

**Pages Missing**

# The Canada Lancet

VOL. LIII

TORONTO, JANUARY, 1920

No. 5

---

## EDITORIAL

---

### THE EPIDEMIC OF SMALLPOX.

The people of Toronto are now reaping what for years they have been sowing. There is only one way of preventing smallpox, and that way is by vaccination. It may be that this epidemic is mild; but smallpox has not always been mild, and will not always be mild. Grip came to be a sort of joke, and people would say "he has the grip", and smile; but a year ago grip slew its hundreds of thousands. So with smallpox, it will come along some day with the fury of the tornado and sweep away its thousands.

It will be a sorry day for the people if the present mild form of disease lulls them to sleep and vaccination becomes generally neglected. When a severe form of the disease does come, it will then be too late, and before the protective power of vaccination could be invoked, many would perish. So it was in the State of Pennsylvania many years ago. There was an unvaccinated community, and there were 5,000 deaths. Montreal, because of this same folly, had in 1885, 3,164 deaths.

Those who tell us that sanitation is the means of controlling the disease, either do not know, or are wilfully misleading the public. The most perfect system of sanitation is perfectly helpless in the presense of an epidemic of smallpox. It will strike down the cleanest as readily as the filthiest, and enter the home of the millionaire as readily as the poorest hovel. There is only one shield of defence; and that is the scar on the arm. When the disease meets this sign, it bows and retires.

In days gone by the only way of arresting an epidemic was arrived at when a sufficient number had recovered so as to wait on the new cases. Not till then could there be any stay in the disease. All the talk about natural immunity is downright nonsense. There are very few, indeed, who will not contract smallpox, if exposed. But perfect immunity can



be secured by vaccination. The wild talk against vaccination is very wrong, as it is creating a needless fear in the minds of the people. The operation is both safe and simple, and when performed in early childhood causes no trouble.

The irresponsible talk about introducing into the body disease is also a wrong use of the facts. It is true that vaccination is a disease. It is the cow form of smallpox, a form that does not kill, and yet protects. If the people neglect vaccination there will be an epidemic of smallpox from time to time, with the usual suffering, scarring, and deaths, say nothing of the loss of time and money. Are the people going to be led by the great body of scientists, or by a few, who do not know, or who designedly are misleading them, by declaring that vaccination is of no value, or offering "a vaccine pill?"

---

#### WHY THIS THING?

At the meeting of the Ontario Medical Association last year, the Committee on Ethics brought in a report, which was adopted by the association, condemning in unstinted language the editors and publishers of medical journals in Ontario because such advertisements as *Sal Hepatica* appeared in their pages. We called attention to the fact then, and showed that the best journals in the world carried such advertisement. We also pointed out that Dr. T. C. Routley, Secretary for the Ontario Medical Association, edited a journal which was guilty of the very thing the Committee on Ethics condemned in others.

We have just looked through the pages of the *Canadian Medical Quarterly* and find *Sal Hepatica* advertised in the December issue of 1919. We also note that Dr. J. H. Mullen, Vice-President, is on the editorial board, and that Dr. T. C. Routley is Editorial Secretary. How is this sort of thing to be explained? We do not for a moment say that advertising *Sal Hepatica* is wrong, but we do say that those who condemn others for doing this should be brought to the test of the recommendation of the report on ethics of last year, and be asked to resign from the Ontario Medical Association.

We do not care what others do in such matters; but when certain persons undertake to set the pace for others they should be willing to keep it up themselves. To all such we would give them these words:



Teach me not as some ungracious parsons do,  
 The steep and thorny way to Heaven;  
 While, like a puffed and reckless libertine,  
 Himself the primrose path of dalliance treads.

But regardless of these high priests of medical ethics, the Ontario Medical Association will live on and do good work. We only condemn the narrow, but are ready to praise the broad.

---

#### THE ROCKEFELLER GIFT.

It is with pleasure we refer to the splendid gift of Mr. John D. Rockefeller to aid medical education. The princely gift of \$100,000,000 has been made by him for this purpose. Of this large sum \$5,000,000 will be apportioned among the Canadian medical colleges in aid of original research and investigation. This will no doubt have the effect of inducing others to give. When one realizes the full meaning and far-reaching influence of such a gift, it staggers one to think that even yet there are some members of the medical profession who cry out against vaccination and protective inoculation against disease.

---

#### CRITICISM! WHY STOP THERE?

We give in another portion of this issue a short paper on this subject by Dr. E. A. Hall, of Victoria, B.C. It should be read carefully. We do not agree with all that is therein stated; but there are essential truths in it.

One of these essential truths is that the medical profession must not suppose that it has attained finality. It is one of the most hopeful conditions of the present that never in the history of the world was the spirit of research so active. The most active and highly trained minds in the world are keenly bent upon forcing nature to yield up her secrets, and demanding from disease an answer to the questions, "whence camest thou, and what will cause thee to depart?" Within the memory of all who are only one-quarter of a century in the practice of medicine many and wonderful answers have been given to both these questions.

But there is still much to learn, and for this reason we should walk with a humble frame of mind, and have our eyes and our ears open for the reception of any truth. With this portion of Dr. Hall's article we are in the fullest accord. Here, however, we must ask the question from what sources have our knowledge and advances come? The answer is that in almost every instance from patient, long and painstaking study



and investigation. Hippocrates, Galen, Morgagni, Paré, Larrey, Harvey, Hunter, Chareot, Sydenham, Lister, Vesalius, Virchow and hosts of others did not reach the great truths they did reach by any other route than that laid down by the late Sir William Osler in his master word "work." Research, research, research; work, work, work; thought, thought, thought. Through doubts and gropings they arrived at the truth. This was the *ikmas phrontidos*, or "mental sap", of the ancient Greeks that has ran down through centuries and has raised the science of medicine to the glorious position it now occupies.

But the case is quite different when we turn to such cults as Christian Science, osteopathy and chiropraxy. They are not imbued with a spirit of research. The very reverse is the fact—they are dominated by the spirit of reaction against progress.

Christian Science is a crude traversity on religion, and a gross misrepresentation of disease and treatment. It is the very negation of the spirit of progress and reason, by openly declaring there is no such a thing as disease; and that to say there is only creates trouble. Mrs. Eddy was the embodiment of impudence when she said that she was greater than Christ, as she completed when He had left incomplete. The only thing to be found in Christian Science is the inculcation of the notion of suggestion and faith, and this can be done a million times better without the cant, ignorance, and mercenary humbug of Christian Science. We do not object to Christian Scientists holding to their religious opinion; but we do object to them treating disease, when they say such is a delusion, and that the poison is in opium only because we think it is there, and that if a majority of the people said the plant did not contain poison, one could make a dinner of it

In osteopathy and chiropraxy there is absolutely nothing except a very crude system of rubbing and manipulation, based upon a wholly wrong conception of disease, pathology, anatomy, physiology, diagnosis, and therapeutics. Any system of treatment that is founded on the view that 95 per cent. of all our ailments arise from some displacement of the spinal bones cannot end anywhere but in disaster. There may be some hysterics, neurasthenics, and mental oddities who can be made believe that twisting and punching at their spines will cure them. This does not remove such treatment from the domain of humbug, with which the reputable physician will not countenance.

This does not for one moment say that he should not examine thoroughly, and if he finds a tender spot in the spinal column, treat it as he would a tender spot on the knee, or in the liver, on sound and proper methods. This is miles and miles away from the position of the osteopath



and the chiropractor who tell us that such diseases as ague, typhoid fever, and a uterine fibroid are only possible because of some previous subluxation of the spinal column.

Our contention all along has been that any one who wishes to treat disease must qualify before the College of Physicians and Surgeons, and then he will have plenty still to learn; but he will have sufficient knowledge of medicine to bring him up to date, and enable him to do as well for his patients as the healing art can do.

We have not had the opportunity of measuring a series of heads of the Christian Scientists to ascertain whether or not they have a greater distance from the base of the nose to the top of the forehead than is possessed by the members of other churches. The real test is what use is made of the brain; and by this test the Christian Scientist falls down. His theory of disease is a compound of ignorance, superstition, metaphysics, and wretchedly misapplied teachings from the Bible. With this we dismiss the subject for the present.

---

#### A MESSAGE OF HOPE.

Cancer is a controllable disease. Our scientific knowledge of its origin and methods of dissemination is still on many points imperfect, but our practical power of arresting its onset in an individual case is already good. Its mortality and the suffering which it causes are both for the most part unnecessary and preventable. We believe that from three-fourths to four-fifths of the deaths from cancer with their attendant suffering could be prevented if all the medical profession were imbued, as they soon will be, with our latest knowledge of the disease; and if all the laity were familiar, not with the dreadful symptoms of the disease in its latest stages which need not be mentioned to them, but with the trifling danger signals which contain the warning of its threatened onset in an individual—of its probable appearance in the future if it is left unchecked. For their own safety every member of the laity should know what these danger signals are. The statement that cancer is controllable, a plain, reasonable and reassuring statement if its natural history and nature, so far as that is assuredly known, and a detailed statement of the warning symptoms, is our message to the community. We wish to spread it throughout all classes in the community and we appeal to you as intelligent and progressive women not only to help us spread it among your own membership and to those who are dear to you, but also by your work and efforts with us to assist in spreading it to the less fortunately, placed in the community.—*Society for Control of Cancer.*



## ORIGINAL CONTRIBUTIONS

## THE RELATIONS OF VITAMINES TO DISEASE.\*

BY J. W. CRANE, LONDON

THE Vitamines theory of food deficiency diseases was enunciated by Funk in 1911 (1). He noted that polyneuritis developed in animals when they were fed on a diet of polished rice; and that these animals rapidly recovered when whole rice was substituted for the polished, and to the unknown substance contained in the husk of the rice he gave the name vitamines. He believed that beriberi, which is analagous to the experimental polyneuritis, scurvy, rickets and pellagra were due to a food deficient in vitamines and to them he gave the name "Deficiency Diseases." (2)

Objections (3) have been raised to the term vitamines, for there are many other substances in food that are as vital to growth and health as vitamines, *e.g.*, the amino acids. Again, all amines contain nitrogen but not the vitamines known as fat-soluble A. However it is a concise term and will probably be retained for some considerable time.

The term, accessory factor, was introduced by Hopkins (4), but other substances, condiments for example, might thus be included. By accessory factor we infer that vitamines are not so essential to health or growth as other food substances. We can maintain health without fats or carbohydrates but we must have the antiscorbutic, the antiberiberic factor, etc. From this point of view, vitamines are the essentials while fats and carbohydrates are more truly accessory.

The term Growth Determinants, does not take cognizance of the fact that these substances are as necessary for the adult as for the growing animal.

The term, Food Hormones, was suggested because it was thought that vitamines produced their effects in a manner analagous to hormones. The small amount necessary to produce marked changes in nutrition is one point vitamines have in common with hormones. For example take thyroxin, the hormone of the thyroid gland. Kandall (5) estimates that one-third milligram will increase basal metabolism one per cent. in a myxedematous patient weighing 150 pounds.

The terms, fat-soluble A and water soluble B, have been suggested by McCollum and Kennedy (6) and have few objectionable features. A diet deficient in fat soluble A (7) produces in animals erophthalmia,

\*Read at the Toronto Academy of Medicine, October 14th, 1919.



a disease characterized by dryness of the eye, keratitis and blindness. An analagous condition has been observed in man. The presence of water-soluble B in a diet prevents the development of polyneuritis in experimental animals, and beriberi in man. Fat-soluble A is contained in butter fat and cod liver oil, in the yolks of eggs and the leaves of vegetables. Water-soluble B is found in milk and fresh vegetables.

Eijkman (8) as early as 1897 compared the prevalence of beriberi among the prisoners in the gaols of the Dutch East Indies. He divided the total number (more than one quarter of a million of men) into aliquot groups of 10,000. He found that in each group of 10,000 eating polished rice there were 3,900 cases of beriberi and that in each group of 10,000 eating the unpolished rice there was but one case. These statistics proved conclusively that beriberi is caused by a diet of polished rice. Several years later, Funk demonstrated that polished rice lacks vitamins which are found in the outer covering of the rice grains. In Canada, beriberi is practically unknown but it might be suggested that neurasthenia, neuralgia and chronic nutritional diseases have as a complication a subacute type of this disease and that part of the benefit of the Weir Mitchell treatment can be explained on the assumption that the full diet, in which milk and eggs predominate, supplies the necessary vitamins.

McCullum (7) states that xerophthalmia and beriberi are the only true deficiency diseases in the sense in which Funk and his school employed this term. Nevertheless in this paper we shall briefly discuss scurvy, rickets and pellagra.

Scurvy has been known since the days of the Crusaders. The barbers of those early days were the surgeons and one of their duties was to trim the gums of patients suffering from scurvy.

Jacques Cartier (9) gives a very accurate description of the disease which was very prevalent among his sailors while at Quebec during the winter of 1536-37. He says, "The mouth became so infected and rotten at the gums that all the flesh fell off even to the roots of the teeth, so that the teeth nearly all fell out." The bark and leaves of a tree called Ameda were boiled and cured the disease in a few days.

Captain Cook (10) in his second voyage to Australia in 1773 had a similar experience when the diet was limited to biscuits and salt meat. The sailors "who were incapable of moving without assistance, were in the compass of a few days able to walk about of themselves when they were given 'wort,' marmalade and rob of lemons and oranges." (11)



An interesting report showing the value of fresh beer as a cure for scurvy comes from Norway. Among the men of a certain sailing vessel scurvy appeared and the captain put into port and left his patients there while he proceeded further down the coast for fresh vegetables. Some of the men secured a supply of fresh beer and rapidly recovered while their less fortunate comrades had to await the arrival of fresh vegetables.

Scurvy existed among the troops of the various armies during the recent war, least of all among the men along the Western front. Severe outbreaks occurred in Mesopotamia (12) and Serbia. The investigators at the Lister Institute only late in the war learned the value of germinated seeds, *e.g.* peas and beans, in the cure of scurvy. Acting on this suggestion (13), Major H. W. Wiltshire (14) made some interesting observations in treatment of scurvy in Serbian soldiers. Beans were allowed to germinate for 48 hours and then ten minutes boiling was ample time to fit the beans for eating. He reported that seventy per cent. were cured within four weeks with germinated beans as opposed to fifty-three per cent. treated with lemon juice. Captain Cook had used this method over 200 years before. He took with him malt which on germination produced fresh beer which formed a very agreeable cure for the disease.

Hess (15), in his investigation of scurvy in children, noticed that pasteurized milk, milk with high fat content, buttermilk with no fat, protein milk or proprietary foods would not produce the disease with regularity and so concluded that scurvy was not a deficiency disease as defined by Funk. The primary disturbance is a faulty diet which favors a secondary infection (16). Milk is only mildly antiscorbutic: it has been estimated that an infant requires at least one pint of fresh, raw milk daily to protect it from scurvy. If pasteurized, stale or heated milk is used, more than one pint will be needed. Since milk contains fat-soluble A and water-soluble B, we can readily understand what Mrs. Rose (17) intended to emphasize by this fanciful comment, "When the milk pitcher is allowed to work its magic for the human race, we shall have citizens of better physique than the records of our recruiting stations show to-day. Even when the family table is deprived of its familiar wheat bread and meat we may be strong if we invoke the aid of this friendly magician." Milk has a high calcium content and a considerable amount of sodium chloride, two of the most important mineral elements in the body. The universal practice of salting food, the craving of animals for salt and the drinking of water rich in calcium indicates the important role these chemicals play in human economy.



When we remember that it usually requires about six months before a case of scurvy reaches a phase where it can be recognized clinically, it is clear that the great majority of cases must be latent and inaccessible to diagnosis by clinical or laboratory methods. It is therefore more and more necessary that antiscorbutics should be added early to the diet of the bottle fed infant. Canned tomato (18) has recently been advocated and has the advantage over orange juice in that it is inexpensive and available at all times of the year. Cabbage, onions, and turnips are other sources of antiscorbutics.

Studies of rickets have convinced some investigators that this, too, is not a deficiency disease, since many cases have developed among breast fed infants. Rickets is perhaps the most common disease in children caused by a defective diet. In the larger cities, especially among the foreign population (19), rickets in infants is the rule rather than the exception. The lack of fat-soluble A in the diet has been regarded as the cause of this disease. Dogs (20) can be fed on a diet in which vegetable oils supply the fat, and scurvy readily develops. It is easy to prevent this by substituting butter fat for the vegetable oils. The inorganic salts, especially calcium and phosphorus, are regarded by other investigators as important etiological factors (21). A defective diet favors infections and this may be regarded as part of the diseased condition.

Pellagra, according to Goldberger (22), is caused by a diet, deficient in fat-soluble A, water-soluble B, a defective mineral supply, and perhaps inadequate supply of animal protein foods. Pellagra, although fairly common in the Southern States, is unusual in Canada. A few cases have been reported in the Asylum service.

McCollum (23) is satisfied that with the diets employed in Europe and America there is no such thing as a vitamine problem other than that of securing an adequate amount of the substance fat-soluble A. In planning a balanced diet there should be included the proper proportion of the essential constituents, fats, carbohydrates, proteins, inorganic salts, and vitamins or fat-soluble A and water-soluble B. Without these indispensable elements, the animal cell is unable to maintain its activities unimpaired or the adolescent subject to attain normal growth. Continued deprivation leads to disease and ultimately to cessation of life. The great war has taught us that appetite is by no means so safe a guide for the adequate selection of foods as has generally been supposed. The soldier brought with him to the mess an appetite trained in likes and dislikes, with local prejudices for or against certain articles of diet, and it was impossible to coax or coerce him in accepting a diet, which scientific studies deemed best for him.



## SUMMARY.

1. Xerophthalmia and beriberi are two deficiency diseases in the sense in which Funk and his co-workers employed this term.

2. Scurvy, rickets and pellagra are caused by diets which are faulty and which favor secondary infections.

3. A diet of carbohydrates and fats, protein and inorganic salts of ample calories may still be a dangerously deficient diet.

4. Appetite is by no means as safe a guide for the proper selection of foods as has generally been supposed.

5. Latent and mild cases of beriberi, scurvy, rickets or pellagra are even more common than suspected, associated with chronic nervous conditions, characterized by malnutrition.

6. Antiscorbutics, *e.g.* orange juice or tomatoes, should be added early to the diet of the infant.

7. The more liberal use of protective foods, milk and the leafy vegetables should be advocated.

8. Inadequate diet favors infection, *e.g.* tuberculosis, scurvy, rickets, pellagra.

In conclusion, it seems that we, as Canadians, should earnestly consider the advantages of a nutritional laboratory where many problems of national importance would be investigated. The admirable work of the Carnegie Nutritional laboratory of Boston and of the Lister Institute of London should stimulate a more thorough study of the many problems of nutrition. The Inter Allied Scientific Food Commission decided to recommend that France, Italy, England and the United States establish laboratories for the study of human nutrition. The Commission called attention to the fact that at least one quarter of the income of a nation is devoted to the purchase of food by its individual citizens, and that since the poorer the individual, the greater is the proportion of his wage devoted to the purchase of food, it is therefore a matter of highest importance for the welfare and prosperity of a nation that the methods of the best possible utilization of its food resources be sought out and in time definitely established by reliable scientific data.

## BIBLIOGRAPHY.

1. Funk, C.; Lancet, 1911, 2, 1266.
2. Funk, C.: Biochem. Bull. 1915, 4, 304.
3. McCollum, E. V.: Newer Knowledge of Nutrition, p. 32; Mac-Millan, 1919.



4. Hopkins, F. G. : Jour Physiology, 1912; 44, 425.
5. Kandall, E. C. : Jour. Amer. Med. Ass., Sept. 14, 1918, p. 870.
6. McCollum & Kennedy; Jour. Biol. Chem., 1913, 16, 431.
7. McCollum, E. V. : Newer Knowledge of Nutrition, p. 114.
8. Eijkman, C. : Arch. Path. Anat., 1897, 148, 523.
9. Jacques Cartier; Voyage de 1, Cartier au Canada, 1863, p. 34.
10. Kippis—Voyages Round the World—Captain James Cook, p. 180.  
H. T. Coates & Co., Philadelphia.
11. Kippis—Voyages Round the World—Captain James Cook, p. 188.
12. Mesopotamia Commission Report, 1917, 10, 71.
13. Chick, H. and Hume, E. : Biochem. Jour., 1918; 12, 131.
14. Wiltshire, H. W. : Lancet, 1918, 2, 811.
15. Hess—Amer. Jour. Diseases of Children, Nov., 1917, p. 337.
16. Hess—Amer. Jour. Diseases of Children, Jan., 1917, p. 98
17. Rose, Mary Swartz : Everyday Foods in War Time, 1918, p. 11.
18. Hess, A. F. and Unger, L. J. : Amer. Jour. Diseases of Children, 1919, 17, 237.
19. Hess, A. F. : J.A.M.A., 1918, 70, 900.
20. Hopkins, F. G. : British Med. Jour., April 26, 1919, p. 509.
21. Morse, J. L. and Talbot, F. B. : Diseases of Nutrition and Infant Feeding, 1915; p. 322.
22. Goldberger, Wheeler and Sydenstricker : J.A.M.A. 71, p. 949, 1918.
23. McCollum, E. V. : Newer Knowledge of Nutrition, p. 138.
24. Lusk, G. : Science, New Series, Vol. 50, No. 1283, p. 97; Aug. 1, 1919.

---

#### MEDICAL THOUGHTS, FACTS, IDEALS AND FANCIES.

BY JAMES S. SPRAGUE, M.D., BELLEVILLE, ONT.

WHEN, in July, 1919, Sir William Osler, M.D., Regius Professor of Medicine in the University of Oxford, was, on the eve of his seventieth birthday, presented with one hundred and fifty volumes by and including members of our profession on both sides of the Atlantic, he, in reply, said in his thanks:

“Paraphrasing my lifelong mentor—of course I refer to Sir Thomas Browne—among multiplied acknowledgment, I can lift up one hand to heaven that I was born of honest parents, that modesty, humility, patience and veracity lay in the same egg, and came into the world with me. To have had a happy home in which unselfishness reigned, parents whose self-sacrifice remains a blessed memory, brothers and sisters helpful far beyond the usual measure—all these make a picture delight-



ful to look back upon. And any success I may have attained must be attributed in large part to the unceasing kindness of colleagues and to a long series of devoted pupils whose success in life is my special pride."

The presentation was made by Sir Dr. Clifford Albutt, Regius Professor of Physics, Cambridge University (and his age is eighty-three years), in the name of the great body of subscribers. Sir Clifford said to Osler—the Nestor of Modern Oxford—a leader in the van of medicine and as an exemplar to us all:

"In you we see the fruitfulness of the marriage of science and letters, and the long inheritance of a culture which, amid the manifold forms of life, and through many a winter and summer, has survived to inspire and adorn a civilization which so lately has narrowly escaped the fury of the barbarian."

In thus presenting a sketch, in brief, of the event so meritorious, my object is to illustrate the happy reference Sir William employed in referring to the words found in *Religio Medici*, whose author, Sir Dr. Thomas Browne, (1605-1682), has won the favor, thereby, not only of Osler but all scholars. It is no common happiness to be born to virtue and such was named by one of the oldest Latin authors: *Non mediocris felicitatis est ad virtutem nasci*. This quotation, I think, was employed by Dr. Weir Mitchell in his address at the banquet given to Osler on his departure for England. Yet with all the gifts of hereditary virtue and ability, Osler tells us the key to success is *work*, and this is endorsed by Dr. A. Jacobi, deceased, in many of his lectures and papers. I find in Horace's Satire IX these confirming words: *Deducam, nil sine magno vita labore dedit mortalibus* (to mortals nothing under heaven is, without toil incessant, given).

To us, who for many years have been country doctors, Osler's words are very consoling, inspiring and justly applicable. The backbone of our profession is the general practitioner and no other profession can boast of the same unbroken continuity of methods and ideals, "for he" (the general practitioner), as Oliver Wendell Holmes, M.D., LL.D., said, "stands by all confessed, the truest, noblest, wisest, kindest, best." With Pasteur you and I should believe: "Happy is the man who carries with him a God, an ideal of beauty, and who obeys Him, an ideal of art, an ideal of science, and an ideal of the virtue of the Gospel."

"In the name of all that is sacred to science and the good of humanity," said John Ferguson, M.A., M.D., editor of Canada Lancet, "surely the day has not now come, when there is to be a lowering of our ideals; when Athena and Artemis must close their eyes with a shudder on what has been done to wisdom and the care of the sick; and when Apollo shall no longer see the sun at his zenith, but as he hastens to his setting, per-



mitting the gloomy shades of night to spread over his beloved Delos." These words are employed to illustrate disgust and sorrow, and are expressive of contempt for and against several catch-penny, will-o-the-wisp schemes as Christian Science, vitapaths, osteopaths, chiropracts and others of their ilk in their inane proposals to be allowed to practise in this, our enlightened province, with its three time-honored, well-equipped and well-endowed universities. To such iconoclasts and defamers of our temples, Dr. Lauria's words do not appeal: "One must have ideals that in the strife for perfection, he must seek to attain; and if in a limited degree only a portion or fraction of it is attained, the sweeter the consciousness of victory, and of not having striven in vain for the glory of our noble profession and for the sake of humanity."

My brother! alas for thee, if thou from thine own soul dost turn and flee. Better for the house and company of pain; better distress; better the stones of strife, the bread with tears; humiliation, and despair and fears, all, all the heart can suffer, the soul know, rather than with the bestial train to go, with base rejoicings, ignorant of woe, as Varley tells us, with the inspiring words of Hor. Carm. IV, 4: 38: "*Doctrina sed vim Promovet insitam; rectique cultus pectora roborant.*"

The multitudinous cults that seek seats with the mighty men cannot, and do not, understand these incentives to higher efficiency—this *Religio Medicorum*, this veneration by us for the labors and researches of our dead, and living fathers and masters, and their *monumenta priorum*, priceless and venerable, illustrating fully that we regard our work as the most honorable of the learned professions, and that the medical profession is a slave to nothing but its own high ideals. That it ranks as far superior to all other vocations among the educated nations is in evidence when we behold so many publications in book form, most especially, and for public reading, in which the doctor is so honorably introduced as the leading personage in his altruistic labors for reformations and in interests needing assistance, and in those equally needing resistance. Before is a list, carefully collected, such as refers to our profession in which the authors in romance or novel forms have enshrouded the general practitioner, especially in merit, with the noblest personage of our times. In vain one may look for as many such works by prominent writers who have held the barrister, the attorney-at-law, or minister of the Gospel as an exemplar or leading character in which altruism, nobility of work and benefactory examples are so well illustrated and of equal recognition and public endorsement.

In the *movies* the doctor is always introduced as a man of worth and as worthy of the highest respect, personally and professionally, and we have yet to find an illustration in such picture portrayals derogatory



to our vocation. In our profession we have no character, such as Marks the lawyer, one always sees produced by Uncle Tom's Cabin—in all of its low characteristics of our sister calling, so debased a character is presented that one wonders why the High and other Courts of Law should allow such a public representation, the tendency of which is naturally repugnant to the ordinary mind, and assuredly not pleasing to any judicial mind; morally it is a low order, yet pleasing to the rabble and the low-brows. Fieldes' immortal *The Doctor*, copies of which are found, or should be found in our offices or homes, ennobles our profession and no characteristic lawyer or pastor has been portrayed by picture, indicative of the honor of either sister vocations. If such is our position among men and even many citizens in ordinary life have the illustrations named, it is indeed requisite and demanded that you, my brother, wherever located, should read those volumes, whose worth is announced, and possess the engraving or photogravure of *The Doctor*.

It is evident that members of our profession for several centuries have read, and with profit and interest, Sir Thomas Browne's *Religio Medici*, and why not you? *Anatomy of Melancholy* equally as meritorious and as classical, if any way proficient in the classics of Greece or Rome, as you should be, you should make an equal study. *Reflections of a Late London Physician*, and the publications relating to our professional life, ethics, etc., in the several books issued by Saalified & Company, Akron, O., medical book publishers, are pleasing, instructive and lead you to higher ambitions and a proper understanding of your worth and duties, even obligations, as a doctor, and as the Commonwealth's best and wisest servant, not only doing honor to yourself, but, thereby, doing honor to our profession, the one for which we bared our breasts to serve. Fully believing that "no class of men see the inner lives of the people more than the physician—no class of men have a greater opportunity for doing good," and that in Hufeland's words, for you and me: "Thine is a holy and high office. See that thou exercises it purely, not for thy own advancement, not for thine own honor, but for the glory of God, and the good of thy neighbours. Hereafter thou wilt have to give an account of it."

Medicine is not, nor is law, a private profession. The medical man to-day is not a private practitioner; he has a social obligation to sustain; he is a trustee for society, his duty to his patient and to his patient's friends must be read in the unwinking light of his own social responsibility as a guardian of public life and a leader of public opinions. The public good is the moral standard by which his professional services are tested. Privileges recognized by the public, and protected by parliament, give duty supreme claim, and make that obligation binding upon every



member of our profession. If so, and no intelligent citizen doubts it, where is the position of the members of so-called medical cults? Is any state or province, in these days of our medical triumphs, so inane as to allow baseless cults with followers equally as uncultured, and existence, recognition or even tolerance? Such is, to-day, in medicine and surgery. In the words of Lord Randolph, which we assert as referring to our profession's triumphs: "Oh, such a day, so fought, so followed, and so fairly won, came not till now, to dignify the times, since Cæsar's fortune."

O! Iole, how did you know so well Hercules was a god? Because I was content the moment my eyes fell on him, he conquered whether he stood, or walked, or sat, and it is with you the right and the obligation to be, in your circle, a Hercules, provided you have the scholarship and the personality essential to be classified as a modern divinity among us. Our universities are crying not in vain for scholars, such as Hippocrates has ably defined, and their cry, in ages, has been not without answer: "Give us men, fresh and free and frank; men of thought and reading, men of light and reading, men of royal breeding (Osler-like, family and origin), the nation's welfare speeding men of faith and not fiction, men of lofty aims and action; give us then—I say again—give us men," men to notify the nation that osteopaths, vitapaths, pandiculators and moonshine cults are *still* hunters, whatever their camouflage may be. These thoughts or reflections are but those of the few that thought and professional zeal and interest touch among the many that my services in medicine for one-half century have embraced and concerned me, ye, even obsessed in my loyalty and devotion to its honor. Will you, my brother, carry on the work? I must quit soon as my years are seventy and five.

I, too, must after the writing of this spend a few hours with my Virgil, Horace and other classics; after that pleasing time I will take a few hours in the completion of an oil painting, a copy from the masters, or prepare copy for two of our provincial medical journals, for as time is passing away so rapidly I feel constrained to arouse every energy to action, so that when asked in my last moments, "What have you done?" I can reply, "I have done my best for my profession." Are you, brother, with your experience and old age, giving to *Canada Lancet* those sorely purchased experiences of triumphs and hopes, such as will cheer, console, or instruct your fellow readers in interests wherein we are equally interested?



## CRITICISM! WHY STOP THERE?

By ERNEST A. HALL, M.D., L.R.C.P.ED., Victoria, B.C.

**D**URING several months "The Lancet" has treated us to not a few incursions into the realm of Quackery and has shown its readers upon what a small modicum of truth a system of therapeutics can be built. I repeat "of truth" because there is no system of theology of therapeutics that meets with favor and claims adherents, without some fundamental factor of truth, without something that appeals to as well as ministers unto human need.

We must remember, that aside from mathematics, truth is relative and not absolute. Further research and increased development are continually changing our view-point. Those of us who live are constantly casting off our ignorance of to-day, which was the wisdom of yesterday and rejoicing in each newly explored region, as contributory to the fulness of life. Does not Mr. Dooley, in his inimitable style, tersely express the thought when he says "The truth is anything wurricks. When the truth stops wurricking it becomes a lie and when a lie begins to wurrick it becomes the truth."

This, by the way,—leading up to the statement that we, whose minds are open, often find truth in out-of-the-way places, sometimes among the garbage cans of orthodoxy, often among the illogical, contradictory and absurd teachings of christian science and occasionally we stumble upon it in the armamentarium of the osteopath and rarely that of the chiropractor; but in all of these, while there is much to eliminate, there is something of interest and something to learn. Nor should we "pass by on the other side, wagging our heads" in the presence of these cults and isms, satisfied that we are "The People" and wisdom will perish with us.

The reason given that these cults are not orthodox has no place in the progressive thought of to-day. Where is there one thoughtful medical who at the age of fifty believes in the orthodoxy of his Sunday school teacher? He has not degenerated but out-grown the narrow statements of truth as he has out-grown his baby-clothes. Life is bigger and truth is greater than it once was. Definition is too small; it fails to define. Theology, once the prince of science, has become the expression of ignorance in terms of superstition, for we know little of Omnipotence and have yet evolved few terms in which to express ourselves, and the voice of the past in this department knows no vocabulary except that of superstition. Medicine, which in our graduation day gave us twenty cures for every disease, now gives two hundred and twenty diseases without any cure for them, while we still grope for light "like infants crying in the night."



These noble professions, administered by super-men, still claim respect, but at the hands of "genus homo non sapiens." What a sorry spectacle! It is in areas presided over by this latter class that quackery reaps the rich harvest.

What is christian science, but an ever extending protest against the superstition and tradition of the church, and the materialism of the medical profession? The non-scientific, yet intelligent citizen, is reacting against the dogmas, rituals and conventionalism of to-day. He is asking for the elimination of that which modern thought cannot reconcile with infinite love, while he realizes that we are more than body and has found too often the beneficent results of those physical forces that unfortunately the sub-medical man ignores, and he goes where he can make the best bargain, if he gets more for his money in christian science than he gets by paying church dues and doctor's fees, can he be blamed?

Is it not time we looked upon this matter seriously—we have looked upon it critically long enough. Physicians have talked, clergymen have railed but this cult, christian science, still grows as no other has ever grown,—nor are its converts all ignorant. You will find, upon close observation, a greater measurement from the base of the nose to the tip of the head, of the average christian science devotee than in the membership of any of our churches. This is not creditable to us, but it should warn us and set us thinking. It is not enough for us to point out, as this journal has so fully done, absurdities here and contradictions there. Any one familiar with the Bible can do this same thing. If any one of us would hold up, before an absolutely unprejudiced mind, his own remnant of orthodoxy, he would find it equally faulty. We must cease abusing and find what is the basal truth in all of these "irregular" systems. It must be there or they would not claim their millions of followers.

Is it not time, in these days of commission making, that a commission were appointed to determine the fundamental kernel of truth in all these systems, for truth alone is freedom. It would be an interesting experience, and not without its educative value for readers to wander into the office of an osteopath and complain of a sore back or indigestion, and make an analytical study of the performance, and the next time he had a neurotic patient, to make a close examination of the spine. He may be surprised in finding that the "subluxations" of the osteopath are in his patients' congestive areas of tenderness and can be easily mapped out. He will also find hard masses about the size of a bean, that he has never heard of in his medical lectures, so tender that they can scarcely be manipulated, but a few days of deep massage with spinal



vibration will produce wonderful results in the removal of these painful areas and lessening of the neurasthenia. Such routine examination should never be omitted in nervous cases. Not only will the osteopathic secrets be revealed, but the number of cases that he will refer to the X-Rays with the diagnosis of tuberculosis or metastatic involvement will also surprise him.

In conclusion let me emphasize this statement, that there is no form of unorthodox activity that has not had its inception in our deficiencies, and its success in our neglect, that opposition cannot successfully obstruct, nor criticism prevent the development of any system that bears a message to a weak and suffering humanity.

It should be ours to read, look, mark and inwardly digest; lest we lag behind in the race, and remember that history knows no dogmatism more dogmatic than the dogma of the Doctors. Why stop at criticism?

---

#### THE RELATIVE CONTENT OF ANTISCORBUTIC PRINCIPLE IN LIMES AND LEMONS .

The results of experimental investigation and historical inquiry by H. Chick, E. M. Hume, R. F. Skelton and A. H. Smith (*Lancet*, November 30, 1918—735) are conclusive in showing that fresh lime juice is far inferior to the juice of the lemon in the prevention of scurvy. Experiments on guinea pigs and monkeys show that lemon juice is at least four times as efficient. Preserved lime juice was found to have no value whatever.

The history of two Arctic expeditions, that of the Investigator in 1850 and that of the Alert and Discovery in 1875, shows that in the case of the former, supplied with lemon juice, there was almost complete immunity from scurvy during the first two years of great difficulty and privation. In the latter case, supplied with lime juice, scurvy was prevalent at the end of the first winter.

The curious fact is noted that the "lime juice" which enjoyed a deservedly high reputation as an anti-scorbutic in the British Navy 125 years ago was not lime juice at all but lemon juice. When the supply of this substance from Spain and later from the Mediterranean failed and the juice of the West Indian lime was employed it became evident that the genuine sour lime juice was inadequate as a prophylactic against scurvy.



## CURRENT MEDICAL LITERATURE

## ARTIFICIAL PNEUMOTHORAX

Joseph Rosenblatt, Bedford Hills, New York (*Journal A. M. A.*, Dec. 6, 1919), after noticing certain disadvantages in the two-puncture method of inducing therapeutic pneumothorax, such as the possibility of air embolus in a vein and the possibility of introducing unfiltered air through the exposed lumen of the needle, suggests a simpler method of using a two-way stopcock between the syringe and the needle used for injecting a local anesthetic. One end of this stopcock fits the point of the syringe and the other end fits the needle. A branch extends from the side of the stopcock to which can be attached a rubber tubing leading to the gas apparatus. The stopcock is also provided with a two-way valve, so that when it is turned one way the needle connects with the syringe for drawing up and injecting the local anesthetic, and when turned the other way it communicates with the side branch leading to the gas apparatus. The advantages are summed up as follows: "1. The operation is rendered much simpler and easier. 2. The amount of trauma to the pleura is greatly minimized, and so pleural shock is less likely to occur. Though the cause of pleural shock is not well known, yet judging from what is known about shock in general, it is reasonable to suppose that pleural shock is less likely to occur when the pleura is punctured with a small needle than when it is pierced with a dull trocar and cannula. 3. Subcutaneous emphysema is less frequent. 4. The patients do not dread the operation so much when this method is used, as they consider it of a minor character, and it is well known that the state of mind of the patient is an important factor in the success of the treatment." The apparatus is illustrated.

## THE POPULATION OF THE WORLD AND THE RATE OF ITS INCREASE

Every so often, sociologists and statisticians begin to "view with alarm" the rapid increase in the world's population and to predict world catastrophe as an inevitable result. Recently the statistician for the commonwealth of Australia, G. H. Knibbs, in a monograph on population, stated some significant facts and estimates in regard to the present and the future population of the earth. Knibbs puts the population of the earth for the year 1914 at 1,649,000,000, or about thirty-nine million in excess of the estimate of Jarascsek, the French statistician, for 1910. The



annual rate of increase in the world's population for the five-year period 1906 to 1911 Knibbs estimates at 0.01159, or 1.159 per cent. of the population. Should such a rate of increase be continued, it must result in a severe strain on the resources of Nature. Knibbs asks whether medical men in future will take a stand in favor of so colossal a population that the masses will scarcely be provided with the bare necessities of life, or will they favor birth control and a limitation of births in such a manner that the population of the earth shall never be greater than can be adequately provided for on a high plane of physical, mental and moral existence?—*Jour. A. M. A.*, Nov. 22, 1919.

---

#### CLASSIFICATION OF LARYNGEAL TUBERCULOSIS

After describing in detail the three types of laryngeal tuberculosis, namely, the acute, the subacute and the chronic forms, Dworetzky of Liberty, New York, proposes the following classification: peracute tuberculosis of the larynx; acute tuberculosis, stages 1, 2 and 3; subacute tuberculosis, stages 1, 2 and 3; and chronic tuberculosis, stages 1, 2 and 3. The complication of laryngeal tuberculosis should affect the classification of the accompanying pulmonary tuberculosis in the following manner: 1. Pulmonary disease with acute or peracute laryngeal involvement should be classified as advanced, no matter in what stage the pulmonary lesion may be; 2. Pulmonary tuberculosis, with a complicating subacute tuberculosis of the larynx, should be advanced one stage; and 3. Pulmonary cases, with chronic laryngeal tuberculosis, should be classified strictly according to the pulmonary condition, for such laryngeal lesions have no effect on the prognosis of the disease.—Julius Dworetzky, *The Classification of Laryngeal Tuberculosis. American Review of Tuberculosis*, Nov., 1919, vol. III, No. 9.

---

#### ADJUSTMENT OF RESPONSE TO NERVE STIMULUS IN VOLUNTARY MUSCLES

Levick (*British Medical Journal*), bases some conclusions on the results of tests made upon many hundreds of men, and including every grade of nerve injury. Records were taken of the height, rate of rise, and rate of fall of the curve produced by the contraction of a muscle by means of an interrupted galvanic current. In every case the affected muscle was compared with the healthy counterpart. It was found that when a normal muscle was subjected to a series of stimuli of varying strength it responded by a succession of contractions of varying height, but of uniform duration. The duration of the contraction of a given muscle is the same, whether the stimulus is short and sharp or long and



diffuse. Slight diminution of the conductivity of a motor nerve by compression or injury causes a slight lengthening in the wave of contraction of the muscles which it supplies. Abnormal and persistent increase in of the duration of the contraction of the muscles supplied. After suture the stimulation of a motor nerve through irritation, leads to a shortening of a nerve and its regeneration the faradic response of the muscle is the first to appear, then the muscle begins to respond to electrical stimulation with a slight shortening of the contraction curve. This is followed by a period of further shortening until, after complete regeneration of the nerve, the muscle contraction curve is lengthened until the normal is restored. The study of the duration of muscle contraction curves promises to prove of considerable value in diagnosis.—Charlotte Med. Jour.

---

### INFLUENZA

An outbreak of influenza in the New York Training School for Girls at Hudson, in which all the inmates had been vaccinated against the disease soon after it first appeared in this country and escaped the epidemic when it occurred in the city, is reported by A. B. Wadsworth, New York (*Journal A. M. A.*, Nov. 29, 1919). This occurred in the latter part of December, 1918, and lasted through January, 1919. The influenza bacillus was isolated from the nasopharynx of the ten vaccinated patients who were examined, and from three of the unvaccinated ones. At the same time cultures were taken from five girls who had been vaccinated. In February, a second outbreak occurred, making the total number of cases, for the two outbreaks, 166 among the vaccinated, and thirty-seven among the unvaccinated. These thirty-seven were probably admitted after the general vaccination had been carried out. After the second outbreak, cultures were taken from thirty-eight cases, and the influenza bacillus was isolated from thirty-two. Thirty cases developed among the vaccinated, and the germ was found in twenty-six of them. Eight cases developed among the unvaccinated, and in six the bacillus was present. Cultures were taken from five persons who had been vaccinated but who had not developed the disease. Two cultures of the bacillus were isolated. The results are of interest as showing the effectiveness of a rigid quarantine enforced during the first epidemic in town in preventing the spread of influenza, over the use of an experimental preventive inoculation, the practical value of which is indeterminate; and also that with changing personnel a rigid quarantine should be maintained for a sufficient length of time to prevent later outbreaks. The general distribution of influenza bacilli during the outbreak is remarked on without conclusions being drawn.



## PERITONITIS

A method of treating peritonitis, following operation or wounds, is described by G. W. Crile, Cleveland (*Journal A. M. A.* Nov. 29, 1919). The occurrence of infection is shown by two characteristic groups of symptoms—general and local. The former are accelerated pulse and respiration, raised blood pressure, increased temperature and rapid loss of strength and weight, indicating the presence of an acid-forming activation. The local symptoms are pain, tenderness, distention, muscular rigidity, intestinal paresis and vomiting, and indicate the protective response of the organism to the bacterial invasion. The problem, therefore, is the same as the prime problem of abdominal surgery in general—the reduced resistance and mounting acidosis of the patient. The prime requisites in treatment are: first, the conservation of the remaining energy of the body against further depletion, and, second, the neutralization and elimination of the superabundant waste products. When immediate operation is not required, the vitality of the patient may be increased by diet, fresh air, and, above all, rest and sleep, until the favorable time for operation occurs. In case of the perforated intestines of the soldier, and in the starved civilian patient with partial obstruction or acute infection, operation cannot be postponed. "In these cases the administration by rectum of a 5 per cent. solution of sodium bicarbonate with 5 per cent. glucose, and an immediate transfusion of blood may effect a sufficient restoration for the operation, or at least for the first séance of a two-stage operation under strict anociation—nitrous oxid-oxygen analgesia, local anesthesia, and the minimum amount of manipulation required to complete the operation; or, in grave situations to make a sufficient anatomic adjustment to save the patient until an interim of rest and restoration has sufficiently increased his vitality to permit the performance of the second and major stage of the operation." In technic every step should be under complete anociation, and the essential points for this are nitrous oxid-oxygen; an anesthetized incision; accurate, clean-cut work and adequate drainage; Fowler's posture; vast hot packs over the entire abdomen and well down the sides; 5 per cent. sodium bicarbonate solution with 5 per cent. glucose by rectal tap continued as long as it is tolerated; primary lavage of the stomach, rarely repeated if the anociation is complete; from 2,500 to 3,000 c.c. of physiologic sodium chlorid solution given subcutaneously every twenty-four hours until danger is past; morphin hypodermically until respiration is reduced to from 10 to 14 per minute, but this last should be omitted in streptococcus peritonitis. Under this combination of anociation of the disease and the operation, Crile says that he and Lower performed 409 operations for acute appendicitis, with or without generalized peritonitis, with a death.



## VITAMINES, UNKNOWN BUT ESSENTIAL ACCESSORY FACTORS OF DIET.

Lecture delivered by Prof. F. G. Hopkins, of the University of Cambridge at Kings College on February 19, 1919.—*The Lancet*, March 1, 1919.

The science of the nineteenth century has made it clear that it is the quality and not the quantity of food which is all important. The essential elements for human nutrition are proteins, fats, carbohydrates and mineral salts, but in addition there is needed something produced by plants in appreciable quantities. The nutritive importance of this substance is out of all proportion to the small amount in which occurs in natural foodstuffs.

Beri-beri is very common in rice eating communities. That the cause was due to the removal of an essential food factor in the preparation of the rice was shown by Eijkman in 1897.

Feeding experiments on animals show that if the food consisted of pure protein, fats, carbohydrates, and mineral salts, the animals not only did not thrive, but, after a longer or shorter interval died, whilst an extremely small amount of this essential factor added to the diet converted it into a perfect nutriment. It is essential that these additions to the food be obtained from living tissue.

Many unsuccessful attempts have been made to isolate these substances though it is certain that they are actual substances and not qualities. They can be extracted, precipitated and redissolved but they cannot be completely separated from other substances. Their exact chemical nature and the exact amount needed for the body are not known. There are at least three of these substances, each one serving some particular function in nutrition. Two of these substances are soluble in water and one in fats.

The water soluble substance is removed when rice is polished and it is the absence of this which causes beri-beri. This is known as the antineuritic substance. Rickets in children, a disease of great national importance is associated with the fat soluble vitamine. Scurvy is another dietetic disease caused by absence of a water soluble vitamine.

The whole vitamine question is of the greatest importance in regard to the child population. Although we may not have beri-beri or pellagra and though scurvy might be rare, we have much ill health which stops short of definite symptoms, minor departures from the normal which occurred before the establishment of actual disease. The absolute absence of vitamins meant disease, their relative absence, malnutrition.



## PERSONAL AND NEWS ITEMS

## PERSONAL AND NEWS ITEMS.

The will of Henry Clay Frick, coke and steel pioneer of Pittsburg, disposes of \$117,300,000 in gifts for public benefit. Among the bequests are \$15,000,000 to Princetown University, \$5,000,000 to Harvard University, \$5,000,000 to the Massachusetts Institute of Technology and the Educational Commission of Pittsburg. Fifteen other institutions will receive \$500,000 each. The rejoicing at Princeton and the other educational institutions over these extraordinary windfalls is in the meantime greatly tempered until a clause in the will as to deducting tax payments from amount of bequests is finally decided. If Pittsburg officials are right charitable bequests will shrink to \$11,000,000. In the meantime it is recalled that Mr. Frick received an honorary degree from Princeton a few years ago. At the time of his death he was a member of the Board of Trustees. His son, Childs Frick, is a graduate.

Col. D. W. McPherson, C.M.G., who commanded the Ontario Government Hospital at Orpington, Kent, and who has the distinction of being the first Canadian officer to leave Toronto for overseas in 1914, arrived in the city yesterday, having returned on the Tunisian. Col. McPherson was accompanied by his wife, and will resume his civilian practice in Toronto as soon as possible.

Yellow fever will be wiped off the earth within five years, it was asserted by Dr. T. C. Lyster, chairman of the Yellow Fever Commission, which went to Peru and Ecuador in 1918. Already the disease has been eradicated from Central America, he said, although it still rages in Southern Mexico and a portion of Brazil. The stegomyia mosquito is the only means of transmitting the disease. A serum to combat the fever has been used with excellent effect, Dr. Lyster said.

Dr. W. C. Mackechnie wishes to announce to the profession that he has resumed practice at 96 College Street, Toronto, and will confine his practice to diseases of the nose, throat and ear.

The opening of the new General Hospital of the Salvation Army at Crawford avenue and London street, Windsor, planned for 29th December, has been deferred until the second week of the New Year, when Commissioner William Richards of Toronto, head of the Salvation Army in Canada, is expected to officiate at the dedication services.

Dr. C. M. Sellery has been appointed to the medical staff in China, and will take up his work next August. Dr. Sellery has served overseas with the Medical Corps in England and France. He is a graduate of To-



ronto University, and was a volunteer student for the mission field before the war. He is a son of Rev. S. Sellery now retired and living in Toronto.

Major William Baillie, B.B., of Toronto, was presented by his military friends recently with an illuminated address.

The New York Clinic for Narcotic Habitues has been attended by a very remarkable degree of success. Over 5,000 persons have been treated, and 20 per cent. of them are women.

Sleeping sickness has made its appearance in a number of places in Canada. The death-rate has been high for the number of cases.

Scarlet fever, diphtheria, measles and whooping cough are very prevalent in Ontario, with 554, 744, 1,026 and 219 cases respectively reported to the Board of Health during December. Smallpox cases numbered 1,414.

The late Dr. Charles E. Treble, who died suddenly in Grace Hospital on the 28th of October last, left an estate of \$120,000, consisting of real estate amounting to over \$70,000, and the balance in stocks, bonds, life insurance, etc. The legatees are his wife, Violet Marian Treble, and his four infant children, the eldest of whom is only eleven years old. Upon certain contingencies happening, the following bequests are made: To Grace Hospital, \$5,000; The Methodist Union of Toronto, \$5,000; trustees Metropolitan Methodist Church, \$5,000; and the balance to his two sisters and brother.

Enacting of legislation which will prohibit physicians from prescribing over eight ounces of liquor at one time is under consideration by the Provincial Government, along with other marked changes in the Manitoba Temperance Act.

An extra of the Canada Gazette announces that the Act amending the Opium and Drug Act, which was passed at the summer session of the House, became effective from December 1, 1919. It was provided in the Act that it should come into effect on a day to be fixed by proclamation of the Governor-General. The amendment provides that imports into Canada or exports from Canada of cocoa leaves, cocaine or any of their salts, or preparations of opium alkaloids or their salts or preparations, shall be only by license from the Minister who is presiding over Federal Department of Health. Anyone guilty of a contravention of this Act is liable to a fine not exceeding \$1,000 and costs, or to imprisonment for a term not exceeding one year or to both fine and imprisonment.

"The board has endeavored to do what it considers its duty to the public of Ontario against the neglect by the city of Toronto in carrying out the law, and does not see any reason for taking further proceedings,"



was the only comment made yesterday by Dr. W. S. McCullough, provincial health officer, regarding the decision of the judges in the mandamus action brought against the city.

The ratepayers of Midland, Ontario, have voted \$30,000 to St. Andrew's Hospital of that town. The hospital was donated two years ago by Mr. James Playfair.

Dr. John Noble has been unanimously elected chairman of the Toronto Board of Education. This is a great honor, and has been well earned by many years of faithful service to the people.

The local board of health, Windsor, has decided to put into effect immediately an order compelling all school children to be vaccinated or be provided with a certificate of vaccination within the last seven years before returning to school after the Christmas vacation, as a measure of precaution against what is now considered to be the inevitable spread of smallpox.

The vaccination of school children and the free distribution of vaccine to physicians were matters discussed by the Board of Health for the Province of Quebec. Dr. Boucher, Medical Health Officer, was instructed to send circular letters to the heads of educational institutions and to all physicians, requiring them under penalty to report all cases of smallpox or chickenpox they may have knowledge of. Information was laid before the board to the effect that some 350 cases of smallpox had been reported in the Province.

Walk a mile each day to keep the doctor away, advises the United States Public Health Service. Try walking to work every morning and see if it doesn't make you younger and healthier.

Cattle are fattened for slaughter by being overfed and not allowed to exercise. Many men and women prepare themselves for slaughter by voluntarily adopting the "stall fed life", says the United States Public Health Service. Don't overeat and take plenty of healthful, outdoor exercise.

Hot house people are like hot house plants. They can't stand exposure to severe weather, says the United States Public Health Service. Sleep with the windows open and keep every room well ventilated.

The Beit Memorial Fund Committee have elected seven Fellows of whom two are women. One of the Fellows is Dr. Thomas Archibald Malloch, a graduate of McGill University, who will study types of pneumonia in relation to bacterial organisms as a help towards exact diagnosis and treatment. The value of the Fellowship is £300 a year.



Too much sleep is almost as injurious as not getting quite enough, says the United States Public Health Service. The average adult should sleep eight hours in every twenty-four.

One man in every three was rejected by drafts boards for physical disability. According to the United States Public Health Service, a great many of these defects might have been eliminated and probably will be in the next generation.

Give your physician a chance to keep you well before you call him in to cure you, advises the United States Public Health Service. An occasional thorough examination by a competent physician will save you money and prolong your life.

Don't always call the aching joint r"heumatism", says the United States Public Health Service. Bad teeth are sometimes the real cause and it is always wise to consult both the doctor and the dentist. Have an X-ray made of the teeth.

Beware the much advertised "sure cure" for disease, warns the United States Public Health Service. While experimenting, the disease often gets beyond the point where it can be cured by a competent physician.

The entire profession of Canada learned with deep regret that Sir James Grant, of Ottawa, in his 9th year, sustained a fractured leg recently.

This is the scarlet fever season, warns the United States Public Health Service. A clean, sanitary mouth will help to prevent it. Compel the children to brush their teeth regularly and keep the mouth clean.

Beware bootleg liquor, warns the United States Public Health Service, for much of it contains wood alcohol and other poisons. An ordinary swallow of wood alcohol may produce death or blindness. **DON'T RISK IT.**

Every sore throat is a danger signal, says the United States Public Health Service, and may indicate some acute, infectious disease, such as diphtheria or scarlet fever. Take no chances. Have a physician make an immediate examination. A few hours delay may cause death.

Rats cost every person in the United States one-half of one cent a day, says the United States Public Health Service. Write to the Surgeon General, Rupert Blue, Washington, D.C., for an instructive bulletin on how to get rid of them.

Keeping physically fit is the first rule to be observed in keeping well, says the United States Public Health Service. Exercise is necessary to health.



"Watch Your Step" is a fine slogan to be observed in buying shoes, says the United States Public Health Service. Get them large enough, built on sensible lines and most of your corns and bunions will disappear.

Walking "Indian Fashion", that is, with the feet pointed straight to the front, instead of at the customary angle, has been found to be good for weak arches, says the United States Public Health Service.

Dr. Harold M. Tovell wishes to announce that he is confining his practice entirely to the specialty of Roentgenology. Office 184 Bloor Street East, Toronto. Phone, North 306.

Sir Thomas Fraser, formerly president of the Royal College of Physicians, Edinburgh, and for many years Professor of Therapeutics in Edinburgh University, died on 5th January at the age of 78.

Dr. T. C. Routley wishes to announce to the medical profession that he has removed to 129 Oakwood Avenue, Toronto. Phone, Hillcrest 6900.

Dr. J. H. McPhedran wishes to announce to the medical profession that having returned from overseas he will confine himself to the practice of internal medicine. Office, 155 Bloor Street East, Toronto.

Dr. Thomas Archibald Malloch, an Ontario and Quebec writer on medical subjects, and captain of the Canadian Medical, is among the appointments to the Beit Memorial Fellowship for medical research.

The immensely valuable library of the late Sir William Osler, Bart., has, it is said, been given to his alma mater, McGill, by the terms of the famous physician's will. Bibliography, was the late Sir William's hobby, and in its pursuit he amassed a library which included practically everything useful in modern medicine and many rare and curious old works on the healing art, printed in bygone centuries.

Several hundred nurses employed in hospitals of New York have formed a union affiliated with the American Federation of Labor, to be known as the Trained Nurses' Association, Local No. 16,461, it became known recently. The new organization's first act, it is said, will be to present demands for a readjustment of hours and wages. Mrs. Rose Maxwell, secretary of the union, stated that the nurses' chief grievance is their long hours, the average working day of a graduate nurse being 12 hours. It is planned first to organize the 3,500 trained nurses in New York and Brooklyn hospitals, and then gradually extend the movement throughout the state. Mrs. Maxwell said the union intended to obtain the eight-hour day for all nurses.

At many points in Canada there have been cases of sleeping sickness. Manitoba has had the largest number.

The nurses in Toronto have agreed to the eleven hour day when caring for patients in the hospitals. This applies only to graduates.



---

**OBITUARY**

---

**SIR WILLIAM OSLER, BART, M.D., F.R.S., F.R.C.P.**

Sir William Osler died at Oxford, England, on 29th December, 1919, in the seventy-first year of his age. The late Sir William Osler was born at Bondhead on 12th July, 1849, a son of the parsonage. He graduated from Trinity College in 1869, and began his medical studies in Toronto, but subsequently went to Montreal and took his degree in medicine at McGill in 1872. He then studied in Europe for two years.

On his return he was appointed to the chair in physiology in McGill Medical College, where he labored with great success and industry in the departments of physiology, pathology and clinical medicine. In 1884, he was offered the chair of clinical medicine in the University of Pennsylvania. He accepted the position and became a very successful teacher in Philadelphia for five years. In 1889, he was offered the professorship of clinical medicine in Johns Hopkins University, Baltimore, and the position of physician-in-chief to the Johns Hopkins Hospital. There he remained until 1905, when a call came to him to fill the position of Regius Professor of Medicine in the University of Oxford. In this position he remained until his death.

During these forty years he was a most successful teacher, and had the power of enthusing those who came under his influence with the spirit of work and research in a most remarkable degree. He took a keen interest in his students and in young practitioners, and to-day throughout the world there are very many who mourn his loss in a very personal way. He was to all who came in contact with him most genial, and to his student a very close friend. They learned that

He was a scholar and a ripe and a good one,  
Exceeding wise, fair spoken and persuading,  
And to those who sought him, as sweet as summer.

He was a prolific writer on medical subjects, and his pen covered a very wide range of subjects. But wide as the range was none of his articles or addresses were weak or hastily prepared. He spoke always



from a fulness of knowledge and a conviction of heart, and his readers accepted what he had to say. His style was a perfect one, and he wrote with a splendid command of "that will of English undefiled." His text book on the practice of medicine for many years was the most popular ever written. The splendid faculties which nature gave him he cultivated with such diligence that he had long been regarded as one of the world's leading scholars. With malice toward none, with charity for all, and firmness in the right, he lived a supremely useful life, and died as one of the world's greatest benefactors.

Sir William Osler ever took a keen interest in medical societies. At sometime in his life he was an active member of the Montreal Medico-Chirurgical Society, the Canada Medical Association, the Philadelphia Academy of Medicine, the Medical and Surgical Society of Baltimore, the Royal Society of Medicine of London, the Toronto Academy of Medicine, holding in these the highest offices in the gift of the fellows. He became a Fellow of the Royal College of Physicians, London; a Fellow of the Royal Society, London; a student of Christ Church, Oxford. In 1885, he delivered the Goulstonian lectures before the Royal College of Physicians, London; was Cartwright lecturer in 1887 at the New York College of Physicians and Surgeons; and was Silliman lecturer at Yale in 1911. He was a Councillor of the National Association for the Prevention of Tuberculosis.

Many of the great universities and seats of learning vied with each other in conferring upon him honorary degrees. Among these may be mentioned the Universities of Edinburgh, Yale, Liverpool, Harvard, Aberdeen, Oxford, Dublin, Leeds, Johns Hopkins, Trinity College, London, Christiania, Berlin, Vienna, McGill and Toronto. For his services to medical science he was knighted and created a baronet by the present king on the occasion of his Coronation in 1911. He was also made an honorary fellow of a number of learned societies, such as the Royal Society, London, and the Academy of Medicine, Paris.

He will ever be ranked among the great masters of medicine, and his name will go down through the future with Harvey, Sydenham, and Lister. Such praise must be reserved for the rare few. He built his greatness on three foundation stones—work, fellowship, and charity. Gifted with a rare power of expression, and a most fluid and copious choice of language he was the ideal exponent of medical science. His writings commanded a wider circle of readers than has ever been the lot of any medical author. One of the secrets of this lay in the fact that he had studied every phase of general world literature, and drew heavily



from the rich storehouses of the past; while the science and thought might be his own, the form of deliverance would follow that of the greatest masters of dialectic. There were few subjects he did not touch, and all which he did touch he adorned.

Christ-church Cathedral, Oxford, was crowded at the memorial service to Sir William Osler. The whole faculty of the University was present as well as many other representative men of Oxford and several leaders of the medical profession in London. There principal mourners were Lady Osler; Mr. and Mrs. Frank Osler, brother and sister-in-law; Mrs. Chapin, sister of Lady Osler; Dr. Gwynn, nephew; Dr. Malloch; Mr., Mrs. and Minss Emons, Colonel Donald Armour.

Others attending were Sir George Perley, Sir George Parkin, Donald MacMaster, Dr. George Dagderow, Colonel Chisholm, Lady Stratheona, Lord and Lady Harcourt. Sir Clifford Allbutt, regis professor of physics at Cambridge University, gave further testimony of his admiration of Sir William Osler by his presence and the Royal College of Physicians, the Royal College of Surgeons and Royal Society of Medicine were represented by their presidents.

The remains of Sir William Osler were conveyed to London for cremation privately at Golders Green.

On Sunday, 4th January, there were no fewer than seventeen memorial services held in various University cities in Britain, Canada, and the United States. These great tributes while living and after his death were paid to him because he was one

“whose even balanced soul  
Business could not make dull nor passion wild;  
He saw life steadily and he saw life whole.”

No obituary of Sir William Osler would be complete without a reference to his charming personality. He was sympathetic with the student in his troubles, he was ever encouraging those who felt their tasks too heavy, he set the example to work by making it his own master word, he was the impersonation of honesty in his methods and statements, and he was so unassuming as to leave the impression that he was wholly unconscious of his own greatness. He possessed to a remarkable degree the power to stimulating those who came under his influence, being a true enthusiast himself. Being a great and versatile genius and a born humorist, he shed light and pleasure all around,



while an equitable temper crowned all his gifts. Because he was so true to himself he could not be false to any one; and "on his unembarrassed brow nature had written gentleman." To these splendid qualities of head and heart were added unflinching determination of will in the defence of truth and right. The three characteristics that shone forth in him with ever increasing brightness were his devotion to work, an ardent love of learning of every kind, and an unbounded charity for all.

No estimate of the late Sir William Osler would be at all complete without a reference to his high moral ideals. It could be said of him as was said of Nathaniel, that he was a man without guile. He was transparently honest to himself and to all men. He was a true disciple of the great Hippocratic code, and it could be said of him that "his heart was as far from fraud as Heaven's from earth." He not only preached but he practised all his life the precept—

Thus above all to thine own self be true,  
And it will follow as the night the day,  
Thou canst not then be false to any man.

---

#### E. W. SPRAGGE, M.D.

The death occurred, 31st December, of Dr. Edward W. Spragge, M.R.C.S., L.R.C.P., one of the oldest and most highly esteemed members of the medical profession in Toronto, who passed away at his residence, 7 Prince Arthur Avenue. He had been in failing health for some time, but the end was not expected. The deceased gentleman was the eldest son of the late Hon. John Godfrey Spragge, Chief Justice of Ontario. He was born in Toronto, September 5th, 1843, was educated at Upper Canada College, Barrie Grammar School and Trinity University. He was a licentiate of the Ontario College of Physicians and Surgeons, a member of the Royal College of Surgeons, London, a licentiate of the Royal College of Physicians, Edinburgh. On the completion of his medical studies he returned to Toronto and commenced practice of his profession, and became one of its most prominent and highly thought of practitioners. He was for over 47 years the Chief Medical Officer of the Toronto Police Force, and for many years occupied a similar position with the Canadian Pacific Railway Co. Notwithstanding his large practice, he found time to take an interest in and to encourage sport. He was a well-known cricketer, taking part in all the principal matches of his time, and a well-known figure in the International Elevens. He was also an expert tennis player. In aquatic circles, he was quite well known, being in his time one of the crews of the Argonaut Rowing Club,



and was one of the oldest life members of the Royal Canadian Yacht Club. He was also interested in the Masonic Order, being a member of Ionic Lodge. He was a staunch Conservative, a true Imperialist, and a firm adherent of the Church of England, being a member of St. George's Church. He married a daughter of the late Hon. James Morris, of Brockville, by whom he is survived, and by three children, Godfrey E. Spragge, of Toronto; Mrs. Trevor Gwyn, of Winnipeg, and Mrs. Arthur Wilkie, Toronto.

---

#### W. A. MOLSON, M.D.

Dr. William Alexander Molson, one of the oldest practitioners in Montreal, where he had been in practice for the past 50 years, died 5th January after a prolonged illness. He was a classmate of the late Sir William Osler, with whom he kept up a close friendship all his life.

---

#### CAPT. J. FRASER RICHARDSON, M.D.

Robert D. Richardson, of 103 St. Clair Avenue West, Toronto, has received a cable notifying him of the death of his eldest son, Capt. J. Fraser Richardson, officer commanding the 49th Indian General Hospital in Afghanistan.

Capt. Richardson was transferred from Mesopotamia to the Afghan frontier in October, since which time his parents have had no communication from him.

Capt. Richardson had been engaged a number of years in the east in medical work, having been in charge of a missionary hospital on the Afghan frontier before the war. He served in civilian life under the Church Missionary Society, and it was due to his knowledge of the language and the people that he was chosen to command the 49th Indian Hospital, and a large military hospital in Mesopotamia, where he was stationed when he first enlisted.

Capt. Richardson was 35 years of age, was born in Winnipeg, and was a graduate of London University, England. He was the grandson of the late Dr. James Richardson, of St. Joseph Street, Toronto.

---

#### SYLVANUS JOY, M.D.

Dr. Joy died at his home in Tillsonburg on 31st October last, in his 87th year. He was a medical practitioner of fine character, and wide knowledge of his calling. He was born in Utica, N.Y., and was a graduate of Columbia University and Bellevue Medical College, N.Y.



After coming to Canada, he obtained the degree in medicine from Queen's University. He practised at different times in Otterville, Woodstock, and Tillsonburg. For many years he was surgeon to the G.T.R. He had a large practice and held the good will of his clients to a very remarkable degree.

---

A. P. MACAULAY, M.D.

Dr. Macaulay died in Brockville on 27th October last at the age of 55. He was Medical Health Officer for Brockville, where he was very highly esteemed. He was president of the Ontario Medical Health Office in 1906. He was a graduate of Trinity of the class 1889. He practised in Frankford prior to settling in Brockville.

---

NICHOLAS HOPKINS, M.D.

Dr. N. Hopkins died at Summerville on 7th November. He had practised there for many years, and was in his 77th year at the time of his death. During the active years of practice he had a large clientele.

---

CAPT. EGBERT GARDINER, M.D.

Dr. Gardiner died in Cleveland. He was a member of the C.A.M.C., and was a graduate of McGill University.

---

CAPT. J. W. MCKAY, M.D.

Dr. McKay died from an attack of appendicitis in Calgary last November. He was a graduate of Toronto University.

---

F. WOODHULL, M.D.

F. Woodhull died at Hartney, Manitoba, in October last, in his 56th year. He graduated from Trinity Medical College.

---

CRANDALL LOUGHERY, M.D.

Dr. Loughery was a graduate of McGill and was on the staff of the Montreal General Hospital, where he died on 25th October, at the age of 28.

---

ALEXANDER DUFF STEVENS, M.D.

Dr. Stevens died in the General Hospital, Sweetsburg, on 22nd November.

---



## BOOK REVIEWS

## FOOD FOR THE SICK AND THE WELL.

Food for the Sick and the Well, How to Select It and How to Cook It. By Margaret P. Thompson, Registered Nurse. Cloth, ix+82 pages. Price \$1.00. Yonkers-on-Hudson, New York: World Book Company.

This is a practical volume. It was finished on the anvil of experience—whence comes most of our valuable knowledge—and it has been tested and proved. It gives definite aid in meeting a difficulty which to many persons is a real one.

This is a book of receipts, the result of many years of experience in arranging, changing and adapting them so as to form a well regulated diet for the sick and for convalescents, as well as for those who are well and wish to remain so.

The housewife as well as the physician and the nurse will find in this volume a valuable help and guide. The text discusses the relation of food to health and the necessity of a balanced menu.

There are receipts for breakfast cereals, breads, eggs, soups, meats, fishes, cereals and starchy vegetables, green vegetables, salads and desserts, cakes, albuminous drinks, jellies, canned fruits, and cheese dishes.

An additional section of the book devotes itself to treatments such as baths, sponges, hot-packs, salt-rubs, poultices, mustard plasters, enemas, douches, and directions for the proper way of filling a hot-water bag.

An index of several pages will enable people to find what they are looking for in a hurry.

## PROGRESSIVE MEDICINE.

A quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by H. A. Hare, M.D., and L. F. Appleman, M.D. Vol. IV., December, 1919. Diseases of the Digestive Tract and Allied Organs, Diseases of the Kidneys, Genito-Urinary Diseases, Surgery of the Extremities, Shock, Anaesthesia, Infection, Fractures and Dislocations, Practical Therapeutics. Lea & Febiger, Philadelphia and New York. Price per annum, \$6 in paper.

The contributors to this volume are E. H. Goodman, H. A. Christian, C. W. Bonney, D. E. Lee, and H. R. M. Landis. Throughout the articles are of a very high order of merit, and will well repay the most



careful study. The latest views are set forth in attractive form. The paper, type and illustrations could not easily be surpassed. It is a pleasure once more to review a volume of this excellent series. The entire set of volumes can be recommended with much confidence to the medical profession. Any doctor who is in search of first class reading matter can not do better than secure and study progressive medicine. The selection of authors and subjects reveals the care exercised by the editors. This is now volume 84.

---

### PHYSICAL BASIS OF HEREDITY.

Physical Basis of Heredity by Thomas Hunt Morgan, Professor of Experimental Zoology in Columbia University. With 117 illustrations. Philadelphia and London, J. B. Lippincott Company. Canadian Agent, Charles Roberts, 201 Unity Building, Montreal. Price in cloth, \$2.50.

We have on former occasions reviewed two volumes of this series. Judging by these, and the volume now before us, very great care has been taken to give the scientific world the very latest and the very best results of research. The author approaches his subject in a thoroughly scientific and satisfactory manner. He takes the two fundamental laws of Mendel to begin with, namely, The Segregation and independent assortment of the genes. To these he adds the four new laws of later discovery, namely, that of linkage, the linear order of the genes, interference, and the limitation of the linkage groups. To most persons the study of heredity has been regarded as a waste of time, as it was almost entirely a matter of speculation. This the author declares to be erroneous and states "that the fundamental aspects of heredity have turned out to be extraordinarily simple." As one reads through the present volume this gradually becomes apparent. In a most careful way the author shows how the male and the female chromosomes combine. In doing this he makes free use of diagrams and tabulation, also of illustrations setting forth the various forms of union as seen in poultry and flies. This work clears away all doubt about the transmission of accidental traits. As a basis for the study of scientific medicine, this work on heredity must prove most



valuable. It can be very cordially recommended, and a full measure of praise accorded to the author for the fascinating way in which he has placed this subject before the reader.

---

### FRACTURES, DISLOCATIONS, ARTIFICIAL LIMBS.

Fractures, Compound Fractures, Dislocations and their Treatment with a Section Amputations and Artificial Limbs. By John A. C. Macewen, M.B., C.M., B.Sc., Capt. R.A.M.C., Senior Assistant to the Regiments Professor of Surgery in the University of Glasgow. Glasgow, Maclehose, Jackson & Company. Price, 12s 6d net.

This is a new work that makes its bow to the medical profession, and in doing so has no occasion to offer an apology. The entire arrangement of the book is satisfactory. It is well got up. Fine paper, clear type, excellent illustrations and beautiful binding, all make the book attractive and agreeable reading. But these features would not be sufficient. The text must attain a scientific and practical standard that would meet the needs of the profession before it could be recommended a suitable book to consult. We think that this standard has been reached. The author has had a large amount of clinical material to draw from both in private and hospital practice in a great city like Glasgow, and in the army. This material has been turned to the very best use, and we have a most interesting volume. The work is small and very convenient. Throughout, the author has displayed skill in arranging his cases. The descriptions are precise and clear. This new work can be most cordially recommended, and we venture to say that in a very short time further editions will be demanded. The profession soon learns of a good book, and here is one.

---

### LABORATORY EXAMINATIONS.

Examinations of the Laboratory of the Practising Physician by Dr. Grey Laroche, and Preface by Dr. Chauffard, with 111 figures. Masson & Company, Paris, 1919. Price 15 francs.

This volume is one of a series of very high class works that are being published by the firm of Masson and Company. The authors of this series are specialists of large experience, and are giving reliable information for the use of the profession. It is fitting that after the war,



France should so soon show such energy in medical investigation. This is a very valuable addition to the series, and will prove most helpful to those who consult it.

---

### NERVOUS SYSTEM DISEASES.

Diseases of the Nervous System, a text-book of Neurology and Psychiatry, by Smith Ely Jelleffe, M.D., Ph.D., formerly Professor of Psychiatry, Fordham University, New York, and formerly adjunct Professor of Diseases of the Mind and Nervous System, New York Post Graduate Medical School and Hospital, and William A. White, M.D., Superintendent of St. Elizabeth's Hospital, Washington, D.C.; Professor of Nervous and Mental Diseases, Georgetown University, and Lecturer on Psychiatry, U. S. Army, and U. S. Navy Medical Schools. Third edition, revised, rewritten and enlarged. Illustrated with 470 engravings and 12 plates. Lea & Febiger, Philadelphia and New York, 1919. Price, \$8.00.

We have reviewed former editions of this work, and note with pleasure the changes and improvements that appear in each successive edition. The present edition is to a great extent a new work; it has undergone such a thorough revision. The authors have spared no pains to make this work as complete as possible, and also to represent the latest and best opinions on nervous diseases. It would be impossible to attempt any details in the space at our disposal, but the general opinion may be expressed with perfect confidence that this is a really high class work. Those who wish information on nervous diseases and consult its pages will not rise from the perusal disappointed. The publishers have done their part well. The paper, binding, press work, typography, and illustrations are the best possible.

---

### SPINAL CORD ANAESTHESIA.

General Spinal Cord Anaesthesia by Professor Thomas Jonnesco, corresponding member of the Academy of Medicine, Paris, late Rector of the University of Bucarest. Masson & Company, Paris, 1919. Price, 44 francs.

This small book, one of a very superior series, gives every possible detail regarding the administration of analgesics for the production of spinal cord anaesthesia, and on the choice of agent to be employed. Anyone who has occasion to induce anaesthesia by this method will find this a very helpful manual. It is well worth reading.

---

### INTERNATIONAL CLINICS.

In our issue for December the price of International Clinics for the year was quoted at 9. It should have been \$10.



## MISCELLANEOUS

## A FORMER EPIDEMIC OF SMALLPOX.

*Editor Canada Lancet:*

Sir,—In my medical student days in Toronto, there was a serious epidemic of smallpox in the city which was said to have commenced in 1870. So far as I have definite knowledge there was an outbreak of a virulent type in the latter part of 1871. I was told at the time that there was what was called a mild form of the disease present from about the middle of 1870 which had continued for rather more than a year. It was evidently very like the present epidemic in Toronto. Suddenly, without warning, a malignant type developed during Christmas week of 1871. A young woman who had been a chamber maid in a down town hotel, was brought into the General Hospital with a disease which turned out to be smallpox. The house surgeons at the time were medical students, Abbott and Robinson. Abbott contracted the disease and was seriously ill for some weeks. Although the patient was placed in a separate ward, and isolated so far as possible, and vaccination was commenced, 18 patients out of a total of about 100, contracted and of these 9 died. Early in February, 1871, a building north of the old gaol, which had been hurriedly prepared, was opened, and used as an isolation hospital, and the house surgeon who had not contracted the disease, now Dr. R. H. Robinson of 532 Palmerston Blvd., Toronto, was placed in charge, and remained there about two months. After his retirement, the late Dr. Riddell was placed in charge. During Robinson's regime, about 120 smallpox patients were admitted, and of these about forty died.

Thus within three months there were about fifty deaths in the main building and its annex. This virulent form continued in Toronto during the whole year of 1872 and it was estimated, so far as I can remember, that there were altogether 200 deaths.

When we consider the present epidemic which is very similar to that of 1870, we ought to realize that a grave peril exists at the present time, and a malignant type of the disease may to-morrow replace the mild type of to-day; and we should take serious thoughts of the possible consequences.

Toronto now has a population ten times that of 1872, and a proportionate mortality would now be about 2000. Let us hope, however, that we are much better protected now than were the inhabitants in



foarmer days. Still it is probable that the advent of the severe form would cause at least 500 or 1000 deaths. In those days the facilities for vaccination were to some extent limited by the insufficiency of the supply of vaccine lymph prepared from what were known as healthy smallpox crusts or "scabs"; but a successful "take" then, was similar to that of to-day, and the beneficial results were then so apparent that it was universally believed that successful vaccination made a patient immune to smallpox even under the worst of sanitary conditions in their homes. I, myself, after careful observation, had no doubt about the efficiency of successful vaccination, and my experience afterwards when I acted as assistant to the late Dr. Corey of London, England, in his vaccination station at St. Thomas' Hospital, for three months in 1877 tended only to confirm my optimistic views.

ADAM H. WRIGHT

30 Gerrard E., Toronto, Jan. 16th, 1920.

---

#### TORONTO STATISTIC.

Pneumonia claimed the greatest number of victims in the 308 deaths registered in the city during December, 56 persons dying from that cause. Sixty-two still births were reported in addition to the hotel.

Next on the list was cancer, with 44 victims, while diphtheria claimed 22, organic diseases of the heart 38, tuberculosis 19, Bright's disease 17, cerebro-hemorrhage and apoplexy 12.

The new disease of encephalitis lethargic, commonly described as sleeping sickness, made its appearance in the city, claiming five victims out of half a dozen reported. There were three deaths each from typhoid, scarlet fever, whooping cough and influenza.

During 1919 deaths registered numbered 5,703 exclusive of still births, being 11.4 per thousand of the population. While this figure is low as compared with a total of 7,635 in 1918, yet it is about the average preceding years. In 1917 it was 5,597 or 11.8 per 1,000 of the population, and in 1916 it was 5,931 or 12.9.

The outstanding fact of the yearly statistics is that not a single death was reported from measles. On the other hand, fatal cases of diphtheria have gone up by leaps and bounds as compared with the total for preceding years.



The following official table tells its own story:

	1919. Dec.,	1919. Nov.,	1918. Dec.,
Diphtheria .....	343	248	130
Scarlet Fever .....	180	112	69
Typhoid Fever .....	7	5	4
Measles .....	56	19	3
Smallpox .....	1,046	811	0
Chickenpox .....	153	340	32
Whooping cough .....	62	37	11
Mumps .....	143	106	9
Spinal Meningitis .....	1	1	2

In view of the claims of the anti-vaccinists that diphtheria often follows vaccination, the above report is interesting. In this connection, the M. O. H. said: "The situation is deserving of the closest investigation, and I shall not be satisfied until I have secured all possible information. And when I have had an opportunity of weighing all the evidence, I shall issue a full and frank report."

#### PROVINCIAL HEALTH STATISTICS.

In the health returns for the province for December pneumonia ranks as the most dangerous disease with 180 deaths. Tuberculosis follows with 95 deaths and diphtheria next with 65. Typhoid fever follows a long way behind with 21 deaths, scarlet fever with 17, measles with 14, and whooping cough and cerebro-spinal meningitis had 9 deaths each. Deaths also occurred from acute influenzal pneumonia to the number of 3, influenza 5, and infantile paralysis and smallpox two each. With the largest number of cases, 1,414, smallpox had the smallest number of deaths. Tuberculosis continues to make the steadiest drain on the life of the province, though there were many fewer deaths from this cause in December, 1919, than in December, 1918, when 138 were recorded.

Diphtheria is another dangerous disease and scarlet fever and measles are coming to be regarded as almost equally dangerous. But pneumonia continues to be the most deadly of the swift moving maladies. In our climate, bracing and vitalizing as it is, the danger from swift changes of temperature, more frequently due to artificial than to natural conditions, makes it necessary to take every precaution. No "cold" should be neglected and fresh air, especially at night, should be insisted upon.



## DR. AVISON'S WORK.

The best modern illustration of this awakening of the twelve was given by Dr. Avison in connection with his work in Korea. When he went as a medical missionary to that land the first thing that impressed him was the enormous amount of physical suffering among the people. He knew that single-handed he could make no progress in combating it. He decided then to devote his energies to the training of young Koreans in the practise of medicine, and by this means he expected to start a movement that would in the course of time give them scientifically trained men of their own blood to minister to the physical needs of the people. It was a serious undertaking. He had to teach every subject himself, to invent medical terms in the Korean tongue, for their language contained none of them, and to collect slowly the instruments by which they might be trained. He had his first class with him fifteen years, and when they were ready to graduate there were only seven left. He made elaborate arrangements for the graduation ceremony, because it was an important event in the history of the nation.

The largest hall in the city was secured for the ceremony. Members of the Korean court were to be in attendance and the Marquis Ito was to present the diplomas. Then he began to wonder what the men themselves were thinking about the matter, and at the first opportunity he asked them what they were going to do now that they were leaving him. They answered: "It has been a hard struggle. We all have families and we are very poor. We thought that if we could go into one of the towns and practise medicine and make a little money it would be very nice. Then we began to think of all you had given up to teach us and so we have decided to stay with you and help you with the other men." After telling this the Doctor exclaimed: "Was it all worth while? What would I have taken for the seven? I thought I had been training practitioners and here I had seven men." They had caught the idea of service and they were possessed with it to the extent of putting their lives in it. It meant that the movement was to be a success because these men were dominated with the idea of service and were investing their lives in the cause.

---

FACTS ABOUT CANCER.

Cancer is unquestionably increasing throughout the world.

At the beginning cancer is usually painless and difficult to detect.

At its first small growth it can be safely and easily removed by a competent surgeon.



Cancer is not a constitutional, or "blood" disease.

Cancer is not contagious.

Cancer is, practically speaking, not hereditary.

Every lump in the breast should be examined by a competent doctor.

Persistent abnormal discharge or bleeding is suspicious.

Sores, cracks, lacerations, lumps, and ulcers which do not heal, and warts, moles, or birthmarks which change in size, color, or appearance, may turn into cancer unless treated and cured.

Probably 60 per cent. of cancers of the rectum are first regarded as piles. Insist on a thorough medical examination.

Continued irritation in some form is the usual cause of cancer. It rarely results from a sudden injury.

A doctor who treats a suspicious symptom without making a thorough examination does not know his business.

Cancer, probably the most dreaded of all diseases, is on the increase in America and throughout the world in spite of the fact that it is curable if treated early, says the United States Public Health Service. In its death toll in the United States cancer already ranks among tuberculosis, pneumonia, heart disease and diseases of the kidney, and it is much more feared than any of these. This is because of the ignorance of the public, the difficulty of detecting a cancer in its early stages and the fact that when it has reached the recognizable stage it has gone beyond the curable stage.

The medical world to-day believes that work for the control of cancer should be largely similar to that so successfully carried on in tuberculosis; that is, it should consist mainly in widespread education of the general public to recognize cancer in its precancerous state, it should train the people at the first alarm to seek the advice of a competent physician, and it should keep the public freely advised of the latest scientific knowledge concerning cancer, its causes, prevention and cure.

The first and most important requirement in such a campaign of education is that the public change its viewpoint. The United States Census Bureau for 1917 gave a total of 61,452 deaths from cancer as compared with 112,821 from pneumonia, 110,285 from tuberculosis, 115,337 from heart disease and 80,912 from kidney diseases. So it will be readily seen that cancer already ranks among the leading causes of death in this country.



Cancer is apparently increasing. The record death rate shows about two and one-half per cent. more cases every year. It has risen from 62.9 deaths per 100,000 of population in 1900 to 81.6 in 1917. Some of this increase is unquestionably due to an improvement in recording and gathering vital statistics and to better diagnosis, but it is generally believed that these factors do not alone account for the increase.

Cancer, if discovered early and treated immediately by a competent physician and surgeon, is now regarded as a curable disease. Unfortunately the early discovery is difficult. Unlike almost any other disease its first attack is usually painless, and often, therefore, before the disease is discovered it has reached the stage where a major operation is necessary and the chances of cure have been greatly reduced, if not entirely lost. Another unfortunate circumstance is that in many cases when a person realizes he has cancer he fails to seek the best medical treatment. Advertising quacks and patent medicines, claiming phenomenal cures, loom up like a last ray of hope to the afflicted. As a matter of fact their treatment invariably aggravates instead of helping and when competent physicians are finally consulted the case is really beyond any hope of recovery, or arrest.

The belief that cancer is contagious has caused untold suffering and occasionally cruel neglect of the unfortunate sufferers. So far as it has been possible for scientists to learn there is no germ capable of causing cancer in human beings or animals. In communities where the cancer prevalence is higher than in others it has invariably been traced to the fact that most of the young people had left the community. Since cancer is a disease of middle age the higher rate was to be expected. There is no case on record in which either an operating surgeon, or nurse, has contracted cancer from coming into contact with it, even after years of work exclusively in this field.

Another popular myth that seems to be pretty well exploded is that cancer is hereditary. No argument could be more convincing than the way life insurance companies look at this aspect of the disease from a business point of view. In deciding whether a person is a "good risk" these companies disregard evidence that cancer occurred in one or both parents, or in other ancestors. Their carefully-kept statistics covering many years prove that the person to be insured will not necessarily contract the disease. Indeed the insurance companies say there is no cause for apprehension even if both parents died of cancer. The most that could be fairly argued is that people whose families seem particularly susceptible to cancer should well inform themselves with regard to early symptoms and be on the alert for the first danger signal.



The tissues of the body, the muscles, the glands, the bones, are each composed of a very large number of very tiny cells, which may be compared to the bricks in a building, and they are held together by a material which may be compared to the mortar. However, the body cells are alive, constantly growing and dying off, according to certain laws which we do not completely understand. Sometimes these cells begin to grow and develop along lines which are not in harmony with the usual order. A little group of the cells forms a lawless colony, which constitutes an unhealthy, growing spot in the body. This may occur on the skin, in the breast, stomach, throat, or in any part of the body. Frequently they form a little hard lump which can easily be detected by touching it and which can very easily be removed by the physician. If this mass is not removed at once it usually continues to grow and to branch off into the surrounding tissues. This penetration marks the difference, the fatal line between the benign or harmless growths like warts, and malignant growths or cancers. Finally a large mass is formed and minute portions become detached and are carried to other parts of the body. When ordinary cells become detached and get out of place they usually die. Cancer cells, on the other hand, have such a power of survival they continue to grow wherever they are deposited and new cancers are the result.

Cancer often arises after continued, long irritation of various kinds and in and about benign growths, or ulcerations. Cancer of the lip and mouth has been known to come from burns, from pipe stems, from constant irritation from bad teeth and among East Indian races from chewing the betel nut. Cancer of the external abdomen in the natives of Kashmir, never observed among other races, arises from burns from kangri baskets of live coals which these mountaineers wear as a kind of warming pan. Cancer of the oesophagus is observed in the Chinamen who eat their rice too hot, while it is absent in the women who eat their rice cold at a "second table."

Women, unfortunately, are most susceptible to cancer. Between the ages of 35 and 43 three times as many women as men die of cancer, and between 45 and 50 twice as many die. They should, therefore, be especially educated to recognize the first signs of a benign growth and consult a physician at once. Persistent ulcerations, cracks and sores, warts, moles, or birthmarks which change in appearance, or grow larger, should be removed. All forms of chronic irritation should be prevented.

While no one in particular can be said to be susceptible to cancer it can truthfully be said that so far as is known no one is immune to it and statistics leave no room to doubt it is on the increase. The time has come when the general public should be educated as thoroughly as in the nation-wide campaign for the control of tuberculosis.



To aid in this work the United States Public Health Service has carefully prepared a neat, pocket-sized booklet, "Cancer, Facts Which Every Adult Should Know", written in lay terms. This book will be forwarded on application to the Public Health Service, Washington,

#### DECREASE IN NARCOTIC DRUGS.

The figures in the first column following show the imports into Canada for consumption during the fiscal year ending March 31, and in the second column for the six months ending Nov. 30, 1919:

Cocaine, oz. ....	12,333	3,293
Morphine, oz. ....	30,087	9,424
Crude, opium, lbs. ....	34,263	7,222

In this connection an official of the Department of Health points out that the figures included those for June, 1919, when the Department had just been taken over from the Board of Commerce, consequently they had no control during that month, as the great majority of the dealers' supplies were already in Canada or on the way to Canada. A more correct comparison of the enormous reduction is to take the figures for the quarter ending Oct. 30, when the total supply for consumption was 1,100 lbs., as compared with 8,500 lbs. for the corresponding period last year.

#### ROCKEFELLER'S CHRISTMAS GIFT.

John D. Rockefeller gave to mankind a Christmas present of \$100,000,000—half to the General Education Board to raise the salaries of college professors and half to the Rockefeller Foundation to aid in its work of combating disease through improvement of medical education, public health administration and scientific research. It is estimated that Mr. Rockefeller's public gifts total approximate \$450,000,000. While leaving to the General Education Board the task of selecting the colleges which shall receive awards for their teaching staffs and the amount each is to receive, Mr. Rockefeller urged that the principal as well as the income be used "as promptly and largely as may seem wise."

The trustees of the Rockefeller Foundation also are authorized to utilize both the principal and income of their gift, in connection with which Mr. Rockefeller added that if the board "should see fit to use any part of this new gift in promoting medical education in Canada, such action would meet with my cordial approval." Such action will be taken, according to Dr. George E. Vincent, president of the Foundation, who stated to-night that the trustees would be asked to set aside \$5,000,000 for this purpose.



## Hundreds of Medical Men

use Grape-Nuts on their home tables for they know it to be pure, wholesome and exceedingly nourishing.

The best parts of wheat and malted barley, including their mineral elements, are used in making

# Grape - Nuts

Twenty hours baking, after a mixing process that starts the breaking down of the starch in the grains, produces the rich, sweet nutlike flavor.

These facts explain the ease with which it is digested, and why Grape-Nuts is so good a food for elderly people, young folks and invalids, as well as athletes and all clear brained workers.

### "There's a Reason" for Grape-Nuts

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

Postum Cereal Co., Battle Creek, Mich.



## MEDICAL PREPARATIONS

---

### DENVER CHEMICAL COMPANY.

In an age when the written word runs into millions every year, fearless, indeed, is the writer who dares to produce "mere words". To hold a reading audience, facts and facts only are an essential and the portrayer of facts is the popular author of the day.

The physician, in his ever constant search for additional knowledge, is entitled to the best there is, and with this end in view a brochure, "The Pneumonic Lung", has been published in the belief that therein the discriminating physicians will find some facts which will aid him in the pursuit of his professional duties. The text matter of this booklet is the result of long and exhaustive study of the literature on pneumonia in its different phases, and in its preparation the works of practically every standard author who has discussed internal medicine have been consulted. The clinical records of hospitals have been a source of information and confirmation; the most recent discussions on pneumonia in America, British and French medical journals have been perused, and no field which would yield information has been left untilled.

The illustrations have been painted especially for the accompanying text. The subject has been given the closest attention and study, and no opportunity has been neglected to attain the close pathological and anatomical touches so essential in bringing out the necessary details, thus adding to their practical value. Expense has been no factor in the production of this brochure. With the object of presenting to physicians a booklet which would refresh their knowledge of the etiology, pathology, symptomatology and treatment of a most destructive disease and in order that they might constantly have at their elbows an authoritative and most practical exposition of the subject, the authors have gone deeply into the matter.

Physicians may obtain, without expense to them, a copy of this interesting booklet by addressing The Denver Chemical Mfg. Co., 20-34 Grand Street, New York City, N.Y.



**SMOKE**

**SWEET CAPORAL  
CIGARETTES**

“The purest form  
in which tobacco  
can be smoked”

*Lancet.*

**SOLD**

**EVERYWHERE**





PROPHYLAXIS AND TREATMENT OF INFLUENZA AND  
INFUENZAL PNEUMONIA.

Dr. E. C. Rosenow, of the Mayo Clinic, has probably done more to determine the prophylactic value of vaccines in influenza than any other individual in the country. He reported on the use of a prophylactic vaccine last winter. There were 100,000 cases under observation, with 300,000 controls. He declared that the incidence of influenza was about three times as common and the death-rate five times as high among the uninoculated as among the vaccinated persons.

Parke, Davis & Company's Influenza-Pneumonia Vaccine is prepared essentially in accordance with the original formula and method of Dr. Resenow. It is administered in three injections, at intervals of six or seven days.

What about the treatment of influenza and influenzal pneumonia?

Physicians who employed Pneumonia Phylacogen last winter with the most striking results gave an initial injection of 16 minims immediately to every patient who came down with influenza. The second day the dose was increased to 32 minims, the third day to 48 minims, and so on until convalescence was established.

When pneumonia had already developed, 16 minims of Pneumonia Phylacogen was administered immediately. Twelve hours later 32 minims was injected, and the dose was gradually increased every twelve hours until the critical period had been passed.

Parke, Davis & Company, Walkerville, Ont., will be pleased to send a copy of a new booklet, "Prophylaxis and Treatment of Influenza and Influenzal Pneumonia," to any physician requesting it.

## AFTER THE LONG SCHOOL YEAR

the tired school child, whether girl or boy, is extremely liable to become vitally depressed, worn out both physically and mentally, and more or less anemic. With the coming of warmer weather, this depreciated condition becomes accentuated and it is the part of wisdom to take steps to build up the tone of the organism, enrich the vital fluid by creating new red cells, and hemoglobin, and employ every available means adapted to reconstruct the cells and tissues and restore the depleted vitality. Pepto-Mangan (Gude) does yeoman's service in such condition, by furnishing an agreeable, absorbable, and assimilable organic combination of iron and manganese, the agents most needed for blood repair, and general reconstruction. It is pleasant to take, and does not irritate the digestive organs nor cause constipation.