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THE CANADA LANCET

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THE OLDEST MEDICAL JOURNAL IN THE DOMINION

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The Canada Lancet

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Medical Council of Canada

JUNE EXAMINATIONS, 1918

The examinations of the Medical Council of Canada will be held in Toronto and Winnipeg, coincidently, on June 18th, 1918.

Forms of certificate may be obtained from the Registrar at any time.

Registration for the June examination will close promptly at the Registrar's office in Ottawa, on May 21st, 1918.

R. W. POWELL, M.D., Registrar
180 Cooper Street, OTTAWA, ONT.

The Canada Lancet

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EDITORIAL

THE PREVENTION OF VENEREAL DISEASES.

The Ontario Legislative Assembly at its recent session placed upon the statute book a very important Act. We give the act in full in another portion of this issue, and would advise our readers to study carefully its several provisions.

We regard this Act as one that is calculated to have a far-reaching effect. In some of the sections the word *may* seems to be rather weak, and one would have preferred to see *shall* in its place. But when a health officer *may* do any act in the interest of the public, if it is not done, the fault must lie at the door of the officer, and not of the Act, which arms him with the power to act.

The sections dealing with advertising remedies will meet with general favor. Then, again, the restrictions placed upon druggists and pharmacists in the matter of selling remedies are bound to do good. A remedy can only be sold by a druggist if it is prescribed by a qualified medical practitioner, or is approved of by the Provincial Board of Health. This will abolish the fake proprietary treatment. Specific "This" and Specific "That" must go.

Hospitals must also make provision for the proper treatment of venereal diseases. This is as it ought to be. The Act provides also that special preparations may be made under the supervision of skilled persons. and distributed to the medical profession. This may have the effect of reducing the cost of salvarsan, etc. We invite the views of our readers on this Act.

THE CANADIAN ASSOCIATION FOR THE PREVENTION OF TUBERCULOSIS.

The report of the annual meeting held in Ottawa on 26th September, 1917, is before us. It is a compact volume of 350 pages. It is made up of addresses, the reports of the different officers, and the reports of a number of sanatoria.

The volume is full of interesting material. The addresses pay attention to the question of tuberculosis among soldiers and how best this very vital subject should be managed. It is encouraging to learn how much useful work is being done by the sanatoria. This report is well worthy of close study.

THE CANADIAN MEDICAL PROTECTIVE ASSOCIATION.

It is with unfeigned pleasure we review the excellent report of this association. Owing to so many of the members having gone overseas the membership has declined from 747 in 1916 to 678 in 1917. This, however, should be only a temporary condition.

The annual fee is $3, and when one considers the advantages of membership to a busy practitioner, with all the risks of suits against him, this fee must be regarded as very moderate.

At the end of the year 1917, there was $14,221.92 on hand, and no liabilities. This speaks well for the years of toil and effort given to the affairs of the association by its esteemed president, Dr. R. W. Powell, of Ottawa.

A number of actions had been brought against members, but so far none of these had succeeded in securing a verdict. Of those that remained unsettled, the solicitor does not think any of them serious.

The moral support that such an association affords a member is of much value. Since the association began, it has been very successful in defending actions brought against members. The one thing we note with some surprise is that in all Canada the membership is so small.

BIRTHS, MARRIAGES AND DEATHS IN ONTARIO.

The statistics of Ontario for 1916, as issued by Hon. W. D. McPherson, and prepared by Dr. J. W. S. McCullough, the Deputy Registrar-General, reveals much material for satisfaction, and some features that are not so pleasing.

The total population is 2,776,885. This is creeping well up to the three-million mark. The birth rate in 1915 was 24.2 per 1,000, but in 1916 it had fallen to 23.5. The illegitimate births were 20.9 per 1,000 births. In the previous year it was 21.9. The increase of births was 19,684 over the deaths for the year.

In 1916 there were 23,401 marriages. This was 105 fewer than for the year 1915. The number of persons married per 1,000 of the population was 16.8.

The number of deaths was 35,580, or 12.8 per 1,000. In 1915 the rate was 12 per 1,000. This shows a slight increase. On the basis of

100,000 the following causes predominated: Heart disease, 120; pneumonia, 104; tuberculosis, 92; cancer, 72; apoplexy, 53; infantile diarrhœa, 44; diseases of the arteries, 45; Bright's disease, 37. If the deaths caused by heart disease, apoplexy, and disease of the arteries be added, the total will show that 216 per 100,000 die of some form of cardio-vascular trouble. The death rate from tuberculosis is practically the same since 1911. Infant mortality under one year was 107 per 1,000 of the population.

THE ONTARIO MEDICAL ASSOCIATION.

This association meets this year in Hamilton during the latter week in May. We urge upon the profession the duty of becoming members, through the local associations. The fee of $2 from a large number will put the association in such funds as will enable it to go forward and accomplish something for the doctors in this Province.

The coming year will be one of organization, study of the conditions, and preparing to deal with the legislation that is sure to come up at an early date. It would be a very great mistake to imagine that a good Medical Act will be obtained without an effort.

There is a legend that an ancient Greek, whose cart was stuck in the mire, was praying to Jupiter for help. In answer to this prayer he was told to put his own shoulder to the wheel, and, if he could not succeed, Jupiter would assist him. The moral is plain.

From the information at our command, we are inclined to believe that the osteopaths, chiropractors, etc., will put up a strong fight for privileges. They all feel that their rights are being taken from them. The fact is they have no rights and must be regarded as squatters under the cover of a certain legal judgment. Chiropraxy is an abomination, and osteopathy is a glorified massage founded upon an entirely wrong conception of disease.

THE CARE OF THE FEEBLE-MINDED.

It is very encouraging to note with what sympathy Premier Hearst received a deputation whose aim was to urge the claims of the feeble-minded. The feeble-minded are somewhat like the poor, we are sure always to have a certain number of them with us.

The feeble-minded are true objects of commisseration. They are what they are from no fault of their own. They have strong claims upon the body politic for food, shelter and raiment; and to be given such duties to do as they are capable of doing in return for what is done for them.

Then, again, they call for proper care, because they may so readily fall into vicious habits, and become a real source of danger to the community. They are almost certain to marry or have illegitimate children, and in this way pass on the impaired stock. We know it has been said by scientists of high standing that there is not much foundation for this fear, on the grounds of heredity. We flatly differ.

Then, there is another potent reason why they should be cared for and separated into colonies by themselves. One of the legs upon which venereal diseases stand is the feeble-minded. The control of the feeble-minded will do much to help control the social vice.

Then, finally, it is by far the cheapest way to deal with them. Isolation and prevention will yield a hundred per cent. dividend.

GUSTAVE ADOR.

Gustave Ador is now an old man, but is full of activities. He found the International Red Cross Society, and is at present its president. Quite recently the Nobel Peace Prize has been awarded to him. He is a member of the Swiss Federal Council.

During the present war the International Red Cross has been very active in locating the prisoners of the various nations. It has never ceased in its efforts to render them assistance, and forward to them communications from friends, or food. It has been also very active in securing the exchange of prisoners, wherever such was possible under the rules of the belligerent countries.

OSTEOPATHY.

It may be taken for granted that many osteopaths are sincere, and a goodly number follow the system because it is a sort of special form of practice and brings in some money.

In the first place, the founder, Andrew Taylor Still, never received any medical education. His own autobiography settles this point once and for all. He may have gathered up some medical lore by reading and in conversation with his father, who is said to have been a doctor as well as a minister of the Gospel.

A. T. Still had an entirely erroneous view regarding the causation of disease. He held and taught that disease was caused by some displacement, in the skeleton usually, and that this displacement or subluxation impinged upon nerves and arrested the flow of nerve energy.

Then the next erroneous theory he held was that there was in the human body a remedy for every ill, and all we had to do was to set this stored-up remedy loose. This, of course, is so absurd that its mere statement refutes it.

Then, again, he was wholly wrong when he taught an utter lack of faith in drugs. Drugs have their place, and the experienced therapeutist knows their great value. He was also wrong when he spoke of the regular medical profession as depending almost solely upon drugs. This is quite untrue; for doctors use many therapeutic agencies other than drugs.

Further, Still made a false claim when he said he had made a new discovery. For thousands of years before his day manipulation had been employed in the treatment of disease. He only gave an old practice a new name, and padded it out with foolish notions.

According to Still, and the view is followed by his followers, the proper way to treat typhoid fever, pneumonia, diphtheria, peritonitis, tonsillitis, etc., is to correct the malposition of some part of the skeleton, which in the vast majority of cases will be found in the spinal column. In order to become a victim to scarlet fever one must first have a subluxation, and this makes the person liable to the disease. Correct the displacement, and, presto, the disease disappears. Could anything be more absurd?

But what will puzzle most medical men is that one who has intelligence enough to learn the anatomy, physiology, chemistry, and the other subjects that constitute the course of study in an osteopathic college, can still adhere to the ridiculous theory of displacements and subluxations as the cause of all diseases. The perversity of such reasoning or acting is enough to make one stop and wonder why it is so. It would appear so clear to everyone, but the osteopath and the chiropractor, that a cancer may appear in a woman's breast without a spinal subluxation, that to hold such a view seems like the act of the wilfully blinded.

DEFECTS AMONG DRAFTED MEN

In the December number of the Monthly Bulletin of the New York State Department of Health, Dr. Frank Overton, Sanitary Supervisor, gives a noteworthy article on "Defects Among Drafted Men." In the second district of Suffolk County, 1,200 men were examined in seven days. Defective sight was found in 3.08 per cent. of those rejected, and, from general statistics, it is safe to assume that a very small percentage knew of these defects, and it is very probably likewise true that a large proportion of these defects might have been prevented, corrected or cured had proper attention been given in time. Now is the opportunity to apply this lesson to the rising generation.

SELECTED ARTICLES

EXPERIENCES IN A BASE HOSPITAL.*

By Thomas McCrae.

IT is always important to keep in mind that no one man sees all phases of disease in war; indeed, the great majority of men will see only one phase. Men in different places see different stages of the same disease. Practically all the patients in the base hospitals in England come from France, some only 36-48 hours from the trenches. My work was in an active general hospital of 2,080 beds, with a number of associated convalescent hospitals, so that the service was constantly moving. One might think that to handle a service of 1,000 medical or surgical patients would be difficult, but with proper methods it seemed little more than the management of 100 beds.

In regard to the transport of the wounded, a message would come, for example, that 180 stretcher cases or 100 walking cases were on the way. The message would be received some hours ahead, and the convoy trains would come within five minutes of the specified time. The hospital trains are very well equipped, and the man in charge stops the train, when he wishes, for emergency cases. When the trains arrived, the stretchers were ready and the cases were assigned to the wards on the station platform. Every wounded patient carried on his coat a thick envelope of waterproof paper, on the outside of which was the diagnosis. There was enough on the card to indicate where the man belonged. The adjutant would look at the card and write on it the ward to which the man was assigned. The average time for a convoy of 120 stretcher cases was one hour from the time the train was in to the time the last man was in bed.

Among the diseases peculiar to war, we may first mention trench fever. This is absolutely new, so far as I could see. The vast majority of the cases come from the trenches, but a certain number have arisen back of the trenches. Statements are made that the disease has originated in hospitals in England among nurses and orderlies waiting on patients with the disease. I was told one case occurred in a nurse in the hospital where I was. I was able to prove that this was not so, and I could not find anyone who had definitely seen such a case. The patients have an onset much like any other acute febrile disease. They feel badly for a day or two, have a good deal of headache, malaise, chills, fever and loss of appetite. The fever begins comparatively early and is not necessarily high. When those symptoms develop at the front, the men are sent down at once, and I saw some of them in about three or four days

* Selected from Johns Hopkins Bulletin, March, 1918.

after the onset. In general, there is nothing particular in the examination, except one striking thing. They complain of pain, which is generally described as being in the shins. The fever is variable; it lasts sometimes five, six or seven days, sometimes only three or four, and then drops and the temperature runs along for some days at normal. After this interval of from five to seven days there is a sudden elevation in temperature, the fever going up to 102 to 104 degrees. This persists for 24 hours and then drops to normal. There is another afebrile period for five to seven days, and then another paroxysm, the temperature again dropping to normal. That may go on for seven or eight attacks. The majority of the patients had two or three; after that the temperature was normal and there was no return of fever. With this elevation of temperature, there is apparently no increase in leucocytes. The pulse always goes up a little and then the patient looks very ill. The point of particular interest is the condition in the legs called "painful shin". In the majority of cases the shin is very tender. In some cases when one goes near the bed, the man implores you not to touch it, a condition I have only seen otherwise in very severe cases of rheumatic fever. If you examine more carefully, you find that they often have tenderness behind the knees. Indeed, a good many of the patients had as much tenderness on pressure behind the knees as in the shins. After the period of fever is over, there is nothing left but this excruciating pain, which is usually worse at night; and it is very common to find these men sleeping during the day. Naturally, in such a condition, symptomatic therapy is of importance, but it was not very successful. Locally, the application of a solution of Epsom salts gave more relief than anything else. I was interested in trying the effect of sunlight. It acted like magic in some cases, but unfortunately they were the exceptions. Some of the patients were not affected at all. The views as to the etiology are conflicting and not one has been confirmed. A good deal of evidence points to the fact that the disease is carried by lice.

A second disease which one might say is peculiar to war is the war nephritis, in which there certainly are seen features which are different from the ordinary acute nephritis seen in civil life. These cases usually have an acute onset. Many of them do not know anything is wrong until told by their comrades that their faces are swollen. Some begin with severe headache and others have to fall out on a march on account of dyspnea; others feel weak and have pain throughout the body. In the early days edema is comparatively common, particularly of the face, and there is slight fever. One feels after watching these patients that such a case may go on indefinitely. It is called acute nephritis, but it goes on for week after week without and apparent change. The edema clears

up fairly promptly. Uremia is not very common, although we had several patients brought in with it, who, when they left France, had apparently been well. After a few days, as the edema disappears, the patients feel better except for the persistence of excessive headache, which is generally relieved by lumbar puncture. The most persistent finding was blood in the urine, which went on indefinitely. It was not, as a rule, macroscopic after the first few days. There were a certain number of pus cells in nearly all these patients, and one curious thing was that the patients who had uremia were the ones who did the best. The duration in those cases was less than in the men who did not have uremia. The blood-pressure was not at all constant; in many there was a tendency to a rise during the day, often associated with the headache.

One naturally wonders what is at the bottom of these cases. A few are instances of an acute flare-up of an old nephritis, but these are only a small number. Again, one thinks of an infection from the throat. This has been studied pretty thoroughly, and it cannot be found except in a very small proportion. Pathologically, the features are exactly like those found after scarlet fever. In the majority of the cases the etiology is unknown.

One saw a certain number of cases of jaundice. We were hunting very busily for spirochætes, but did not find any. A number of cases resembled ordinary catarrhal jaundice; others were much more severe and one did not know what to call them.

One condition is going to worry every medical man in war service, and that is the cases of so-called soldier's heart. I saw nothing in these cases in any way peculiar to war. They were what we would ordinarily term cardiac neuroses, with perhaps a few additional points. There are nearly always some disturbed sensations referred to the heart. The patients often complain of pain which is a striking feature of the cases. In some there is breathlessness on any exertion and there is generally marked vacomotor disturbances, which is sometimes very striking. Examination shows very little. In a few there is evidence of dilatation, but in the great majority of cases you can find very little in the way of an actual objective sign.

There has been a great deal of discussion as to the cause of this condition. No doubt nervous strain plays a tremendous part. Physical strain did not seem to be a contributing factor. Perhaps a good deal of it might be attributed to tobacco. Smoking is almost constant, and nearly always cigarettes. The average runs from 20 to 40 a day. It is a serious question in the hospitals, where tobacco is issued as food is issued. It is a very difficult matter to cut down tobacco when it is being constantly served. If one goes into the history carefully, one is impressed

by the number who have a susceptibility to tobacco. Some men regard smoking as the prime factor in these disturbances of the heart.

Of course, we looked for internal secretion disturbances, but they are nearly always conspicuous by their absence. A certain amount of infection may have played a part, but this is by no means invariable. In a few cases there had been damage to the heart beforehand, but there was no one thing that stood out. The more you observe them, the more you feel the tremendous importance of the nervous disturbance.

Of peculiar interest were the patients with gas poisoning. Early in the summer we got quite a number of gassed patients with what was designated as the "new gas". It was entirely different from any used before. A little later men spoke of it as "mustard gas". I asked many of them what they had noticed. Some had not noticed anything, but others said there was a smell of garlic. A few days later a chap came in who had been a chemist, and he said he was certain the smell was that of arsenic fumes. The men came in with varying symptoms. We had ten men come in together, who had been gassed at the same time with very different results. As a rule they felt nothing at the time. Sometimes there was constriction and difficulty in breathing, but the majority did not know they had been gassed. Some time afterwards, in from two to three hours to two days' time, the first symptoms appear, a profuse vomiting which lasts a few hours in some cases, in others for days. Many had irritation of the eyes, conjunctival redness and swelling, marked photophobia and inability to use the eyes in a light at all bright. That lasts a verying time, sometimes as long as two to three weeks. A few had corneal ulcer. In certain others, the brunt of the injury fell on the larynx. There were some very acute cases of laryngitis, with a good deal of cough, and in some patients marked bronchitis. Perhaps the most curious sign of all was the effect on the skin in certain of these patients. Some of them looked as if they had been stripped and some one had thrown mud on them in the centre of the chest, and from there it had splashed all over them. There was nearly always pigmentation and of a remarkable appearance. Some desquamated very promptly, while others went on to an acute dermatitis. The Tommies called these lesions "gas burns". They began as a small bleb, which perhaps might increase until it was as large as the palm of one's hand. I saw no instance in which a soldier was apparently permanently damaged by this particular gas, although it is, of course, too early to say positively, except in some of the laryngeal cases. The eye condtions recovered perfectly. Some of the men developed severe attacks of abdominal pain two to three weeks after being gassed, suggesting acute appendicitis. The first one I saw had rigidity, muscle spasm and great tenderness and

it was a question whether he should be operated upon or not. However, the leucocytes were not increased and we waited; in 24 hours the pain had gone. There were a number of such cases.

The neurological side of the work is a subject upon which you might talk at great length. The two main problems are the injuries of the nervous sustem and the so-called war shock. Wounds of the head and nerves are simply bewildering. One of the great problems is as to when one should operate and when they should be left alone. Theoretically it may sound easy to decide, but it is a very difficult problem to settle. Among the patients with war shock some will talk frankly about what happened, some have no recollection at all, while others hesitate and you cannot get them to speak. It seems to me probable that in some of these shock cases there has been a certain amount of organic damage. One thing that harms the war-shock patients particularly is travel. A thunder-storm would excite them greatly. With lightning, they would often jump off the bed. If you could let one war-shock patient see another chap "acting up", he would usually subside and quiet down for an hour or two. We did not get a large number of these patients, but when a lot came in, we would generally try to pick out the most intelligent and work the matter out with him. In a certain number of cases, one got marked results. One patient lost all outward signs in about four days. This created a tremendous interest in the ward. We put him to work with other patients and he was the means of clearing up a number of the men who had come with him. When his condition had been explained to him, he said: "Why didn't I know that before? I see the whole thing now. If I had known before I went up to the front, I would never have been like this. I went up and heard a whole lot about shell shock and was all ready for it before it came." This particular man had been buried for a few minutes and came out with well-marked shock. With some cases it was impossible to do anything by analysis or suggestion. They have to have a certain amount of intelligence before one can do a great deal.

Mixed up with the whole subject of gas poisoning is aphonia. Many patients have difficulty with speech and a certain number are definitely hysterical, but I am not referring to them at present. Many patients who had been gassed, or who had had various disturbances, were left with aphonia. The majority improve slowly. Another thing which is extremely common is stammering. A great many of the men stammer, not necessarily the patients with war shock. It is striking to see how many in the wards are affected.

I mention one point because it is appearing quite often in the literature, and that is the case with foreign bodies in the lungs. I am not

speaking of the patients who need surgical treatment, but of those who have recovered and who have foreign bodies in the lungs. As you know, the French surgeons are strongly advocating operating on these patients. One hears that the mortality is rather high. The feeling in the Canadian service is strongly against operation. I saw a number and in the great majority you could find little in the way of signs. It seems bad practice to meddle with a condition which is not serious, at any rate at present, unless there are definite indications that one is going to make things better.

With regard to tuberculosis in the soldier, my feeling is that you cannot keep the standards up too high. To say as some men have said and written, that because a patient has had tuberculosis and has recovered is no reason why he should be rejected, seems to me to be absolutely wrong; and to say that men with pulmonary lesions that are not causing symptoms should be passed, appears to me to be abject nonsense. The man who has had tuberculosis should not be sent to the front line, although such men could be used back of the lines in many ways. Some writers claim that men with tuberculosis have done very well; perhaps they do, but when you think of them being constantly damp, sleeping in dugouts crowded as closely as possible, and often crowded into cellars, the conditions are certainly bad. In addition, the men with bacteria in the sputum are spreading infection; it could not be otherwise. My feeling is that the men who have had bronchitis or chronic emphysema should not go to the front lines. I do not believe that they should be passed as Class A men.

The medical officers who go to the front have some nice work ahead of them in diagnosing tuberculosis in the soldier. It is an entirely different matter from diagnosing tuberculosis in the civilian. The men have nearly all had bronchitis; they have nearly all lost weight. You hear that every one gains weight at the front; some do, but many have lost a great deal. With the bronchitis, they often have blood-streaked sputum, and there is also often slight fever. You get a man like that, particularly with signs of an old lesion at one apex, and what are you going to do about it? Many men with acute tuberculosis came back from the trenches with no fever, while the bronchitis patients did have fever. The X-ray plates did not help very much, because many patients showed marked shadows through the lungs. Then, again, you have not unlimited time to settle the matter; you have got to decide it promptly. As one senior medical officer said: "What we want in the men in charge is that they make decisions promptly. The man who handicaps us is the man who hesitates in making decisions." Now, how are you going to settle promptly cases like those I have mentioned? If the patient has

tuberculosis, he ought to be sent home promptly; but we do not want to send back a chap who has a bronchitis that is going to clear up. The diagnosis of tuberculosis is one of the most difficult problems they have over there.

Another class of diseases is the gonorrheal infections and lues. The work in a war hospital gave me a big surprise in reference to them. There are more patients with lues in the medical service of hospitals in this country to-day, several times over, than in the general military hospital. Caces of active infection would not be seen in general hospitals. However, when one takes a 1,000-bed service constantly full, one would expect a considerable incidence. The only gonococcus cases were old infections and there were very few of those. Instances of lues were extremely rare. We always had a large number of Wassermann reactions done, and the amazing thing was to find how few were positive. Diagnosis made by the Wassermann were very occasional; indeed, there was nothing like the occurrence that one gets in an ordinary civil hospital. A certain number of the men had been most efficiently treated and showed negative reactions. The army treatment for lues is very thorough.

Just a note about the dental work. That was a very pleasant surprise. There are not many hospitals in this country to-day that are having anything like the grade of dental work done that was carried on in the military hospital to which I was attached. The whole staff was there all the time and any doubtful cases went to the chief at once. The mouth condition in the soldiers was much better than one would expect it to be. The men were taught to take care of their mouths, and it was a pleasure to see the way in which the dental work was done.

Mention should be made of the orthopedic work. American orthopedic men are largely responsible for the establishment of orthopedic centres attached to different hospitals. One cannot speak too highly of the work they are doing.

The X-ray work is a tremendous burden. The regulation is that any patient who may have a foreign body in him must be X-rayed, and with one or two hundred coming in at once, you may imagine the strain.

The mortality in the hospitals in England is surprisingly low. On the medical service where I was during the summer, there were four deaths, three from tuberculosis and one from pneumonia. There were no deaths from nephritis and none from gas poisoning. The deaths on the surgical side were also very few.

One point that comes up constantly is that of prognosis and this is most difficult to handle. Here is a man who comes in, and the question arises, "Is he likely to be well in a month, or will it take three or six months, and at the end of that time what sort of shape will he be in?"

That problem comes up every day. With the Canadians, if the case was to be a long one, it was better to send him back to Canada. If he is going to get well, of how much use will he be? The problems are very much the same as those the American troops will have; and one must decide promptly as there are always patients waiting to come in. Another paint is that it is so difficult to get experience. You discharge a man and send him on to a convalescent home and then you see no more of him. You cannot easily get data concerning him. Deciding wisely about the outlook for a patient is perhaps the most difficult problem of all.

The personal side is most interesting; it was a pleasure to spend as many hours as possible in the late afternoon and evening talking to the men. You could not get such a varied collection of men anywhere else. I often think of three adjacent beds in one of the wards. In one was a Montreal barrister, a graduate of an English university, in the next a typical Devonshire rustic, and in the third a Canadian Indian. It was impossible to get the men to talk much about what they had done, and not much about what they had seen. One of the most interesting groups came in one night, and just by chance about 20 beds in one ward were filled by men who had gone to France in August, 1914. When you saw those men you realized to some extent why that original force was able to do what it did. It was the first time that one or two of them had been back in three years. You could not get them to talk very much. They had, of course, been through all the terrible first days of the war. The thing that came out in talking with them was the fearful fatigue. As one chap put it: "You would get a chance to stop and you would drop there and feel that you could never get on your feet again. The whole thing now is just a blur of fatigue, beyond anything anybody could describe." Those were the chaps one felt like saluting for what they had done for every one of us.

They are great readers and devour books. What impressed me most was the amount of serious reading many of them were doing; collections of poems from many authors were extremely popular. It was surprising to find how much Shakespeare was read. Of course, they were not particularly keen on war literature.

The men are great collectors. One night when a convoy was coming in late, I saw the stretcher-bearers having a hard time of it with one chap who had what appeared to be a considerable mass projecting on either side of the stretcher. Theweight was so great they were obliged to put the stretcher down to rest. Across the foot was a great sack about 6 feet long, full at first sight of what appeared to be junk. The chap

had collected helmets and all sorts of stuff. The wonder was how he ever got it through.

The personal side of the work was intensely interesting. The gratitude they had for what you were doing for them made you ashamed; it seemed so little compared with what they had done.

One important thing I would like to emphasize for the medical men who are going over. The first lesson a soldier learns is that of obedience and the second is how to wait. That lesson we all must learn. You cannot expect that the wounded and sick are going to come in at maximum all the time, although you have got to be prepared for the maximum. The medical organization has to be prepared for the largest possible volume of sick and wounded that can come at any given time. You can only do that by having many more men than are necessary for the average. Of course, the waiting is slow work, but it is one of the things that has to be learned.

The thing that made the strongest impression on me over there was the spirit of the men. I did not see the men at the front, but of the men in the hospitals nothing finer than the patience shown can be imagined. I cannot think of any one working in a war hospital for even a short time without coming away with his belief in the essential soundness of human nature strengthened.

SOME CASES OF HEART LESIONS MET WITH IN SCHOOL CHILDREN.*

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CASES of known heart trouble and of suspected heart lesions are frequently referred to the medical inspectors when visiting the schools; more often perhaps children who, by parents and teachers, are regarded as normal, healthy children, are found with heart lesions either well or partially compensated. The percentage of such children in Transvaal schools is approximately 3.5 for both organic and functional heart lesions; for organic lesions alone it is approximately .8; but full statistics are not yet available; and these percentages must, therefore, be regarded as merely an estimation. An organic defect is usually classed as a defect interfering with the child's progress at school; parent and teacher are told about it and the case is referred to the family doctor. Functional lesions may or may not be so referred, according to the importance attached to them by the individual inspector. The average parent has such a horror of "heart disease", and it is sometimes so difficult to make him or her understand the essential difference between an organic lesion

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and a functional anomaly, that it is hardly ever advisable to draw attention to such lesions. Cases with pronounced myocardial defect, cases in which the child becomes breathless after slight exertion such as is required for ordinary physical drill, are exempted from school and referred for treatment, for it may be taken as a general rule that where a child is not physically able to participate in the work and the ordinary routine that school attendance involves, he or she should be at home and under proper medical supervision and treatment. It is unfair to teacher and child alike to send such a child to attend classes burdened with the proviso that he or she must not take drill or must be exempt from some part of the school work, and consequently subject to more particular, individual care and attention from the teacher. The following notes on some of the conditions of the heart frequently met with at routine inspections of school children may serve to show the variety and interest of cardiac lesions among school children.

Congenital Heart Disease.

This type of heart lesion is by no means so rare as is commonly supposed. During the past twelve months 18 cases came under my own observation at the routine examination of some 5,000 children. When one considers that a large percentage of children with congenital heart disease die before they reach school age, the frequncy of this type of lesion appears to be considerably under-estimated. To attempt an exact diagnosis of the particular kind of lesion one has to deal with is usually to attempt the impossible, nor is it at all necessary to do so, for the only practical value of exact diagnosis in organic heart lesions is to influence our verdict in regard to prognosis. In congenital heart cases such prognosis is fairly easy. Cases with enlargement of the heart, with a diffused thrill, cyanosis, and a murmur, no matter over what part of the cardiac area it is best heard, are cases in which the prognosis is gloomy; such children are usually met with in infant classes and do not survive puberty, notwithstanding the best care and attention bestowed upon them. Where there is cyanosis one can safely postulate pulmonary stenosis; in all cases of this group there is either a patent ventricular septum or a patent ductus arteriosus, the murmur in the former case being transmitted from right to left and in the latter propagated upwards into the neck. Children with these four main symptoms are usually undersized, sometimes with clubbing of the fingers, more especially on their palmar aspect; they are easily fatigued, have a very low resistance to infections, and usually succumb, in the early years of school life, to pneumonia or gastro-enteritis. It is little use excluding them from school, for they are usually as happy there as at home, and sometimes are bright and very intelligent children; but the prognosis is bad in the ex-

treme, and treatment of any kind, beyond guarding the child as much as possible from infection and overstrain, is of no use whatever. Surgery may, perhaps, do something for these children, as has been suggested in cases of acquired mitral stenosis; but the chances of successful interference are so exceedingly slight that no one has as yet dared to attempt it. Where there is enlargement with a murmur, sometimes with a mild thrill, but with no cyanosis, we have certainly no pulmonary stenosis to deal with, but merely with an open septum or ductus arteriosus. Such children are usually equally weak and undersized; they may, in addition, show signs of congenital hypoplasis, which leads to such stigmata as painful eversion of the feet, coxa valga or vara, and lateral curvature; but they do not present that puffed-up appearance of the face and hands which one sees invariably in the cyanotic cases. Clubbing of the fingers is a marked sign in such cases; sometimes it is the only sign, as a certain percentage of congenital heart disease presents no murmur whatever. This clubbing is very characteristic, and is marked on the dorsal aspect of the fingers, being quite unlike the drumstick clubbing which one sees in rheumatic and chronic bronchiectatic cases. According to most authorities, compensation in this class of case also fails early and frequently; pulmonary complications are common and although such afflicted children are usually active and intelligent, the outlook for them is almost as gloomy as for those with pulmonary stenosis. This is certainly not true in the Transvaal Province so far as my experience goes, for I find that these children apparently do well until they reach the age of puberty—that period of relatively sudden and unequal stress upon the heart of a child; if they successfully pass this stage they seem to suffer comparatively little from their hearts. One very striking point is the quick and total cessation of praecordial pain just at the time when the pubertal enlargement of the heart takes place. It is interesting to speculate as to what may occasion this improvement in a symptom which is one of the most distressing with which the congenitally abnormal heart is afflicted. Finally, there is a third group of cases, examples of which are met frequently enough in all schools, and more especially among native children. In these there is no enlargement, no cyanosis, and most often no thrill; the main signs are the maldevelopment of the child—the relative hypoplasia in all organs—and the presence of a loud, harsh systolic or praesystolic murmur heard over the whole praecordial area, sometimes heard only over a limited space. The diagnosis in such cases lies between a patent auricular septum or a patent ductus areriosus, with the odds much in favor of the latter. I do not consider that where the murmur is localised and not propagated upwards a patent ductus arteriosus can be excluded,

but the point is one for academic discussion. As already stated, the correct diagnosis of a congenital heart lesion is, and in the absence of prolonged laboratory investigation of the patient's heart, must remain a matter of inference and exclusion, and as such it is largely speculative whether there is on lesion only or whether two or more co-exist, makes very little difference to the verdict as regards prognosis, and does not in the least degree modify the treatment. For such children, although they suffer from organic heart disease or rather from organic heart defects, appear to go through life with very little overload upon them; they reach and pass puberty without suffering from the crises that invariably confront children with the more severe form of congenital heart defect, and with care they live to a "ripe old age." Very often the lesion is accidentally discovered, and in some cases the child is treated by rest in bed and by medication, with no result so far as the heart is concerned, but with very unfavorable consequences so far as his own and his parents' view of his future is concerned. It can hardly be too strongly insisted upon that for all practical purposes such children may be regarded as normal. They do not "considerably improve at a lower altitude"; it is true that when a child goes from the high veld down to the coast, is excused school work and, incidentally, fatigue, gets somewhat better home treatment, and entirely changes his environment, a general and decided improvement in health is the result, but a similar improvement is seen in low veld children with similar defects when they are sent to the high veld for a holiday. Sphygmomanometer readings shows that there is almost no difference in the work done by the heart of such children at the Johannesburg altitude and at the Delagoa Bay level. Such children can take part in all school games and in the ordinary school routine, with far less chance of a breakdown than children with compensated mitral regurgitation. Their danger signal is enlargement of the heart occasioned by overstrain, and for that reason it is advisable to re-examine them from time to time.

It is a curious fact that children with this type of congenital lesion, when they have passed the age of puberty, appear to grow lustier and bigger than children of the same class with normal hearts, and that in young adult life they stand bodily strain far better than individuals who have functional cardiac anomalies. Congenital heart disease of this type is still, I believe, looked upon as exempting an individual from military service; but, provided the man is otherwise sound, it should not be a greater bar to such service than pronounced flat feet, which experience shows lead to far greater invalidity in the field.

Acquired Organic Disease of the Heart.

Practically the only form of the valvular type that we meet with

in school children is mitral regurgitation. In badly compensated cases a double mitral lesion, with tricuspid insufficiency is seen, but such advanced cases rarely come under our notice. Mitral stenosis by itself is very rarely seen, though it is often diagnosed on quite insufficient evidence. Aortic regurgitation I have only met with thrice among Transvaal school children aortic stenosis never. This latter disease is one of the rarest affections of the heart in children, although, like mitral stenosis, it is more commonly diagnosed, both ante and post mortem, than it ought to be. I have found reports of post-mortem examination on children in whom the condition was diagnosed during life, wherein it was stated that the aortic orifice was stenosed; whereas what was really the matter was that, although the valves were fully competent, there was considerable under-development of the aorta itself, and the condition was, therefore, a chronic hypoplasic aortitis and not aortic stenosis. Many of the curious murmurs heard in the aortic region in children, murmurs which we now regard as functional largely, are possibly due to such hypoplasia which is by no means infrequent in all undersized and feeble children. Where an adherent pericardium exists, they are almost certainly due to this cause.

The diagnosis of an organic lesion of the heart should not be made on the evidence elicited by percussion, palpitation, and auscultation alone. Percussion is notoriously fallible in outlining the shape of the child's heart, even in the dead body where there is no movement of the lung lobes to disturb the note. Auscultation can only inform us of the abnormality in the sound of the organ, and, although this knowledge is of considerable value, it is only valuable when it is supported by other evdience. Irregularities of the valves are common in children, and yield murmurs which are typical of valvular defects, although they are transient, and the prognosis based on such murmurs alone is apt to be too pessimistic. Where a murmur suspected of being due to organic disease is heard, the heart should be auscultated with the child in different postures, standing, lying down, in the knee elbow position, and sitting or with his head much lower than his feet, after exertion and at rest. If the typical systolic murmur, the one most commonly enccuntered, does not change under these varying conditions, mitral regurgitation may then be safely diagnosed. The prognosis in such cases of organic valvular disease does not depend upon the condition of the valve or the quality of the murmur; it depends solely upon the integrity of the heart muscle—an axiom which is very often entirely overlooked. It is this integrity of the cardiac muscle, or more accurately the functional activity of the cardiac ganglia, that determines the limits of compensation. In every case of acquired valvular disease there is probably

some damage to the cardiac ganglia; in congenital heart disease of the benign type, the probability is that these ganglia have suffered no damage and that the integrity of the muscle is as unimpaired as it is in the case of normal individuals. A definite prognosis in a case of valvular disease can, therefore, only be made when we know to what extent the heart muscle is below par. The ordinary signs of decompensation are signs of heart failure, and necesitate vigorous and timely treatment; what we have to look for are slighter signs that can only be elicited by special examination. In a case of kidney disease we do not wait for the onset of kidney failure, uraemia and acidosis; we test the functional integrity of the kidney by pharmaco-dynamic tests and take precautions accordingly. In cases of organic disease of the valves of the heart that too should be the rule. The value of the sphygmomanometer to the general practitioner is still much depreciated in some quarters; but it is just in the estimation of the functional integrity of the heart muscle that it is the best and practically the only serviceable apparatus that he can use. If it can be augmented by the use of the polygraph and the electro-cardiograph, so much the better; they will give earlier and perhaps more accurate warnings of the onset of heart fatigue, as distinct from heart falure, but they are, in this Province at least, beyond the reach of the family practitioner. The sphygmomanometer, however, is easily obtainable, can be used in every case, and after a little practice and due correction for altitude and temperature, gives valuable information regarding the state of the heart muscle. In the schools medical inspectors have no opportunity, except in cases that are brought to the clinic, to attempt such an investigation. All that they can do is to judge, according to the best of their knowledge and experience, whether or not a child with organic disease of the heart, myocardial or valvular, should continue to come to school or should be excluded. If there are signs of decompensation, exclusion is obviously the rule. The difficulty of judging is in well compensated cases, where home conditions and the habits of the child have to be taken into consideration, and such consideration is much more in the province of the family practitioner than in that of the inspector. All cases of organic disease of the heart are, therefore, referred to the family practitioner; it may or may not be a work of supererrogation to do so, but, at any rate, it is erring on the safe side. The parents are told, together with the teacher, that the child suffers from such disease, but it is explained that, subject to the family doctor's subsequent ruling, the child may attend school, take part in all school routine and games, provided he does so under supervision and does not exert himself, and that the prognosis as regards health is good, provided again care is taken that the heart is not

subject to overstrain. It is my own rule to recommend such children to get into the habit of spending at least one day per month in complete rest in the open air; and to keep to this habit throughout their lives. Medicines they do not need, for when drug treatment is advisable they should be at home and in bed. Where there is evidence of myocardial trouble, even though the heart is well compensated, they are recommended to see their own doctor for treatment. In such cases my own experience is that rest and small doses of digitalis are all that is required to restore the functional activity of the heart, which, with proper care and the avoidance of fatigue and over-strain, may go on for years without showing the slightest sign of functional impairment. Injections of digitalis, it is perhaps worth while to note, are absolutely useless in such or in any heart case.

Most of the cases of organic valvular and myocardinal disease met with in the schools are the result of acute infections, chief among which in this province appear to be pneumonia, scarlet fever, rheumatic fever, and possibly malaria. It is possible also that malaria accounts for the somewhat high percentage of congenital heart lesions encountered in the low country. I have not been able to satisfy myself that so far as the whole Province is concerned rheumatic fever is responsible for the majority of heart cases met with among school children, as it certainly is elsewhere. Moreover, "rheumatic fever" here appears to be of a much milder type than that encountered in London schools, and provided the little patient is made to rest in bed until all dilatation of the heart has subsided—a matter usually of from one month to six weeks' rest in bed—the permanent effects on the child's heart are not serious. It is, however, very difficult to make parents realise the imperative necessity of such absolute rest in bed after attacks of scarlet fever, rheumatic fever and malaria. Cases of permanent damage to the heart, which I have met with in school children in the low veld schools, are directly traceable to neglect of such precautions after mild attacks of malaria. Nevertheless, the permanent effects of acute myo- and endo-cardial inflammation concurrent with specific fevers, seems to be less pronounced here than in Europe. This is by no means an original observation, but has been more than once referred to by others, but no one has yet attempted to supply an explanation. I have, for instance, examined children with most pronounced mitral regurgitation, the result of rheumatic fever, and eighteen months later have re-examined such children without finding a trace of a murmur or any evidence of cardiac abnormality beyond an enlarged heart, although the children had no special treatment in the interval. Such experience makes one chary of prognosticating anything in a heart case in a child, especially when there is no evidence of heart fatigue.

Functional Heart Murmurs

Less than a quarter of a century ago it used to be stated that functional murmurs in children were of the rarest occurrence. We know better now, and in fact some of us go so far as to allege that 60 per cent. of all murmurs heard in children are not caused by organic defects at all, but are due to alterations in the quality of the blood, to stimulation of the central nervous system, and to emotional causes. Possibly many of the abnormalities in the heart rhythm and sounds in children are slightly accentuated evidences of perfectly normal processes due to the rapid growth of the child's heart before the age of puberty, especially the sudden increase in strength and volume of the right auricular wall and the auricular septum. Alterations in the rhythm of the heart are perhaps entirely due to this cause, for they are perhaps entirely due to this cause, for they are so frequently met with that it is difficult to believe that they can depend on a pathological condition. The most frequent functional deviation from the normal in school children is undoubtedly sinus irregularity or sinus arrhythmia, which is an abnormality of impulse formation, and is of no practical importance, although when it is suddenly met with in a child suffering from acute disease, the irregularity of the pulse may lead to entirely false deductions being formed. Certainly, no drug treatment is required. Equally unimportant are the extra systoles which are not infrequently found at routine examinations and may, especially when the child is excited, give rise to a most curiously irregular pulse. This condition must be distinguished from the alternating pulse, which is fortunately exceedingly rarely met with (never in school children at routine examinations) and then generally at the terminal stage of acute fevers; this latter is not a functional anomaly, but like auricular fibrillation and heart block, a sign of very serious organic mischief.

Alterations in the sound of the heart are even of less importance than alterations in its rhythm. Basal murmurs, sometimes sufficiently harsh to cause anxiety, are met with in many growing children after exertion. At a school athletic meeting one may sometimes obtain most beautiful aortic regurgitant murmurs in children who, a few minutes after the examination, will have quite normal hearts. Prolonged athletic exertion—a season's football for instance—will bring out such murmurs on very slight exertion such as swaying the body, bending forward, or knee bending, but they disapear in the recumbent position and give rise to no symptoms. Such murmurs at the base appear to be more common in high veld children than in those in the low country. That they are accompanied, especially in athletes, by a certain amount of enlargement is purely a physiological hypertrophy, and should be care-

fully distinguished from dilation which is a sign of heart fatigue, pointing to a functional interruption of one of the most important primary qualities of the heart muscle, contractibility. Children with dilated hearts usually show some degree of auricular fibrillation, and their blood pressure examination reveals the fact that the heart muscle is distinctly below par; they are very rarely indeed seen at the schools, though, possibly, they are frequently enough met with by the family practitioner. Children with hypertrophied hearts, on the other hand, are common enough, and why this condition should cause any greater anxiety than a hypertrophied biceps or gastrocnemius, I have never been able to understand, for physiologically the two are identical in causation. That overstrain at sports, especially on the high veld, may seriously affect the child's heart, no one attempts to deny, but my experience so far has been that cases of such overstrain are exceedingly rare. One would, on the analogy of the overstrain in stokers, who, of all classes of individuals, suffer the most from cardiac dilatation due to occupation, expect to find such overstrained hearts more frequently in the hot moist climate of the low veld; but there, even the children who daily do a large amount of hard physical farm labour, myocardial degeneration, apart from the "malarial heart", appears to be rare. Basal murmurs in weakly children are also common enough; they sometimes develop when the child comes to a high veld school from a low veld school, and *vice versa,* and are nearly always accompanied by alterations in the blood pressure. Apical and tricuspid murmurs are heard in children who are otherwise perfectly normal, but disappear when the child lies down, or when he exerts himself. In young smokers a soft diastolic apical murmur is not uncommon, and is possibly not entirely functional but due to some muscle change, since in such children the heart sounds are generally less clear and slapping than in normal children. In children with the tumultuous action of the heart that is so frequently a sign in hyperthyroidism, it is sometimes very difficult or even impossible to say that a harsh apical murmur, which changes but does not altogether disappear after exertion, is "haemic" or "functional" and not organic; similarly in the case of children, cachectic after malarial fever, in whom the apical murmur is transmitted backwards into the axilla. These are the query cases which need re-examination from time to time. They are probably not purely functional or physiological, but depend on some transient damage to the heart muscle which is easily repaired. In fact, all that functional cases need is re-examination from time to time. No medical treatment and no special advice to child, teacher or parent are necessary, and indeed it is more often desirable not to draw attention to what has been discovered.

Sometimes, however, it occurs that a child with a purely functional anomaly—for instance, sinus arrhythmia—asks to be excused drill on his doctor's certificate. In such cases the medical inspector has rather a difficult task before him, and the simplest way out of it is to endorse the certificate pending private communication with the family doctor.

AN ACT FOR THE PREVENTION OF VENEREAL DISEASES.

HIS MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

1. This Act may be cited as *"The Venereal Diseases Prevention Act."*

2. In this Act,

(*a*) "Board" shall mean Provincial Board of Health;

(*b*) "Local Board" shall mean Local Board of Health;

(*c*) "Prescribed" shall mean prescribed by this Act or by the Regulations;

(*d*) "Regulations" shall mean regulations made under the authority of this Act or *The Public Health Act;*

(*e*) "Venereal disease" shall mean and include syphilis, gonorrhoea and chancroid.

3. (1) Whenever any person is under arrest or in custody charged with an offence against the Criminal Code of Canada or against any Statute of Ontario or any by-law, regulation or order made under the authority thereof, or has been committed to a gaol, reformatory or other place of detention upon conviction of such offence, and the medical officer of health for the municipality or district believes that such person is, or may be, infected with, or has been exposed to infection from venereal disease, the medical officer of health may cause such person to undergo such physical examination as may be necessary, or as may be prescribed by the regulations, in order to ascertain whether or not such person is infected with venereal disease.

(2) If, upon such examination it is found that the person examined is so infected the medical officer of health shall give such directions for the treatment of the patient and, if necesary, for his detention and isolation and the prevention of infection from him as may be deemed proper and as may be authorized by the regulations, and he is hereby empowered to do and authorized any act necessary to effect the carrying out of such treatment, detention, isolation and prevention, and it shall be the duty of every such patient to carry out such directions as to treatment and of every constable, gaoler, warden, superintendent and officer having the care and custody of any infected person in any place

of detention or in any hospital to see that the directions of the medical officer of health are duly carried out.

(3) It shall be the duty of every physician in medical charge of any gaol or place of detention or of the inmates thereof to report to the medical officer of health the name and place of detention whether before or after conviction of any person, whether included in the class mentioned in the preceding subsections or not, whom he suspects or believes to be suffering from venereal disease, such report to be made within twenty-four hours after the time of arrival of such person in the gaol or place of detention.

4. (1) Subject to the regulations, where the medical officer of health is credibly informed that a person resident in the municipality or district for which the medical officer of health is appointed is infected with venereal disease and has infected or is liable to infect other persons, the medical officer of health may give notice in writing to such person requiring him to consult a legally qualified medical practitioner and to procure and produce to the medical officer of health within a time to be specified in the notice a report or certificate of such medical practitioner that the person so notified is or is not suffering from venereal disease.

(2) If such certificate is not produced within the time stated in the notice, the medical officer of health may, by writing signed by him authorize any legally qualified medical practitioner to examine such person and report or certify as to whether he is or is not suffering from venereal disease.

(3) If by the report or certificate mentioned in either of the two preceding subsections it appears that the person so notified is suffering from venereal disease the medical officer of health may exercise the powers and duties as vested in him by subsection 4 of section 3 to such extent as he may deem necessary in the public interest or to the full extent therein provided.

(4) If the person so notified produces a report or certificate from a legally qualified medical practitioner in the prescribed form stating that such person is suffering from venereal disease or if the report or certificate under subsection 2 of this section is to the same effect the mdical officer of health may, in place of proceedings under the preceding subsection, deliver to such person and to the legally qualified medical practitioner signing the said report or certificate directions in the prescribed form as to the course of conduct to be pursued by such person and may require him to produce from time to time such evidence as may be deemed advisable that such person is undergoing proper medical treatment and is in other respects carrying out such directions, but

in case such person fails to comply with the course of conduct prescribed for him and to produce the evidence hereinbefore referred to the medical officer of health may, as to such person, exercise any or all of the powers vested in him by subsection 2 of section 3.

(5) No action or other proceeding shall be brought against any legally qualified medical practitioner in respect of any examination, report or certificate made or given by him under the provisions of this Act, unless and until the consent, in writing, of the board to such action or other proceeding has been given, signed by the chairman and secretary of the board.

(6) The medical officer of health, or a legally qualified medical practitioner appointed by him in writing for that purpose, may enter in and upon any house, outhouse or premises, in the day time, for the purpose of making enquiry and examination with respect to the state of health of any person therein, and may cause any person found therein who is infected with any venereal disease to be removed to a hospital or some other proper place, or may give such directions as may prevent others being infected in the said house, outhouse or premises.

(7) The powers and duties by this section conferred or imposed upon the medical officer of health, may be exercised and performed by the Board in any case in which the Board deems such action expedient.

5.—(1) Every hospital receiving aid from *Ontario* under *The Hospitals and Charitable Institutions Act* shall make effective provision for the examination and treatment upon such terms as may be prescribed of such persons or classes of persons suffering from venereal disease as may by the regulations be declared fit to be treated at such hospital, and in case of default the Treasurer of Ontario may withhold from any hospital the whole or any part of such grant which would otherwise be payable.

(2) The Lieutenant-Governor in Council shall have power to designate any hospital or other public institution or portion of any such hospital or institution under its jurisdiction or any house or building as a hospital or place of detention or isolation for the reception and treatment of any person suffering from venereal disease.

6.—(1) No person other than a legally qualified medical practitioner shall attend upon or prescribe for or supply or offer to supply any drug, medicine, appliance or treatment to or for a person suffering from venereal disease for the purpose of the aleviation or cure of such disease.

(2) Every person guilty of a contravention of subsection 1 shall incur a penalty of not less than $100 and not more than $500.

(3) Subsection 1 of this section shall not apply to a registered pharmaceutical chemist who dispenses to a patient of a legally qualified medical practitioner the proscription of such practitioner or other medicine, drug or appliance approved of by the regulations for the cure or alleviation of venereal disease.

7.—(1) Every person who

(*a*) publishes or causes or allows to be published in a newspaper or magazine or other periodical publication any notice, advertisement, statement, testimonial, letter or other matter;

(*b*) issues or publishes or causes to be issued or published any book, almanac, pamphlet, fly-sheet, document or other matter;

(*c*) posts up or exhibits in any place so as to be visible to persons being in or passing along any street, highway, railway or public place, any notice, statement, advertisement, testimonial, letter or other matter.

(*d*) distributes, circulates or delivers or sends by post to any person any pamphlet, circular, notice, statement, advertisement, testimonial, letter or other matter, intended to recommend or suggest the purchase of or to promote the sale of any article as a drug, medicine, appliance or instrument or as part of any treatment for the alleviation or cure of any venereal disease or of any disease or affection of the genito urinary organs or intended to convey an offer to give or prescribe any form of treatment for any of the aforesaid diseases,

shall incur a penalty of not less than $100 nor more than $500, and in default of immediate payment thereof shall be imprisoned for a period not exceeding twelve months.

(2) Subsection 1 of this section shall not apply to any such article which has been approved by regulations nor to books, documents and papers or other matter published in good faith for the advancement of medical or surgical science.

(3) Before any proceedings are taken under this section against any newspaper proprietor, printer or publisher for printing or publishing or allowing to be published any notice, advertisement, statement, testimonial, letter or other matter in a newspaper the Board shall notify the proprietor, printer or publisher that the publication complained of is an infringement of this Act, and he shall not be liable to prosecution except in respect of an offence of the same or a similar nature after such notification.

(4) Any of the matters or things prohibited by this section may be restrained by injunction or order in an action in a county or district court having local jurisdiction or in the Supreme Court of Ontario, but

such proceedings shall not prevent, delay or in any way be a bar to any prosecution or other proceedings authorized by this Act.

8. Every person who, knowing or having reason to believe that he is or may be infected with venereal disease, does or suffers any act which leads or is likely to lead to the infection of any other person with such disease shall incur a penalty of not less than $100, nor more than $500, and in default of immediate payment thereof shall be imprisoned for a period not exceeding twelve months.

9. Every person who

(*a*) contravenes any provision of this Act or of the regulations for which no other penalty is provided by this Act;

(*b*) wilfully neglects or disobeys any order or direction lawfully given by a medical officer of health or by the Board or a local board under this Act or the regulations;

(*c*) hinders, delays or obstructs any officer in the performance of his duties under this Act, or

(*d*) without lawful authority publishes or discloses any proceedings taken under this Act, or the regations;

shall, where no other penalty or proceedings are prescribed or authorized incur a penalty of not less than $25 nor more than $100, and in default of immediae payment shall be imprisoned for a period not exceeding three months.

10.—(1) Every person who, publicly or privately, verbally or in writing, directly or indirectly, states or intimates that any other person has been notified or examined or otherwise dealt with under the provisions of this Act, whether such statement or intimation is or is not true, in addition to any other penalty or liability, shall incur a penalty of $200, and in default of immediate payment shall be imprisoned for a period of not more than three months.

(2) Subsection 1 shall not apply to disclosures made in good faith to a medical officer of health for his information in carrying out the provisions of this Act, nor to any communicatin or disclosures made to a legally qualified medical practitioner or in the course of consultation for treatment for venereal disease, nor to any communication authorized or required to be made by this Act or the regulations.

11. *The Ontario Summary Convictions Act* shall apply to prosecutions under this Act or the regulations, but all proceedings for the recovery of penalties under this Act, except those authorized by section 7, shall be conducted in camera and no report of such proceedings shall be published in any newspaper.

12. Every person employed in the administration of this Act shall preserve secrecy with regard to all matters which may come to his know-

ledge in the course of such employment, and shall not communicate any such matter to any other person except in the performance of his duties under this Act, and in default he shall in addition to any other penalty, forfeit his office or be dismissed from his employment.

13.—(1) The Board, subject to the approval of the Lieutenant-Governor in Council, may make regulations:

(*a*) prescribing the forms of notices and certificates to be given or issued under this Act;

(*b*) declaring what shall be deemed to be lawful and proper methods and remedies for the treatment, alleviation and cure of venereal disease, and requiring all advertisements, statements, testimonials, letters or other matters of or regarding such remedies to state the date and number of the official approval of the same and such other information as may be deemed desirable;

(*c*) prescribing the course of conduct to be pursued by any person infected with venereal disease in order to effect a cure and to prevent the infection of other persons;

(*d*) for distributing to medical practitioners and hospitals such information as to the treatment, diet, and care of persons suffering from venereal disease and may require medical practitioners and hospitals to distribute the same to such persons.

(*e*) prescribing rules for the treatment of such persons in hospitals, places of detention and other institutions;

(*f*) for preventing the spread of infection from persons suffering from venereal disease;

(*g*) requiring medical practitioners, hospital superintendents and heads of places of detention and public institutions to make reports upon the cases of venereal disease coming under their treatment or care but, except where it is otherwise provided in this Act, without disclosing the name or address of any person suffering from venereal disease, and prescribing the form of such reports;

(*h*) providing for the putting up of notices and placards dealing with venereal disease, its cause, manifestation, treatment and cure in all public urinals and conveniences and similar places;

(*i*) providing for public advertising and placarding of such information relative to the treatment and cure of venereal disease and the places where proper remedies can be obtained as may seem desirable;

(*j*) imposing penalties for the violation of any provision of this Act or anything covered by this Act or any regulation;

(*k*) generally for the better carrying out of the provisions of this Act and for the prevention, treatment and cure of venereal disease;

(*l*) prescribing the procedure to be adopted and the evidence to be required in case of an appeal to the Board from any action or decision of a medical officer of health under this Act;

(*m*) providing for the procedure relative to detention for the purpose of examination or cure or the prevention of infection, so as not to interfere with the course of justice in case of persons under arrest or in custody previous to trial for any offence committed against the provisions of this Act or anything therein authorized or under any other Statute or the Criminal Code.

(*n*) prescribing the method and extent of the examination of any person with a view to ascertaining whether or not such person is infected with venereal disease.

(2) The Board, with the approval of the Lieutenant-Governor in Council may, out of any moneys approprited by the Legislature for the purposes of the Board, provide for the manufacture and free distribution to local boards and to medical practitioners and hospitals of any drug, medicine, appliance or instruments which the Board may deem useful or necessary for the alleviation, treatment or cure of venereal disease or the prevention of infection therefrom.

14.—(1) The treasurer of the municipality shall forthwith, upon demand, pay the amount of any account for services performed therein under the direction of the local board and for materials and supplies furnished, or for any expenditure incurred by the local board or by the medical officer of health in carrying out the provisions of this Act, or the regulations, after the local board has, by resolution, approved of the account and a copy of the resolution certified by the chairman and secretary has been filed in the office of the treasurer.

(2) The corporation of the municipality shall be entitled to recover the amount expended in providing such medical attendance, medicine, nurses and other assistance and necessaries for any person having any venereal disease from such person, but not the expenditure incurred in providing a separate house or in otherwise isolating him except where such isolation is provided in an hospital or other place designated as such under this Act.

15.—(1) Every person who deems himself aggrieved by any action or decision of a medical officer of health under this Act may appeal

therefrom to the Board by giving notice in writing to the Board and to the medical officer of health.

(2) The Board may require the appellant to furnish such information and evidence and to submit to such examination as may be prescribed or as the Board may deem necessary to determine the matter in dispute.

(3) The decision of the Board shall be final.

16. This Act shall come into force and take eeffct on the 1st day of July, A.D., 1918.

PUBLIC HEALTH

What efforts are being made to purchase public health Surgeon Preble of the U. S. Public Health Service has lately summarized the expenditures of 330 cities in the central and eastern United States for public health work It appears from his statistics that the average per capita expenditure varies fairly directly with the size of the community. Yet the average salary of the health officers of sixteen cities having a population between 100,000 and 300,000 is less than $2,500 a year. The annual average per capita expenditure for the 330 communities cited by Preble is 27.2 cents, varying from 9 to 39 cents. If we accept as generally agreed that the expenditure of about 50 cents per capita is necessary for satisfactory public health activities, the average city in the group just referred to is expending only slightly more than half the amount that is considered reasonable for the control of health hazards. This is manifested by the results achieved. For the average expenditure of 27.2 cents, Preble found an average sanitary rating of only 66.7 out of a possible 100 per cent. The larger cities, with an average expenditure of 39 cents annually, get an average sanitary rating of 80.8 per cent. Hence he justly adds that under efficient management it might seem reasonable to expect that an expenditure of about 50 cents per capita annually would raise the sanitary rating of the group to a point above 90 and result in a marked deduction of sickness and a saving of lives, a worthy return on the investment. Perhaps broader public education in the science and accomplishments of preventive medicine and hygiene will help to make even smaller communities begin to realize that their health officials are too poorly paid—and consequently their health activities too poorly organized and administered. We propose to revert repeatedly to the contention that the sanitary status of a larger community in which menaces are varied is likely to remain low as long as the appropriations for its health department remain low so that efficiency cannot be purchased. Surely the chief of public health establishment is as worthy of his hire as a chief of police or a fire department head—*Jour. A. M. A., Jan.* 19, 1918.

CURRENT MEDICAL LITERATURE

THE EFFORT TEST OF TACHYCARDIA.

Aubertin refers to some of the resources in use for testing the action of the heart through induced tachycardia. His own method is based upon that of Martinet and Lian, who after a given effort take the blood pressure and pulse. He provokes effort-dyspnea by muscular exertion, effort-tachycardia by the same resource and finally notes the degree of cardiac acceleration produced by standing. The results thus obtained are constant in normal subjects. Patient is examined at a time in which digestion is believed to be quiescent, *i.e.* not long before meal time. The pulse is now counted until the emotional reaction is found to have disappeared (from 3 to 10 minutes), the patient being recumbent. He then stands up with muscles not tense and his pulse is taken over a period of 3 minutes, after which he lies down for a second recumbent count. He now exercises in his socks in some manner which can be controlled and measured for one minute, after which his pulse is at once taken. He then lies down for the same purpose. In this position his respiration is also noted. The various pulse rates are charted in curves. Two maxima correspond to the rate on simple standing and after exertion, but the latter varies greatly with the character of the effort. The mere acceleration proves nothing for the test is really meant to ascertain the length of time required for the heart to reach its normal frequency. In the normal subject we sometimes see a "reaction-bradycardia". Subjects with organic disease who have good compensation may react as normal subjects because the test is not of the patient *per se* but of his circulatory apparatus. On the other hand, subjects with a very marked tachycardiac reaction may come to equilibrium during the normal interval. When tachycardia persists and remains high for a prolonged period—this is a rare phenomenon—the cause may not be apparent.

In theory the myocardium should be weak and easily dilatable but if such is the case why is it not the rule in uncompensated organic heart disease? Transitory arrhythmia due to extra systoles is seen after the subsidence of effort tachycardia. The clinical value of the test lies as already stated in the length of interval required for equilibrium which in the great majority of cases is reasonable and not paradoxical. The value of the method consists in part in its simplicity, for no apparatus is necessary—the blood-pressure is not taken and even the stethoscope is not required save in the special case.—*Medical Record.*

ANAESTHESIA IN OBSTETRICS.

One of the many empiricisms in medicine which are rapidly melting away as a result of careful experimentation and thoughtful clinical observation is the long-held notion that in spite of the inherent danger of chloroform, it is nevertheless the best and safest anæsthetic in obstetrical work. It was universally believed that for some unknown reason there was an especial tolerance to chloroform by the gravid woman, ond a particular tolerance to it during labor pains. Those who feared chloroform ordinarily were quite reassured as to its safety in obstetrics. It is true that until such of the newer anæsthetics came into general use as nitrous oxide, ethyl chloride, etc., chloroform was the most convenient anæsthetic to use in the short obstetrical manipulations and operations that arose during labor because of the simplicity of administration, small quantity of the anæsthetic required, rapidity of full anæsthesia, and rapidity of recovery therefrom without the discomfort and annoyances usually following on ether anæsthesia. Fatality statistics were not collected and the real mortality from chloroform poisoning was not adequately brought to the attention of the practitioner.

Recent experimental work, described by Davis and Ferguson in a paper presented at the fifth annual meeting of the American Association of Anæsthetists, shows that there are certain well-defined tissue changes which can in a measure account for sudden chloroform fatalities and the untoward effects of the other anæsthetics. In animals narcosis with chloroform produced swelling of the cells, fat infiltration, necrosis, and hemorrhage. Ether did not produce necrosis, but there ensued a parenchymatous degeneration of a milder degree and some tissue swelling. On the other hand nitrous oxide had little tendency to cause tissue changes. In the profound tissue changes may be found a plausible explanation for the delayed fatalities from chloroform. But, of course, death from chloroform administration may occur at any stage and without premonitions of any kind as a result of ventricular fibrillation, which quite justifies the terror that this anæsthetic usually has in general anæsthesia. Indeed, statistics now at hand, even in obstetrical work, point to the fact that chloroform is the most dangerous of anæsthetics. However, almost any anæsthetic if administered over a long period will produce hemolysis, retention of metabolic products, and acidosis, especially in the fetus. And unfortunately in every consideration of the choice of an anæsthetic or the effect of anæsthesia too little, if any, attention has been paid to the ecect upon the fetus. Yet in every case of untoward action the effect is more marked and more dangerous to the fetus than to the mother. This is especially the case with chloroform.

In the case of nitrous oxide, considered the safest anæsthetic, the long iontinued administration is very prone to produce asphyxiation in the fetus *in utero* even without visible effect on the mother. Of course, when there is cyanosis of the mother the danger to the child is very great, and while the administration of oxygen with the gas reduces this danger it does not wholly eliminate it in prolonged anæsthesia, and rebreathing is so dangerous to the infant that it ought to have no place in obstetrical anæsthesia. Aside from these contraindications in the use of nitrous oxide and its combinations, high blood pressure, especially that encountered in the pre-eclamptic stage, and hyperthyroidism are absolute contraindications to its use.

It seems then that ether is still the safest anæsthetic to use in obstetrics if there do not exist any contraindications such as would bar it in general surgery, as long preanæsthesia period—that is, the long first stage—after-effects, complications, etc. Ether is borne better by both fetus and mother. Of course, both ether and cloroform tend to lessen contractions of the uterus, are cumulative in their action, and are not so quickly eliminated. To a much greater degree than with chloroform babies born after ether anæsthesit may show the effects of the drug for many hours. Except for the marked tendency to asphyxiation nitrous oxide does not have any after-effects on the infant because of its rapid elimination.—*Medical Fecord.*

PRINCIPAL CAUSES OF DEATH

Census Bureau's Summary of Mortality Statistics for 1916, in the United States.

According to a preliminary announcement with reference to mortality in 1916, issued by the Director of the Bureau of the Census, the "registration area," which contained approximately 70 per cent. of the population of the entire United States, reported for that year 1,001,921 deaths. Of these deaths, nearly one-third were due to three causes—heart diseases, tuberculosis, and pneumonia—and nearly another third were charged to the following nine causes: Bright's disease and nephritis, cancer, apoplexy, diarrhea and enteritis, influenza, arterial diseases, diabetes, diphtheria, and typhoid fever.

Comparative Death Rates for 1916
(Per 100,000 Population)
Registration Area.

Heart diseases	159.4
Tuberculosis	141.6
Pneumonia	137.3

Bright's disease and nephritis	105.2
Cancer and other malignant tumors	81.8
Apoplexy	81.3
Diarrhea and enteritis	79.3
Influenza	26.4
Arterial diseases	23.9
Diabetes	17.0
Diphtheria and croup	14.5
Typhoid fever	13.3

Cancer and other malignant tumors caused 58,600 deaths in 1916 in the Registration Area. Of these, 22,480, or nearly 39 per cent., resulted from cancers of the stomach and liver. The death rate from cancer has risen from 63 per 100,000 in 1900 to 81.8 in 1916. (For the whole United States the cancer mortality is not less than 80,000 per annum.) The increase has been almost continuous, there having been but two years, 1906 and 1911, which showed a decline as compared with the year immediately preceding. It is possible that at least a part of this increase is due to more correct diagnoses and to greater care on the part of physicians in making reports to registration officials.

It is interesting to note from the Census announcement that "because of progress in the prevention ad treatmet of tuberculosis of all kinds, the decline in the tuberculosis death rate in recent years has been most pronounced, having fallen from 200.7 per 100,000 in 1904 to 141.6 in 1916, a decrease of nearly 30 per cent." This is indeed a gratifying result of education in that particular field, and should serve as a stimulus to those engaged in the campaign for the control of cancer.

Although the statistics indicate that cancer is on the increase, nevertheless, encouraging evidence is now available showing effects at the principal points of our educational activities. We are continually receiving reports from hospitals, clinics, and surgeons in private practice which indcate a steady increase in the number of patients seen in time for successful treatment of the actual disease and a very marked increase in the number of those seeking advice about abnormal and what are admittedly pre-cancerous conditions. It must be remembered that ten years of organized effort in the field of tuberculosis was necessary to effect a marked reduction in the death rate from that disease, and that what knowledge has done for tuberculosis, knowledge will do for cancer.

COMBATING CANCER IN SWITZERLAND

The Council of the Swiss Association for Combating Malignant Disease has addressed a circular to the Swiss doctors calling attention to

the conspicuously high incidence of cancer in Switzerland and to the fact that nothing is yet known either as to the cause of the disease or the explanation of its special prevalence in that country. The council, therefore, asks for precise statistical and clinical information in regard to all fatal cases of cancer of the breast. Special notes are requested, first, of the influence of lactation, mastitis, or previous innocent tumours (fibro-adenoma, cysts) on the development of cancerous growth, and, secondly, of the effect on prognosis of operation, Roentgen rays, or radium aplpications. This inquiry will be based on the death certificates sent in to the Statistical Department. Similar information is also requested in regard to the patients still living at the end of 1915 who had been under treatment for mammary cancer during the preceding five years. A modest honorarium of 2 frans is offered for each schedule thus filled in, and the association hopes to obtain statistical material which may lead to the formation of some useful opinion. Switzerland has, as is well known, the highest cancer death-rate in the world, although alone among civilized countries the rate is a diminishing one. Inspection of all dead bodies by a medical man is compulsory in Switzerland, and this may to some extent account for the highness of the date-rate in cancer. Any proposal to amplify the statistical information on cancer in that country is valuable and welcome, and the selection of mammary cancer for intensive study is a wise one. The frequency of operation, with its accompanying accuracy in pathological diagnosis, secures a firm objective basis for the data, and the points selected for the questionnaire are precise and well selected. The demarcation of urban, industrial, and pastoral communities in the population is definite and should enhance the value of the results obtained.

TYPES OF PNEUMOCOCCI INFECTION.

W. T. Vaughan, Ann Arbor, Mich. (*Journal A. M. A.*, Feb. 16, 1918), describes in detail the Avery method for determining the type of pneumococci germs, as used in the United States Army. The tubes need not be absolutely sterile, though that is desirable, but it is not any special additional trouble to insure sterility of the tubes, when using dry heat for the purpose of sterilizing a part of the pipets. Certain points require special emphasis. First and foremost, the sputum used must come from the chest and must not be contaminated with saliva. It must be emphasized also, that a report for Type IV pneumococci infection is a negative report. In regard to the dilution of serums used, it must first be said that Types I, II and III may be used undiluted. This is especially true in Type I serum. Dilution should be made in sterile physiologic sodium chlorid solution, and should be kept cold.

If the infection should be with the steptococci, instead of the pneumococci, it will be found in the smear from the six-hour culture with uncontaminated sputum. If possible, the determination of pneumococci type by this rapid method should be controlled by agglutination reactions on pure cultures of the organisms. A blood culture should be made in every pneumonia case, soon after the patient's entrance into the hospital, adn if pneumococci growth is obtained, an agglutination test should also be made. If time permits, further identification tests should be made on the pure culture.

BALANITIS GANGRENOSA.

R. L. Sutton, Kansas City, Mo. (*Journal A. M. A., March* 9, 1918), says that gangrenous balanitis is a fairly uncommon affection, even in large venereal clinics, but its serious character when unrecognized entitles it to more attention in medical literature than it has received up to the present time. The disease is due to the symbiosis of a fusi-form bacillus and a spirochete structurally resembling those found in Vincen's angina. Culturally, they are anaerobic, and both stain readily with dilute carbolfuchsin, a tinctorial reaction which distinguishes the vibrio from the *Spirochaeta pallida* of Schaudinn and Hoffmann. The rapidly developing lesions, usually single, on the foreskin are unlike chancroid and do not cause inflammation of the inguinal glands. The pus is of a characteristic foul odor. The local and constitutional symptoms vary with the severity of the disease. Phimosis is on early complication. The spread of the disease is rapid, and the amount of tissue destruction may be very great. Salvarsan takes first place in the constitutional remedies as a spirocheticide. Sutton reports a typical case treated at first with the usually most efficient local remedy, hydrogen peroxid, without notable success, but later yielding to subcutaneous injections of oxygen.

PERSONAL AND NEWS ITEMS

Mr. R. G. Haight, of Gelert, received a telegram recently, stating that his son, Dr. W. W. Haight, had been released from a German prison camp and was then in Holland on his way home.

Major Sidney S. Burnham "made at least two daring personal reconnaissances in heavy machine gun fire. His cheerfulness and coolness were a wonderful example to his men," on the occasion for which he received the Distinguished Service Order. Major Burnham enlisted as a lieutenant in the first month of the war. A son of Dr. H. B. Burnham, 47 Warren road, Toronto, he is an "old boy" of Upper Canada College

and a B.A. of University College, 1911. Major Burnham, who went to France in September, 1915, has frequently been mentioned in despatches, and was recently gazetted a general staff officer of the third grade.

Capt. Oswald John Day received the bar to his Military Cross "for leading bearers through an enemy barrage and effecting the recovery of wounded close to the German lines." Capt. Day came to the Medical school from Orillia with year '14, and enlisted in the Royal Army Medical Corps with the rank of lieutenant. He was previously reported gassed. The Military Cross was awarded him last June.

It is announced that there is no intention of abandoning the Whitby Hospital. This is one of the institutions that must be retained, as both the active and permanent cases can be cared for in it. The Military Department cannot yet look after all the former class of cases.

Figures just completed show that 505 medical officers serving as combatants had been killed or had died of wounds up to the close of the year 1917.

The late Mr. William Wood, of Toronto, left the following sums to public institutions: Toronto General Hospital, Western Hospital and Grace Hospital, each $3,000; Weston Free Hospital, Sick Children's Hospital, Muskoka Free Hospital, each $2,000; Home for Incurables, $1,000.

After being attached to the staff of various overseas hospitals, Capt. O. J. S. Little, M.B., '14, has been recently appointed to Ravenscroft Military Hospital, at Seaford, Sussex. Capt. Little, who went to England as M. O. of the 220th Batt., came from Seaforth to the Univer city, before entering medicine. Prior to going overseas he was for nearly two years assistant superintendent of the Isolation Hospital, Toronto.

Surgeon Fred W. Leech, of Newburgh, who took his M.B. at the University with class '17, is now with the royal navy, and has been attached for foreign service. Enlisting at the end of his third year in the C. F. A., he was with the 4th Brigade headquarters staff in the spring of 1915, going overseas in May. The following September he crossed to France and served there for a few months before being re called to Canada to complete his course. Immediately on graduating he again signed up for, and was appointed, a naval surgeon.

Mrs. Cotton, wife of Dr. J. Milton Cotton, of Toronto, died on 5th March.

Lieut. Frank J. Elkertn, M.B., '17, whose home is at Chamberlain, Sask., is now acting on the Medical Board at Risborough Barracks, Shorncliffe. He matriculated from Regina College, and was in business for five years before entering the University, where he took an active

part in college affairs, notably "Daffydil Night" and the Glee Club. Lieut. Elkerton served on the staff of the Base Hospital here for some time after enlisting.

Capt. George F. Lewis, who went overseas as a medical officer in April last, served with the Scottish Borderers when his battalion was sent to France in drafts. He is now back again in England, and has charge of the men undergoing remedial treatment at Seaford, Sussex, Capt. Lewis was borr at East View. He entered the university with Class '16 medicine.

Capt. T. H. Bell, who received the Military Cross for directing the work of stretcher-bearers for forty-eight hours without rest, under heavy shell fire, graduated from Trinity Medical schol in '96, and enlisted from Winnipeg with No. 4 Field Ambulance. He was also mentioned in despatches by Gen. Haig last June.

Capt. Willis C. Connell has been serving for the past year and a half in a British hospital or Dar-es-Salaam German East Africa. He originally went overseas as a private with No. 2 Casualty Clearing Station, but returned to complete his course in medicine, graduating with class '16. Since receiving his degree he has been on active service with the Royal Army Medical Corps. Capt. Connell came to the University from Prescott.

Lieut.-Col. A. J. Mackenzie, medical officer of the 48th Regiment (Highlanders), who has returned home from overseass, it is said will in all probability be given the command of the group consisting of Spadina, College, Givens, Crawford, and the military wards of the Toronto General Hospital.

Dr. Geraldine Oakley, of Toronto, has been appointed supervisor of the medical inspection in the public schools of Calgary.

Dr. M. D. Morrison, of Dominion, N. S., has been appointed Chief Officer of the Nova Scotia Workmen's Compensation Board.

At a meeting of the London City Council, Dr. W. S. Downham was appointed medical sanitary inspector at a salary of $2,000.

The Western University, London, has decided to admit women medical students.

George Clemenceau, the strong man of France, and Prime Minister at this hour of crisis, is a physician and the son of a physician. He has just passed his 76th birthday.

Dr. C. J. Hastings, M. O. H., Toronto, was recently elected President of the American Health Association.

Professor John Weir, Assistant Superintendent of the Maritime School for the Blind, has stated that there are in Nova Scotia 800 adult blind for whom there is no provision as to accommodation or teaching.

The Fredericton Board of Health draws attention to the need for the establishment of an isolation hospital. The danger from smallpox is very real.

In Moncton, N. B., a building has been purchased and converted into a smallpox hospital.

Dr. W. C. White, a graduate of Toronto, 1901, has been appointed chief of the Bureau of Tuberculosis of the American Red Cross in France.

At the annual meeting of the Governors of the Western Hospital, Montreal, it was stated that the cost of maintenance had risen from $2.47 in 1916 to $3.01 in 1917. The deficit had gone up from $17,438 to $40,324.

The annual report of the Protestant Hospital at Verdun, Quebec, pointed out that the instituion was greatly overcrowded. There was a deficit of $38,471.

The Jeffrey Hales Hospital, Quebec, last year cared for 901 patients. The James Douglas Tuberculosis wards have been added.

The Laval Hospital for the Treatment of Tuberculosis, which has been built in Quebec, will soon be opened.

The Winnipeg Board of Control has made an additional grant of $58,600 to cover the deficit of last year.

A new hospital at Eston, Sask., has been opened by Dr. Seymour, Commissioned of Public Health.

Dr. Alfred Thompson, member for the Yukon, will, it is announced, resign his position as medical superintendent of the Hospitals for Returned Soldier Invalids.

The governors of Notre Dame Hospital, Montreal, have decided to build a million-dollar hospital on Sherbrooke Street.

His many friends will welcome Dr. Howard Harrison home again. He has settled in the late Dr. A. R. Gordon's house.

Col. W. B. Hendry, M.D., has been home for a short time on leave. It is expected he will return after discussing some changes in the University of Toronto Base Hospital.

Lieut.-Col. H. C. Parsons, who was temporarily in command at Basingstoke while No. 4 Canadian General Hospital (University of Toronto) was being moved there from Saloniki, has again been appointed O.C., while Col. W. B. Hendry is on leave in Canada.

The Province of Saskatchewan some months ago adopted the plan of free distribution of dipheritic anti-toxine.

During the past year municipal hospitals have been established in Edam, Eston, Shaunavon, and Lloydminster. By-laws have been passed at Davidson, Rosetown, Kerobert and Lampman for hospitals.

It is proposed to build a soldiers' hospital at Kananaskis in the Foot Hills, at a cost of $900,000, half by the Dominion and half by the Province of Alberta.

In the Calgary Hospital the daily cost last year was $1.95. This year it is expected to be $2.00.

Dr. MacEachern, the superintendent of the Vancouver General Hospital, states that in 1906 there were 50 patients treated daily, whereas now the number is 800. The death rate was 36 per 1,000.

Sir George Hare Philipson, M.D., of Newcastle, England, died recently. He was recognized in England as one of the ablest physicians. He was in his 82nd year.

Yale Medical School has now an endowment fund of $2,568,812. This is said to be adequate for the upkeep of the colege. It will affiliate with the New Haven Hospital.

By the will of General George W. Carpentier the following bequests are made: Presbyterian Hospital, $200,000; the Sloane Maternity Hospital, $80,000; Saratoga Sanatorium, $40,000; Medical Department Columbia University, $50,000; Columbia University, $200,000.

Dr. Samuel Gibson Dixon, the Commissioner of Health for the State of Pennsylvania, died in Philadelphia recently at the age of 66. Dr. Dixon had paid visits to Toronto in connection with health conventions.

A council of women's organizations in New York is taking active steps for the betterment of conditions affecting children and child welfare work. It is hoped to materially reduce infant mortality.

There is a decided shortage of hospital accommodation to meet the needs of the returned soldiers. It may be necessary to return for a time to the out-patient system.

It has been almost definitely proven that trench fever is communicated by the agency of the trench louse. This will enable the medical officers to do much in the way of prevention. To prove this theory a member of the New York Presbyterian Hospital Unit underwent experimental inoculation by means of the trench lice.

Dr. Horace Brittain, superintendent of the Toronto General Hospital, stated before the Board of Control that the adoption of a sliding scale of charges on patients whereby each would pay the cost of maintennce, would obviate the recurrence of deficits.

At the annual meeting of the Daughters of the Empire it was decided to add another wing to the preventorium. It was claimed that this institution has been of very great service in the prevention of tuberculosis.

OBITUARY

C. B. ECKEL, M.D.

The death took place on the 15th of March at St. Thomas, of Dr. C. B. Eckel, of Brant Avenue, Brantford, aged 32. He had been practising as a specialist in the city for three years. He was taken ill last year in September, and went with his wife and little daughter to St. Thomas, hoping thereby to benefit in health. But he was never able to return to Brantford and resume his practise, and during the intervening months has been an invalid in the home of his brother-in-law, Mr. W. F. Thomas. Dr. Eckel was born in Pembroke, Ont. He graduated from Victoria College in Arts, and later in Medicine from the Toronto Medical College. For one year he practised as a physician on the Six Nations Reserve. From there he removed to Adelaide, eight miles from London, where he remained for five years. At the end of that time he located in Brantford.

MORTIMER H. HAIGHT, M.D.

Dr. Mortimer H. Haight, a prominent Toronto physician, who had not been in good health for some time, died on the 13th of March, at his residence, 96 Avenue road, in his 49th year. His death, however, was unexpected.

Born in New Durham, Ont., the late Dr. Haight received his elementary education there, and concluded his studies at McGill University, graduating in 1893. For fourteen years he practised medicine at New Durham, afterwards spending two years in Paris and Vienna, taking up special work in the hospitals there. He was an active member of Olivet Congregational Church, and was superintendent of the Sunday school. He was also a member of Canada Bowling Club. In 1893 he married Miss Nettie E. Lampman, of New Durham, who still survives him, and he is also survived by a sister, Mrs. F. R. Sims, of Ottawa, and a brother, Dr. Edward Haight, of Kalamazoo, Mich., U.S.A.

PETER CONROY, M.D.

Dr. Peter Conroy, aged sixty-five, one of the best known physicians in the Province of Prince Edward Island, died at his home in Charlottetown on the 15th of March, from pneumonia. He was a graduate of Laval, and had practised in Charlottetown for forty years. He was Dominion Quarantine Officer, a Governor of St. Dunstan University, and a Trustee of Falconwood Insane Hospital. He has two sons at the front.

J. A. DEVLIN, M.D.

Dr. J. A. Devlin, of Stratford, Ontario, died in London, Ontario, on 10th March. For many years he had an extensive practice in Stratford, and was coroner for the County of Perth. For some time past he has been living in London, where for two years he served on the Separate School Board.

J. S. BOOTH, M.D.

Dr. Booth, of Montreal, was running to catch a street car and slipped. He fell in front of the car and was killed.

GEORGE VILLENEAUVE, M.D.

Dr. Villineauve, of Montreal, Medical Superintendent of the St. Jean de Dieu Asylum, died on the 21st of January. He was widely known as an alienist. He served with the Sixty-Sixth Battalion during the Riel Rebellion.

ARTHUR MEEK, M.D.

Dr. Meek died at his home in Southwold, near Stratford, Ontario. He was taken ill with pneumonia. He was in his sixty-fourth year. He was born at Port Stanley.

W. H. HAMILTON, M.D.

Dr. Hamilton, of Fort William, Ontario, died in the early part of February. He was born in North Easthope, and 63 at the time of his death.

LAURENT CATELLIER, M.D.

Dr. Catellier died at Quebec after a long illness, in his seventy-ninth year. He had been consulting physician to the Quebec Board of Health, Surgeon to the Hotel Dieu, and Dean of the Medican Faculty of Laval University in Quebec. He was a graduate of Laval. He took a keen interest in medical societies.

MAJOR J. H. RATZ, M.D., C.A.M.C.

At the time of his death Major Ratz was medical advisor to the Pension Board. He was born in Elmira, Ontario, in 1869. After attending the high school at Galt, he graduated in Arts and Medicine from the University of Toronto, obtaining his M.B. in 1895. He practised in New Dundee, Elmira and Trenton. In January, 1915, he joined the C. A. M. C. He served with the 34th Battalion for a year, and was then appointed to duty at Shorncliffe. On his return to Canada he was attached to the Pension Board.

ARTHUR JOYAL, M.D.

Dr. Joyal, of Montreal, died of heart failure in his fifty-ninth year. He was a graduate of Laval while he afterwards became attached as a teacher. He made a specialty of diseases of the nervous system.

DONTAGUE DESNOYERS, M.D.

Dr. Desnoyers died in the Sacred Heart Hospital in Sherbrooke, at the age of seventy-two. He graduated in the United States, and on returning to Canada was appointed on the staff of Laval Medical College, Montreal. He was in Rome when Garibaldi took the city and was made a prisoner. He then returned to Montreal.

WILLIAM H. JAMESON, M.D.

Dr. Jameson graduated from McGill in 1893. He did extensive post graduate work abroad on diseases of the nose and throat, which he followed as a specialty on his return to Montreal. He was in connection with McGill Medical College at the time of his death, which was caused by a brief illness.

BOOK REVIEWS

MATERIA MEDICA, PHARMACOLOGY, THERAPEUTICS AND PRESCRIPTION WRITING.

Materia Medica, Pharmacology, Therapeutics and Prescription Writing. For Students and Practitioners. By Walter A. Bastedo, Ph. G., M.D., Assistant Professor of Clinical Medicine, Columbia University. Second edition, reset. Octavo of 654 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1918. Cloth, $4.00 net. Canadian agents, The J. F. Hartz Company, Limited, Toronto, Ontario.

This is a very good and useful book on the subject of drugs, their preparation and their uses. Its contents are compact and well arranged, and are adapted for quick reference or more deliberate study. It is a pleasing feature to note the attention that is devoted to the physiological action of drugs, as this must ever be at the very foundation of successful prescribing. Throughout the book doses are given in figures of grains, drachms, ounces, etc., and in brackets the corresponding dose in the metric system. For example, extract of hyoscyamus, ½ grain (0.03 gm.). The physician in seeking valuable information on this subject should procure a copy of this book.

CLINICAL LECTURES ON INFANT FEEDING.

Clinical Lectures on Infant Feeding. By Lewis W. Hill, M.D., Children's Hospital, Boston, and Jesse R. Gerstley, M.D., Michael Reese Hospital, Chicago. 12 mo. of 377 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1917. Cloth, $2.75 net. Canadian agents, The J. F. Hartz Company, Toronto, Ontario.

This volume of nearly four hundred pages consists of two parts. The first part is made up of a series of seven clinical lectures by Dr. Lewis Webb Hill; and the second part of ten lectures by Dr. Jessie R. Gerstley. The general principles and methods of infant feeding are very carefully discussed by the authors. The several varieties of foods and the methods of preparing these receive due consideration. Such conditions as constipation, acidosis, diarrhœa and so on are dealt with. This is a book that should find its way into the hands of every doctor who has to give advice on the rearing of children.

AMERICAN ILLUSTRATED MEDICAL DICTIONARY (DORLAND).

A new and complete dictionary of terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, Veterinary Science, Nursing, Biology and kindred branches; with new and elaborate tables. Ninth edition, revised and enlarged. Edited by W. A. Newman Dorland, M.D. Large octavo of 1,179 pages, with 331 illustrations, 119 in colors. Containing over 2,000 new terms. Philadelphia and London: W. B. Saunders Company, 1917. Flexible leather, $5.00 net; thumb index, $5,50 net. Canadian agents, The J. F. Hartz Company, Limited, Toronto, Ontario.

This is a very complete and reliable medical dictionary. It is a volume of 1179 double-column pages. Derivations are given with much care, and for all the important terms. The meaning of war words, new words, dental terms, veterinary terms, biographical names, table of signs, anatomical tables, chemical formulæ, methods of treatment, tests, serums, operations, table of the exanthemata, dosage table and many illustrations. This book is convenient in size, absolutely trustworthy in matter, done in very clear type, bound in a most attractive manner, and richly ilustrated. It is an ideal medical dictionary, and should be a constant companion of every doctor in his studies.

THE THIRD GREAT PLAGUE.

The Third Great Plague: A Discussion of Syphilis for Everyday People. By John H. Stokes, A.B., M.D., Chief of the Section of Dermatology and Syphilology, the Mayo Clinic, Rochester, Minn. 12 mo. of 204 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1917. Cloth, $1.50 net. Canadian agents, The J. F. Hartz Company, Limited, Toronto, Ontario.

This book of 200 pages is a veritable mine of information about syphilis. Cholera, smallpox, bubonic plague, malaria and yellow fever,

diseases that have wrought havoc in the past, are now to a very great degree under control. The three modern plagues that the author mentions are tuberculosis, cancer and syphilis. The first of these is now being held in check to a very gratifying extent. The author states that the disease was brought to Europe from the island of Hayti by the sailors of Columbus. From Spain it spread over the world. The author gives a very readable account of the nature of the disease, the blood tests, its treatment, its cure, its heredity aspects, its transmision, and its prophylaxis. We have enjoyed very much the perusal of this book.

AMERICAN ADDRESSES ON WAR SURGERY.

American Addresses on War Surgery. By Sir Berkeley Moynihan, C.B., Temperory Colonel, A. M. S., Consulting Surgeon, Northern Command. 12 mo. of 143 pages. Philadelphia and London: W. B. Saunders Company, 1917. Cloth, $1.75 net. Canadian agents, The J. F. Hartz Company, Limited, Toronto, Ontario.

This small book, the work of one great surgeon, is dedicated to anonther great surgeon, G. W. Crile. Sir Berkeley Moyinham is so well known that anything he says is bound to attract attention and to be read at the earliest apportunity. There are five addresses in this volume: The Causes of the War; Gunshot Wounds and their Treatment; Wounds of the Knee-joint; Injuries to Peripheral Nerves and their Treatment; and Gunshot Wounds of the Lungs and Pleuræ. Each of these is so well thought out and based on such wide experience that it carries a real message for the profession at this time. The publishers have rendered a signal service in collecting these addresses into book form.

INFECTION, IMMUNITY AND SPECIFIC THERAPY.

A Practical Text-book of Infection, Immunity and Specific Therapy, with Special Reference to Immunologic Technic. By John A. Kolmer, M.D., Dr. P. H., M.Sc., Assistant Professor of Experimental Pathology, University of Pennsylvania. With an introduction by Allen J. Smith, M.D., Professor of Pathology, University of Pennsylvania. Second edition, thoroughly revised. Octavo of 978 pages, with 147 original illustrations, 46 in colors. Philadelphia and London: W. B. Saunders Company, 1917. Cloth, $7.00 net; half morocco, $8.50. Canadian agents, The J. F. Hartz Company, Limited, Toronto, Ontario.

This great work has reached its second edition and has been thoroughly revised and brought up-to-date. This work is so comprehensive and complete that it is impossible to attempt to give a synopsis of its contents. The problems of infections, bacteria, immunity, serums, vaccines, treatment and prevention have assumed a constantly and rapidly widening aspect. Steadily new diseases are being regarded as due to living organisms. Many diseases are now known to be caused by a

variety of the organism, such as typhoid fever and pneumonia. The study of the life history of man's invisible enemies is one of the most fascinating in the whole of science. This book tells the wonderful story in splendid style.

PROGRESSIVE MEDICINE.

A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by H. A. Hare, M.D., and Leighton F. Appleman, M.D. Vol. I., March, 1918. Philadelphia and New York: Lea and Febiger. Price, $6.00 per annum.

This is now the seventy-seventh volume of the whole series. Year by year the publishers and authors have striven to make this work better and more useful. This volume takes up Surgery of the Head, Neck and Breast, by Charles F. Frazier; Surgery of the Thorax, by George P. Müller; Infectious Diseases, by John Ruhräh; Diseases of Chuldren, by Floyd M. Crandall; and Rhinology, Laryngology and Otology, by Geo. M. Coates. This is an excellent collection of topics, and they are handled in a masterly manner. Our best wishes for this series of volumes. They are progressive.

THE SPLEEN AND ANAEMIA.

Experimental and Clinical Studies. By Richard Mills Pearce, M.D., Sc.D., Professor of Research Medicine, with the assistance of Edward Bell Krumbhaar, M.D., Ph. D., Assistant Professor of Research Medicine, and Charles Harrison Frazier, M.D., Sc.D., Professor of Clinical Surgery, University of Pennsylvania. 16 illustrations, color and black and white. Philadelphia and London: J. B. Lippincott Company. Montreal, Canada: Charles Roberts, 201 Unity Building. Price, $5.00.

Books such as this are rare and should be valued highly. The authors, especially Professor Pearce, have devoted much time to the subject matter of this work. Everything is done in a careful and thorough fashion. In the first place there is a full review of the history of the removal of the spleen, in which it is stated that the organ was first removed in 1578, but the name of the operator is not known. There is an elaborate account of experimental work on dogs, and the effects of the removal of the spleen. A chapter is devoted to the study of the regulatory influence of the spleen. Then there is an examination into the changes in the bone marrow and the liver and the lymph nodes. The metabolism studies on the dog before and after removal receive full consideration. There are many observations also made on the metabolism changes in man. The various types of splenomegaly are taken up. Diagnosis, prognosis and treatment are discussed clearly and fully. Treatment of splenic diseases, and especially by splenectomy, constitute

one of the most interesting sections of the book. The conclusions arrived at by the authors will, no doubt, materially modify the views of the profession on diseases of the spleen and the best methods of treating them. The field for operative measures is considerably broadened. To the pathologist, the internest and the surgeon this book will come as a welcome visitor.

MISCELLANEOUS

HARD MONTH ON HEALTH

The health record of Toronto for the month of February compares favorably with January, but is not nearly as good as was the record for February a year ago. Tuberculosis cases showed a big drop, but there was a considerable increase in the number of cases of other communicable diseases. The comparison:

	1918. Feb.,	1917. Feb.,	1918 Jan.
Diphtheria	138	102	148
Scarlet fever	129	42	122
Typhoid fever	7	4	8
Measles	344	332	295
Smallpox	1	2	..
Tuberculosis	44	77	155
Chickenpox	87	63	137
Whooping cough	44	21	75
Mumps	87	26	113
Spinal meningitis	1	3	3
Erysipelas	7	5	7
Infantile paralysis	..	1	1

DECREASE IN DEATHS

A falling off in the number of births and deaths in February, compared with the same month last year, is reported for Toronto. There was, however, an increase in marriages from 335 to 353. The figures are as follows:

	Feb., 1918.	Feb., 1917.	Jan. 1918
Births	913	958	1011
Marriages	353	335	379
Deaths	525	551	543

The deaths from contagious diseases were as follows:

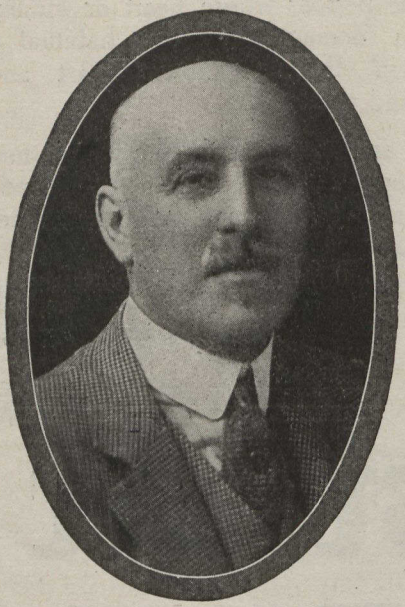
	Feb., 1918.	Feb., 1917.	Jan. 1918
Smallpox	0	0	0
Scarlet fever	4	1	2
Diphtheria	12	2	8
Measles	1	0	3
Whooping Cough	1	0	0
Typhoid fever	2	2	2
Tuberculosis	30	36	24
Infantile paralysis	0	0	0
Cerebro-spinal meningitis	3	3	0

MAJOR ROBERTSON RETURNS

Major Bruce Robertson, whose return to Canada to resume his work as a member of the Medical Faculty, was requested by the University of Toronto, through the President, Sir Robert Falconer, has been serving in France with No. 2 Can. C. C. S. since September, 1915. During his long period of service in Flanders, Major Robertson not only acted as surgical specialist in charge of that department at the casualty clearing station, but showed that life-saving results could be obtained in connection with the transfusion of blood, and led to this important factor in war surgery being introduced into the British army. Two articles by Major Robertson on the tranfusion of blood in connection with military surgery appeared in the British Medical Journal in the summer of 1916 and the autumn of 1917, and while in England, on his way back to Canada, he prepared a report on the subject for the Surgical Congress of the allies, to be held in Paris. Major Robertson also introduced a bed for use in abdominal cases that has been adopted by the Red Cross, and the Army Medical Corps, in caring for soldiers suffering from wounds of this nature.

A graduate in Arts of University College before completing his medical course, Major Robertson was prominent as a student in social and athletic activities, being a member of the Thirteen Club and also of the Senior Arts Rugby team. Prior to going overseas he was assistant in clinical surgery at the University and on the staff of the Hospital for Sick Children. He enlisted as a lieutenant with the C.A.M.C. on August 5, 1914, went overseas as captain early in 1915, and received his promotion to major in France last April.

POLITICAL REMINISCENCES OF SIR JOHN WILLISON



SIR JOHN WILLISON,
Whose Political Reminiscences begin in the May Number of The Canadian Magazine

THE publication of these reminiscences will be an outstanding event in Canadian historical literature. Starting in the MAY number of THE CANADIAN MAGAZINE they will continue every month for at least a year, and will appear only in THE CANADIAN MAGAZINE. The collection as a whole will be an invaluable addition to the political history of Canada.

To the student of political history this series will have a special appeal, for with its aid one may follow the great political events of the past forty years and obtain inside information never before given to the public.

The author, Sir John Willison, has seen the inside workings of both political parties, first as a Liberal, and latterly as a Conservative, and there is probably no man in Canada better fitted to turn the spotlight on the politics and politicians of the two great parties in Canada. This should be particularly interesting now when both parties have joined forces in the Federal arena and the extension of the term of the Ontario Legislature has been unanimously agreed to until one year after the war.

These reminiscences are without animus, malice, or cant, because they are strictly non-partisan. But they are illuminating, entertaining, jovial, kindly, vivacious, and full of personal touches of great interest and insight.

[SEE NEXT PAGE]

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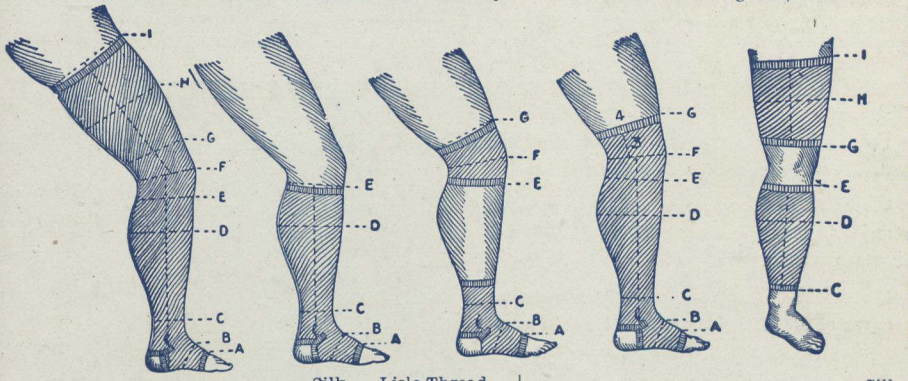

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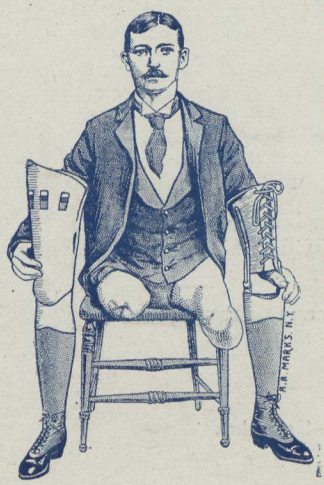

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