand. Those who had an acquaintanceship with the former edition will be able to recall how ably it represented the best that was then to be found in surgical practice. The present edition has undergone a thorough revision. It brings the science and art of surgery up to the latest date. The paper, printing, binding, illustrations, and, indeed, everything about the make-up of the book are the latest and the best. This is a volume that cannot be reviewed in any detail. There is nothing to find fault with, and all that remains is to say that no surgeon can afford to be without this work. It is indispensable.

FRACTURES AND DISLOCATIONS.

- A Practical Treatise on Fractures and Dislocations. By Lewis A. Stinson, B.A., M.D., LL.D., (Yale), Professor of Surgery in Cornell University Medical College, New York; Consulting Surgeon to New York, Bellevue, St. John's and Christ Hospitals, corresponding member of the Societe de Chirurgie of Paris. Seventh Edition, revised and enlarged, with 459 illustrations and 39 plates in monotyp. New York and Philadelphia: Lea and Febiger, 1912. Price, \$5.00.

Stinson on Fractures comes along in a new edition. This work is now familiar to a host of readers. It has come to be regarded as one of the books that must be in every medical library. No surgeon can afford to be without this book, and the general practitioner who is constantly meeting with fractures and dislocations will find in this volume a sure guide. Dr. Stinson has made the subject of fractures and dislocations so peculiarly his own and for such a long period of time that he has now come to be regarded as an authority the world over. His book is a guiding voice in every sort of difficulty and complication. It speaks well for the judgment of the medical profession that edition after edition of this work is called and bought up. This is the highest of all praise.

A TEXT-BOOK OF OBSTETRICS.

- A Text-book of Obstetrics: including Related Gynecologic Operations. By Barton Cooke Hirst, M.D., Professor of Obstetrics in the University of Pennsylvania. Seventh Revised Edition. Octavo of 1,013 pages, with 895 illustrations, 53 of them in color. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$5.00 net; half morocco, \$6.50 net. Canadian agents, J. F. Hartz & Co., Toronto.

This work of Professor Hirst is an old and reliable one on the subject of obstetrics. This edition, the seventh, has been carefully and thoroughly revised and enlarged. Everything that one would expect to find in a modern text-book and authoritative manual on obstetrics is found in this book from the pen of Dr. Hirst. There are 895 illustrations and 53 in colors. These illustrations are well executed and aid the text to a very marked degree. The publishers have chosen a paper which brings out the artistic qualities of the cuts in a satisfactory manner. First there is a full discussion on the physiology, diagnosis, and management of pregnancy. This is followed by a section on the management of labor and the puerperium. This leads up to the discussion of the mechanism of labor. The pathology of pregnancy, labor and the puerperium is the next section of the book. This is followed by obstetric operations. The last section is devoted to the new-born infant. The best methods of examining the patient is given clearly. Much attention is paid to this very important aspect of the obstetrician's duties. The care of the patient and the performance of operations are handled

in a skillful manner. Generally, the rules of treatment will be found to be satisfactory. In speaking of the nephritis of pregnancy, the author remarks that "the bowels should be kept fairly open, but not by saline purges." In the discussion of eclampsia the following statement is made: "If, in spite of milk diet, confinement to bed, purgation, diuresis and diaphoresis, the blood pressure rises, the albumin increases and the urine decreases, labor should be induced." This is sound teaching. The author states that eclampsia is due to a toxæmia and the toxins must be eliminated from the system. Through free action of the skin and bowels by diaphoresis and purgation. The treatment by anaesthetics, morphine, bleeding, chloral, etc., are taken up. Many other points might be referred to, but enough has been said to show that this volume is one of unusual merit, and should find many who will avail themselves of the pleasure of reading its pages.

THE PRACTICE OF GYNECOLOGY.

A Text-book on the Practice of Gynecology. For Practitioners and Students. By W. Easterly Ashton, M.D., LL.D., Professor of Gynecology in the Medico-Chirurgical College, of Philadelphia. Fifth Edition, thoroughly revised. Octavo of 1,100 pages, with 1,050 original line drawings. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$6.50 net; half morocco, \$8.00 net. Canadian agents, J. F. Hartz & Co., Toronto.

The author states that this edition has undergone a thorough revision. There has been associated with the author, Mr. John V. Attender, who has prepared the illustrations, 1,050 in number, in line drawings. These illustrations are very valuable, and reveal an excellent perspective. Passages of more than usual importance are emphasized by a spacing of the type in such a manner as to catch the eye at once. In every phase of diagnosis and treatment this work takes a first place. The author has given to its preparation great pains. On every page there is evidence of the same care and thoroughness. Operations are described step by step, so that there is no possibility of mistake. After a very careful examination of the contents of this book we have come to the conclusion that it reflects much credit upon the author, and is a valuable addition to the library of any practitioner who has diseases of women, either medical or surgical, to treat. The whole field of gynecology is covered in this work and in such a manner that there is nothing left to be desired. We can most heartily recommend the book as a safe and sure guide in a most important department of the medical and surgical work.

DISEASES OF THE STOMACH, INTESTINES, AND PANCREAS.

By Robert Coleman Kemp, M.D., Professor of Gastro-intestinal Diseases, New York School of Clinical Medicine. Second Edition, revised and enlarged. Octavo of 1,021 pages, with 388 illustrations. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$6.50 net; half morocco, \$8.00 net. Canadian agents, J. F. Hartz & Co., Toronto.

In this volume a wide range of topics are discussed. The first edition appeared some time ago, and the author has made good use of his time in revising and improving this second edition. The work is both medical and surgical in its teachings, as the indications are laid down with clearness when operative treatments should be had recourse to. Much attention is paid to diagnosis. This is very essential, as it is frequently difficult to distinguish one condition from another. The analysis of symptoms, as found in the pages of this book, will assist greatly in enabling one to come to correct conclusions. A perusal of the index shows that nothing has been omitted. The text is well written and this is a matter of prime importance to the one who has to make use of a large book in his daily practice. This work should have a large circulation. With this book at his hand the practitioner can acquaint himself with the most recent teachings on diseases of the stomach, intestines and pancreas. We have had much pleasure in reviewing this very excellent volume.

CLINICAL MEDICINE.

Studies in Clinical Medicine. By C. O. Hawthorne, M.D., Fellow of the Royal Faculty of Physicians and Surgeons of Glasgow, Lecturer on Medicine Medical Graduates' College and Polyclinic, London; Physician to the Northwest London and Royal Waterloo Hospitals, formerly examiner in the Universities of Edinburgh, Glasgow and Aberdeen. London: John Bole, Sons, and Danielson, 1912. Price, 6 shillings net.

In the preface we are told that many of the essays going to make up this volume have appeared in various journals at different times. This does not in the least detract from the value of the book. Indeed, these "clinical studies" are of a most interesting and valuable character. So many of the subjects of importance are taken up in these articles that one almost regards the book as a treatise on clinical medicine. The author has an attractive way of laying before the reader what he has to say that the reading of the book ceases to feel like a "study" and becomes a real pleasure. It would not be possible to mention all the topics discussed. It may suffice to say that these articles and lectures cover the ground of clinical medicine in an able manner. The publishers have made the book a handsome one.

DENTAL SURGERY.

A Hand-book on Surgery for Dental and Junior Medical Students. By Arthur S. Underwood, M.R.C.S., Eng., L.D.S., Eng., late examiner Royal College of Surgeons of England, etc. And Bayford Underwood, M.R.C.S., Eng. London: John Bole, Son, and Danielsson, Oxford House, 83-91 Great Litchfield Street W. Price, 3s 6d net.

In this neat volume the publishers have laid before the reader something to think well of. The paper, binding and typography are excellent. The dentist and the junior medical student will find much here just ready to his hand. It is not by any means an easy task to make a good epitome of a subject, and yet an authority on a subject do so, and some of our small books in this way are most useful. This small volume is a case in point. There is not a superfluous word, and yet, not one lacking that would be required to make a statement clear. The different regions of the body are taken up and sections given to general surgical principles. Diagnosis is carefully stated. Treatment is briefly, but well considered in all cases. This is one of those sort of books that those for whom it is specially intended may read, ponder and digest. It will bear many readings, and much of it could to advantage be memorized.

 THE PRACTITIONER'S VISITING LIST FOR 1913.

An invaluable pocket-sized book containing memoranda and data important for every physician, and ruled blanks for recording every detail of practice. The Weekly, Monthly and 30-Patient Perpetual contain 32 pages of data and 160 pages of classified blanks. The 60-Patient Perpetual consists of 256 pages of blanks alone. Each in one wallet-shaped book, bound in flexible leather, with flap and pocket, pencil with rubber, and calendar for two years. Price by mail, postpaid, to any address, \$1.25. Thumb-letter index, 25 cents extra. Descriptive circular showing the several styles sent on request. Philadelphia and New York: Lea and Fibiger.

Being in its twenty-ninth year of issue, The Practitioner's Visiting List embodies the results of long experience and study devoted to its development and perfection.

It is issued in four styles to meet the requirements of every practitioner: "Weekly," dated for 30 patients; "Monthly," undated for 120 patients per month; "Perpetual," undated, for 30 patients weekly per year, and "60 Patients," undated, for 60 patients weekly per year.

The text portion of The Practitioners' Visiting List for 1913 has been thoroughly revised and brought up to date. It contains, among other valuable information, a scheme of dentition; table of weight and measures and comparative scales; instructions for examining the urine; diagnostic table of eruptive fevers; incompatibles, poisons and antidotes; directions for effecting artificial respiration; extensive table of

doses; an alphabetical table of diseases and their remedies, and directions for ligation of arteries. The record portion contains ruled blanks of various kinds, adapted for noting all details of practice and professional business.

Printed on fine, tough paper suitable for either pen or pencil, and bound with the utmost strength in handsome grained leather, The Practitioners' Visiting List is sold at the lowest price compatible with perfection in every detail.

THE PHYSICIAN'S VISITING LIST.

Visiting List for 1913, Lindsay and Blakeston. Sixty-second years of its publication. Philadelphia: P. Blakeston's Sons and Company, 1072 Walnut Street. Price, \$1.25.

This visiting list has been long well known. It contains the necessary pages for visits and engagements. It also contains much useful information for ready use, such as doses of drugs, the metric system, incompatibilities, treatment of poisoning, etc. This pocket visiting list is got up in a neat and attractive form, bound in limp leather, with pocket, etc. It is just such a book as any physician should have in his pocket.

NEW JERSEY VITAL STATISTICS.

Thirty-fifth Annual Report of the Board of Health of the State of New Jersey, 1911, and Report of the Bureau of Vital Statistics, Trenton, N.J.; State Gazette Publishing Company, printers.

This volume, like all those from New Jersey Board of Health, contains a great deal of valuable matter on questions of public health. To those who have to deal with subjects this volume will prove most useful.

SIR WILLIAM TENNANT GAIRDNER.

Life of Sir William Tennant Gairdner, K.C.B., M.D., LL.D., F.R.S., Regius Professor of Practice of Medicine in the University of Glasgow. By George Alexander Gibson, M.D., Sc.D., LL.D., Senior Physician to the Royal Infirmary, Edinburgh, with a selection of papers on general and medical subjects. Glasgow: James MacChose and Son, publishers to the University, 1912. Price, 10s. 6.

It is with feelings of a peculiar personal interest that we review this book from the pen of Dr. G. A. Gibson, so well known to many Canadians, about one who deservedly enjoyed a world-wide reputation. In the fall of 1880, the writer of this review spent three weeks with the late Sir William Gairdner in the wards of the Western Infirmary, of

Glasgow, then a new building. It is only fair to say that he was kindness personified, and put himself about not a little that the writer's days in the Infirmary might be both pleasant and profitable, and they certainly were both. Sir William was an excellent clinical teacher. At the time to which we refer he had some very interesting heart cases over which he spent much time. He was both a didactic and categorical teacher, with a strong leaning towards the Socratic method. His favorite plan was to exhaust a case by a combination of instruction and questioning. The volume before us is delightful reading. The first portion gives a biography of Sir William. This is told in easy and graceful language. There is much in it that reveals to the reader the development of medicine during the many years that he taught his favorite subject of medicine. The second portion of the book gives a number of Sir William's articles and addresses delivered on many occasions during the long period of his professional life. These addresses show that he possessed a very remarkable mind. He was an ardent lover of truth, he was endowed with an unusually clear mind, and was gifted with rare excellency of expression. This book should be read by many, and by everyone who has any desire to occupy a useful position in the ranks of his profession. The late Sir William was a great scholar, a wise man, and a humble spirit. He lived true to the words of Bailey:

And let each try, by great thoughts and good deeds,
To show the most of heaven he hath in him.

HIMSELF.

Talks With Men Concerning Themselves. By E. B. Lowry, M.D., author of "Herself," "Truths," etc., and Richard J. Lambert, M.D. Chicago: Forbes and Company, 1912. Price, \$1.00.

This book deals with sex topics in a clear and sane manner. It puts in the hands of men useful information on subjects that much nonsense has been written and said. Such a book will clear the mind of the reader of many foolish fears and notions, and place him in possession of the truth. It will tell him what he ought to do and what to avoid. There are many young men who ask their physician for advice. To such this book could be safely recommended. There is much harm done to the young mind by advertisements and certain styles of literature that are scattered broadcast over the country. The authors have written a book that sets things in their proper light. If a young man would read such a book as this and follow its advice, it would save him much anxiety, and often a good deal of money spent foolishly on quacks and fakirs.

MISCELLANEOUS MEDICAL NEWS

STUDENTS AT UNIVERSITY REACH TOTAL OF 3,825.

A remarkably good showing has been made at the registration at the University this year considering the fact that the higher standards of entrance came into effect, and were naturally expected to make a big reduction. There is a decrease of 325 in all faculties, compared with the full year total up to the time of convocation last year, but it had been anticipated there would be a much larger decrease.

The complete registration figures, announced yesterday, are as follows:

Faculty of Arts—Master of Arts, 105; doctor of philosophy, 10; first year, 519; second year, 422; third year, 330; fourth year, 313; occasional students, 415; summer session, 98. Total, 2,212.

Faculty of Medicine—First year, 122; second year, 127; third year, 114; fourth year, 117; fifth year, 52; occasional students, 61. Total, 593.

Faculty of Applied Science—First year, 142; second year, 204; third year, 171; fourth year, 122. Total, 640.

Faculty of Household Science—Occasional students, 48.

Faculty of Education—300.

Faculty of Forestry—First year, 9; second year, 6; third year, 6; fourth year, 11. Total, 32.

This gives a complete registration of 3,825, as compared with last year's figures of 4,150. However, it is expected that before convocation many additional names will have been added.

COUNTY SANITARIA.

That a county has the right to establish a tuberculosis sanitarium in any township within its rights is in effect, the meaning of the decision arrived at by a board of arbitration at Windsor of which Dr. J. W. S. McCullough, Provincial Officer of Health, was chairman.

The County of Essex owns sixteen acres of land in the Township of South Gosfield, and proposed to use the property as a site for a tuberculosis sanitarium. The township health authorities objected to the establishment of the sanitarium. The Provincial Board of Health was appealed to, and arbitration was suggested. A board composed of Sheriff D'Avignon, representing the county; Reeve Wigle, representing the township, and Dr. McCullough, went over the whole question and finally decided that the county was within its rights in building the sanitarium. The structure will cost about \$20,000.

THE SURGEON.

BY ANNE M'QUEEN.

As high priest, teaching an acolyte,
 He watches over each holy rite,
 The flame and water to make them clean—
 Body, and garment, and weapons keen—
 With sacred care for a sacred strife:
 To rout a foe in the House of Life!
 For blade and body must both be pure,
 And hand be steady and eye be sure,
 And weapons purged in the fiery glow,
 Whenever he wars against a foe.
 With joy of battle his soul is rife.
 Behold! he enters the House of Life!
 His flashing blade, it is dripping red—
 He follows fast where the trail has led
 To the sacred shrine with ruby throne,
 Where Life has fought with the foe alone.
 As the high priest's hand may lift the Veil,
 He boldly enters the holy pale;
 His hand is steady, his weapon bright—
 The foe is vanquished and put to flight!
 And Life awakens, with anguished breath;
 For Man has grappled and beaten—Death!

THE DANGEROUS WORLD.

BY ESTELLE M. KEER.

The world's a very dangerous place for such a little boy;
 The flowers all carry pistils, on purpose to annoy;
 Sometimes the great bull-rush-is out, and then I hide my head,
 And when thee trees shoot every spring, I cough, and stay in bed.

It's simply terrible to think how many flowers are wild!
 I do not think the woods are safe for one who's just a child.
 And even in the garden is a tiger-lily's lair
 While dande-lions on the green, spring up most everywhere!

You can't tell when you'll see a snake or step upon a toad,
 And unexpectedly you'll find snap-dragons by the road,
 And so you may as well be brave, or else pretend to be,
 For dangers lurk in every flower and hide in every tree.

INFANT MORTALITY LESS.

Dr. Hastings reports a decline in infant mortality for the month of October. Of 426 deaths only 33 per cent., or 135, were of infants under two years, and 121, or 28 per cent., of infants under one year. The percentages are one-quarter less than those of September. Twenty-six deaths of persons over eighty years of age are reported:

Ages at death (all causes)	No.
Under 1 year	121
1 year	14
2 years	5
3 years	3
4 years	2
5 to 9 years	9
10 to 14 years	5
15 to 19 years	8
20 to 29 years	30
30 to 39 years	36
40 to 49 years	35
50 to 59 years	44
60 to 69 years	46
70 to 79 years	39
80 and over	26
Not stated	3

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ADDED TO MEDICAL COUNCIL.

The following medical men have been appointed by the Dominion Government as members of the Medical Council under the new Dominion Medical Act: Dr. T. G. Roddick, Montreal; Dr. George Kennedy, MacLeod, Alta.; Dr. Walter Bapty, Victoria, B.C.

With these appointments the Council is complete save for the representatives of the Medical Councils of Prince Edward Island and Saskatchewan.

The Dominion Medical Council, in session at Ottawa on 8th October, elected the following officers: President, Dr. Roddick, Montreal; vice-president, Dr. Thornton, Deloraine, Man.; registrar, Dr. R. W. Powell, Ottawa; executive committee, Drs. McKechnie, of Victoria Harbor; Hardy, of Toronto; Stewart, of Halifax; Brett, of Banff; Spankie, of Wolfe Island, and Normand, of Montreal. Doctors from all over Canada were present, and were in session for two days.

SIXTEENTH INTERNATIONAL CONGRESS OF MEDICINE.

The Congress will meet on 6th August, 1913, in London, under the presidency of Sir Thomas Barlow. The King is the patron. H.R.H. Prince Arthur of Connaught has consented to open the Congress. The treasurers are Sir Dyce Duckworth and Mr. G. H. Making. Sir A. P. Gould is chairman of the executive committee, and Dr. W. P. Herringham is the grand secretary.

CONTAGIOUS DISEASES IN ONTARIO FOR SEPTEMBER.

The new provincial regulation requiring the notification of all cases of tuberculosis has been in the hands of local officials for more than a month now, but so far the returns do not reveal much added energy upon the part of physicians and local boards in reporting.

The tabulated reports show:

...	1912.		1911	
	Cases.	Deaths.	Cases.	Deaths
Smallpox	4	0	20	0
Scarlet fever	92	6	174	2
Diphtheria	115	11	225	26
Measles	80	3	17	1
Whooping cough	109	16	31	6
Typhoid	297	31	327	34
Tuberculosis	110	60	94	75
Inf paralysis	12	6	5	2
Spinal meningitis	4	4	1	1
	823	137	894	147

HINTS ON THE PREVENTION OF CANCER.

The following hints for the prevention of cancer are given by Dr. J. Fletcher Little, Medical Officer of Health, for Harrow-on-the-Hill:

When warts, moles (especially dark-colored), and other skin growths are exposed to constant irritation they should be immediately removed.

Avoid excessive smoking, as it predisposes to cancer of the lips, tongue, cheeks, etc. Inhaling cigarette smoke tends to cause cancer of the vocal cords.

Avoid irritation of the tongue and cheek by broken, jagged teeth. Take great care of the back teeth or grinders. Money spent on

the teeth will bring a greater return than any other investment.

Avoid excessively hot feed and drink, which induce cancer of the throat.

Avoid taking large quantities of iced drinks and ices.

Masticate all food thoroughly, as food imperfectly chewed causes chronic irritation of the alimentary canal.

Avoid alcoholic drinks, as they are a predisposing cause of cancer, and diminish the average prospects of survival by 30 per cent.

Do not delay when cancer is suspected. Early recognition and prompt removal deprive cancer of its terrors.

ALVARENGA PRIZE OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA.

The College of Physicians of Philadelphia announces that the next award of the Alvarenga prize, being the income for one year of the bequest of the late Senor Alvarenga, and amounting to about one hundred and eighty dollars, will be made on July 14, 1913, provided that an essay deemed by the Committee of Award to be worthy of the prize shall have been offered.

Essays intended for competition may be upon any subject in medicine, but cannot have been published. They must be typewritten, and if written in a language other than English, should be accompanied by an English translation, and must be received by the secretary of the college on or before May 1, 1913.

Each essay must be sent without signature, but must be plainly marked with a motto and be accompanied by a sealed envelope having on its outside the motto of the paper and within the name and address of the author.

It is a condition of competition that the successful essay or a copy of it shall remain in possession of the college; other essays will be returned upon application within three months after the award.

THOMAS R. NEILSON, M.D. Secretary.

MEDICAL PREPARATIONS, ETC.

PITUITRIN IN DIFFICULT PARTURITION.

Every physician who has any considerable obstetrical practice owes it to himself and to his patients to familiarize himself with the oxytocic function of Pituitrin. Here is an agent which, according to re-

ports in the medical journals of the Old World (notably of Germany)—if obstetricians adopt it generally, as now seems likely—is destined to rob childbirth of much of its pain and terror. What shall we say of such an agent that fails but once in over a hundred cases in which it is used? And that is just what happened in Dresden, according to a report of Vogt, of the Royal Gynecological Clinic of that city. Vogt adds: "It was not necessary to have recourse to forceps in a single instance in which Pituitrin was employed."

For the benefit of physicians who are uninformed on the subject, it may be said that Pituitrin is an extract of the posterior or infundibular portion of the pituitary gland. While in use for a number of years—chiefly, perhaps, as a hemostatic and heart stimulant—it is only of late, comparatively speaking, that its value in uterine inertia has been fully understood. The product is prepared and marketed by Parke, Davis & Co., to whom inquiries should be addressed for further particulars of this remarkable agent. Not very long ago the company issued a pamphlet in which a number of interesting and surprising case reports were published. We understand that copies of this Pituitrin pamphlet are still available and may be obtained upon application to Parke, Davis & Co., at their offices in Walkerville, Ont.

THE PALLID SCHOOL GIRL.

In view of the modern methods of education, which force the scholar at top speed, it is not to be wondered at that the strenuous courses of study prescribed for the adolescent girl more than frequently result in a general break-down of both health and spirits. Each winter the physician is consulted in such cases and almost always finds the patient anemic, nervous and more or less devitalized. In most instances a rest of a week or two, together with an efficient tonic, enables the patient to take up her school work again with renewed energy. Pepto-Mangan (Gude) is just the hematinic needed, as it acts promptly to increase the red cells and hemoglobin, and to tone up the organism generally. It is particularly suitable for young girls because it never induces or increases constipation.
