

PAGES

MISSING

The Canada Lancer

VOL. LII.

TORONTO, APRIL, 1919

No. 8

EDITORIAL

THE ONTARIO MEDICAL ASSOCIATION.

The meeting of the Ontario Medical Association will be held in Toronto this year, on 28th, 29th, and 30th May. It is announced that Sir St. Clair Thompson will give an address. It is expected that a number of prominent members of the profession in the United States will be present, and contribute to the programme. This Association should be well supported, as it has a long and splendid record to look back upon, and a brilliant future ahead of it.

LIQUOR AND THE TEMPERANCE ACT.

Hon. W. D. McPherson introduced into the Legislature, recently, a bill to amend the Ontario Temperance Act. The outstanding features are that the Commissioners are authorized to take over the liquor traffic. This should lead to two results: a guarantee of quality and a reasonable price. As liquor is sold now only for medicinal purposes the profiteering feature should disappear, and the quality should be the very best.

Under the amended act the vendor may hold the doctor's prescription for such time as will enable enquiry to be made that the signature is that of the prescribing doctor. This is intended to check the custom of bogus orders. It is also provided that if the prescription is bogus, or was obtained in an irregular way, or that the liquor will be used by some one else than the person for whom it was prescribed, the person presenting such an order may be arrested by any officer of the law without warrant. It is also made an offense for any one who obtains a prescription to sell or transfer it to any other person for said person's use. For such an offense a fine of \$50 to \$300 is fixed.

The amount of liquor a doctor may keep for dispensing purposes will be fixed by Order-in-Council. Thus a doctor who is far from a

vendor might be allowed the full quantity of ten gallons, while one near a vendor might be restricted to a lesser quantity.

These changes in the act will do much to clear the atmosphere, and surround the traffic with safeguards to the profession and the people.

A FEDERAL HEALTH DEPARTMENT

There seems now no doubt but that the Parliament of Canada will enact legislation that will create a department for the purpose of guiding the health interests of the country. The exact terms of the bill are not yet made known.

The effect of such legislation will be very great, and most valuable. In due time it will have a unifying effect on the health laws of the several provinces, each will endeavor to fall into line with the national practice in the matter of public health.

But there are some topics of vital interest that can only be handled by a federal department. Then, further, the health laws of the provinces must sometimes be implemented by a national act to become fully effective for good.

Such a measure should receive the support of the medical profession of the country. We have pointed out on many occasions that there is no way in which the country can invest money that will yield such a splendid return.

A GREAT GIFT TO THE UNIVERSITY OF TORONTO

Sir John and Lady Eaton have announced their intention of giving to the University of Toronto \$25,000 a year for a period of 20 years, for the purpose of aiding the department of medicine. It is stipulated that some one must be chosen to give his whole time to the department of medicine and another to give half time to the department of pediatrics. When these changes come into effect the results will be far-reaching, and the future students will be decided gainers thereby. It is most encouraging to see the generous spirit developing in this country.

OPTOMETRY

In another part of this issue we publish the proposed bill to regulate the practice of optometry. We would advise a careful study of its various clauses. The danger in this sort of legislation is that a similar bill may be introduced some time to regulate osteopathy, and the result will be the creation of a number of quasi professions. This would be a disaster.

ORIGINAL CONTRIBUTIONS

THE CANCER PROBLEM.

By EUGENE LYMAN FISK, M.D.

Is cancer preventable? Is cancer curable? Is it contagious? Does it run in families? Is it true that the disease is on the increase and that practically all attacks are fatal? No; cancer is not a hopeless, incurable disease. If taken at the beginning, the majority of cases of cancer are curable. Practically all cases, however, will end in death if let alone. The only cure for cancer is to remove every vestige of the disease, and the only absolutely sure way to do this is by a surgical operation. Records of our best hospitals prove that the chances of cure are very high with early operations, and that these chances decrease with every day of delay. Since the disease rarely causes pain at first it may be very easily neglected during the early and more hopeful stages. Moral: Learn the danger signs so that you may guard against its insidious onset in your own family and be able to extend comforting and intelligent advice to others in case of need.

A DESTROYER OF MANY LIVES.

Cancer is one of the most prevalent and menacing diseases of modern life. It is estimated that it causes over half as many deaths in the United States as does that other great scourge, tuberculosis. There is this difference, however: tuberculosis prevails at all ages, while cancer is essentially a disease of adult life. At ages over 40, one person in eleven dies of cancer. One woman in eight, and one man in fourteen, over forty years of age, is attacked by the disease with fatal results. Because of public ignorance and neglect, cancer now proves fatal in nine out of ten cases. If, however, proper precautions and treatment were observed, most of the deaths which occur from this cause might be eliminated.

Cancer is, moreover, a disease of special interest to women. It has been estimated that between the ages of thirty-five and forty-five, three times as many women as men die of cancer. Between the ages of forty-five and fifty twice as many die. This high degree of death among women is due to cancer of the breast and of the generative organs. It is encouraging to remember that these forms of the disease, like all the other forms, are usually curable by competent treatment in the early stages.

Although there is much that we do not know about the cause and cure of cancer, there are enough things that we do know, and on which all medical men of repute are agreed, to enable us to prevent at least 60 per cent. of the 80,000 yearly deaths which it causes in the United States.

HOW CANCER BEGINS.

Cancer begins in one spot, as a small growth, which in the early stages can easily be removed. If neglected, however, it spreads and gets beyond control. An attack of cancer may be likened to a fire in a house, which is discovered soon after it starts, a bucketful of water may extinguish. If cancer is discovered at the very beginning, the slight operation which is necessary to remove it may be no more serious or painful than the extraction of a tooth or "having one's tonsils out." If the matter is delayed, it may take all the skill of our best surgical experts and all the help of our most expensive scientific apparatus to root out the danger. In case the matter is delayed too long the unfortunate individual who is afflicted with it must abandon all hope. An early recognition of the disease is at present the all-important factor in its control, and until physicians know more about the real causes of cancer our chief hope of overcoming this enemy of the human race must lie in the fact that people everywhere will learn to recognize the danger signals of the early stages, and seek advice and treatment while there is yet time.

HOW CANCER DEVELOPS.

It is not easy accurately to define a cancer, but it is quite possible to describe some of its characteristics. It is well known that the tissues of the body, the muscles, the glands, the bones, etc., are each composed of a large number of very tiny cells. These cells have been well compared to the bricks in a building, and they are held together by a material which may be likened to mortar. These cells, however, are not composed of dead material, like bricks. They are alive, and growing, and dying off, according to certain laws which we do not yet completely understand.

Sometimes certain of these cells begin to grow and develop along lines which are not in harmony with the usual order. A little group of the cells seems to form a kind of lawless colony which constitutes an unhealthy and growing spot in the body. This spot may occur on the skin, in the breast, in the stomach, in the throat, or in any other part of the body. Frequently the cells form a little hard nodule or lump, which can easily be detected by the sense of touch, and which can very easily be cut out with the surgeon's knife, leaving little or no disfigurement.

If, however, the abnormal growth, which is thus started, is allowed to continue, it invades the surrounding tissues, and eventually parts of the original growth may break off and be carried in the blood to other parts of the body, where they start secondary growths.

It is just as though, in a case of fire, the wind might carry sparks and flaming shingles to other parts of the building starting secondary fires there. It is important to remember, however, that cancer is not a

constitutional or blood disease, like typhoid or malaria, for instance. When we are sick with typhoid, we are "sick all over". But when we are afflicted with cancer, we may be afflicted only in some tiny spot, and we may be perfectly well and wholesome in every other portion of the body. This is one of the most comforting things about this otherwise unpleasant disease.

THE PROBABLE CAUSES.

Cancer arises after long continued irritation of various kinds in and about benign growths and ulcerations. For instance, cancer of the lip and month is frequently caused from pipe smoking, broken teeth, and the chewing of tobacco. Cancer of the stomach frequently follows an ulcer of the stomach. Cancer of the uterus has frequently been traced to neglected lacerations and ulcerations; cancer of the skin from irritated moles and warts, and breast cancer from neglected sores, cracks, and especially from lumps which were at first benign (harmless).

It is thought by some that an irritation involving heat is particularly liable to cause cancer. In this connection it is interesting to note that cancer of the esophagus or food pipe has often been traced among the men in China to their habit of eating hot rice; on the other hand, it is not observed among the women of the same land who are accustomed to eat their rice cold at a second table.

Doctors were formerly taught that a benign growth always remained benign, but it is now known that benign tumors may become malignant growths. The old teachings about diagnosis recognized cancer only in the incurable last stages; everything else was diagnosed as benign. But doctors are now taught to recognize the pre-cancerous conditions in which treatment actually prevents the development of the disease.

Prevent any form of chronic irritation and you prevent at least the possibility of cancer of many types. Persistent ulcerations, cracks and sores, warts, moles, or birthmarks which change in appearance or grow larger, should be removed. Intelligent attention to these and other danger signals, and prompt examination by a competent physician or a surgeon, will greatly reduce the probability of one's having cancer.

If cancer in its beginning caused as much pain as a good stiff toothache or earache does, we should at once take warning, and most cases would be attended to without the fatal delay. However, pain—that blessing in disguise—is a danger signal which is usually not present at first, and therefore it behooves us to learn the other commonest symptoms or danger signals of the more important types of the disease. It must be remembered that these signals do not necessarily mean cancer,

but they should lead to a prompt consultation with a good physician or surgeon.

One of the most hopeful and curable forms of cancer is that dread of many women, cancer of the breast. Any lump in the breast, whether painful or not, should receive immediate attention.

There is one exception to this rule in the case of nursing mothers. Lumps suddenly appearing in the nursing breast are usually temporary and unimportant. It is also true that in the case of some women temporary lumps appear at the time of the monthly period. Many physicians, however, believe that safety lies in securing the opinion of a medical man on the appearance of any lump whatever which arises in the breast, and certainly all physicians are agreed that any lump which persists should have attention.

When malignant disease began in the uterus and adnexa it was regarded among the most hopeless localities, but now it is placed among the more hopeful, because it is possible to recognize the danger signals in an early stage and the removal is relatively safe and easy. Every woman should be well acquainted with the two main danger signals of this form and she should know definitely that although they are not necessarily certain signs of cancer they are warnings which should lead to immediate consultation with a doctor and to an immediate and thorough examination.

Cancer of the stomach and intestines is at best one of the most difficult forms of the disease with which to deal, and this makes it doubly necessary for us to give the earliest possible attention to the danger signals, always remembering that they may be caused by other than cancerous origins. Here, too, while it is foolish to get excited over common symptoms, it is just as foolish to take unnecessary chances. We must strive to take a middle course and steer clear between the shoals of hypochondria on the one hand and the rocks of foolhardy carelessness on the other.

In all chronic indigestions in middle age the most careful and early investigation at the hands of a skilled physician is advisable, and all the constantly improving technical methods of modern medical science, especially the X-ray, are required.

NOT HEREDITARY, NOT CONTAGIOUS.

It is comforting to remember that the present verdict of science regarding cancer is that it has not been proved to be hereditary. Moreover, it is a cheerful consideration in this connection that cancer, being as it is one of the diseases of later life, does to a certain extent go hand in hand with longevity.

Another encouraging thing to remember about cancer is that it is not contagious. In spite of the enormous number of cancer cases throughout the country we do not know of a single proved case of contagion. On the other hand, we have many reasons which practically amount to proofs that it cannot be transmitted. Nurses and others who are obliged to care for patients afflicted with cancer need have no fear of contracting the disease through their labors.

It is not a rare occurrence to find well-established cancerous growths, of which the individuals are wholly unconscious. In another class of cases, slight ulceration or persistent stomach or intestinal derangements, which are noted by the individual, but dismissed as of little importance, are found on close investigation to be of malignant character. As already stated, it is a great mistake to be continually looking for trouble of this kind, and the way to avoid this bad habit is to follow the system of periodic examination wherein the body is automatically protected against the development of unsuspected disease, and the mind is relieved of worry and responsibility in these matters.

WHAT EVERY WOMAN SHOULD KNOW ABOUT CANCER.

BY FRANCIS CARTER WOOD, M.D.,

(Director of Cancer Research under the George Crocker Special Research Fund of Columbia University.)

CAN'T you give me some hope, Doctor?" said the pale, sad-faced woman. "The children need me here so much. My husband died some years ago, and I am all they have. I did not know that an operation had to be done early. My mother had a cancer, and when this lump came I thought I knew what it was, but I did not dare tell anyone, or come to see you, because I had heard her say that operations did no good. I saw an advertisement of a salve, and so I bought some of that and rubbed it on, but it seemed only to make things worse. Now I come to you, and all you say is, 'If you had only come in time!' I did not know that a cancer could be cut out and never come back, if it was only done soon enough. There has been so much in the newspapers lately about wonderful cures with radium. I hoped you would tell me that I could get well without an operation, and now you say that it is probably too late!"

How often we physicians hear this sad story—of delay for months and years—of hope that something will happen—of fatalistic belief in the inheritance of cancer—of that thousand-year-old faith in an ointment well rubbed in, a faith that can be traced back to the ancient Egyptians.

Why is it that there is no real public knowledge of the danger of cancer and the only means of its cure?

PHYSICIANS MUST NOT ADVERTISE.

I am afraid that the blame for much of this lack of information must be laid at the door of the physician himself. The binding code against advertising affects the honorable man—not the quack. The source of the medical knowledge of the masses to-day is still the charlatan and his newspaper advertisements, and it is time, indeed, that the public receive accurate information from those who know the situation.

The remarkable fall in the death rate from tuberculosis during the last few years is due to the widespread publicity given by physicians, both as individuals and as members of the Association for the Study of Tuberculosis, to this simple fact: that the disease can easily be cured, if taken in time. Similar campaigns of publicity have been carried out by the life insurance companies and the mutual benefit societies, with equal success. The cure of tuberculosis, however, is a relatively simple matter, requiring chiefly rest, good food and fresh air; the cure of cancer, on the other hand, is, unfortunately, more difficult.

Cancer is a disease which, especially when it is internal, is often hard to recognize, and, moreover, it is one which requires immediate action if good results are to follow. This immediate action, in the vast majority of cases, is recourse to operation by highly trained and skilled specialists.

To some people the words "highly trained" and "skilled specialists" bring chiefly the thought of a heavy bill; but it must be remembered that in hundreds of hospitals and dispensaries throughout the land, especially in the larger cities, the advice of such specialists can be obtained on the payment of a merely nominal fee, and that at any price the services of a man who knows are less expensive in the end than those of a quack.

THE BEGINNING OF PUBLIC EDUCATION.

A beginning in public education about cancer has, indeed, been made by the American Society for the Control of Cancer, an organization formed to spread accurate and authentic knowledge concerning the disease among both physicians and the public; such, for instance, as the fact that in England cancer is the most frequent cause of death among women after the age of forty-five; that in the United States one man in fourteen and one woman in eight over forty years of age die of the disease; that, if taken at the beginning, the majority of cases of cancer are curable; that the only cure is the removal of every vestige of the disease; and that the only sure way of accomplishing this is by a surgical operation.

The efforts of this society have met with the most cordial reception. Boards of health, medical societies, insurance companies, and individual physicians have shown great interest in the work, and have taken an active part in the campaign to diffuse such knowledge of cancer as everyone should possess.

What is this knowledge? It may be summed up in a few words: Cancer is not a blood disease, but one which usually begins after middle life as a very small lump. If this lump can be found and cut out the cancer will be cured. Cancer is not inherited, nor is it contagious or due to a germ. Cancer is rarely painful, except in the last stages. While external cancer appears as an ulcer, a sore, or a lump, internal cancer can be told only by its symptoms—cancer of the stomach by dyspepsia, bloating, vomiting of food and blood; cancer of the bowels by colic, bloating, and passing of blood; cancer of the womb by bleeding at unexpected times or after the change of life; cancer of the kidney by blood in the urine.

If everyone who showed any of these symptoms immediately consulted a physician, especially one who has had a hospital training, and knows how to make the modern laboratory tests and to use the X-ray machine in diagnosis many lives would be saved.

Distrust the physician who does not have a microscopic examination made of any lump of the nature of which he cannot be certain. Most early cancers can be diagnosed only in this way. If one waits for all the symptoms to appear, it is often too late to save life.

While we do not know the cause of cancer despite all the investigations which have been made by scientific men, yet we do know a great deal about how it occurs and what is apt to precede it, and our lack of knowledge as to the cause does not prevent our being able to cure it. Many diseases of which we do not as yet know the real cause are nevertheless curable. So we find that cancer frequently begins in moles or warts which are irritated or rubbed by the clothing or made to bleed or kept sore by repeated injury of any sort. Such warts and moles are perfectly harmless at first and become dangerous only after they have been irritated for a long time, especially if the person is of the cancer age—this, above forty. It is wise, therefore, to have such moles removed if they are in a situation where they are liable to be rubbed or injured.

BEGINNINGS OF CANCER.

Physicians have noted, also, that cancer may develop in a scar of an old burn, or in places where a chronic ulcer forms, as on the lip or tongue or leg, and it is important to see that such injuries are healed as soon as possible. Ulcers on the tongue or cheek are frequently caused by the scratching of a poor filling or by the sharp point of a decayed

tooth, and a dentist should be consulted if a sore spot in the mouth does not heal in a few days.

The first beginnings of an internal cancer are much more difficult to discover, because these tumors when they start are found only by accident. But it has been found that they very often begin in some slight inflammation or ulceration. Ulcer of the stomach, which is a common starting point for cancer, is a good example; while such ulcers are frequently in women, they can be easily cured by suitable treatment if they are taken at an early stage. If a cure cannot be obtained by dieting, it is now considered wise to have the ulcer removed. Cancers of the lower bowel, also, are not infrequently preceded by some sort of chronic inflammation or ulceration, and persons suffering from chronic dysentery, bleeding piles or ulceration of the bowel should consult a physician.

Cancer of the breast in women frequently follows chronic inflammation, and is not caused by a blow, as is so frequently thought. Any woman who notices a lump in her breast should at once consult a physician.

THE ONE AND ONLY CURE.

Cancer cannot be cured by ointments, salves or pastes. These preparations are prescribed only by quacks, a fact which should be known to everyone. Caustics will cure some small cancers of the face, but no other kind. Do not rely on radium or X-ray; they certainly and permanently cure only the small face cancers, and although many deep cancers may be greatly improved by the use of radium or X-ray, in most cases this change is only temporary.

What radium and X-ray can do, when we know better how to use them, is, of course, not settled, but what we do know now is that removal by operation will cure many more cancers than will treatment with radium or X-rays.

The only way in which the ravages of cancer can be checked is by early diagnosis. This early diagnosis can be made only when the patient consults a physician; no physician can possibly seek out and examine people without their requesting it. The people must come to him. Many people say that they do not want doctors examining them, though, curiously enough, they make no objection to the most thorough medical examination if it is for life insurance. Why should they object if the examination is to preserve their own lives, and not merely to afford means of saving money for the lives of others. They think nothing of going to a dentist once a year to have their teeth examined. Why should they not go and have their bodies examined to see if any serious disease exists, especially after they have reached the cancer age.

THE ONCE-A-YEAR EXAMINATION.

In the larger cities a beginning has been made in this direction, particularly by the life insurance companies, which offer to their clients the option of an examination, performed at stated intervals, by reputable physicians not connected with the company.

Unfortunately, this opportunity does not yet exist outside of the cities, but there are everywhere plenty of physicians who are perfectly competent to recognize early cancer, and there are many laboratories where specimens can be examined free if the physician himself has not a sufficient equipment.

Why, therefore, should not every person of the cancer age go to her physician once a year, even if she has no serious symptoms, and learn whether a cancer is present or not. In the vast majority of cases an answer can be given. If the cancer is found early, it is likely to be so small that a competent surgeon will be able to remove it, with every hope not only that life will be prolonged but that the tumor will never return. The results of the best modern surgery in cancer are quite extraordinary. Cancer of the lip in its early stages can be cured in ninety per cent. of the cases; cancer of the breast, if taken early enough, certainly in half of the cases, and cancer of the womb in a quarter of the cases. No other means of treatment offers the same amount of hope. To delay means certain death, for cancer does not cure itself.

ON THE TREATMENT OF CERTAIN FORMS OF OPACITY OF
THE CORNEA AND VITREOUS.

BY G. STERLING RYERSON, M.D., L.R.C.S.E., F.A.C.S.,

THE object of this paper is not to discuss all forms of treatment or corneal opacities and vitreous opacities, but to draw attention to certain methods of treatment which in my hands during a long series of years have given good results. We have all had the experience of the disabilities to which patients have been subjected by opacities of the cornea following ulceration of the cornea and the removal of them has been a serious problem. Any method, therefore, which may aid us in achieving this object is welcome. Like all other oculists, I have used yellow oxide of mercury extensively, and to a lesser degree the red oxide. Some benefit was obtained, but there seemed something wanting to clear the nebulous condition which still remained to interfere with the patient's vision. Many years ago I learned the method of steaming the cornea prior to the application of the yellow oxide. I show the apparatus used. A fine stream of steam is projected on the cornea for the

period of two or three minutes, then the yellow oxide ointment (1 per cent.) is placed in the conjunctival sac and the eye is gently massaged for two or three minutes. The steaming produces a marked increase of vascularity of the conjunctiva and probably softens the corneal epithelium and permits of ready absorption. When this treatment is persisted in for some time daily, if there is not too great a reaction, or if there is much reaction, two or three times a week, a very great improvement of vision takes place. I need hardly say that in this treatment is inapplicable to dense scars following permanent destruction of corneal tissue.

Another method by which I have treated corneal opacities with some degree of success is by the subconjunctival injection of normal salt solutions. One must be liberal with the amount used, beginning with a small quantity and gradually increasing the quantity. Some bear it well, and some react strongly. It goes without saying that the solution should be carefully sterilized and that the conjunctiva should be lightly cocainized.

The other method of treatment to which I would draw attention is what I call *pressure inunction*. This is applicable to the denser forms of corneal opacity, other than destructive scars, which are irremediable. The treatment consists of a plasma made of one drachm of calomel to the ounce of vaseline, very thoroughly and carefully rubbed up, so that there are no crude particles left unemulsified. A small quantity is placed in the conjunctival sac and a rather thick layer is spread on the eyelids. The eye is then covered with a pad and a roller bandage is firmly and carefully applied, so as to exert moderate pressure. A thin flannel bandage is best for this purpose. The dressing is worn for two hours daily. The patient or his friends can be taught to apply this treatment. As I have said, I have found this kind of treatment useful in the denser opacities, but I think I have obtained results in opacities of the vitreous. A process of absorption goes on, with or without the aid of pilocarpin, producing in course of time a marked improvement of vision in opacities of the vitreous following hemorrhage into that body or in the case of opacities resulting from effusion.

2 College Street, Toronto.

MAGNESIUM SULPHATE IN PELLAGRA.

I find magnesium sulphate a very useful remedy in the treatment of pellagra in the first stage. Using this remedy, I keep the bowels active for several days, and give strychnine, 1-40 grain, several times daily, as a supportive tonic. The magnesium sulphate purge seems to eliminate the poison of pellagra from the system.—Dr. W. B. Dorris, in *The Amer. Jour Clin. Med.*

CURRENT MEDICAL LITERATURE

SERUM DOSAGE IN DIPHTHERIA.

Dr. Joseph Comby (*Presse Medicale*) issues a warning against hesitation and delay in the treatment of diphtheria by antitoxin. Often, in insidious forms of the disease, the child has already been ill three to five days before the physician's initial visit, and even then the physician will frequently withhold specific treatment another day while awaiting a positive bacteriologic diagnosis. In severe cases the amount of antitoxin administered is often unwarrantably small, through apprehension of anaphylactic manifestations. The ratio of cases with such manifestations in Comby's experience has been but fifteen per cent., but even if this ratio were exceeded, the resulting erythema, urticaria, arthralgia, or fever are trifling and ephemeral, and death from this reaction never occurs. A mere suspicion of diphtheria indicates immediate serum injection, without waiting for the results of the bacteriologic examination. Even in subjects who have previously received serum, a large dose—never less than twenty mils of the French official antitoxin, should be given at the start. In severe or tardily treated cases, the dose should be from forty to 100 mils, to be repeated within twenty-four hours if necessary. A child of three years, seen on the fourth day, received 120 mils in thirty-six hours, and a girl of fifteen, 600 mils in the course of a few days. Under such doses the throat and nasal fossae rapidly clear and apparently hopeless cases recover. Serum reactions seem less frequent and marked after large than after small doses. Large doses, moreover, are therapeutically all sufficient, rendering throat irrigations and applications, with the attending discomforts in small patients, quite superfluous.

TINCTURE OF IODINE IN ERYSIPELAS.

Dr. William Keppler (*The Medical Clinic*) considers a ten per cent. strength of tincture of iodine, vigorously painted over the affected area and surrounding tissue, an efficacious remedy in the treatment of this affection. He emphasizes the importance of its application in equal strength to all of the affected area including the folds, wrinkles and recesses. Where the diseased part is smooth and of easy access the preparation is applied by means of a tampon of iodized gauze, a second application being made at once after the one has dried. The iodization must extend beyond the part implicated by at least a hand's width, to insure successful results. Direct application of the tincture to the affected

area, and principally the spots which are difficult to reach, is essential. Subsequently, an equal distribution of the remedy may be effected by means of a gauze or cotton tampon. After the first application, in the majority of the cases, a prompt recession of the symptoms is noted. The temperature drops to normal, occasionally even less, while the subjective disturbances often vanish as if by magic; an extension of the redness distal to the brown margin of the iodine application is not discernible. He states that such favorable results cannot, of course, be expected, especially not upon the temperature curve, when other morbid processes complicate or are secondary causes of the disease. But even here, the cutaneous process itself is influenced in a like favorable manner. He lays stress on the fact that even where the erysipelatous skin is covered with vesicles, it tolerates well the iodine applications, and in this regard does not differ from the normal skin. Only occasionally does a slight burning sensation manifest itself. In his experience, no remedy compared in the slightest degree with the success of the iodine (10 per cent.).

MIXED VACCINES IN INFLUENZA

A. J. Minaker, and R. S. Irvine, San Francisco *Journal A. M. A.*, March 22, 1919) describe the use of mixed vaccines and their results at the Naval Training Station in San Francisco, during the late pandemic of influenza. A culture of *B. influenzae* was obtained from the Rockefeller Institute, but difficulties were encountered in reproducing good growths in ordinary human blood agar, or sufficient quantity for the needs. From the findings, it was concluded that human blood contained natural immune bodies in varying amount. "Following a suggestion of Professor Hall of the University of California, the human blood agar when cooled was cooked in a Freas dry oven at a temperature of from 100 to 115 C. or until it changed to a rich chocolate brown; in fact, it was found that even when this agar was apparently overcooked, luxurious growths were secured. Whether this result was due to the destruction of the natural immune bodies, or to a liberation of the hematin from the blood, or to both, remains to be settled. Suffice it to state that with this medium not only could subcultures be easily grown, but also primary cultures from lungs, sputum and postnares demonstrate the presence of *B. influenzae* in easily recognizable colonies. To obtain pure cultures of the pneumococci, human blood agar gave best results, while for vaccine, 2 per cent. glucose bouillon gave ample growths. The streptococci were grown and gathered from blood agar, 15 per cent. human blood, centrifuged and washed (both washed and unwashed were tried with very little difference noted) and diluted in a 0.5 per cent.

phenolized salt solution. For the gram-positive bacteria the standardizing was done by using Wright's method and counting chamber; the influenza bacilli were counted by ratio with standardized pneumococci." The toxicity of the bacteria was tested on laboratory animals, and also on human volunteers for the *Streptococcus hemolyticus*, large doses producing no untoward effects. Each cubic centimeter of the mixed vaccine contained 5 billion *B. influenzae*, 3 billion each of pneumococcus Types I. and II., various strains; 1 billion of Type III., and 100 million *S. hemolyticus* of two strains. These were sterilized separately for an hour at 56 C., and then mixed with 0.5 per cent. phenolized salt solution to make the desired amount. In addition to this they prepared a lipovaccine, to weighed portions of which a sterile mixture of 10 per cent. lanolin in oil of sweet almonds was added and the mass again triturated for three hours. Each cubic centimeter contained 2 mg. of the bacterial powder. One c.c. of this mixture caused no serious results in a guinea-pig, and the same amount caused moderate reactions in inoculated volunteers. Of the civilian population 1,080 were inoculated, also 1,950 marines. These circulated freely in Vallejo and San Francisco. The 3,100 men from the San Pedro Naval Camp were inoculated about November 15, when the epidemic was in its recrudescence in Los Angeles and vicinity. The observations included white and differential blood counts, and agglutination tests. The reactions were comparatively trivial, beginning about six hours after inoculation and abating within thirty-six, in no case lasting over forty-eight hours. The writers state that in view of the low incidence of the disease in the inoculated persons the facts undoubtedly indicate a noteworthy protection against influenza and its complications, given by the mixed vaccines freshly prepared from the chief etiologic bacteria, and should encourage further work in this line. An attempt is now being made to regroup the Type IV. pneumococcus so as to add it to a mixed vaccine when needed.

INFLUENZAL BRONCHOPNEUMONIA

E. R. LeCount, Chicago (*Journal A. M. A.*, March 29, 1919, says the first feature observed in the lungs in influenzal pneumonia to attract the attention of the practitioner in fatal cases is the relatively small portion of the organ involved, and, with this, a perhaps even more noticeable feature, the huge watery and often bloody exudate in the lung tissue and bronchioles. It forms one of the most interesting and tell-tale signs of influenza. There is also some fluid of the kind in one or both pleural cavities. It is scant in fibrin, and unlike the pleural exudate of any other form of acute pneumonia. The pneumonia is commonly called

bronchopneumonia, but it differs from other bronchopneumonias in its predilection for the periphery of the lungs and in the extent to which the inflammation is hemorrhagic. LeCount reports the findings in a case of an early death from this form which are characteristic. Next in importance is the change in the medium size and smaller bronchioles to the involved lung tissue. Early, their linings are simply red, but later they become necrotic and their content a thin mucopus, like that of early gonorrhoea, or one containing small flocculent gray or gray-brown masses. Slight dilatation of the smaller bronchi is common. The brain substance is quite regularly swollen, the convolutions flat. The even external contour and the narrowness of the lateral ventricles constitute another conspicuous feature. This edema of the brain substance is less than that of uremia or heat-stroke. The spleen in influenza is not so large as in lobar pneumonia. "Less constant are generalized icterus; the early appearance of staining of the lining of large blood vessels by laked blood; patches of necrosis of the larynx or trachea lining; hyperplasia of the lymphoid tissues of the thorax and neck; slight acute serofibrinous pericarditis; acute interstitial emphysema of the lungs and mediastinal tissues, or of these with subcutaneous tissues as well; otitis or accessory (nasal) sinus inflammation, or actual suppuration as small abscesses in the lungs." It is hard to believe, LeCount says, that with so many distinctive features and so much of novelty in pathologic anatomy it can fail to possess a correspondingly definite etiology.

SIGNIFICANCE OF REFERRED NERVOUS PHENOMENA IN THE DIAGNOSIS OF PULMONARY AND PLEURAL INFLAMMATION.

F. M. Pottenger works out with great detail the distribution of the various nerve segments that supply the lungs and pleura as well as the more external thoracic structures. Involvement of pulmonary and pleural tissues, in the author's opinion, may embrace also the nerves and the effect, therefore, be reflected to more superficial parts in the domain of corresponding nerves, and this effect may be noticed as various motor, sensory and trophic disturbances. Five illustrations make clear the nervous distribution and other thoracic anatomical relations.

Pleural and pulmonary inflammations do not express themselves in identically the same structures. At times the seat of the underlying lesion may be determined by the peculiar character of the respiratory motion alone. Inflammations of the lung and pleura tend, by reflex nervous action, to bring about limitation of movement of various areas of the chest. When the inflammation affects the portion of pleura that is below

the fifth rib, the degree of limitation is usually greater than when it involves the upper portion. Sensory effects of deep-seated inflammations are also reflected to the surface. When the pleura over the central tendon of the diaphragm is inflamed, sensory phenomena predominate over motor; while, when the lung is involved, motor predominate over sensory. Reflex sensory disturbances caused by inflammation of the costal pleura are almost wholly confined to the surface of the chest wall unless the costal portion of the diaphragmatic pleura is involved, when the sensory changes may be, and usually are, transmitted along the intercostal nerves over the abdominal wall. A chronic inflammatory process in the lung may cause atrophy of the skin and subcutaneous tissue above the second rib anteriorly and the spine of the scapula posteriorly. Extensive chronic hilum inflammation usually causes atrophy of the skin and subcutaneous tissue in the interseapular space. Localized atrophy of the skin and subcutaneous tissue elsewhere over the bony thorax is due to chronic inflammation of the underlying pleura in the path of nerve endings which are in reflex connection with the intercostal nerves which supply the atrophied structures.—*Am. Jour. Tuberc.*, Feb., 1919.

COAGULOSE IN HEMORRHAGE

There is to be found in the *Proceedings of the Royal Society of Medicine* for December, 1917, the following statement of clinical experience:

Mr. A. S. Blundell Bankart: I have a number of times used Coagulose for bleeding during operations, and I have found it very effective. It is an amorphous powder said to be precipitated from normal horse serum and put up by Parke, Davis & Company. I have applied it locally in solution to bleeding surfaces, and sometimes the effect has been quite astonishing. Coagulose has also been used subcutaneously at the Queen's Hospital for Children in cases of melena neonatorum, hemophilia, and other persistent bleeding, and it has proved so successful that it has practically become the routine treatment there for all such cases. Such a preparation always available has obvious advantages over serum, which must be freshly prepared for injection.

Dr. Eric Pritchard: Is there any advantage in giving human serum rather than human blood? Because there must be some delay in the preparation of the serum, and there is some danger of its becoming contaminated. I have had for some time in hospital a case of purpura, with constant hemorrhages which have been treated by a variety of methods. Coagulose has had a most striking effect in stopping the

hemorrhages temporarily. I have tried injection of blood from the father, hypodermically, and this also seems to have an equally good effect, but the method is troublesome, and if the Coagulose is always as effective as the serum or the blood it will prove a very valuable substitute.

Dr. Humphreys: I have tried Coagulose in three cases, one of them a case of hemophilia. The boy had been bleeding for three weeks before he came into the hospital, and the Coagulose stopped the bleeding in less than half an hour. The second patient, a boy with purpura, had several attacks of epistaxis, and they have all been successfully treated with Coagulose. The third case, one of hemophilia, was admitted into hospital with a violent attack of hematemesis. I gave him a teaspoonful of Coagulose by the mouth, and it stopped the bleeding within an hour, and he had no further attack. I have tried it locally as well, for the gums. A boy came into the casualty for severe epistaxis, with a plug soaked with Adrnalin in the nostril. I removed that plug, and put in one soaked with Coagulose, and in half an hour the bleeding had ceased and the boy left the hospital.—*Therapeutic Gazette.*

TREATMENT AND MISTREATMENT OF TUBERCULOSIS.

S. V. Wright, of Dallas, Texas, discusses the proper treatment of tuberculosis in the *American Review of Tuberculosis*, for July. When a case of tuberculosis is discovered the duty of the physician is not only toward the patient but also toward the family. Immediate relatives and associates, especially young children should be examined for tuberculosis and if clinically ill, or in the case of children, if undernourished, proper steps should be taken. Toward the patient the prime duty is to give him the proper education. As this is best achieved in an institution, steps should be taken for his admission to such a one suited to his case. The relative importance of continued treatment after arrest of symptoms should be insisted on. He should be taught the proper attitude toward this disease, to take it just seriously enough and not too much so. He should learn that he must continue to observe these principles for a long time if he is to be restored to usefulness.

The recognized effectual measures are "nature's processes"—rest, good food, fresh air and sunshine, and graduated exercise. Adjuvants are medicine, surgery and artificial pneumothorax.

METHUSELAH AND LIFE IN THE OPEN.

V. Y. Bowditch, of Boston, makes a plea for the value of fresh air, in the July number of the *American Review of Tuberculosis*. The observation of the wholesome efficacy of fresh air goes back as far as Hip-

pocrates, and has persisted through the centuries despite much popular superstition to the contrary. Its place in the proper treatment of tuberculosis, however exaggerated at one time, is generally acknowledged. The immediate occasion of Bowditch's paper is the publication in a well-known New York periodical of an article on the "Superstition of Fresh Air," in which the author is quoted as advocating properly re-washed and re-circulated air, but resorts in the end, in case the elaborate and expensive ventilating machinery fails, to the admission of outside air through opened windows, in other words, contradicts his original position of pronouncing fresh air unnecessary. Bowditch traces the development of the fresh air treatment of tuberculosis and shows how great were the gains made by patients under the new regimen. Instances of improved physical and mental condition among school children when given sufficient fresh air are cited. A simple and efficacious ventilating system is described.

LARYNGEAL TUBERCULOSIS TREATED BY REFLECTED CONDENSED SUNLIGHT.

The topic is discussed by Mills and Forster in a paper from the Cragmor Sanatorium, Colorado Springs. They describe an improved method, used by them, which proceeds as follows: The patient sits with his back to the sun. Sunlight is first reflected from a concave metallic mirror into the patient's mouth, and upon a metallic laryngeal mirror held in proper position in the throat. A glass mirror is used to view the larynx, to observe that the light is being properly directed. Both the metallic condensing mirror and the glass observation mirror are attached by adjustable joints and supports to a frame which can be conveniently placed in front of the patient. After a little practice most patients readily learn to observe their own larynges and to direct the light upon the lesions.

Beginning with very short exposures, usually thirty seconds daily, these are gradually increased to a maximum total of ten minutes, or, in a few cases, twenty minutes once or twice a day. A few brief case reports are given, and there is a diagrammatic sketch to illustrate the method of application. The authors have been encouraged by their results and feel that the method warrants more extended trial.—*Am. Rev. Tuberculosis.*

PULMONARY CONDITIONS SIMULATING TUBERCULOSIS.

Elliott, of Toronto, in his experience as visiting physician to a number of military hospitals, was called upon continually to make diagnoses

upon large numbers of men with diseases of the chest. He found very many soldiers who had been returned from overseas because of the diagnosis, "tuberculosis suspect," whom he found to be really suffering from non-tuberculous pulmonary disease. There is no doubt, he thinks, that 60 to 80 per cent. of the cases returned to Canada from overseas as tuberculosis suspect must be classified as not suffering from tuberculosis. He classifies and gives differential diagnostic points on a number of conditions that may stimulate the symptoms and signs of pulmonary tuberculosis. These conditions fall under the following heads: Intranasal complications, dental complications, diseases of the bronchial tree, pulmonary diseases, pulmonary abscess, diseases of the pleura, empyema, gunshot wounds of the chest, other pulmonary conditions, conditions secondary to heart and circulation, Graves disease and gas poisoning. He also has a few words to say about the malingerer.—*Am. Rev. Tuberculosis.*

CANCER DECALOGUE.

The Arkansas Committee appended to its printed report, the "Cancer Decalogue", published some months since by the Massachusetts Medical Society in the *Boston Medical and Surgical Journal*, as follows:

1. The Classical Signs of Cancer are the signs of its incurable stages. Do not wait for the classical signs.
2. Early Cancer Causes No Pain. Its symptoms are not distinctive, but should arouse suspicion. Confirm or overthrow this suspicion immediately by a thorough examination and, if necessary, by operation. The advice, "Do not trouble that lump unless it troubles you" has cost countless lives.
3. There is No Sharp Line Between the Benign and the Malignant. Many benign new growths become malignant and should therefore be removed without delay. All specimens should be examined microscopically to confirm the clinical diagnosis.
4. Precancerous Stage. Chronic irritation is a source of cancer. The site and the cause of any chronic irritation should be removed. All erosions, ulcerations, and indurations of a chronic character should be excised. They are likely to become cancer.
5. Early Cancer is usually curable by radical operation. The early operation is the effective one. Do not perform less radical operations on favorable cases than you do on unfavorable ones. The chances for a permanent cure are proportionate to the extent of the first operation. Make wide dissections, incision into cancer tissue in the wound defeats the object of the operation and leads to certain local recurrence.

6. Late Cancer is incurable though not always unrelievable. Radium, X-ray, ligation, ceutery or palliative operations may change distress to comfort and may even prolong life.

7. Cancer of the Breast. All chronic lumps in the breast should be removed without delay. Benign tumors can be removed without mutilation. Examine all specimens microscopically. An immediate microscopical examination is desirable since, if positive, it permits a radical operation at the same sitting. A radical operation performed ten days after an exploration is nearly always unsuccessful in curing cancer of the breast.

8. Cancer of the Uterus. Any irregular flowing demands thorough investigation. Offensive or even very slight serous flows are especially suspicious. Curette and examine microscopically. Amputate all eroded surfaces which do not yield promptly to treatment. Do not wait for a positive diagnosis.

9. Cancer of the Digestive System is difficult of early diagnosis and therefore unfavorable in prognosis. All persistent and recurring indigestions (more especially if attended by change of color and loss of weight) and any bleeding or offensive discharges demand prompt and thorough investigation.

10. Cancer of the Skin. Any wart, moles or birthmarks which enlarge, change color, or become irritated should be removed promptly. They are likely to become cancer. Do not wait for a positive diagnosis.

DR. COOK ON CANCER.

Cancer is of "greater frequency at ages over forty than pneumonia, tuberculosis, typhoid fever, or digestive diseases." It proves fatal in over 90 per cent. of the attacks. It occurs and often kills its victim when they are in the stage of life during which they are most needed by society. "If taken in the beginning, the majority of cases of cancer are curable, but the only cure is the removal of every vestige of the disease."

The occurrence of cancer is usually associated with some form of injury or long continued irritation of body tissue. Because it rarely causes pain in the beginning, it is often neglected. The following precautions should be rigidly exercised:

Seek early examination by a competent physician in case of—

- (1) Any chronic sore, lump, an irritated or growing mole.
- (2) Chronic indigestion, after forty, particularly with vomiting.
- (3) Persistent abnormal uterine discharge, particularly if bloody.

Never be afraid to know the truth. Delays are always dangerous, sometimes fatal.

WAR TIME DIET AND HEALTH

At a time when the problem of domestic food supply is peculiarly pressing and when dietetic habits are undergoing enforced changes, the question must be frequently asked whether there is any widespread danger to health in these conditions. Any one attempting to answer it must recognize at once that an economic consideration has to be admitted. Rising prices, unless offset by rising wages, must make for malnutrition among the poor. The purpose of the present inquiry is to attend more particularly to those in better circumstances who are able to pay the cost of the staple foods but who are making unwonted substitutions.

When a new dietary is adopted in opposition to the dictates of appetite and pursued under protest, an unconscious reduction of intake may be expected. Some loss of weight may follow, but equilibrium at a new level will ordinarily be established. Few of us have discerned the simple principle to which Doctor Lusk has lately called attention; that we can be large people, maintained on large rations, or much smaller people with a much lighter requirement. Whether the reduction is to be desired or not depends on the original condition. For a considerable fraction of the adult population, weight reduction is calculated to add to the expectation of life.

Our food serves a constructive purpose, but this is the function of but a small part of the total income. A far greater proportion is utilized as fuel to support muscular activity. The maintenance of the body temperature is secured by the oxidation of food material, and it may be suggested that the sedentary individual conserves food when he avoids exposure to cold. If it becomes necessary to save food and coal at the same time the importance of dressing warmly is obvious.

To keep the living tissues in good condition certain chemical compounds—amino-acids, "vitamines," and mineral salts—are indispensable. These specific needs are more surely met when the diet is varied and inclusive than when it is monotonous. This is a teaching which has been greatly emphasized in the past few years. Without questioning the principle, we may still rest assured that the average citizen is in little danger of wrecking his health by the omission of particular "building-stones" from his daily supply.

Among the fuel foods a great deal of substitution seems practicable. To do without cane-sugar is a galling annoyance; more because it deprives us of so many attractive dishes than by reason of any peculiar merit in sugar itself. It is only in recent times that this product has

become an important item in the food of the nation. (Nevertheless it had come to furnish something like one-seventh of the total energy of our people. Its replacement is an operation of vast magnitude.)

Are there any groups deserving special consideration and liberal treatment? At once we think of our soldiers and sailors. We should place in the same class all those whose manual labor and exposure are equally severe. We must, in addition, recognize the high nutritional requirement of childhood and youth. Doctor Gephart's study of the food furnished to the boys of St. Paul's School, Concord, N. H., is suggestive. The allowance to each pupil was found to be greater than that of a hard-working farmer. In spite of this, the average student bought refreshments between meals to an amount which added about 15 per cent to the regular diet. Since the boys were not overweight we can not say that they took any more food than their active systems required.

When, as at present, the public conscience is awake, and people everywhere are concerned to know their patriotic duty, individuals may impose upon themselves extreme and ill-advised denials. In such cases health may suffer. These men and women need to be set right in their practice just as truly as do those who are selfishly indifferent to the exigency. They must endeavor to conserve their own capacity for service and not solely the nation's food.

We need particularly to cultivate a right mental attitude toward the situation. It is within our power to determine whether we will magnify our privations or find an intellectual pleasure in grasping the problem and watching the process of its solution. We may dwell on the unwelcome restrictions or we may with greater advantage rejoice in the new spirit of co-operation. It is likely enough that the dissatisfaction we are tempted to feel with our daily food arises chiefly from the unhappy undercurrent that is in every mind. The terrible facts of the war are to be resolutely faced, but we shall do well to preserve our mental balance by sane recreation, good reading, and other interests detached from this colossal horror. If we can keep a philosophic temper we can make light of dietetic trammels.—*Percy G. Stiles, of Harvard Medical School, in Health News.*

COL. BUSHNELL ON TUBERCULOSIS.

George E. Bushnell, Col. U. S. A., retired, discusses the treatment of tuberculosis in the *American Review of Tuberculosis*, for July. Rest, fresh air, exercise, feeding, symptomatic treatment and tuberculin are taken up in turn. The object of any form of treatment is to aid the

natural defenses that exist in any animal body, be it that of a guinea pig or that of a human being, which has received an initial slight immunizing infection. Pulmonary tuberculosis as it usually presents itself manifests a tendency to cure or at least a tendency to become localized. There can be no doubt that an immunity is present and that it is an immunity of a very high degree. It is reasonable to believe that comparatively slight remedial agents may suffice to arrest the patient's organism to make the comparatively slight effort demanded to acquire again the state of absolute resistance to the tubercle bacillus. The agents that have been found to be helpful in this regard are better oxygenation from abundance of fresh air, rest to restore the weakened nerves of the patient and lower demands upon his reparative powers, and good food well assimilated. These constitute the tripod of treatment; with them, wisely used, wonders can sometimes be accomplished, but only, it should always be borne in mind, in cases in which there already exists an immunity which is capable of reinforcement. In tuberculosis we prescribe not medicine but a mode of life. The psychical side is that which is most neglected, yet in it the most notable successes are attained. Next to a good immunity and a good physician, the third most important desideratum in the treatment is faith in the physician and willingness to co-operate on the part of the patient.

The influence of rest in abating the severity of an inflammatory process is well known. The effect of motion and of friction in spreading infection from a suppurating focus is a familiar surgical fact. Not only should deep breathing be avoided but motion of the upper extremities should be reduced to a minimum. Rest is also highly desirable to promote a cicatrization and encapsulation. And lastly, rest of the body is needed for its recuperation. Physic and physical relaxation should both be practised. The neurasthenic tuberculous patient with the anæsthesia of fatigue or the restlessness of the overfatigued who are "too tired to rest" must learn to rest and relax not only to recreate his energy in some measure, but to store it up. Rest must be by all means associated with the outdoor life so far as is practicable.

The problem of exercise is one that will frequently tax the acumen of the physician. The febrile tuberculous patient in whom the maximum daily temperature habitually exceeds 99.5°F. should unquestionably be kept in bed. The best rule is to require the acute case to rest irrespective of temperature, as the condition becomes more chronic to be guided strictly by the thermometer, and when the case has become one that is progressing toward arrest, to ignore the slight fluctuations of the temperature. Cases with large lesions must be treated with more severity as respects the enforcement of quietude than those with small lesions. Each case must be the subject of special study. As has been well said,

the patient who begins to exercise has reached a period of danger in his course of treatment.

In cases where there has been a nutrition deficit the problem is easy—all that is necessary is to give the patient what and as much as he wants. For those that have no true deficit to make up, stuffing with food is only prejudicial. In many cases, difficulties of digestion are dependent upon the kind, rather than the amount, of food.

The symptomatic treatment of the consumptive does not differ from that of other patients; cough medicines should be used sparingly and only for special indications. The idea that expectoration is infectious for the patient and must be gotten rid of without delay is an error, as is the notion that it is extremely dangerous to swallow sputum. The physician can be of much comfort by teaching that the fugitive pains in various parts of the body and the various manifestations of indigestion are common in all those whose health is below par and have no direct communication with tuberculosis.

Tuberculin is most helpful to those who need help least. Advanced cases of tuberculosis are very seriously impaired by it. But the rather numerous class of sanatorium patients who have little or no active tuberculosis, their disease being of a chronic, though often diagnosed as acute type, are able to tolerate it, sometimes apparently to their advantage.

PULMONARY AND PLEURAL ANNULAR RADIOGRAPHIC SHADOWS.

With a wealth of illustrations to support their thesis, Sampson, Heise and Brown, of the Trudeau Sanatorium, publish a noteworthy article on "silent" or unrecognizable cavities in the lungs that are detected by X-ray. The authors prove rather conclusively that many of these "cavities" are not intrapulmonary, but are interpleural and situated between the lobes of the lungs or between the lungs and the chest wall. In other words, they are likely to be interlobar pneumothoraces or hydro-pneumothoraces, or localized pneumothorax. Annular shadows, cast upon the X-ray plate, in a large part of these pathological formations, were noted 50 times in 423 consecutive cases admitted to the Trudeau Sanatorium. This would be 11.8 per cent. of admissions. The authors conclude that these annular shadows occur in patients more likely to be suffering from pulmonary softening, and that they indicate rupture of the lung. Because of adhesions only partial pneumothorax, with or without fluid, results. The pneumothorax usually occurs in the upper part of the greater oblique fissure and in the horizontal fissure on the right. It can rarely be diagnosed clinically and indicates a somewhat graver prognosis.—*Am. Rev. Tuberculosis.*

PERSONAL AND NEWS ITEMS

An Inquiry Into the Medical Curriculum by the Edinburgh Pathological Club. (Edinburgh: W. Green & Sons.) Please note that this book is not on sale. A few copies are still available for distribution. Application should be made to the Secretary, Dr. H. M. Traquair, 16 Manor Place, Edinburgh.

In view of the necessity for a more central location and commodious quarters for the *American Journal of Surgery*, new offices have been taken at 15 East 26th Street, New York.

The Eugenics Research Association has addressed a formal memorial to the Theodore Roosevelt Permanent Memorial National Committee urging that a "Roosevelt Institute of Family Life" be developed in connection with the Eugenics Record Office of the Carnegie Institution at Washington, for the purpose of elevating the human race.

During the past nearly twenty-one months the American people have given in cash and supplies to the American Red Cross more than \$400,000,000. No value can be placed upon the contributions of service which have been given without stint and oftentimes at great sacrifice by millions of the people.

"When the United States entered the war the American Red Cross had about 500,000 members. To-day, as the result of the recent Christmas Membership Roll Call, there are upwards of 17,000,000 full paid members outside of the members of the Junior Red Cross, numbering perhaps 9,000,000 school children additional.

The American Red Cross work in France was initiated by a commission of eighteen men who landed on French shores June 13, 1917. Since then some 9,000 persons have been upon the rolls in France, of whom 7,000 were actively engaged when the armistice was signed. An indication of the present scale of the work will be obtained from the fact that the services of 6,000 persons are still required.

In the State of New York there has been a great rush for narcotic drugs in anticipation of prohibition. During January a larger quantity of such drugs was sold than during the entire year of 1918.

The Division of Venereal Diseases of the United States Public Health Service is starting a vigorous campaign against venereal diseases. Surgeon-General Rupert Blue has sent out a letter to the physicians of the country calling attention to the spread of these diseases.

Thomas Addis Emmet, M.D., LL.D., died at his home in New York City on 1st March in his 91st year. He graduated from Jefferson Medical College in 1850. For many years he held prominent official positions, and was an extensive writer on gynæcological subjects. He was a grand-nephew of Robert Emmet, who strongly urged Irish independence.

The General Education Board of the Rockefeller Foundation has set aside \$400,000 as an endowment fund for the department of obstetrics for the Johns Hopkins Medical School. The same foundation set aside \$150,000 for the Meharry Medical College for Negroes in Nashville.

On 15th February of this year there were 105,476 beds available for army purposes in the United States.

King George decorated the following American physicians with the Military Cross: Capt. E. Christofferson, Lieut. T. Doyle, Lieut. A. Gillis, and Lieut. R. MacDuffie.

Dr. Sampel W. Lambert has resigned his double office of Professor of Clinical Medicine and Dean of the Medical Faculty of the College of Physicians and Surgeons of Columbia University.

Andrew M. Paterson, D.M., F.R.C.S., Professor of Anatomy at Liverpool University, died on 13th February. He was born in 1852, and was a splendid teacher, and a well-known author.

The Carnegie Corporation has donated \$250,000 to Queen's University, Kingston, Ontario. This will be welcome news to the many friends of Queen's University.

Col. C. A. Peters, who was Assistant Director of Medical Services with the Fourth Canadian Division, has returned to Montreal.

A new hospital is planned for Belleville. The work of erection is undertaken by the people of St. Michael's Parish, and the building will be located near St. Michael's Roman Catholic Church.

An effort is being made to raise a large sum of money for new buildings for the Medical Department of the Western University, London. They are to be asked to give \$150,000.

A bill has become law in Dakota that provides for the inspection of public and private schools, and even homes where infectious diseases are supposed to exist.

Lieut.-Col. J. W. McIntosh, of Vancouver, who has returned from the Front, has become an ardent advocate of a State Medical Service. He thinks it would be a good arrangement for the returned medical men, and also in the working out of the Workmen's Compensation Board.

Dr. Wolferstan Thomas has been in Brazil for thirteen years at

the head of a commission trying to eradicate yellow fever. As a result of these efforts the country is almost freed from the disease.

The Canadian Medical Association will meet this year in the City of Quebec on 25th, 26th and 27th of June. It is expected that a number of prominent physicians and surgeons will attend from Britain and France.

The report of the Sanitorium at Kentville, N.S., shows that good care and treatment is very potent in controlling the progress of the disease. In nearly all the patients the disease became quiescent, improved, arrested or cured.

Hon. Dr. Roberts, of Moncton, N.B., made a strong appeal for better legislative measures to guard the people against communicable diseases. He pointed out the great loss through sickness.

In the City of Quebec it is reported that there were 24,553 cases of influenza treated in hospitals or private homes. The city expended \$25,687 during the epidemic.

Dr. P. V. Faucher has been appointed to the chair of *materia medica* of the Medical Faculty of Laval University.

The proposed memorial hall for McGill University, in honor of her dead in the war, is estimated to cost \$150,000.

The Department of Soldies' Re-establishment will erect a hospital building near Woodbridge at a cost of \$500,000. The funds are to be supplied jointly by the Federal and Ontario Governments.

In British Columbia the question has been raised as to the legality of a prescription for liquor written by one who is not a registered practitioner. The Commissioner has ruled that all such prescriptions are invalid.

The Government of British Columbia has assured the City of Vancouver of a grant of \$15,000 towards the erection of an emergency hospital. The work of erection was at once commenced.

The New York University and Bellevue Hospital Medical College have opened their doors to women students with equal privileges to those enjoyed by male students.

The Base Hospital in France which was equipped by Mount Sinai Hospital of New York, has cared for 2,800 patients, at a cost of \$652,835.

By an Order-in-Council the following diseases are made notifiable in Ontario: Influenza, acute influenzal pneumonia, acute primary pneumonia, trench fever, typhus fever, relapsing fever, and bacillary and amœbic dysentery.

The American Red Cross has made a donation of supplies valued at \$1,553,982 to the American Committee for Relief in the Near East. These supplies are to be distributed by a commission which the latter organization is sending to Armenia and Syria to supervise relief work in those countries. Previous cash contributions to the committee by the Red Cross totaled \$4,500,000.

Dr. Mary Walker died in New York recently at the age of 87. During the American Civil War she did surgical service, and was commissioned to act on the staff of a surgical hospital. She was awarded the Congressional Medal of Honor for bravery on the field. She graduated M.D. from Syracuse in 1855.

The French Government has conferred upon General William C. Gorgas the Order of the Legion of Honor. The insignia of the order were bestowed through U. S. Secretary of War Hon. N. D. Baker.

Dr. James Tyson, of Philadelphia, died there 21st February, at the age of 77 years. He held many important positions, among them being those of Dean of the Medical Faculty of the University of Pennsylvania, and Professor of Medicine in the same university.

In Kansas City there have been a number of cases of sleeping sickness. One case was asleep for five months, another 57 days, and a third for 120 days. It is thought to be an aftermath of the influenza.

The American Red Cross has set aside \$100,000 to be given as scholarships to graduate nurses who have served in the war to encourage them to take up public health nursing.

Dr. Alice Hamilton has been appointed assistant Professor of Industrial Medicine in Harvard Medical College. She is the first woman to hold a position on the staff of Harvard University.

A serious outbreak of smallpox is reported to have occurred in the vicinity of Chatham, with cases in Morpeth, Ridgetown and the surrounding district, and at the request of Dr. Marr, M.O.H., a supply of vaccine was forwarded by Dr. T. L. McRithie, local Medical Health Officer of Health.

The John McDonald Chapter, I.O.D.E., is considering the question of equipping and maintaining a room at the General Hospital, which would be at the disposal, free of charge, to relatives of men who have been killed in action.

Dr. Llewellys Barker, head of the Department of Medicine at Johns Hopkins University, Baltimore, was the guest of honor at a banquet of the Academy of Medicine, 1st April, in the King Edward

Hotel, which was attended by 250 guests. Dr. Barker, an eminent authority on cardiac disorders, came to the city to address the Academy on "Prognosis and Therapy in Disease of the Heart." His lecture, which followed the banquet, was attended not only by many of the local doctors, but also by physicians from many outside points.

The Grand Army of Canada will draw the attention of the Government to the unfair treatment of veterans whose injuries have left them subject to epileptic fits. At present they receive a pension, but are free to take employment, which they may lose when stricken. The G.A.C. suggest that these men should be placed on farms where they would have constant medical supervision, and where they could be credited with the profits from their employment until they are cured.

It is believed that smallpox was first recognized as a disease in Asia. In China references are made in writing, 1122 B.C., to a disease presenting the symptoms of smallpox. In ancient Sanskrit literature there are records of fatal epidemics of unknown origin and name, which were prevalent in India and Persia at least five thousand years ago. In the sixth century of the Christian Era it was described by Aron, an Egyptian physician, who wrote of smallpox specifically, and differentiated it from measles.

Dr. J. H. Branth, of New York City, reports that for some time he has used a mixture of waxes for sealing wounds. He uses a preparation of this character on nearly all sutures, leaving the lowest base for drainage. A preparation of this kind acts as a splint for immobilization. He uses a gauze pad to absorb the exudate. The wax peels off after healing is completed. Re-dressing is, of course, necessary where exudate is collected.

Mr. Justice Clute a short time ago expressed from the bench the opinion that it would be a very risky thing for a doctor to give a friend a drink of some stimulant in his office. This may add a new phase to the working of the O.T.A. if the doctor carries any liquor in his grip for emergency cases.

Dr. Stuart M. Fraser, Provincial Health Officer, Manitoba, states that next year he is going to rigorously enforce the vaccination law.

The Government of Manitoba has decided to erect in Winnipeg a home for the deaf and dumb, at a cost of \$500,000.

The Government of Alberta has made a grant of \$5,000 to the Victorian Order of Nurses to assist it in caring for outlying districts, and a grant of \$25,000 to enable doctors to locate in sparsely settled places.

Saskatchewan Government proposes spending \$250,000 on a hospital for the insane, and \$155,000 for the purpose of enlarging the hospital at Battleford.

Dr. M. M. Seymour, the Commissioner of Health for Saskatchewan, has advised the people to be inoculated against typhoid fever.

The Legislature of Saskatchewan has adopted an Act for the prevention and control of venereal diseases.

During the months of October, November and December there were 2,014 deaths in British Columbia from the influenza.

The annual meeting of the Vancouver General Hospital showed that during the year 13,575 patients had been treated. There had been 887 deaths. During the influenza epidemic there were 1,304 patients in the hospital on one day.

The State of Montana has passed legislation providing for the examination of pupils and teachers in the public schools. All officials having charge of schools must undergo examination; and the Act authorizes the appointment of health officers and nurses.

The Rockefeller Foundation will appropriate this year \$2,264,130 for public health, and \$3,662,504 for medical education.

OBITUARY

J. HARTY, M.D.

Dr. Harty, of Kingston, son of the late Hon. W. Harty, died of pneumonia in London, England, on 23rd February. He graduated from Queen's University in 1897, but did not practise. He was in England on a visit when taken ill.

STEWART MACKENZIE, M.D.

Dr. Stewart MacKenzie, of Toronto, fell on 27th March, from a fourth floor window at 112 West 45th Street, New York, where he was stopping, and suffered injuries to his skull and several ribs. He died shortly after he was taken to Bellevue Hospital. He did not lose consciousness. The hospital authorities ordered that the injured man's brother, Alexander MacKenzie, of Toronto, be notified immediately.

Dr. MacKenzie, who was about 40 years of age, stated that he had been in New York several weeks following his discharge from the Cana-

dian army because of being wounded and gassed in France, and that he fell out of the window, which he had opened in order to get fresh air.

W. A. VERGE, M.D.

The death occurred in Quebec on 28th March of Dr. W. A. Verge at the age of 65 years. Dr. Verge practised in that city for 37 years. He also took an active part in politics, and as a candidate was defeated in Quebec Centre for the House of Commons, and on another occasion in Bonaventure County for the Quebec Assembly.

HENRY CHIPMAN, M.D.

Dr. Chipman, of Grand Pré, N.S., died on 18th January, in his seventy-fifth year. He had followed his practice in Grand Pré for half a century, and during these years took a keen interest in every movement for the betterment of the community.

PATRICK ROBERTSON INCHES, M.D.

Dr. P. R. Inches died in St. John's a short time ago in his eighty-fourth year. He graduated at the University of New York in 1866, and obtained the M.R.C.R. Eng., in 1868.

H. A. MIGNAULT, M.D.

Dr. Mignault died in Montreal at the age of 80. He graduated from McGill in 1858, and was for many years a visitor at the Hotel Dieu.

C. J. GOSSIP, M.D.

Dr. Gossip died in Halifax at the age of 82, on 13th February. For twenty years he practised in Dartmouth, but for many years lived in Halifax. He was a much-respected citizen.

LOUIS EDOUARD DESJARDINS, M.D.

Dr. Desjardins died in Montreal at the age of 82. He was a well-known eye specialist, and was for many years connected with Laval Medical College.

SAMUEL WESLEY BURNS, M.D.

Dr. Burns was in his eighty-second year at the time of his death, which occurred recently in Shelburne, N.S., where he had practised since 1864.

BOOK REVIEWS

ESSENTIALS OF SURGERY.

A Text-Book of Surgery for Students and Graduate Nurses and For Those Interested in the Care of the Sick. By Archibald Leete McDonald, M.D., the Johns Hopkins University, formerly in charge of the Department of Anatomy, University of North Dakota; Lecturer on Surgery, Nurses' Training School, St. Luke's Hospital, Duluth, Minnesota. With 46 illustrations. Philadelphia and London: J. B. Lippincott Company. Price, \$2.00, net, 1919. Canadian Agent: Charles Roberts, 201 Unity Building, Montreal, Que.

This is an excellent book for nurses who are called upon to care for surgical cases. The subjects covered are those the nurse has to deal with, and regarding which should possess a proper and accurate knowledge. These subjects are bacteria, local infections, pathogenic bacteria, new growths, wounds, hæmorrhages, anæsthesia, bones, joints, vascular system, head and face, neck, thorax, abdomen, digestive organs, liver, pancreas, spleen, urinary organs and glossary.

Under each heading very judicious remarks are made, and the directions are laid down in plain, clear and accurate terms. A nurse who conscientiously studies this book will find herself greatly benefited thereby, and will have acquired that confidence that sure knowledge brings to one. One can hardly imagine anything that could tend to do a patient more good than that of having a nurse who goes about her work with an air of confidence. This book will do much to give this frame of mind.

The glossary is a very complete one, and, in the absence of a dictionary, defines the terms in general use.

The publishers have done their share of the work well. The book is sent forth in an attractive and readable form. We wish it a wide circulation.

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. 1., March, 1919. Lea and Febiger, Philadelphia and New York: 1919. Price, in paper, per annum, \$6.00.

The contents of this volume are:—Surgery of the Head, Neck and Breast, by C. H. Frazier, M.D.; Surgery of the Thorax, by G. P. Müller, M.D.; Infectious Diseases, by John Ruhräh, M.D.; Diseases of Children, by F. M. Crandall, M.D.; and Rhinology, Laryngology and Otology, by G. L. Richards, M.D.

Among the many publications that are being issued at the present time, Progressive Medicine maintains a high place. The utmost care is taken by the editors in the selection of those who are to contribute

articles, and again in the care shown in revising and correcting the proof sheets.

The several articles in the present volume are ideal in every way. They are trustworthy in matter, and excellent in form, and fully abreast of the most recent views.

The publishers always give their readers the best of typography, clear illustrations and the very best of paper. A subscriber to this series could not ask for more.

MEDICAL CLINICS.

The Medical Clinics of North America, November, 1918. Published by W. B. Saunders Company. Philadelphia and London: every second month (six per year). Price, \$10.00, yearly.

In this issue there are eight articles on influenza. They are of much interest and should be studied. The other clinics in the number are all on interesting topics, and are very ably done. This number, the Philadelphia one, ranks with any of its predecessors. The publishers deserve praise for their efforts at giving the profession such high class medical literature.

NAVAL MEDICAL BULLETIN.

United States Naval Medical Bulletin, Published for the Information of the Medical Department of the Service. Issued by the Bureau of Medicine and Surgery, Navy Department. And Report on Medical and Surgical Developments of the War. By William Seaman Bambridge. Washington Government Printing Office, January, 1919.

This report is full of useful information on the treatment of wounds, on anaesthesia, on joint injuries, fractures, amputations, and plastic surgery. The care of the wounded and the re-education of the disabled, receive full consideration. Many other interesting topics are taken up and the latest methods of treatment laid down.

INTERNATIONAL CLINICS.

A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Paediatrics, Obstetrics, Gynaecology, Orthopaedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and Other Topics of Interest to Students and Practitioners. Edited by H. R. M. Landis, M.D. Vol. I. of 29th Series, 1919. Philadelphia and London: J. B. Lippincott Company; and Charles Roberts, 201 Unity Building, Montreal, Que. Price, per year, \$9.00.

In this volume there are eight clinics, four articles on medicine, one on public health and five on surgery. Words of commendation can be said regarding all these lectures and addresses.

At the present moment three lectures will at once attract attention. These are on influenza, and are most timely and valuable. Dr. R. W. Keeton deals with the condition of the heart as comparable to what oc-

curs in surgical shock. It is mentioned that the administration of sodium bicarbonate aids in the prevention of this. Venesection was tried and the replacement of the blood withdrawn by an equal amount of fluid. Of fourteen so treated all died. The intravenous injection of glucose did not yield gratifying results. The best drugs are digitalis and atropine, as by their means the blood may be removed from the venous to the arterial side of the circulation. The atropine is valuable as a means of relieving the cyanosis. This drug is helpful in the prevention of pulmonary œdema.

It is impossible to refer to other articles in the volume. It may be said that they are all good.

The publishers have set a high standard for themselves, which is difficult to maintain; but this volume certainly does reach the high water mark.

THE PREVENTION OF VENEREAL DISEASES.

Editor, CANADA LANCET:

British Columbia has at last measured up, and put upon its statute books "An Act for the Suppression of Venereal Diseases." It is not ideal, but for the first attempt at this line of legislation by this nominally Liberal yet relative Conservative Province, we shall not find fault. The Act provides: Paragraph 3. (1) Every legally qualified medical practitioner and every superintendent or other responsible head of any hospital, public institution, or place of detention, shall maintain a record of all persons suffering from venereal disease coming under his treatment or supervision, and shall set opposite the name of every person a serial number, and shall report on a prescribed form by name, or, where this is objected to by the patient, by number and not by name, every such person, stating the disease from which he is suffering, to the Provincial Health Officer, in the manner detailed in the regulations. Such report shall be furnished within two days after the existence of such disease has been ascertained.

(2) Should it be reported to the Local Medical Health Officer by the physician in charge of the case, or should the Local Medical Health Officer have reason to suspect that any person believed to be afflicted with venereal disease is refusing or neglecting treatment, or is conducting himself or herself in such a way as to conduce to the spreading of the disease, he shall investigate and report his findings to the Provincial Health Officer, who may direct, if in his opinion it is necessary for the protection of the public health, that the name as well as the number of such venereally afflicted persons shall be reported under proper rules to be made by the Provincial Health Officer for securing secrecy,

and that such person may be confined in a hospital or gaol until the Provincial Health Officer is satisfied that the danger of communication of the infection from such a person no longer exists.

Provision is made for the examination and treatment of such persons committed to gaol. All hospitals receiving aid from the Provincial Treasury must make provision for the treatment of venereal diseases.

None but legally qualified physicians are allowed to prescribe or offer any drug to be used for the treatment of venereal diseases, but this clause does not come into effect "until the lapse of 12 months from the passing of this Act." This is a most astonishing provision, and at variance with the Provincial Medical Act in placing a premium upon illegal practice.

With regard to the infection of the carrier the Act declares:

"11. Every person who knowing or having reason to suspect 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 be liable, on summary conviction, to a penalty of not less than one hundred dollars, nor more than five hundred dollars, and in default of payment thereof forthwith shall be imprisoned for a period not exceeding twelve months."

The sure cure advertiser is completely wiped out. The pamphlet and the almanac have seen their day in British Columbia as carriers of venereal disease cures.

The profession will welcome this Act as a great sanitary advance, and the public will realize that they are being watched as well as protected as never before.

ERNEST A. HALL,
Victoria, B.C.

BILL

AN ACT TO REGULATE THE PRACTICE OF OPTOMETRY.

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 Optometry Act, 1919*.
2. In this Act—
 - (a) "Board" shall mean Board of Examiners in Optometry appointed under the authority of this Act;
 - (b) "Regulations" shall mean regulations made under the authority of this Act.
- 3.—(1) There shall be a Board known as the Board of Examiners

in Optometry which shall be composed of not more than five persons appointed by the Lieutenant-Governor in Council.

(2) The first members of the Board shall be appointed for such terms respectively that an equal number, as far as possible, shall retire annually at the end of two, four and five years respectively, and thereafter at the expiration of office of any member, his successor shall be appointed for a period of five years.

(3) In the event of a vacancy occurring by the death, resignation or removal from office of any member, the vacancy shall be filled for the unexpired portion of the term for which such member was appointed.

(4) A member of the Board may be removed from office at any time for neglect of duty, incompetence or misconduct.

(5) The Lieutenant-Governor in Council may appoint one of the members to be Chairman of the Board and may also appoint a Secretary of the Board.

4.—(1) The Board may make regulations—

(a) Prescribing the course of training and education for the practice of optometry and the qualifications of persons to be admitted to registration as optometrists;

(b) Providing for a course of instruction for candidates for registration in any technical school or other institution in Ontario;

(c) For accepting the licenses, certificates or other evidence of qualification of persons applying for registration who have been practising, or are qualified to practise optometry in any other Province of the Dominion of Canada;

(d) For fixing the fees payable upon registration and by candidates for examination and registration and for certificates of registration or exemption;

(e) Prescribing the procedure of the Board at its meetings and upon the hearing of a complaint that any person holding a certificate under this Act has been guilty of any violation of the law, or of incompetence or misconduct;

(f) Prescribing the duties of the secretary and staff of the Board;

(g) Generally for the better carrying out of the provisions of this Act.

(2) The Regulations shall not come into force or take effect until they have been approved by the Lieutenant-Governor in Council and such approval has been published in the *Ontario Gazette*.

5. The Board shall provide a register which shall be kept by the Secretary, and in which shall be entered the name, address and qualification of every person registered as an optometrist in Ontario.

6. Every person who, after the first day of July, 1919, files with the Secretary of the Board an application, verified by oath or by statutory declaration, stating therein that the applicant is more than twenty-one years of age, is of good moral character, and possesses the qualifications as to general education, training and experience prescribed by the Regulations, may be admitted to examination by the Board as to his qualifications for the practice of optometry, and upon passing such examination shall be registered by the Board as possessing the qualifications required by this Act, and shall receive from the Board a certificate of such registration.

7.—(1) Every person who, on or before such date as may be fixed by the Regulations, makes application to the Board in the prescribed form, may be granted a certificate of exemption from registration under this Act, and the Secretary of the Board shall enter in a book, to be kept for that purpose, the name of every person applying for such certificate, with the address at which he resides, and the address at which he carries on business.

(2) The certificate of exemption may be granted upon proof to the satisfaction of the Board that the applicant—

(a) was carrying on business as an optometrist or optician in Ontario at the time of the passing of this Act;

(b) is a British subject by birth or naturalization;

(c) is of good character;

(d) possesses such education and technical qualifications as may be prescribed by the Regulations.

8. Every person selling or fitting glasses shall deliver to each customer or person fitted, a bill of purchase which shall contain the signature of the person selling or fitting, a bill of purchase which shall contain the signature, post office address and place of business of the person supplying the glasses, together with a specification of the lenses and frames or mountings supplied, and the prices charged therefor, and, in the case of a person holding a certificate under this Act, the number of his certificate of registration or exemption.

9.—(1) When the Board is satisfied that any person, whether or not he is the holder of a certificate under this Act, has been guilty of illegal practices, incompetency, inebriety, fraud or misrepresentation, the Board may prohibit such person from practising or carrying on business as an optometrist or optician and may revoke any certificate granted to him, but before the issue of such prohibition or the revocation of such certificate, the person charged shall be given notice in writing of the charge or charges against him and shall have an opportunity of being publicly heard and producing testimony on his own behalf.

(2) Where a prohibition has been issued or a certificate has been revoked, the person charged may, after ninety days, apply to have the prohibition removed or the certificate re-granted, and the Board may remove the prohibition or re-grant the certificate upon the payment of such fees as may be fixed by the Regulations.

10.—(1) Every person, not being the holder of a certificate under this Act, who after the 15th day of July, 1919—

(a) Appends to his name the term "optometrist" or "optician," or any abbreviation thereof, or wilfully and falsely pretends to be, or wilfully and falsely takes or uses any name, title, addition, abbreviation or description implied or calculated to lead people to believe that he is, or is recognized by law as, an optometrist or optician, or that he is registered or possesses a certificate under this Act; or

(b) Having been prohibited from practising optometry practises the same during the existence of such prohibition; or

(c) Sells, or fits, or supplies glasses by going from house to house or from place to place, or in any other manner than from a permanent place of business, and notwithstanding that he is the holder of a municipal license as a peddler or transient trader; shall be guilty of an offence and shall incur a penalty of not more than \$100 nor less than \$10.

(2) *The Ontario Summary Convictions Act* and amendments thereto shall apply to offences under this Act.

11. Nothing in this Act shall be construed to apply to legally qualified medical practitioners.

MISCELLANEOUS

THE PRESIDENT OF SWITZERLAND.

Gustave Ador, President of the Swiss Confederation, and also President of the International Committee of the Red Cross, is one of the men now prominently in the world's eye. Mr. Ador has been a very active Red Cross man for many years, succeeding Gustave Meynier in the presidency of the International Committee upon the latter's death. He also was the founder of the Agency for Prisoners of War.

Throughout the recent war Switzerland was a neutral country entirely surrounded by warring nations, and a high order of statesmanship was necessary to maintain governmental equilibrium. The Swiss Government and Swiss Red Cross were very helpful to the Allies in matters relating to the care of prisoners in enemy countries.

The International Committee of the Red Cross and the Swiss nation now have a fresh interest by reason of the approach of another Geneva Convention—one that may mean even more to mankind than the one which originally established the Red Cross movement throughout the world.

MEDICAL CONGRESS TO STUDY AVIATION.

The first international medical aeronautical congress opened in Paris on 10th April, its object being to promote the study of medical problems arising from aviation. Resolutions dealing with physical and psychological tests applicable to candidates for pilots' licenses, the control of flights to high altitudes and the use of oxygen by aviators were presented, and the hope was expressed that these resolutions would be taken into account when an international aerial code is drafted. It was decided to form a permanent committee to present the views of the medical professions in matters appertaining to aviation. Professor Guilain, of the University of Paris, was elected president of this body.

THE MIRACLE OF DUST.

Dust is an important factor in almost every phenomenon of the earth's atmosphere. It is due to dust that the heavens are blue. Without it the heavens would be blacker than we see them on moonless nights. It is especially on mountain heights that the sky is so intensely blue, because the rarefied atmosphere supports only the finest particles. Dust plays a most important role in our atmosphere in determining rainfall, due to the fact that vapor fluidifies upon the dust particles.

Without dust we would have no fog, no rain, no snow, no purplish sunset, no cerulean sky. The surface of the earth itself, the trees, the houses, along with man and beast, would be the only objects on which the vapor could condense, and these would begin to drip whenever the air was cooled sufficiently. In winter everything would be covered with a crust of ice, our clothes would become saturated with water condensing upon them. Umbrellas would be of no avail. In short, the world we live in would be quite another world if there was no dust.—*Literary Digest.*

A COMPLETE OUTFIT FOR BABY'S FIRST DRESSING.

"From one-quarter to one-third of the pupils admitted to the schools for the blind have lost their sight from infection acquired at birth or during the first ten days of life, and there are innumerable other cases of those who are partially blind from the same cause. The re-

sponsibility for this appalling condition rests with the nurse, midwife or physician who had charge of the confinement," states F. Park Lewis, M.D.

This danger of blindness from ophthalmia neonatorum arises from the lack of proper material at the time of birth. In many families material for cleansing the umbilical cord and for cleansing the mouth, nose and eyes is seldom at hand when wanted, especially where the birth is in charge of a nurse or midwife.

To meet this need Johnson's First Dressing for Infants has been prepared. This outfit meets all these needs. It also fulfils the requirements of the growing number of States which require the use of prophylactic measures in cases of babies' sore eyes at the time of birth. Nearly thirty States require cases of babies' sore eyes to be reported to the Board of Health; eighteen require or recommend prophylactic measures.

This outfit also meets the recommendation of the National Committee for the Prevention of Blindness. Many medical organizations have recommended the use of such an outfit.

The Johnson's First Dressing Packet contains the following items:
One envelope containing two sterilized tapes for tying the umbilical cord.

Two gauze pads (one with perforations) for dressing the umbilical cord.

One package boracic acid for cleansing and disinfecting the umbilical cord and eyes.

Two small gauze pads for cleansing the eyes, mouth, etc.

Three pieces of sterilized absorbent cotton for cleansing the eyes and dressing the cord, etc.

One ampoule of nitrate of silver solution (one per cent.) for instillation into the infant's eyes when necessary.

One flannel binder for holding the umbilical cord in place.

Three safety pins.

One miniature package of Johnson's Toilet and Baby Powder for use after the infant's first bath.

One miniature bottle of Synol Soap for the bath, cleansing the hands, etc.

One chart for making the birth record.

Full directions accompany each item and a circular in each packet gives instructions to the nurse or midwife.

SUPPLIES FOR THE CARREL METHOD OF WOUND
STERILIZATION.

Surgeons who are interested in the Carrel method of wound sterilization, by intermittent saturation of the wound by means of a specially devised solution of sodium hypochlorite, will find the Chlorin-Soda Ampoules the most convenient and accurate method of preparing the solution.

Following is a list of supplies for the Carrel method which are made by Johnson & Johnson, and which may be obtained from druggists and physicians' supply houses:

Chlorin-Soda Ampoules.—One ampoule of liquid chlorin and one tube of sodium salts contain the exact amount of material necessary to prepare one liter of Carrel-Dakin solution of standard strength—.45% to .50% sodium hypochlorite. These items are supplied only in sets containing three ampoules of liquid chlorin and three tubes of sodium salts (sufficient for three liters of Carrel-Dakin solution).

Ampoule Holder.—(Connected with rubber stopper) For holding the chlorin ampoule in the bottle when making the solution.

Protective Bags.—To cover five pint or half-gallon bottles, to protect user in case of breakage of glass bottle.

C. D. S. Rubber Instillation Tubes.—These are perforated, ends tied, and the perforated area covered with special absorbent Turkish toweling made for the purpose. Packed six in a box.

Rubber Instillation Tubes (plain).—Perforated and ends tied, but not provided with diffusers. Packed one dozen in a box.

Diffusers.—Made of special Turkish toweling manufactured for the purpose. Prepared in "tubes" twelve inches long, ready for application to perforated instillation tubes. These are extra diffusers to replace those removed by the surgeon and destroyed after each daily change of dressings. Packed one dozen in a box with a glass applicator to facilitate slipping them over the rubber diffusers.

Bacterial Charts.—As designed by Dr. Carrel for charting the bacterial "count" by which the point of approximate sterility is determined. No charge.

THE LIQUOR DISPENSARIES.

The decision of the Ontario Government to take over the sale of liquor for medicinal purposes, and conduct or control the dispensing of it is one that is justified by existing conditions, and similar action may be expected in other Provinces.

The Winnipeg *Telegram* says it is reliably informed "that wholesale druggists buy Scotch whiskey right here in Winnipeg from the wholesale liquor dealers for \$24 a case, and without even opening the case resell it to local retail druggists at \$45 a case—thus making a profit of \$21 for the work of doing a little carting and bookkeeping." The retail druggists do the dispensing, and the *Telegram* says they re-sell to the public in prescriptions at a rate which gives them \$63 a case.

It may be argued by some that the making of liquor expensive discourages its use, but on the other hand it is to be noted that the condition which makes the sale of liquor as highly profitable as this to those who handle it creates a strong impulse to push sales and pile up profits.

The taking over by the Government of the dispensing of liquor cuts away at a stroke the profit-making interest and the incentive to push sales. The prices would be reduced by the elimination of large profits, but when the Government is the only lawful retailer there will probably be a steady decline in the quantity of liquor bought, sold and used.

PUBLIC HEALTH BILL.

The Government bill creating a Department of Public Health is expected to be brought down comparatively early, although the exact form of it is not yet determined. It is seemingly an open question whether a separate Ministry will be created or the work added to that of one of the existing departments.

So far as can be learned, the functions of the department would include:—

(1) Very careful supervision of immigration by process of medical inspection to ensure that only those of good physique and in good health be admitted to the country.

(2) Institution of medical research along the lines of the Pasteur and Rockefeller Institutes, but with particular reference to diseases peculiar to Canada.

(3) Direction of propaganda as to how to live to promote health, collectively and individually.

It is understood that the subject of medical education, the tests and

examinations to be applied and the regulations of different schools of medicine and healing will be left to the discretion of Provinces.

HALF A YEAR IN THE CLINICS.

In the extra-cantonment zone clinics administered by the U. S. Public Health Service and aided by the Red Cross, there were treated between January 1, this year, and October 1, a total number of 21,141 cases of venereal diseases. This total includes all patients regardless of age, sex and color.

In the following analysis of records from these clinics there are omitted a number of persons whose age was not stated or concerning whose case the report was incomplete. Of the records which are complete, the following analysis is available:

Syphilis—Total	6,644
Gonorrhœa—Total	9,192
Chancroid—Total	676

Of these syphilis cases, 87 were males under 15; 146 were females under 15 years. Of the gonorrhœa cases, same classification, the record is 45 and 115; chancroid, 1 and 2.

One of the morals which such a tale would seem to point is surely the importance of preventive work among girls under 15 years. This again stresses recreation and home conditions, at least where a state law prevents giving work papers to a child of less than fourteen years.

C.A.M.C. NEWS—MONTH OF MARCH, 1919.

Appointments (Canada)—Lieut.-Colonel Percy Keith Menzies is posted for duty under the A.D.M.S., M.D. No. 2; Major Robert Frederick Flegg is appointed to a permanent conducting staff, and attached to the Clearing Services command; Lieut.-Colonel Archibald Lorne Campbell Gilday, D.S.O., is appointed as acting D.A.D.M.S., M.C. No. 4, vice Major H. S. Muckleston; Capt. Walter Lawson Muir is posted for duty under the A.D.M.S., M.D. No. 6; Capt. Gerald Shaw Williams is posted for duty under the A.M.M.S., M.D. No. 10; Lieut.-Colonel Ethelbert Browne Hardy, D.S.O., is posted for duty as Officer Commanding St. Andrew's Military Hospital, vice Major T. D. Archibald; Major Benjamin Leslie Guyatt is posted for duty as Officer Commanding Base Hospital, Toronto, vice Lieut.-Col. Ethelbert Browne Hardy, D.S.O.; Capt. Louis Joseph Adolphe Mignault is appointed to the staff of the A.D.M.S., Embarkation, M.D. No. 6; Lieut. Romeo Jules Vallee returns to M.D. No. 4 from M.D. No. 6; Capt. William Goldie is posted for duty

under the A.D.M.S., M.D. No. 2; Major Harvey Lee Jackes is posted for duty under the A.D.M.S., M.D. No. 2; Capt. Harold St. Clair Wismer returns to M.D. No. 1 from M.D. No. 2; Capt. Charles Edmund Flatt is appointed to a permanent conducting staff, and attached to the Clearing Services Command; Major Thomas Logan Towers is posted for duty under the A.D.M.S., M.D. No. 1; Capt. Charles Francis Dunfield is posted for duty under the A.D.M.S., M.D. No. 1; Capt. Arthur Martin is posted for duty under the A.D.M.S., M.D. No. 4; Lieut. Garnet George Stonehouse is appointed under the A.D.M.S., Embarkation, and attached to the Clearing Services Command; Capt. Roy Gordon Brain is posted for duty under the A.D.M.S., M.D. No. 1; Capt. Duncan Alexander Campbell is posted for duty under the A.D.M.S., M.D. No. 2; Major Charles H. Robson is posted for duty under the A.D.M.S., M.D. No. 2; Lieut.-Colonel Daniel Paul Kappele, D.S.O., is posted for duty as Officer Commanding Brant Military Hospital; Colonel Frederick Samuel Lampson Ford, C.M.G., ceases to be employed as A.D.M.S., Embarkation, and resumes duty in the branch of the D.G.M.S., Militia Headquarters, Ottawa; Major William Boyd McKechnie is posted for duty at the Vancouver Military Hospital.

Promotions.—Capt. Ernest Herbert Young to be Major while commanding the Military Hospital, Cobourg; Capt. Clarence B. Farrer, to be Major, 11th March, 1919. The following Lieutenants to be Captains: Lieut. Roy Dickson Lindsay, 1st January, 1919; Lieut. Daniel Alexander Carlyle, 1st December, 1918.

Returned from Overseas.—Capt. A. E. Naylor, Capt. D. A. Campbell, Capt. D. Black, Capt. E. H. Marcellus, Capt. M. U. Valiquet, Major James Carlyle Fyshe, Major James Albert Dickson, Capt. William Lewis Colquhoun MacBeth, Capt. Henry Stephen Gooderham, Major Robert Flegg, Colonel H. A. Bruce, Capt. C. K. Wallace, Colonel W. H. Delaney, Capt. F. B. Day, Lieut.-Colonel J. S. Jenkins, Capt. R. P. Borden, Major C. H. Robson, Major E. H. Mayhood, Major John Wesley Pilcher, Lieut.-Colonel G. E. Kidd, Capt. D. A. Warren, Major R. J. McEwen, Capt. C. L. Douglas, Capt. A. R. Alguire, Capt. L. P. Churchill, Capt. N. Monk, Capt. W. Hale, Major F. W. Tidmarsh, Capt. J. A. Reid, Major J. F. Irving, Major W. H. MacDonald, Major A. Beech, Capt. H. A. W. Brown, Capt. W. D. Cruickshank, Major K. E. Cooke, Capt. C. E. Hanna, Capt. R. F. Greer, Capt. H. V. Malone, Major J. A. Briggs, Lieut.-Colonel T. M. Leask, Capt. R. M. Harnie, Capt. (a.-Major) G. E. McCarteney, Capt. George Douglas Jeffs, Capt. W. C. Givens, Major (a.-Lieut.-Col.) C. Hunter, Major W. G. Lyall, Capt. J. Bilodeau, Capt. C. O. Banting, Major G. W. Hall.

Retirements.—The following officers have been struck off the strength of the Canadian Expeditionary Force, on general demobilization and various other reasons: Honorary Lieut.-Colonel David Law, Capt. William Cole, Capt. Maurice Joseph Vigneux, Capt. Horace John Haslett, Major James Albert Dickson, Capt. William Lewis Colquhoun MacBeth, Capt. Henry Stephen Gooderham, Capt. Ernest Samuel Moorhead, Major George Carleton Hale, Capt. Albert Franklin Mavety, Major Harold Struan Muckleston, Lieut.-Colonel Norman Victor Leslie, Major Joseph Damase Page, Lieut.-Colonel Wellington Howard Reilly, Major Horace Weldon Coates, Capt. Leeming Anderson Carr, Colonel Charles Ayre Peters, Capt. Wilfred Joseph Harringer, Capt. Patrick Herman McNulty, Capt. Benjamin Amedee Le Blanc, Major Stuart McVicar Fisher, Capt. Thomas Harold Douglas Storms, Capt. Donald Thomas Evans, Lieut.-Colonel Reginald Stirling Pentecost, Major George May Foster, M.C., Major John William Hutchinson, Major Clive Augustus Staples, Major Robert James McEwen, Capt. Beresford Harty Thompson, Capt. Allen Bernard Greenwood, Lieut. Charles William Duck, Colonel Henry Raymond Casgrain, Major James Ernest McAskill, Capt. Norman Monk, Capt. Charles Sears McKee, Capt. David Scott Johnstone, Colonel James Henry Wood, Lieut.-Colonel Charles W. Vipond, Capt. Van Arsdale Blakslee.

DEATHS IN ONTARIO FOR THE MONTH OF FEBRUARY, 1919.

The total deaths from all causes reported by the undertakers for the Province during the month of February are 3,331. Of this number Spanish influenza and pneumonia caused 812, or 24.3% of the whole. It is satisfactory to know the reports show a great improvement in the last month compared with the previous months of the epidemic. The marked decrease for February indicates the outbreak is abating, as the figures for the several months show: October 3,015, November 2,608, December 1,568, January 1,512, February 812. Total, 9,515. Included in the last month are some 150 deaths that took place in the previous months, but not reported until now, and if deducted would make the deaths for February 662 instead of 812.

The following are some of the cities and towns reporting the most deaths:—Toronto 129, Hamilton 24, Sault Ste. Marie 35, Brantford 18, Ottawa 57, Windsor 15, Kingston 7, St. Catharines 9, London 14, Sudbury 27, Parry Sound 7, Stratford 6, Port Arthur 5, Fort William 3, Guelph 4, Niagara Falls 15, Welland 4, Smith's Falls 14, Carleton Place 6, Belleville 3, Chatham 12, Wiarton 3, Kenora 4, Petrolia 3, Brockville 4.

Children and Coffee

The practice of giving coffee and tea to children is a pernicious one that doubtless has much to do, in an etiological way, with many obscure but tangible disturbances in the young, growing nervous system

The Doctor who recognizes and appreciates this fact sufficiently to take it into full consideration in the treatment of his juvenile patients is certain of a larger degree of success.

It is not difficult to wean children away from the caffein beverages if they are given

INSTANT POSTUM

with Cream (or hot milk) and sugar to taste.

Postum is made of clean, hard wheat, including the bran-coat with its natural content of the valuable "wheat phosphates"—an essential salt in cell elaboration.

Postum is not only wholesome and, in a degree, nutritious, but is really a delightful beverage. Children may safely drink all they want. In this way, when recommended by the family doctor, Postum becomes a helping friend to both doctor and patient.

Samples of Instant Postum, Grape-Nuts and Post Toasties for personal and clinical examination, will be sent on request to any Physician who has not yet received them.

Canadian Postum Cereal Co., Ltd., Windsor, Ont., Canada

Merrickville 4, North Bay 9, Port Hope 5, Victoria Harbor 4, Cornwall 4, Burlington 7.

Following are the cases and deaths of communicable diseases reported by Local Boards of Health for the month of February, 1919:—

Diseases	1919		1918	
	Cases	Deaths	Cases	Deaths
Smallpox	41	...	91	...
Scarlet Fever	337	11	357	4
Diphtheria	329	32	289	18
Measles	21	1	861	6
Whooping Cough	41	2	168	6
Typhoid Fever	12	3	35	3
Tuberculosis	226	144	131	69
Infantile Paralysis	1	...
Cerebro-Spinal Meningitis	14	13	15	10
	1,021	206	1,948	116

Following are the venereal diseases reported by medical officers of health for February, 1919:—

	February.	January.
	1919.	1919.
	Cases.	Cases.
Syphilis	85	125
Gonorrhœa	153	138
Chancroid	5	1
	243	264

Note.—Hereditary syphilis caused 7 deaths of babies under three months old.

Smallpox:—Toronto 2, Hamilton 1, Brantford 3, Ottawa 6, North Bay 1, Chatham 1, Erin Village 3, Rodney 1, Ross Township 6, Pembroke and vicinity 5, Beachburg and vicinity 8, Oliver Township 1, Westmeath Township 2, Sellett Township 1. Total, 41.

NUCLEINOL—A RATIONAL CONSTITUTIONAL TONIC.

The pandemic of influenza which has ravaged the world and Canada, in particular during the past few months, has left those who have been infected physically weak, with nervous system shaken and peculiarly susceptible to the onslaughts of disease. Influenza appears to have the

SMOKE

**SWEET CAPORAL
CIGARETTES**

“The purest form
in which tobacco
can be smoked”

Lancet.

**SOLD
EVERYWHERE**

10

for

15c



faculty of draining the system of its vital forces more than any other infection. The common sense treatment of influenza and of the after effects of influenza is to bring up the system so that it will resist infection and will render it immune to its insidious attacks.

According to Dr. Francis Hacket, one of the best known French physicians, writing recently on the treatment of influenza and its after effects, no remedy approaches methylarsenate of soda in its effectiveness. He strongly advocates its use to restore the vital resistance always diminished and often shattered by influenza. Hacket declared that not only will persons treated with the preparation remain free from infection in the midst of an epidemic, but their vital resistance will be immensely strengthened in every way.

NUCLEINOL contains Methylarsenate of Soda, and in addition Nuclenic Acid, which in itself increases resistance to infection, while the beef extract, the other component part, reinforces the resistant action to infection of the other two. In combination the three products afford an ideal mode of combatting infection by the rational method of increasing the resisting powers of the body to such an extent that the germs of disease can gain no increase. NUCLEINOL is especially indicated at the present time, when the vital and nervous forces of the body are at a low ebb.

We understand that liberal sample and literature will be sent any physician on request by the manufacturers, Frank W. Horner, Limited, Montreal, P.Q.

NEW MEDICAL DEGREE.

Recognizing the increasing value of scientific research work, the Senate of the University of Toronto have authorized a new degree for students wishing to specialize in any of the numerous branches of medical research. Bachelor of Science in Medicine—B. Sc. (Med.)—will be awarded to any student who, on the completion of the first three years of the new six-year course, with honor standing, spends one year in research work on pre-medical scientific work. When a student completes the full six-year course he may then obtain the degree by putting in a year of research along the lines of any of the medical branches, such as clinics, medicine, surgery or obstetrics.

A high standard will be maintained, and in order to qualify for the degree, which will be given in recognition of services rendered by the student, a thorough knowledge of the work will be required.