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IDEALS IN MEDICINE.*

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FELLOWS of the Academy of Medicine, gentlemen and ladies, allow me to thank you for the honor conferred upon me when elected as President of this Academy of Medicine of Toronto. It is my intention to hand over the tiller at the end of my term, feeling that the new craft has been safely launched in a calm sea, and that it is so built that it will be well able to weather any storm. As first captain of the ship, I have felt it incumbent on me to make a few remarks regarding the rules of the sea, and the dangers to be avoided in navigation. Any shortcomings in this address must be attributed to two causes—inability to do better, and hasty preparation. We have all listened to the regulation presidential address, and we have all wondered why they are delivered with such regularity and with so little benefit; however, I am forced to inflict you as a matter of custom.

During our professional career there are occasions that stand out in bold relief—occasions such as this, when one who is passing into the autumn of life addresses his fellows in his beloved profession from the pedestal upon which they have set him. It is quite probable that the sentiments expressed may not find a sympathetic response in the breasts of all, for it is neither possible nor desirable that we should all think alike, but with one sentiment I feel satisfied everyone will agree, the necessity for that spirit of unity, peace and concord in our Academy of Medicine which is so essential to the dignity and usefulness of our profession.

We have here a large city that has grown to its present proportions with astonishing rapidity. Our educational institutions, we hope, have kept pace with this amazing growth, and among them, as the chief ornament, our *alma mater*, of which we are justly proud.

After many weary years of isolated divorce the medical faculty was reunited in the bonds of matrimony, and again became one of the consorts, and not the least, of our many husbanded mother. After the consummation of this happy event a still greater and still stronger union took place when the two great educational families were merged in one. The time seemed ripe for a union, not only of the two great teaching families, but of the little medical experience meetings—our medical societies, into a much greater, more efficient, more active and a better organized body,

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namely, an Academy of Medicine. Any little effort I may have put forth to gain this desired end has been due to the inspiration of that ideal teacher, father and friend, the late Professor James E. Graham, who labored so arduously among the younger generation for the promotion of a better scientific spirit—a something to elevate them from the ordinary rut of humdrum routine practice. He early realized that the university must be reared the foundation, firm and substantial as a necessity, on which completed building and the structure be judged as a whole. It is the finished product that we require; beyond the university walls much must be done to fit out a medical man as one of our ideals. He must leave the halls of learning a student still; he must leave the class-room for the council chamber, and our council chamber in this fair city, we hope, will be our Academy of Medicine.

I propose to consider my subject under three heads—ideals in education, ideals in practice, and ideals in the aims and conduct of our Academy.

IDEALS IN EDUCATION.

It may be granted that the highest purpose in the education of a medical man is to fit him to discharge his future duties. Let us consider, then, the means provided to furnish him with this equipment. Two prominent educational systems at once present themselves to our notice, the English and the German. In a recent valuable paper Sir Felix Semon draws an interesting parallel between the two systems, from which, I think, some lessons may be learned. Permit me to give you a short synopsis of their main features as described by him.

In England the course of actual study for the medical profession occupies five years, three of which are consumed in preliminary and intermediate work, only two being allowed for clinical instruction. In Germany, out of six years allotted to the course, two and a half are devoted to preliminary and intermediate instruction, and three and a half to clinical work. A sixth, or additional year for clinical instruction, was added in 1904.

In Britain the medical institutions receive no State aid, and frequently the authorities are hampered in their work and in the introduction of much-desired improvements owing to lack of funds. In Germany the teaching institutions are wholly supported by the State, and the question of money does not stand in the way of the promotion of the progress of medical science.

After a very acrimonious discussion in the days gone by in connection with the question of State-aided medical education, and after the restoration of the Medical Faculty of Toronto University, the University

Commission, viewing this matter from all sides, finally came to the conclusion that the question involved not merely the necessary advancement in ordinary education, but also the prosecution of research work, in the results of which the country has so deep an interest, and from which it may reap so great a benefit. In the promotion of both the State has obligations. The extent of these obligations it may be difficult now to determine. We have, therefore, in this country accepted the wisdom of the German in preference to the lack of foresight of the British.

In the appointment of teachers the two systems present wide contrasts. With us the baneful system of "inbreeding" still prevails, and when a physician once obtains a position on the teaching staff, his promotion follows as a matter of course. This comfortable certainty does not tend to stimulate him to do further original work. To the German professor, promotion only comes with achievement, and the necessity for constant and patient research always exists.

A comparison of the emoluments received by the teachers under the two systems does not redound to the credit of the English system. With us, unfortunately, the salaries of those teaching medicine, except in a few of the primary branches, have been based upon the idea that they are able to carry on a private practice, and the fact has been lost sight of that in order to do so successfully their time must be their own. The teachers are thus hampered in their work, as they are endeavoring to serve two masters. On the other hand, the public should not be deprived from the benefits to be derived from the knowledge and skill acquired by years of faithful toil as teachers. The ideal condition is a different one to arrive at.

German universities, unlike ours, are State institutions, regulated and supported by the State and conducted on a uniform and officially prescribed plan. As a consequence of this uniformity a student is not confined to the sphere of one university. He may change it at the end of each term if he desires, and he frequently attends three, and even four, during the course of his studies. He is less worried by examinations than his English cousin, though the three he has to pass are conducted with a thoroughness scarcely equalled in the English examinations.

Owing to the greater number of teaching institutions in Britain and the distribution of the students over them, practical bedside teaching is greatly superior to that afforded by the German system, the crowded German clinics not permitting that close personal contact with experienced teachers enjoyed by the English student. I understand, however, that this overcrowding has been of late years overcome to some extent by the utilization of extra-mural hospitals for the purpose of clinical teaching.

From the foregoing comparisons it must be admitted that of the two educational systems the German most closely approaches the ideal. Modern clinical methods are new in medicine, and in this field of study the Germans lead the world. Complaints have been heard here and elsewhere that candidates for the positions of house physicians, house surgeons, medical and surgical assistants are often found deficient in the knowledge of elementary laboratory work. Why? Because too much of their time has been given to preliminary studies and too little to practical work.

A training is useless unless adapted to the real needs of the person trained. The Germans have laid this truth to heart, for their regulations expressly provide that the examinations in physics and chemistry "have to keep particularly in view the *requirements of the future physician.*" While the Germans have been making a march in advance we have been retrograding, owing to our acquiescence with the demands of the teachers of purely scientific subjects. Teachers of physiology and chemistry are intent on turning out physiologists and chemists, and not on turning out well-trained physicians to heal the sick. Students—embryo physicians—have much else to learn to fit them for their future vocations. If men desire to become chemists and physiologists and take the degree of doctor of medicine as a matter of form, well and good, but our curriculums should not be framed to suit the few and injure the many. Subjects of the greatest importance to the future practitioner have to suffer in proportion to the time devoted to purely scientific subjects.

Out of five years the English student has three removed entirely from the hospital wards. Surely the tables should be turned, and two years given to the primary branches and three to the final studies. The early work of the preliminary studies is but frugal fare, while the real banquet is composed of clinical activities. Each clinical fact obtained is as gold in the storehouse of knowledge of the young doctor. It is true that scientific and clinical training are inseparable. They must dwell together, but while the scientific training is more important to the scientist, clinical training is more important to the practitioner, and we are developing and training future practitioners.

Another place in which scientific and clinical training must go hand-in-hand is the hospital, and a hospital is sadly lacking in equipment unless properly fitted with first-class laboratories. I would go further, and say that every hospital should be provided with a practical physiologist, doing research work on the very threshold of disease. Not only should we have pathological laboratories, but we should have physiological laboratories connected with every hospital. In this way we should be able to round up the studies of the students by giving them a campus on which the clinicians and scientists may struggle for the mastery over disease. As these re-

quirements are expensive adjuncts, teaching hospitals, as a link in the great chain of State education, should be liberally endowed by the Government.

In educational matters we must be content to build slowly and to see changes introduced with caution. Each teacher should endeavor to realize the limitations of his power. I think, however, that improvement might be made in our system in three particulars without the fear of anything but desirable results, namely, a rearrangement of the medical curriculum by which more time could be devoted to clinical work; a reorganization of our method of appointing and promoting teachers, and the requirement of a better acquaintance with the French and German languages. In support of my last suggestion I cannot do better than to quote what Sir Felix Semon says in this connection :

"When medicine is becoming more international every day, when the reading of important new papers in the original language is most desirable to most of us, when we have international medical congresses, when we come into personal contact with so many foreign confreres, and when not rarely patients belonging to other nationalities, and not speaking a word of English, seek the aid of many of us—a conversational knowledge at any rate, and one enabling us to read French and German medical papers in the original, is becoming every day more a requirement of the cultured medical man."

If modern languages and classics cannot be mastered by the present school system, would it not be advisable to admit to the study of medicine only those who have obtained an Arts' degree.

IDEALS IN PRACTICE.

"The practice of medicine is an art, not a trade; a calling, not a business," has been said by one well known to all of us. Often the best part of a physician's work lies in the influence which he exercises in the community. When the young man leaves his medical school and enters upon the practice of medicine his education is not finished. It is to be a lifelong study, and the education of the moral man must keep pace with the intellectual. Whether he is a success or a failure will depend upon himself and the honest labor of head and heart which he lays upon the altar of his profession. It is said that the struggle for the ideal is the struggle for the impossible. This may be true, but we are the better for the struggle, and the world is the better for our efforts, even though the end is never gained. "To travel hopefully is better than to arrive, and the true success is in the labor."

Many believe they are doing research work because they are on speaking terms with the genuine workers and those doing original work.

There is no place in our ranks for such as these, none for the dilettante, none for the social lion or for the strategist, who uses the Church to further his own ends in his struggle for a practice. The young physician in looking back among his ideals finds some few standing out in the forefront and becomes better acquainted with them than with many others. Among these we may mention Harvey, whose discovery of the circulation of the blood originated the study of physiology, medicine and comparative anatomy; Jenner, whose wonderful discovery was destined to save so many lives and banish smallpox from our midst; Simpson, whose ardent advocacy placed the use of anæsthetics on a firm footing and insured to humanity the alleviation of pain; and Lister, whose

"Faultless patience, his unyielding will,
Beautiful gentleness and splendid skill,"

introduced the dawn of a new era of Listerism with all its beneficent results.

We all aim to achieve legitimate success, but, unfortunately, of those who enter the race but few attain the goal. Success can only be attained by hard work. Osier defines success as *getting what you want and being satisfied with it*. It is an interesting study to sit down and endeavor to fathom the depths of the minds of the great men who have made a success of their work in the fields of medicine and surgery. Parkes says of Harvey: "When anyone examines into this discovery of Harvey and gradually recognizes its extraordinary importance, he cannot but be seized with an urgent wish to know how the mind which solved so great a problem was constituted." There was no accident about it; it was worked out and thought out point after point, and it had not been anticipated.

But often when success has been attained, due recognition has been withheld and the worker may become discouraged. When Marshall Hall endeavored to establish his method for producing artificial respiration, the Humane Society looked coldly upon the novel plan and ignored it for a long time. However, a life-saving institution, having so much inherent value in it, forced itself upon the public, and to-day it is universally adopted, and has been the means of saving many lives, and asphyxia from any cause has been robbed of many of its terrors.

But we admire the humbly great, such as Jenner and Lister. Humble in his tastes, Jenner resented the glare of the limelight; he sought the seclusion of the valley and not the conspicuousness of the mountain-top. He longed for neither fame nor fortune, and had quite enough to satisfy his modest tastes. To him fame was but a gilded butt forever pierced with the arrows of malignancy.

In Vienna, during the first five years of the nineteenth century, 14,600 persons died from smallpox, while in 1804, three years after the intro-

duction of vaccination, there were but two deaths. It was here that Jenner received his first great recognition. Like other prophets, he was without honor in his own country, and it is not to be wondered at that he should receive his first great recognition abroad. He felt that his work was less appreciated in England than in other parts of the civilized world.

But it is not necessary to be a Lister or a Jenner to be a whole-souled, vigorous, intelligent and successful general practitioner. The old-fashioned general practitioner, Dr. McClure, is an undoubted success. He is a man of a very high type, and he walks by the light of his own lamp instead of by the uncertain lustre borrowed from others; he is guided by high ideals and a firm belief that right must prevail. Dr. John Brown, he who has shed a literary lustre on our profession, says of the general practitioner: "Everybody knows the doctor, and a very important personage he is. He brings us into the world and he tries to keep us there as long as he can, and he is with us at that strange last hour which comes to all when we must leave this world. People should trust and obey the doctor; they should speak the truth to him and they should reward him. On the other hand, it is the duty of the doctor to cure his patients, to be kind and true to them, to forewarn them, and, lastly, to keep his time and his temper." But the beau ideal of the medical practitioner of to-day is Lord Lister—the man who sent surgeons smiling into the operating room, certain of success. We are daily and hourly offering up our meed of praise to the humble Lister, and only those who remember the pre-antiseptic days, now long since passed, can appreciate to the fullest extent the greatness of his discovery. Modifications may have been made from time to time, but none of these improvements of technique have detracted one iota from the originator of Listerism.

When we look into other fields there are many we may well admire. Surely the man who prevents disease and takes away his own occupation is unselfish to the last degree, and may be regarded as an ideal. We do not pay as much homage as is their due to sanitary reformers like John Simon. As a consequence of the work done by the pioneers in this field the State now interferes and forces health upon the people. Parents and children, employers and employed, vendors and buyers, are alike protected by the State health authorities, and medical supervision is provided in case of epidemics.

The doctor who travels off into the fields of literature can scarcely be considered an ideal, but such men have added lustre to the profession, though few of them have prospered as physicians. It must be acknowledged that a man cannot master two trades at the same time, though Brown advised "the fine confused feeding" of miscellaneous reading and thinking. Anything like a complete enumeration of the medical men who have made valuable contributions to *belles lettres* would fill a volume.

To attain success we must be prepared to accept risks—risk of life, risk of reputation and risk of health. No great success has ever been obtained without labor, without hours and hours of incessant toil. We are in great need of the workers—the reapers are few, while the harvest is great. Let it, therefore, be our aim throughout life to assist by every means in our power, by the force of example, by kindly encouragement, the young men who are found willing to work and who do work willingly and well. According to our ideals will be our idea of what constitutes success. There are many paths to the wished-for goal, but it requires the same exertion to travel any of them. There will be obstacles in all paths to be surmounted, and while working hard in one field it is well to broaden the mind by dipping occasionally into other fields than our own, as such a change gives rest, and such a rest is beneficial. The successful man learns rather to act than to speak. Harvey did not make a desirable family doctor, but his mind was of such a mould as often achieves success; while it fitted him for the work in hand it unfitted him for practice.

Away out in the country districts, driving for miles and miles, in daylight and darkness, in good weather and in bad, snatching sleep as best he can, without holidays, without a break, without a minute of life to call his own, works another of our ideals, looked up to by all the countryside as a guardian angel in time of danger. It would seem that he is not a man to be envied, but we know that he has the love and esteem of those to whom he ministers. He is a high type of a successful man; not, however, when judged from a pecuniary point of view, but when estimated as a man who is valuable to his fellows.

“Luckless is he whom hard fate urges on
 To practice as a country surgeon;
 To ride regardless of all weather,
 Through frost and snow and hail together,
 To smile and bow when sick and tired,
 Considered as a servant hired.”

But the poetic muse was mistaken. He understood the work accomplished but did not adequately understand the greatness of the reward.

Of late a mould of commercialism has been spreading over our profession, and it will be necessary for our Academy to give this matter due consideration at an early date. Are we to be commercial, or are we rather to stand by the splendid traditions of the past? Is the practice of medicine to be continued as a trade and not an art, or as an art and not a trade? The safety of a confiding public demands that the art be uppermost, and that this ideal condition which has existed for so long shall continue to exist. John Brown, who has so beautifully said so much, tells us

that "honey is not sweeter in the mouth, or light better to the eyes, or music to the ears, or a warm, cosy bed more welcome to the wearied legs and head, than is the honest, deep gratitude of the poor to the young doctor. It is his glory, his reward. He fills himself with it, and wraps himself all round with it as with a cloak, and goes on with his work, happy and hearty. The gratitude of the poor is worth the having, and worth the keeping, and worth the remembering. Brown had attended the wife of Sandy Campbell, and after having met Sandy he went home and wrote that he could see written on Sandy's face the thought, 'God bless him, he saved my Kirsty's life,' and he could see that he ran back in his mind all those twenty years and laid out his heart on all he remembered, and that did him good, and did the doctor good, too, and nobody any ill." Gratitude is one of those things that people can give, and do give, and are never a bit the poorer, but all the richer. Charity should be written in letters of gold on the brow of every doctor, and what he gives in charity will come back to him increased a thousandfold in the heartfelt gratitude of suffering humanity. His heart should be full of love, and light, and sunshine, and uplifted with the nobleness of his calling.

"The night has a thousand eyes,
And the day but one;
Yet the light of the bright world dies
With the dying sun.

"The mind has a thousand eyes,
And the heart but one;
Yet the light of the whole life dies
When love is done."

IDEALS IN THE ACADEMY.

The work of organizing the Academy has been completed. The committees appointed for the purpose have performed their work faithfully and well, and a foundation has been laid which we hope will ensure success. A constitution and by-laws have been framed, requiring in my opinion but little change, and it is hoped that only urgently needed changes will be made. As an Academy we know no university, no school, and no circle of medical men. The Academy is for the use of the profession of the city and of the Province. Let us sound a note of warning on this point at our inaugural meeting—unity, peace, and concord will be best preserved amongst us by a determination to allow the control of no party, whether that party be connected with the university or the outside profession. And in this manner we will be best able to ward off the demons of discord.

Our Academy is yet but an infant, and as the infant grows its requirements will be greater. We must appeal on its behalf to those whose good fortune it is to accumulate wealth and whose noble generosity urges them to use it for the benefit of mankind. While such benefactors will be aiding this Academy by increasing our resources and enabling us to put before the members of the profession that which keeps them in constant touch with the best developments in the profession throughout the world, they will be benefiting humanity in general.

It is essential to the vigorous life of the medical community that free discussion of the all-important problems of life and death shall take place frequently, and that there shall be an exchange of ideas and a comparison of experiences. Here the old must teach the young, and the young may do much to keep the old in touch with the march of progress. Medicine in the not distant past but held the shadow of knowledge, it now holds the substance; it labored long in hopeless efforts to be of use, it now waits upon humanity with the most brilliant service. Much has been accomplished. The culture tube and the microscope unearthed priceless treasures, and we are now looking carefully into the question of immunity, which, once understood, will be followed by a rational therapy before which the great life-saving discoveries of Jenner and Lister may fade into comparative insignificance. But there are vast fields yet unexplored. Cancer stalks in our midst to-day just as it has done for centuries, and we are no more able to afford relief now than in the past. To meet to discuss, to learn from one another, and to put forth a united effort, we must be organized. The medical profession has always lacked organizing power, the power the Academy should be able to wield in this community. Let the first organized effort be to provide an assembly room for our meetings. In doing this no encroachment should be made upon the small trust fund already established, and no building should be begun until all the money required has been subscribed. I would suggest that committees be appointed to deal with this matter.

We should exact a high standard of conduct, but at the same time we should endeavor to protect the business interests of our brethren, and to put forth a concerted effort to do away with all abuses that tend to rob us of our just emoluments. Fair fees should be paid for the work done, but they should be properly curtailed in the interests of the best traditions of the profession. The doctor's daughter says that her father does not work for money, but for the good he does; but such a sentiment, if idealistic, will not provide her with food and raiment. Most assuredly our first consideration should be for human life and human suffering, and the well-being of the community at large, but, as John Brown says, we must have our reward. Gratitude and honor will not pay the butcher and the grocer.

The incomes of our brethren have fallen off of late years, while the necessities of life have increased in cost. Easy circumstances elevate and prevent that blunting of the feelings that is produced by poverty. Charity begins at home. Let us, then, as an organized body, look into this question and endeavor to find a cure. In England it has been taken up by Sir Victor Horsley. The profession appears to be overcrowded from two factors; first, the large number entering the field; second, the greater control of disease owing to improved sanitation. Few of the liberal professions can boast a worse remuneration, and we are putting forth every effort to further curtail our incomes by further curtailing preventable disease. It is our duty, however, to see to it that the food and water supply of communities is sacredly guarded, and here in our own city there is much missionary work to be done in this respect. Pure food and water and effective drainage should be procured at any cost. By unity we can accomplish much.

Peace, gentle peace, is pleasant; but there are "wagging tongues in every parish," and doctors are estranged from one another for life owing to a lack of mutual understanding.

New ideas seem to beget ruthless criticism. Such eminent men as Liston and Syme quarrelled most fiercely after being close colleagues. While we exhort the members of our profession to dwell together in peace, we do not ask them to sacrifice principle for the sake of peace. Our Academy, we hope, will promote harmony. Having reached the half-century mark, and having fought many fights, I am convinced that infinitely more good may be accomplished by the ways and means of peace. Let the methods adopted to attain our ends be manly and above board, so that the practice of our profession may indeed be an honorable calling. Bickering is said to originate with the older men. Be this as it may, it would be the ideal part of the younger men in all quarrels to keep their own counsel in the interests of peace. Envy has been called the shadow of success, and detraction the echo of its voice, but envy, so common to the human race, might wisely be buried in the deepest recesses of the heart and be known to none but its unfortunate possessor. Fellowship should actually mean what it implies; a spirit of comradeship should prevail, and if we cannot become close friends we can at least remain loyal comrades. Women have entered the lists as friendly rivals, and perhaps formidable ones, but they should be received on terms of equality. Reciprocity in medicine is no doubt an ideal condition, but in the overcrowding of the profession we have its chiefest stumbling-block and the strongest argument against it under existing circumstances.

The well-being of our profession in Toronto has been discussed from time to time by one who has been particularly interested in the formation

of this Academy. We have benefited by his kindly encouragement, advice, and princely generosity—I refer to Professor William Osler. From him I do not hesitate to take the text with which I intend to conclude my address. This is the first presidential address delivered to the fellows of the Academy of Medicine, Toronto, and the text appears peculiarly appropriate—it is a plea for *Unity, Peace, and Concord*, so necessary if we are to achieve any distinct success. If on this occasion we followed the customs of a well-known English medical society we would commemorate by name not only one but all of our benefactors, and would urge others to follow in their footsteps; we would exhort young practitioners to carry on original research, and, finally, we would beseech all the fellows of this Academy to continue in unity, peace, and concord.

Ten years ago when Lord Lister visited our city he told us that the scientific investigation in which he had been engaged for the greater part of his life had been to him an unmixed joy, and when he was able to see the results of his work his joy was increased a thousand fold. "What a magnificent reward." Let us hold up these rewards before our young men to encourage them to emulate Lister and others of like aim. As an Academy we will be judged by the work we do, and let us therefore hope that the work accomplished will fulfil the most sanguine expectations of the most sanguine fellow present.

HYPODERMIC ANÆSTHESIA IN OBSTETRICS.

By F. J. OLD, M.D., Port Colborne, Ont.

IT has been said "that nearly everything in this world has been improved or modied, except the mode in which we come into the world."

So that any advancement which tends to assist and relieve the pangs of childbirth is well worth our consideration. In this connection I wish to refer especially to the use of Hyoscin-Morphine-Cactine Co. hypodermically, replacing Scopolamine and Morphine Co. formerly used, as I consider it has now been proved conclusively that hyoscin is not therapeutically or chemically the same as scopolamine, and is as free from danger when used with proper precautions and according to the technic described later as any anæsthetic can be, and we have in this combination hyoscin hydrobromide gr. 1-100, morphine hydrobromide gr. $\frac{1}{4}$, cactin gr. 1-67 (Abbott), a hypnotic, analgesic, and anæsthetic combined, and we cannot expect to so overcome the system by producing total unconsciousness to sensation without coming near the danger line, especially where complete anæsthesia is produced, for major surgical operations, but as only partial anæsthesia is required in obstetric cases the danger is

no greater, if not less, than chloroform or ether given to produce the same degree of anæsthesia.

The hyoscin should be a preparation from henbane, and not from *Scopola Atropoides*. Chemically pure hyoscin from henbane of minus 20 degrees optical rotation is reliable and apparently safe. Analysis of nominally pure scopolamine frequently shows a rotatory power as low as only minus 2 degrees, and it is found to contain atroscin as an impurity, with the resulting fatalities we hear of following its use.

Professor John Uri Lloyd says: "Hyoscin and Scopolamine are chemically identical, the one having been discovered in hyoscyamus, the other having been discovered in scopolia. The hydrobromide of scopolamine has the same ultimate composition as the hydrobromide of hyoscin, and thus permits the same name, but since atropine and cocaine are also the same chemical composition it will be seen that this is not an evidence of identity in therapy. In our opinion one has no more the right to dispense scopolamine for hyoscin than to label hyoscyamus as belladonna."

Prof. J. V. Shoemaker says "that commercial scopolamine hydrobromide may vary in its physiological action owing to the variable quantity of atroscin present." In fact, some authorities claim that scopolamine hydrobromide should be erased from the Pharmacopœias, as it is merely a mixture of hyoscin hydrobromide and atroscin hydrobromide, and not itself a definite chemical compound.

I wish first to state to you the technic of this method of anæsthesia, and then to present briefly the records of some cases in which I have used it, first giving some cases in detail and then continuing with some cases which present features of special interest. I have been using the technic as described by Dr. C. J. Gauss, of Freiburg, Germany. The first injection given subcutaneously in the usual manner is given when the pains become really severe and frequent, say every six minutes apart, and last twenty to thirty seconds longer, and when the os is dilating well. Dr. Gauss uses two separate sterile solutions, one of scopolamine and one of morphine, prepared specially for him, and each solution tested by himself for impurities. He reports using this in over one thousand cases of obstetrics, and claims no bad results; and as his preparation of scopolamine is free from atroscin he is really using a solution identical with hyoscin. I have been using from *one-half* to full dose of tablet hyoscin hydrobromide, gr. 1-100; morphine hydrobromide, gr. $\frac{1}{4}$; cactin, gr. 1-67. About a half an hour after the initial dose is given a test object (for example, a book) is shown to the patient; a half hour later she is asked whether she remembers the object. This memory test, or "merkfaehigkeit," is the crucial point of the technic. This is repeated with different objects every half hour. When the patient cannot remember

the object she is in the condition described by Gauss as "daemmerschlaf," or twilight sleep, and no more injections are given until later tests show returning waking consciousness; but if the patient gives a positive reply to the test question, or when she does later give a positive answer, a second injection is given usually *without* morphine. The number of injections required to induce "daemmerschlaf" varies. I usually follow the initial dose with a half tablet in from one and a half to two hours, and sometimes find it necessary to repeat again in from one to one and a half hours before "daemmerschlaf" is produced. This last injection is usually plain hyoscin gr. 1-200. In from twenty to twenty-five minutes after the first injection the patient's face flushes up, pulse increases slightly, respirations diminish, and she begins to feel drowsy, and feels some relief from pains; and when she reaches the state of "daemmerschlaf," though she may be able to answer questions when aroused, and cry out during the pains, she does not realize any pain, and on being questioned afterwards has no memory of pain.

Case No. 1: Mrs. L. (primipara), age 20. Measurement of pelvis between spines, 25 c.m.; between the crests, 28 c.m.; Baudeloque diameter, 20 c.m. Examination, at 9 p.m.: Presentation of foetus, left occipito anterior; medium sized foetus; os fairly dilated; pains sharp and severe; patient very restless; pains average seven minutes apart. Hypodermic of H.M.C. given 9 p.m. In twenty minutes some relief from pain, commencing drowsiness, but with steady progression. At 11 p.m. memory test still positive. After 11, pains begin to increase. Memory test still positive at 12. H.M.C. repeated at 12; followed by sleep. Memory test negative at 12.30; pains slightly diminished; but again increased after 2 a.m. Child born at 3 a.m. Slept two or three hours after birth of child, and awoke with no remembrance of birth, and none of second injection, or of pain. Child normal; no complications.

Case No. 2: Mrs. M., age 34 (nine para). Measurement of pelvis: Between spines, 26 c.m.; between the crests, 28 c.m.; Baudeloque diameter, 20 c.m. Examination: Presentation of foetus, L.O.A.; os fully dilated; membranes unruptured; pains severe; bearing down; average five minutes apart. Hypodermic of H.M.C. given at 5.15; drowsy in twenty minutes. Memory test, 5.45, positive. Membranes ruptured at 5.50; child born at 6.15. Sensation of pain slight, but fully remembered. As only one tablet of H.M.C. was used, patient not in "daemmerschlaf." Child, normal. On the second and third day after confinement temperature 100, and complained of stiff neck, and pains in chest and arms; otherwise puerperium normal. As this was not noticed in any further case I do not consider that it can be attributed to the use of H.M.C.

Case No. 3: Mrs. S. (primipara), age 21; highly sensitive temperament. Measurement of pelvis, normal. Examination, at 7 a.m.: Pre-

sensation of fœtus, right occipito posterior; slight dilation of os. At 9, dilation about one inch, complaining severely of pains, averaging five minutes apart, lasting thirty seconds. Hypodermic of H.M.C. given at 9 a.m.; drowsy in twenty-five minutes. Memory test positive at 9.30, 10, and 10.30. Hypodermic of H.M.C. repeated at 10.30. Became more drowsy; pains diminished slightly until 11.30, then returned stronger and more effective. Memory test negative at 12. Os fully dilated and membranes ruptured at 12.30; pains becoming stronger; and coming slightly out of condition of "daemmerschlaf." One half usual dose of H.M.C. given at 1.30. Child born at 2.15. Slept well after birth; awoke with no remembrance of pain or of birth. Child at birth somewhat cyanosed, but strong; color normal in fifteen minutes. This cyanosis is present if the child is born within a short time after the injection of H.M.C.

Case No. 4: Mrs. W. (multipara). Measurement of pelvis, normal. Examination, at 9 a.m.: Presentation of fœtus, L.O.A.; pains five minutes apart; os dilating well. Hypodermic of H.M.C. at 9.15; drowsiness in thirty minutes. Memory test positive at 10.15 and 10.45. One-half dose of H.M.C. given at 10.45. Memory test still positive at 11.30. Pains severe. One-half dose H.M.C. given at 11.30, followed by "daemmerschlaf." Child born at 12.15. No complications; no memory of birth; child normal.

Case No. 5: Mrs. C. (multipara). Measurement of pelvis, normal. Presentation of fœtus, right occipito posterior. Previous history: Severe confinement, large child, occipito posterior at birth. Examination, at 9.45 a.m.: Pains severe; dilation of os, slight. Hypodermic of H.M.C. given and dilation assisted. Memory test positive at 11. H.M.C. repeated. Membranes ruptured at 1 p.m. One-half H.M.C. given at 1.30. Presenting head, turned to occipito anterior, and forceps applied at 2.15. Child delivered at 3 p.m. No memory of birth. A slight amount of chloroform given before applying forceps.

I have now presented to you a few cases in detail. I will give you a few more cases chosen for some deviation from the normal, which may prove of interest to you.

Cases Nos. 6, 7, and 8: Normal, with typical relief.

Case No. 9: Mrs. S., age 24 (four para). Previous births: two still-born. Pelvis and presentation normal. Patient very stout, weight 235. Examination, at 7.15: Pains six minutes apart; os fairly dilated. H.M.C. given at 7.20. H.M.C. repeated with half dose at 9.15. Memory test positive at 9.35. Sensation of pains increasing. One-half H.M.C. at 10.50. Child born at 11.50. No remembrance of pains. Fœtus, still-born. Pale, not cyanosed. No further complications.

Cases Nos. 10 and 11: Normal, with relief.

Case No. 12: Mrs. W. (primipara), age 34. Pelvis and presentation normal. Examination, at 1.30 p.m.: Pains sharp, and nagging; not benefiting; patient tired out. H.M.C. administered. Patient drowsy in twenty minutes. Slept nearly five hours. I was called again at 6.30; pains recommencing; os dilating slowly. H.M.C. administered at 7.40. Progress continues slowly. At 9 p.m., memory test negative. At 10.45, decided to apply forceps. As the patient was slightly reviving from the condition of "daemmerschlaf," a few drops of chloroform were given while forceps were applied; then discontinued. Delivery at 11.30. Child normal; no complications. Patient remembered me coming at 6.30, but remembered nothing after H.M.C. given at 7.40.

Cases Nos. 13, 14, 15 and 16: Normal, with relief.

Case No. 17: Mrs. W. (multipara). Pelvis and presentation, normal. Examination, at 7 p.m.: Pains about six minutes apart, and sharp; os well dilated. Hypodermic of H.M.C. given at 7. H.M.C., one-half dose given at 8.30. Memory test negative at 9. Child delivered at 9.45. No sensation or remembrance of birth. Child *premature*, but strong, and O.K.

Cases Nos. 18 to 24: Normal, with relief; which is the number of cases I have at present the records of having used hypodermic anæsthesia.

These few cases, though not sufficient of themselves to arbitrarily state that this form of anæsthesia is applicable to every case of obstetrics, may serve to illustrate the effectual relief experienced in every case used. These cases were not selected, but were practically consecutive cases in my practice. In a few cases, I arrived too late to use H.M.C., and a few preferred to have chloroform; otherwise these cases were consecutive. In no case did I find any undesirable effects on the mother, either during confinement or afterwards. In only one case did I have a still-born child (case No. 9), but she had a previous history of two still-born children in three births. In one more case the child only lived four or five hours, but it was premature; normal color at birth, but weak; and I do not think death was attributable to the use of the anæsthetic. Dr. Gauss claims a lowered infant mortality, and states that what cases he had of apparent asphyxia or "oligopnea," were caused from the morphia, hence the advisability of not having morphia in the later doses given. These cases of apparent asphyxia recover normal color and breathing in fifteen or twenty minutes, frequently without treatment, or with light massage over the heart:

The success in the use of H.M.C. depends on:

First, not commencing too early when the pains are weak and infrequent.

Second, not forcing the dosage, but repeating oftener if necessary with smaller doses, until "daemmerschlaf" is produced.

Third, frequent testing of memory so that the patient is not allowed to revive from "daemmerschlaf."

Fourth, quietness of patient, and prevention of her being disturbed by outside sounds during labor.

Fifth, securing for her a continued quietness, and prolonged sleep after birth of child, L, not allowing her to hear the cries of the child, or other noises; for, if aroused too soon, she may retain some memory of her pains.

The advantages presented by this method are the relief, not only from the pains, but also the complete removal from the memory of the patient of the intense suffering attending childbirth.

Dr. William Holt says: "The natural fear of the suffering and danger involved in childbirth is an important factor in our modern lamented race suicide; also in marital unhappiness by the wife's refusing all sexual intercourse."

It seems to me, therefore, that in the removal of this dread we are accomplishing an object which has long been the desire and the dream of many sociologists.

We are also preventing many of the nervous and mental diseases which we can all trace to the pain and shock of childbirth; also this method is very easy of administration, requiring only two or three injections, in contradistinction to the continual administration of ether or chloroform. I have not noticed it produce the same diminution of the uterine contractions as we have from even the moderate use of chloroform or ether, and the patient is better able to assist with the voluntary abdominal muscles. In this way I find the length of the confinement is shortened instead of frequently lengthened, as we formerly had it with chloroform and ether. I have found the after-pains very much less, seldom requiring any narcotic, and if any is given I use hyoscin, gr. 1-200, by the mouth. The placenta has in every case been expressed normally in the average length of time. As the uterus remains in a better state of contraction we are less liable to encounter any severe post-partum hæmorrhage, and I think this has been so in my experience.

In conclusion, I feel that in this method of anæsthesia we have a very valuable means of relieving pain, which will be found preferable in most cases to the volatile anæsthetics, not only in obstetrics, but in general surgical work, where it has already been used in many cases of abdominal sections, laparotomies, amputations, etc., frequently without the assistance of chloroform, though sometimes requiring from a few drops to a dram or two of chloroform, in long continued abdominal work.

It is also préférable as a narcotic in place of morphine and atropine, being devoid of the unpleasant nausea following the use of morphine or morphine and atropine, and the relief from pain is greater and of longer duration.

And while not overlooking the strong antagonism against this form of anæsthesia and the danger said to attend its administration, I have only noticed one death reported, and that in a surgical case, out of the many thousands of successful reports; and this was a desperate case, and has not been proved to be attributable to the anæsthetic even though it was given by a nurse carelessly without proper precautions, and the death would have taken place in all probability with an anæsthetic used.

I am convinced that with proper care and precaution that in this method we have a safer, more satisfactory anæsthesia, with more freedom from nausea, hæmorrhage, and post-operative pains, or after-pains, than in anæsthesia resulting from chloroform or ether.

ANTERIOR POLIOMYELITIS.*

By J. S. HART, M.D., Toronto.

ON August 18th of last year, 1906, I was called to see two sick children: H. S., aged 8 years, and M. S., aged 6 years. They had temperatures of 103° F. and 102°, respectively. The older had given evidence of not being "very well" for a few days, while the illness of the younger had begun on that day.

Their father was just recovering from an attack of pseudo-typhoid, and as I had recently attended many cases, and two or more in several houses, in the absence of definite symptoms, I supposed the children to be suffering from the same disease as that through which their father had just passed.

On the following day there seemed little change, though the mother regarded the younger child as very ill without being able to say why. They were both in bed, and no examination was made excepting as to pulse, temperature, respiratory movement and enquiries as to digestive function.

On the morning of the third day the older child showed little change, but the younger seemed helpless, had a perceptible cervical rigidity and opisthotonos. With these symptoms there was difficulty in swallowing, collection of mucus in throat, and shallow respiration.

Fearing that there might have been an unrecognized diphtheria, I took a swab for examination.

*Read at the Toronto Academy of Medicine, November, 1907.

Four hours later the respiratory paralysis was increasing and she was more helpless. The collection of mucus in the pharynx was marked and distressing. In the evening there was further advance in the paralysis, and I asked for a consultation.

The probability of an insidious diphtheria was emphasized by the consulting physician.

Eight hours later the child died, and the next day the bacteriologist reported the swab free from any evidence of diphtheria. This report, with the fact that there was no knowledge of her having received or communicated infection, and that there had been no visible evidence of diphtheria, convinced me that I must find some other diagnosis.

Even though no further service could be rendered her, this subject of diagnosis was important to satisfy the parents and friends as well as the scientific curiosity of her medical attendants.

During the later days of this tragedy, other events were occurring to elucidate it; for on the day following my first visit to M. S. I was called to see M. B., a girl aged two years, and on the next day E. F., a boy aged four years, who had been ill a day before my visit, so that these cases began on the same day, August 19th.

The early symptoms were so similar in these cases that they may be described together. In each, the onset was sudden, though neither had a convulsion. In each when I saw them there was moderate rise of temperature, 101° F. Both were dull and querulous, and both, I remembered afterwards, complained when moved.

In these first days my perceptions had not been quickened by the rapidly advancing paralysis of the first case, and so I treated the symptoms as I saw them and waited. The children were examined in the reclining position only, and there was no investigation as to reflexes or muscular power.

The first definite symptom of this class was that in each of them there was urinary retention, or at least tardiness of urination; so much so that I meditated catheterization, though in neither case was it necessary. (The dysuria was more marked in the girl.)

The delay in urination was not due to failure in secretion, for in each case the bladder was palpable and full.

Next to this warning came, in the case of the boy, well defined opisthotonos, with rigidity and marked pain on movement or handling. When I say movement, I mean movement communicated by another, for at this time he became quite helpless, moving his head and talking, but his lower limbs were quiet and his hands and arms were moved little, and feebly.

In the case of the girl the opisthotonos rigidity and distress in being moved were less, though both were alike highly hyperæsthetic. The girl

was not so generally incapacitated. She had better control of her upper limbs, though the lower ones were equally paralyzed.

These symptoms became fully developed on the 22nd, the day after the death of the first patient and the third day of their illness. Their disease reached its maximum after the same period as the first terminated in death, and I suppose we are justified in believing that the difference in result (for the two later cases are living, and I have the privilege of showing them to you to-night) was due to the anterior cornua of the spinal cord having been involved at a higher level in the fatal case, extending to the respiratory centres.

During the days of greatest intensity in the disease, the children had a dull expression, while they complained monotonously at every disturbance. There was no loss of sphincter power. There was constipation as well as urinary retention. In each case there was loss of appetite and a temperature keeping about one and a half to three degrees above the normal.

In both cases the muscles of the upper extremities and body soon regained their function, but more slowly in the boy, and in about two weeks each was the subject of complete paraplegia involving the lower extremities, and in the boy, the lower part of the body as nearly as I could determine.

Earlier the skin seemed slightly flushed, but now the paralyzed parts were cold, somewhat blue—especially in the boy—tender to touch and painful to move. The dysesthesia was also more marked in the male patient.

When tested, the skin and muscular reflexes of the lower extremities could not be elicited, and when faradism was tried after about two weeks, there was no muscular response in the boy, and but little in the girl over the lower extremities.

No portable galvanic battery being available, reaction to galvanism is unknown.

Regarding treatment, I have little to say. Aside from the treatment of special symptoms as they arise, I have little confidence in anything in the first acute stage.

Diagnosis will in most cases be delayed until definite paralysis is recognized. So when my diagnosis was made I gave bromide and ergot internally, with sinapisms to the spine. If I were criticized for this my defence would be that the medication is as good as any other, though I do not know that it was of any service.

Less doubtful are the advantages, later, of electricity, massage, inculcation of proper habits of posture and gait, orthopedic support, and operation.

In these cases faradic electricity and massage were begun regularly about three weeks after the commencement of the disease. In the case of the girl, daily, and for the boy, massage daily, and faradism about every second day. The massage in each case was given by members of the household.

The boy, not progressing well, was sent to the Children's Hospital, where it was hoped more skilled attendance and better appliances would produce a better result than he was likely to attain at home.

You will see the boy very much worse for his attack, with slight deformity, but very extensive paralysis, involving both the lower extremities. He can climb up on his feet by the aid of a chair or some other suitable object. He walks with the aid of two supporting hands holding his own or along the edge of a lounge. He can balance himself without help, but not walk. You will see the laxity of the knee ligaments and a slight tendency to lordosis. Below the knee there is marked atrophy, and of the thighs to a less degree. The right limb is a little more reliable as a support, and the left foot is over-arched, showing a tendency to equine deformity.

The girl walks, though awkwardly, throwing out the left foot and showing decided valgus. The foot is flung forward, showing the effect of the adductors of the thigh, the quadriceps extensor acting imperfectly. The leg is thin, soft and cold.

The right leg is similarly affected, but to a less degree. There is atrophy, valgus, jerking forward of the limb, all to a less extent. Lordosis is rather more decided in her case, perhaps due to her being more on her feet and adopting that attitude in balancing herself.

There is the singular fact that in the case of the girl an exaggerated patellar tendon reflex is found in the worse limb, while in her other limb and in both those of the boy the reflex is absent.

Both boy and girl are in good general health and both unaffected mentally.

There are several interesting points to be mentioned in connection with these cases. First, that I should have had three cases under my care at once, while during a professional life extending over seventeen years, I have met but two other cases

Second, there was the interesting circumstance that the first of the three cases began alongside that of a sister whose case, developing later into a pseudo-typhoid of very mild type, was at first undistinguishable from it. I have already said that the father had just recovered from the same mild fever.

Third, in my medical experience, I had not had as many cases of this type of fever to treat in four years as I then had in four months.

Fourth, two of the children—the two girls—lived within a few rods of one another.

It is further to be remarked that these cases occurred in what, for Torontonians, was exceedingly hot weather—the memorable week of the meeting of the British Medical Association here last summer. The other two cases in my practice both were met in hot weather.

The history of these cases would justify the present generally-accepted theory that the disease belongs to the acute infectious class. In this malady we are in the same position we were in regard to pneumonia before the discovery of the pneumococcus of Friedlander.

If a germ is the cause, is it a specific germ, or is the nerve structure invaded by various germs? Is it similar to cerebro-spinal meningitis, in which the pathological findings are so various, the meninges showing a special susceptibility to the pneumococcus, but other infections being frequent?

There was an unusual number of cases at the same time as those I report, while pseudo-typhoid was also prevalent. Is the germ of the two diseases the same?

The disease is generally reported more frequent in hot weather. Are activity—for these cases usually occur in robust children—and heat the predisposing elements inducing susceptibility to the germ or germs? These are questions that arise, but which I shall not attempt to answer.

As to the pathology, I shall not speak, as my experience has not led me so far. I hope that this narration may add something of value to the literature of the acute diseases of the spinal cord, and may result in an enlightening discussion on the part of the members present.

THE TREATMENT OF CHRONIC DISEASES OF THE HEART AT BAD-NAUHEIM.

By W. H. B. AIKINS, M.D., Toronto.

THE delivery of an address in Toronto by Prof. Theodor Schott, bearing particularly upon the effectiveness of the Schott method as practised at Bad-Nauheim, created very considerable interest, and was largely the occasion of our visit to the seat of operations for personal observations when in Germany last May.

The town of Bad-Nauheim is beautifully situated in the Grand Duchy of Hesse, in the fertile district of the Wauttereau, a few miles from Frankfurt-on-the-Main, about eight hours on the train from Bremen or Hamburg, and twelve from Paris. It is an ideal health resort, with well laid out park grounds of over three hundred acres. A well shaded avenue

bordered on both sides by pretty villas, leads from the station to the Hot Springs (Sprudel) and to the baths, ending at the terrace of the "Kurhaus," where there is a concert hall and restaurant, reading rooms, billiards, etc. At eight o'clock each morning a concert is given at the drinking fountain by a magnificent orchestra of fifty musicians, and in the afternoon and evening the visitors have musical entertainment—choice and varied. The surrounding country is picturesque, with many points of historical interest.

The official season lasts from the 1st of May to the 30th of September, though some of the bath houses open in April and remain open until the end of October. There are ten bathing establishments at the present time, and in all 267 bath-rooms, where are to be had the various baths as prescribed by the physician practising in the town—Sprudel and thermal alone, or in suitable combination, steam thermal, and the ordinary brine baths (without any carbonic acid). These gaseous thermal muriated waters have attracted world-wide attention owing, chiefly, to the treatment of cardiac diseases by gaseous baths and special methodic resistance exercises, elaborated after years of close study by the Doctors Schott, and further investigated in the most painstaking and thorough manner by Prof. Theodor Schott since the death of his brother over twenty years ago. The form of treatment which was introduced through their genius was a radical innovation, and met with much opposition from those who had an innate prejudice against any advance therapeutically unassociated with drugs, and from others who did not spare the time to properly consider the subject; but the merits of the method are evident on personal observation, and it has grown in estimation until now the Schott school of treatment in heart diseases has enthusiastic adherents and advocates in all civilized countries.

I have to thank Professor Schott for his cordial co-operation in assisting my purpose of study, and for the serious thoroughness he displayed and demanded when investigating the remedial processes, the efficacy of which has been so fully demonstrated scientifically that it can no longer be reasonably called in question.

To give a comprehensive description would perhaps be best accomplished by referring somewhat extensively to the writings of some of those who have carefully studied the action of the natural waters of Nauheim, and have practised Schott's method of treatment also with artificial baths, such as the late Sir William Broadbent, Sir Lauder Brunton, Sir Douglas Powell, Doctors Bensley Thorne, Leslie C. Thorne, Geo. A. Gibson, and J. A. Lindsay, of Great Britain; Doctors Peabody, Satterthwaite and Heineman, of New York; Dr. Babcock, of Chicago; Prof. Strumpell, of Germany; Dr. Baldwin, of Italy, and Dr. Helter, of France.

These, and many others who have had the opportunity of personal observation, have written in commendatory terms of the value of the Schott method. It is unfortunate that this treatment has suffered somewhat from being in the hands of individuals who have made unreasonable pretensions, and who, by adopting erroneous methods, have cast some odium undeservedly upon a really valuable means of treatment.

The properties of the thermal gaseous waters, and their physiological effects on the action of the heart, are well summarized in a brochure issued by the Society of Physicians in Bad-Nauheim,* and also in a paper by Dr. Paul C. Franze.†

(1) The temperature of the Sprudels and drinking springs, as well as their percentage of salt, varies somewhat.

The efficacious properties or constituents are :

(a) The natural heat (about 86° to 94° F.).

(b) The amount of thermal salt, chloride of calcium, and other chlorine salts (2.5 to 3.3 per cent.), of which 2.1 to 2.9 per cent. is thermal salt.

(c) The amount of iron and other mineral salts.

(d) The amount of carbonic acid gas which, corresponding to the variety in administering different forms of baths, is large or small in the most varied graduations; but this also can be entirely eliminated at the graduating works.

The bath-water is supplied by three very abundant Sprudel springs, Nos. VII., XII., and XIV. (so named according to their order of boring), which rise from a depth, respectively, of 530, 600 and 696 feet, and which, owing to the strength of the CO₂ when the stop-cock is opened, are driven up to a height of 50 feet above the surface of the ground. Spring No. VII. is one of the richest in carbonic acid gas ever known. The springs, which burst into the air foaming like champagne, yield up a crystal-clear water in such abundance that 6,000 baths could be given daily.

Sprudel Bath. The water of the springs is brought through conduits leading from the upper tube into the bath direct, without coming into contact with the outer air, so that it preserves its full amount of carbonic acid gas.

Thermal Sprudel Bath. By direct branch-connection with the upper tube, a portion of the Sprudel water is conducted into closed reservoirs, stored therein, and afterwards used for the so-called thermal Sprudel baths. After the slightest possible cooling, and it has no contact with the air, the water loses very little CO₂, even when standing for some time. These baths, therefore, are a near approach to the Sprudel baths.

* The Society of Physicians, Bad-Nauheim, 1906.

† *Folia Therapeutica*, July, 1907.

Thermal Bath. The Sprudel water, which flows out of the upper tubes of the Sprudel, is collected in large reservoirs. On being left exposed to the air, a portion of the carbonic acid gas evaporates. The water, from being clear as crystal, becomes troubled, while the iron and calcium salts, which were held in complete solution so long by the superabundant CO₂, are deposited. A brownish yellow fluid now forms, called thermal brine (Sool), which is used to prepare the thermal baths.

Stream Bath. By means of a special contrivance attached to the baths, it is possible to arrange for stream baths with continuous in-and-out flow of the water—Sprudel, thermal Sprudel, and thermal stream baths.

Brine Baths. The last, and by no means to be despised, forms of the Nauheim baths, are the simple brine baths (coolbader). The brine necessary for these is supplied by the thermal water of the springs, which is freed from iron and calcium as well as carbonic acid by the process of "graduation."

All the baths can be strengthened at will by the addition of the excellent mother-lye which is extracted in Nauheim during the preparation of the salt.

(2) Carbonic acid brine baths are supposed to act in the following way: The ingredients of the water, *i.e.*, the carbonic acid gas, as well as the salts, stimulate the capillaries of the skin, causing them to dilate, and the terminations of the cutaneous sensory nerves. These latter convey the stimulus to the centres of the vasomotor and of the pneumogastric nerves, which thus receive a stimulation by reflex action. The vasomotor stimulation causes increase of arterial tone; that of the vagus slowing the heart's action. However, the action of the mineral baths is only limited to these effects when they are taken at a temperature of 93° to 95°, which is called the "point of indifference," and which in itself has no influence on the body. But, if the bath be cooler, as it is usually prescribed, then the effect of the cold becomes manifest at the same time, tending to bring about initial contraction of the capillaries of the skin. Upon this, after a period varying in length according to the height of the temperature (being longer in cooler, and shorter in warmer baths), "reaction" supervenes, consisting in capillary dilatation. The salts and the carbonic acid not only shorten by their action the period of initial contraction, but intensify the reaction too.

The initial contraction of the cutaneous vessels means increase of resistance, and, therefore, stimulation of the heart to more powerful contractions. The reactionary dilatation is equal to lessening of resistance, and relieving the heart from its ordinary strain. The strengthening influence, then, of a mineral bath on the heart-muscle consists in the initial

stimulation to more vigorous contractions, which are necessary for overcoming the increased resistance brought about by capillary contraction. In a weakened heart, of course, it is essential that this primary period of increased exertion should not last long, and soon give way to relief.

Experience alone teaches fully as to what cases are suitable for the Schott treatment of chronic affections of the heart, and those in which such treatment is apt to be harmful. It is difficult to definitely define between these two classes, but Dr. L. C. Thorne* divides the cases into four groups :

1. Those which will be cured or benefited very greatly by the treatment: Of this group the dilated, enfeebled, and irritable heart, a sequela of influenza, is one of the most promising, and it is also one that, in many instances, resists treatment by drugs, rest, or change of air, so that the unfortunate sufferer often becomes a chronic invalid with nothing but a broken and almost useless life to look forward to. It is no exaggeration to say that the treatment often gives a new lease of life to these cases, though if they are of a severe type they may require two, or even three, courses, at intervals of from nine months to a year, to restore them to health.

Another class of case which belongs to the first group is that of the dilated and enfeebled heart produced by the raised arterial tension present in the circulation of patients suffering from rheumatic or gouty diathesis. This slowly but continuously acting pressure produces in time an overloaded and overworked heart, and thereby an increasingly impure blood-supply, and a progressive weakening of the cardiac systole. It is almost impossible to cure these cases absolutely and permanently. The very fact that the poison is manufactured in the system, and can only be eliminated by a most careful diet and well regulated life, often leads to a recurrence of the heart symptoms in time, and makes it almost a necessity that the patient should undergo a course of treatment regularly every twelve months for two or three years, and then perhaps every second or third year. This no doubt sounds like an arduous task; but, when it is remembered that it often converts this class of case from permanent invalidism to a condition of good health and full enjoyment of life, it cannot be so regarded. Cases of cardiac enfeeblement from excessive smoking and prolonged illness, such as typhoid fever and malaria, belong also to this group. The treatment in these cases is a most valuable aid to such methods of cure, as rest, tonics, change of air, and it produces a much more rapid return to health than could otherwise be expected.

2. Those cases which cannot be cured but can be greatly benefited : In this group may be ranked cases both of rheumatic and gouty origin, in which the valves have been prematurely injured, and where signs of

*The *Lancet*, July 18, 1903.

commencing cardiac failure, such as headache, shortness of breath, palpitation, cyanosis, and pain, are present.

3. Doubtful cases: Among these should be classed a large number of the more advanced forms of valvular affections, whether the result of gout, rheumatism, or other diseases, in which the recuperative powers have been undermined by climatic effect, habits of intemperance, or prolonged illness.

That the treatment should be tried in many of these cases, when all other methods have proved ineffectual, is only fair to the patient; but it is of great importance that it should only be administered by one who is thoroughly conversant with it.

4. Unsuitable cases: Authorities differ greatly as to the nature of the cases that should be included in this group.

Dr. W. W. Baldwin, of Rome, Italy,* who has had considerable experience at Nauheim, and also in the use of artificial baths, regards the contra-indications as follows:

1. Advanced arteriosclerosis, especially if asymmetrical, and when there has been specific infection, or family history of apoplexy, and all cases of the kind in which the baths augment instead of lowering arterial tension.

2. Chronic Bright's disease, unless advanced, is not an absolute contraindication to this treatment, although great caution is necessary to avoid acute renal congestion, and even inflammation through excessive diuresis, which both baths and resistance exercises might cause if pushed too rapidly. Advanced cases of interstitial nephritis with constant abnormally high arterial tension would forbid the treatment. In general, when the renal disease, whether interstitial or of the parenchymatous variety, is too much advanced and very much more serious than the heart trouble, this treatment should not be employed; but secondary congestion of the kidneys, with or without albuminuria, would not contraindicate it.

3. Aneurysm in one of the larger arterial trunks would certainly forbid it.

4. Cases of bronchial asthma and chronic bronchitis would call for great caution in avoiding chills and colds, and would also dictate a milder, slower course of treatment.

5. Dr. Benzley Thorne has employed the baths in cases of heart disease, complicated by pulmonary tuberculosis, with advantage, especially when there are clubbed fingers.

6. In very grave cases of organic heart disease, in which degeneration of the cardiac muscles is too far advanced and favorable reaction could not be expected, this treatment should be omitted, at least until other remedies have been tried without success.

**The Medical Record*, Feb., 1891.

7. In cases of great anæmia and emaciation, where the effervescent baths are not well borne, carefully regulated mild brine baths have a most excellent curative effect. The same rule would obtain in great heart weakness or exhaustion. In anæmic subjects with fatty hearts, great prudence should be exercised in the very gradual substitution of mild effervescence in the brine baths.

With regard to the administration of baths, Professor Theodor Schott* considers that, "if any sign of loss of compensation be present, it is best to begin with a one to one-and-a-half per cent. solution of chloride of sodium (NaCl), to which from one to one-and-a-half pint per thousand of calcium chloride (CaCl) is added. The duration of the first bath should not extend beyond ten minutes, the commencing temperature should be from 92° to 93° F., and should not go below 88° F. during the first week. Special care should be taken with anæmic persons and others with poor circulation who feel cold easily. Equal caution should be used with rheumatics, not to use to high a temperature, never going beyond 95° F. For, useful as the application of hot baths and douches may be in relieving pain and reducing swelling, the tonic effect upon the heart is lost in an equal degree when applied to the latter group of cases. Instead of warmer baths, use those which are cooler and of shorter duration. If the patient remain quiet, it is permissible for him to feel cool for the first half minute, after which he ought to feel the reaction to a grateful warming sensation; if not, the temperature has been too low, and the bath should be made warmer. No second chilly sensation should follow, for this is evidence that the bath has been too long continued, at least from this particular temperature, and the patient should leave the bath at once. During the beginning of a course of treatment, intermissions should occur at stated intervals. At the outset, the bath should be omitted every other day, then every third day, and finally every fourth day. Later the bath is increased in all directions—in its chloride of sodium, increasing it to two or three per cent., the chloride of calcium being increased to one-half to one per cent. Next, with the latter percentage of salts a small quantity of carbonic acid gas (CO₂) is added (equivalent to the Nauheim thermal bath), and last of all to the bath with a large quantity of carbonic acid (the so-called Nauheim bubbling-spring bath). Co-incidentally, we diminish the temperature at 88° to 85° F., even, exceptionally, to 80° F., and increase the duration to twenty and twenty-five minutes."

Prof. Geo. A. Gibson† expresses the opinion that "the effects produced by such artificial baths are in all respects similar to those obtained at Nauheim. The influence of baths so prepared was carefully watched

**Medical Record*, Feb., 1891.

†"Diseases of the Heart and Aorta."

by me, when associated with Sir Thomas Grainger Stewart in the Royal Infirmary of Edinburgh. Their results were investigated by us, and we were led to the conclusion, which indeed is admitted by every one, that the consequences of artificial and natural baths are identical."

When injudiciously used, the baths are apt to cause restlessness and sleeplessness, followed by lack of appetite and loss of strength. Schott holds that there is a reflex stimulation of the heart, producing more complete and thorough contraction, as the result of which the heart becomes hypertrophied; but he is also of opinion that there may also be some direct physiological stimulation of the arterioles and capillaries by the passage of gas through the skin, so as to come in contact with the deeper tissues.

Broadbent* is of opinion that there is more probably a physical dilatation of the capillaries in the skin, so that the resistance to the blood is lessened, and the left ventricle is able to complete its systole.

In this way a more rapid transfer of the blood from the venous to the arterial system would be possible. Broadbent, however, admits that the chief objection to such a view is slowing of the pulse occurring in the bath, seeing that diminished peripheral resistance might be expected to accelerate rather than retard the pulse rate, and he throws out a suggestion that the slowing of the pulse may be attributable to reflex stimulation.

It has been said above that similar effects are produced whether the baths are natural or artificial. It must, however, be admitted that the results of treatment are very different when carried out in this country than at Nauheim. The reasons for this are not far to seek.

The patient under treatment there is removed from the scene of his daily labors, and in most cases, without doubt, from numerous worries, in order to lead an existence characterized by abundance of rest and absolute quiet. The climatic conditions are usually such as to allow him to utilize the fresh bracing air of the district, and he can enjoy a large amount of sunshine, provided with sufficient shade to protect him from the direct rays of the sun. His life at Nauheim is one of peaceful routine. He gets up between seven and eight in the morning and goes to the wells, where, if enjoined to use the springs, he sips the water, as is usual in such bathing-places, with the accompaniment of an excellent orchestra. He then returns quietly to his hotel for breakfast, or enjoys it in a shady nook outside, and after glancing over the morning paper has his bath. After this he lies down and almost certainly falls into a calm sleep, from which he probably does not awaken until it is time for luncheon; after luncheon he again rests until the heat of the day is past,

*"Heart Diseases, with especial reference to prognosis and treatment."

probably sleeping part of the time, and then has the resistance movements or some gentle exercise until it is time for dinner, after which he is glad to seek repose. In this way, life at Nauheim is restful in the highest degree.

The general dietary rules at Bad-Nauheim: Nothing to irritate or distend the stomach. Not to eat to fulness. Not to hurry. Meals as nearly as possible of equal nutritive value. No coffee, no strong tea, no effervescing drinks, no spirits, no beer, no new bread, no fried potatoes, no cabbage, no old peas, no seasoned foods, no salted foods, no pepper, no cheese, no heavy puddings, no ices or iced drinks, no fat (only the mild fats, as butter and cream), no nuts of any kind (including chestnuts). A little mustard. Farinaceous foods only sparingly. Smoking, if at all, in great moderation (speaking generally, tobacco is bad for the heart). Only old still wines at meals only. All fruit to be ripe and properly peeled. No meal to be taken within two hours of bed-time.

The necessity of a generally mixed diet (including fish) and vegetable diet is essential. Milk is largely depended upon to fill in the gap of needed nourishment between meals, and at meals when required, and at night before retiring.

Milk and milk food products are specially recommended in all cases in which renal complication exists or is feared.

To limit the meat diet to white meats in appropriate cases is desirable.

50 College street.

A CASE OF INTESTINAL OBSTRUCTION DUE TO PERSISTENCE AND ANOMALY OF THE URACHUS.

A. Fanoni, New York, in *Medical Record*, June 1, 1907, reports that the patient had had a number of previous attacks of what appeared to be intestinal obstruction, that subsided in the course of a few days. The last attack, however, persisted and operation was found necessary. At the operation a loop of small intestine was found constricted between the abdominal wall and a thick band running from the bladder to the region of the umbilicus. This was resected and the intestine was released. Microscopical examination showed this band to be inflamed patent urachus. This case is of additional interest because symptoms of obstruction appeared again two months later and at the second operation the cause was found to be an intestinal adhesion between the stump of the urachus and the omentum. The stump was also found to be the seat of a tuberculous inflammation.—*American Journal of Surgery*, Aug., 1907.

PROVINCE OF QUEBEC NEWS.

Conducted by MALCOLM MACKAY, B.A., M.D., Windsor Mills, Quebec.

At the regular meeting of the Provincial Board of Health, the following resolution was approved: "Resolved, that in order to protect the Ottawa River, no future sewerage system plans will be approved by the Ontario and Quebec Provincial Boards of Health, unless the municipalities contracting the same shall agree to make provision for the treatment of the sewage, satisfactory to the Provincial Board having jurisdiction over the territory. That respecting sewerage systems already established, no extension will be approved except on the condition above mentioned, and further, the Ontario and Quebec Provincial Boards will interest themselves in bringing the municipalities at present pouring raw sewage into the said river to provide for the purification of the same." This resolution was previously framed by a joint committee from the Ontario and Quebec Provincial Boards of Health.

A report was made that the suit against the city of Sherbrooke for not having reported to the Board last spring an outbreak of smallpox, will be heard in court shortly.

Doctors Lachapelle and Pelletier, delegates to the Health Convention at Atlantic City in September, made their report on the important questions brought up at the convention.

The Board gave its approval to a few projected amendments to the Health Act, and authorized its executive officers to present them to the Government.

It was decided to inaugurate in the Province an annual conference of sanitary officers, at which all municipal Boards of Health will be invited to take part. Such conferences, or sanitary schools, as they have been called, are held in a great many of the States of America, as well as in the Province of Ontario, and have given very satisfactory results. Nothing, indeed, is more practical than to have health officers of each municipality meet together and discuss before them the questions which each of them may have to settle at home. The first annual conference will be called at Three Rivers in June next.

It was decided to further increase the practical utility of the mortuary statistics collected by the Board, by publishing annually a new table indicating for each municipality the total number of deaths caused by diphtheria, scarlet fever, typhoid fever, measles, tuberculosis, smallpox and for children under two years of age by gastro-enteritis.

As purification of sewage becomes more and more necessary in the Province, the Board must see that the natural purity of water courses in the Province be maintained, and in consequence the following resolution was passed: "Whereas apart from the normal increase of sewerage systems in the Province, the extraordinary growth in population which is foreseen for Canada in the near future makes this protection of water courses an urgent question, particularly if the problem of securing water supplies is not to be made very hard to solve by municipalities; whereas up to this time methods of sewage purification do not seem to have been studied, *proprio motu*, by the engineers who have prepared sewerage plans submitted to the approval of the Board; whereas to answer the present needs of the Province it is very important that without further delay, sanitary engineers should be available as constructing engineers; therefore be it resolved, that the schools of engineering be asked to give their co-operation to the Board in this matter by requiring from their candidates to the engineering diploma a knowledge of all the methods of sewage purification."

As architects are the first to be consulted when any building is to be erected, the Board decided to address the following request to that profession: "Whereas ventilated public buildings are the exception in this Province, and particularly so educational buildings; and whereas, even recently-erected buildings show little or no improvement in this direction. The Board earnestly requests the profession of architects to help it to react against this deplorable state of things." This appeal shall be communicated to the Association of Architects of the Province of Quebec.

The annual report of Dr. Laberge, Medical Health Officer of Montreal, states that for the year 1906 the death rate of the city was 19.28 per 1,000 of the population, being 1.32 less than that of the previous year. Diarrhoea and cholera were responsible for the death of no fewer than 1,773 children, being 214 more than in 1905. Notwithstanding this, the mortality among infants under five years of age was somewhat less than in 1905, the proportion being 55.35 per cent. during the summer of 1906. The birth rate is 37.35 per 1,000, or 1.54 per thousand more than in 1905. The birth rate among French-Canadians was 47.66 per 1,000, among other Catholics 21.63 per thousand, and among Protestants 21.20 per 1,000. Among French-Canadians the proportion of marriages was 10.83 per 1,000, being 0.84 per 1,000 more than in 1905; among other Catholics 7.81 per 1,000, or 0.51 less than in 1905; and among Protestants 12.99 per 1,000, or 0.73 more than in 1905.

Owing to the publication of the statement that the city authorities intended to enforce the law which holds doctors or parents responsible for the registration of births, there has been a wonderful increase in the

weekly returns. Hitherto one hundred and twelve has been the average weekly number, but lately there have been weeks in which 275 births have been reported, a great many being of course delayed returns.

The infantile mortality has decreased greatly during the past few weeks and at present is decidedly less than the average.

The sixty-third annual meeting of the Montreal Maternity Hospital, held recently, was of a most encouraging nature. Miss Cameron, the honorary secretary, presented the annual report, in which she stated that the past year had seen a very considerable increase in the work of the hospital. The nursery had been found too small for present needs, and arrangements were being made to use one of the wards in connection with the nursery to prevent overcrowding. The increased cost of living was felt by the management. The current expenses were heavy, and although the revenue from patients was on the increase, many patients were free. She was glad to state that through the subscriptions of friends, Miss Orkney's bequest, and a generous gift of \$2,500 from Miss Moat, the hospital was this month free of all debt. The endowment fund was still inadequate, however, and the sum of \$2,000 was needed to complete the equipment of the operating room.

Miss Lewis, the lady superintendent, reported that a staff of thirteen nurses had been maintained through the year, and occasionally extra assistance had to be called in. Outside duty, and work in the homes of the poor, had increased, calls were answered at any hour. The training of nurses had been carried on as usual, 44 having graduated during the year.

The receipts for the year amounted to \$19,177, and the balance remaining was \$356.29. A sum of almost \$3,000, borrowed previously from the capital account, had not yet been paid back.

Dr. Cameron gave the medical report, with details of work accomplished. There were 600 patients in the hospital during the year, of whom 560 were discharged in good condition; 5 were removed to other hospitals; 9 died, and there were 26 left in the hospital. There were 511 births and 439 babies were taken from the hospital in healthy condition. Of the 34 that died, 17 were prematurely born or of low vitality. Of the adult admissions, 440 were married; 340 were Protestants, 172 Catholics, and 62 Hebrews. The private patients numbered 128; paying public patients, 343; non-paying, 103. The average stay in the hospital was about 21 days. In the outdoor department 104 patients had been seen at their own homes and 101 babies were born, of whom 98 were in good condition. Sixty-five patients were brought in by their own physicians and attended in the hospital.

Dr. Roddick, who presided, said that an endowment fund was urgently needed in order to put the hospital on a firm financial basis, and referred also to the needs of an operating room.

It was announced at the close of the meeting that the charity ball in aid of the hospital would be held as usual this winter.

At the quarterly meeting of the Montreal General Hospital the statement was made that the expenditure during the quarter had exceeded the revenue by \$13,038.

The medical superintendent, Dr. Patch, stated that during the quarter 850 patients had been treated to a conclusion as compared with 930 last year. There were 78 deaths, of which 38 occurred within three days of admission, giving the mortality for ordinary cases as 4.7 per cent. The aggregate number of hospital days was 16,281, an average detention per patient of 19.15 days; the average number of patients per day was 190. In the out-patient department there were 13,197 consultations as compared with 11,927 for the corresponding quarter last year. The ambulance answered 545 calls, compared with 440 last year. Although there is a decrease in the indoor patients, it is to be noted that the hospital has been occupied to its fullest capacity. An effort is to be made to increase the number of life governors.

OVARIAN PREGNANCY.

Dr. J. Clarence Webster, of Chicago, presented a specimen, and said that the society now had records of two cases of ovarian pregnancy. The first case was reported by Dr. Thompson, of Portland, Me., the specimen having been presented five years ago. Three years ago the speaker presented a second specimen. He was now able to present another specimen, which was almost identical with the one he showed three years ago, it having been given to him by Dr. Gunderson, of Wisconsin. Microscopic examination revealed conditions practically identical with those described in his former paper, and therefore he would simply pass the specimen around. One could see the amniotic cavity with the embryo in position. The thickness of the ovarian tissue averaged perhaps half an inch, except the placental area, where it was thicker. There were several hæmorrhages into the ovarian tissue, especially in the position of the placenta. The chorionic tissue extended around the amniotic cavity, and within this was the capsule of the ovary proper. Dr. Gunderson diagnosed the case before operation as one of ovarian pregnancy, and this was the first instance on record in which that had been done.—*Surgery, Gynæcology and Obstetrics*, Aug., 1907.

CURRENT MEDICAL LITERATURE

MEDICINE.

Under the charge of A. J. MACKENZIE, B.A., M.B., Toronto.

THE DIFFERENTIATION OF CHOREA MINOR AND TIC.

CHOREA MINOR.

1. General nutrition suffers early in chorea—the patient growing pale and anemic, and he shows early loss of weight.
2. Expression, when face is quiet, is vacant, sullen and often stupid.
3. Disposition is, as a rule, morose and depressed, but it is often characterized by great irritability.
4. Attention not necessarily but usually is somewhat diminished in chorea.
5. A heart murmur is rarely absent throughout the course of the disease, and, unless previously present, is due to the choreic process.
6. The respiratory function is often disturbed in chorea, the respiration becoming so unequal and irregular that a normal respiratory excursion rarely occurs and the expiratory phase is often *explosive*.
7. If the muscles of articulation are involved in chorea, speech is often indistinct, difficult, and momentarily impossible. Coprolalia and echolalia are never present in chorea.
8. Choreic movements are never confined to one part of the body throughout the course of the disease, though they usually *begin* in arm, face, or leg, and then rapidly extend to other parts; they may be one-sided in the beginning, but they usually become general.

TIC.

1. Tic has no effect on general nutrition and this is usually good. Weight is not affected.
2. Expression is, as a rule, quick and vivacious.
3. Disposition is usually lively and is frequently childlike in tic.
4. Attention is constantly diminished in tic.
5. A heart murmur, unless previously present, is never found in tic, and it is never due to the tic process.
6. The respiratory function rarely shows disturbance in tic, and never similar to that in chorea.
7. The muscles of articulation are never similarly involved in tic, and coprolalia and echolalia are often present.
8. Tic movements are usually confined to a single part of the body and they rarely become general.

9. Choreic movements are never confined to syneriology associated muscle groups; they are indefinite, vary in intensity, and frequently occur in individual muscles.

10. Voluntary movements with the affected parts show a constant though variable degree of incoordination.

11. Choreic movements are involuntary and these movements show more or less incoordination.

12. Choreic movements are not lessened, but are usually made worse by any voluntary effort to control them.

13. A choreic involuntary and incoordinate movement is a *purposeless* movement and was never *imitative*.

14. Any voluntary movement exaggerates the choreic movements.

15. Choreic movements are increased in emotional states.

16. Choreic movements are always exaggerated when the patient is in the presence of others and less when he is alone.

17. Marked associated movements are always present in chorea.

18. Choreic movements are always unpleasant to the patient and are never accompanied by feelings of satisfaction.

19. In chorea minor frequently apparent but rarely actual weakness in certain muscle groups occur.

9. Tic movements are invariably confined to synergicly associated muscle groups; they are definite and occur repeatedly with varying intensity in the same muscle groups, but never in individual muscles.

10. Voluntary movements in tic are never incoordinated.

11. Tic movements, as a rule, are not consciously, but subconsciously voluntary, and they are never incoordinated.

12. Tic movements are lessened and may be entirely controlled for a variable period of time by voluntary effort—the oftener the effort, the greater the control.

13. A tic movement in the beginning was either a *purposeful* or an *imitative* movement.

14. Any voluntary movement usually lessens the tic movements.

15. Tic movements are usually lessened in emotional states.

16. Tic movements are usually lessened when the patient is in the presence of others and aggravated when he is alone.

17. Marked associated movements are never present in tic.

18. When an inhibited tic movement gives way to the desire to tic, the ensuing tic movement is accompanied by feelings of satisfaction and pleasure to the patient.

19. Neither apparent nor actual muscle weakness is ever due to tic.

20. Choreic movements cannot be imitated.

21. Chorea minor, with or without treatment, tends to complete recovery within from two to six months.

22. Chorea minor is a disease.

232 Vanol Building.

20. Tic movements may be readily imitated.

21. Tic, unrecognized and unaided, never tends to recovery, but naturally to perpetuate itself, and it may last a lifetime.

22. Tic is a habit.

PHYSIOLOGICAL ACTION OF TEA AS A BEVERAGE.

Lauder Brunton believes that tea, when properly prepared and taken in moderation, is both useful and agreeable. The avoidance of danger from impure water is not the only advantage to be gained by drinking vegetable infusions. Tea is a stimulant, and the use of stimulants is almost universal. The effect of tea, coffee, or cocoa seems to be threefold—on the circulation, on the spinal cord, and on the brain. When these substances reach the circulation, the flow of blood through the brain is increased, the brain cells are supplied with extra nutriment, and thought is quickened. It is probable that the brain cells themselves are affected by tea or coffee, so that communication between them becomes more rapid, more complete, and more permanent, than under ordinary circumstances. But it must not be forgotten that these substances tend to keep up mental action when it is not needed. Thus sleep, which restores the tired brain, is prevented. These beverages lessen the sense of fatigue and give a sense of well-being and of power, and actually add to the power of endurance. Tea is liable to abuse, and may then bring about most disastrous results. Tea may interfere with nutrition by lessening the feeling of hunger, by rendering food less digestible, and by interfering with the digestive power of the stomach. The different kinds of tea vary in the amount of tannin which they contain. The leaves should never be boiled or stewed. Boiling water should be poured on the leaves, and after standing for a few minutes should again be poured off. Taken with meat, it toughens the fiber. Hard water and water containing iron do not make good tea. A pinch of bicarbonate of soda, when hard water is used, improves the infusion. Tea, when taken in excess, may produce the most serious symptoms and facilitate, if it does not actually produce, mental degeneration. *The Practitioner.*

TREATMENT OF MENTAL DEFECTIVES.

In the *Medical Record*, Nov. 2nd, Block discusses the medical treatment of those generally known as defectives, those who manifest some

moral imbecility or some mental deviation from the normal. A large proportion of these are the victims of some physical default which is remediable, as eye or throat troubles; a number are the victims of malnutrition or of scrofulous or syphilitic conditions which the appropriate treatment will benefit; there are those who suffer from gross lesions of the brain; aside from all these there are a class in whom no such reason can be found for a mental or moral obliquity.

Believing that these are cases of faulty development in the physical media of the mind, and reasoning from the conditions found in scorbutus, the writer determined to try the effect of anti-scorbutic treatment on these cases, and had in a number of cases a singular success, as a grain of citric acid and a drop of nitric acid C.P., in a glass of water three times a day. He quotes a number of instances, and says:

“To conclude, out of thirty cases under my observation, in which I have thus far used this method of treatment, twelve are morally defective; eight are Children’s Court cases from the Brooklyn Probation Association; eleven suffer various kinds of mental enfeeblement, four being very high-grade imbeciles. The other seven really are only backward or weak minded; two are choreic and three epileptic. So far eleven show decided improvement. In four there is some change for the better, while in six the children are decidedly worse. In the other cases I have not tried the treatment long enough to warrant any conclusion.”

GYNÆCOLOGY.

under the charge of S. M. HAY, M.D., C.M., Gynæcologist to the Toronto Western Hospital, and Consulting Surgeon Toronto Orthopedic Hospital.

RADICAL CURE OF UMBILICAL HERNIA.

W. J. Mayo, Rochester, Minn., in *Journal of the American Medical Association*, June 1, 1907, says that by his overlapping-from-above-down method of operation for the relief of umbilical hernia, the largest protrusions can be satisfactorily reduced and the hernial opening closed without tension. The tendinous aponeurotic structures involved are among the strongest in the body, and when overlapping is accomplished the resistance is nearly perfect. The sutures merely maintain the structures in apposition, while the intra-abdominal tension itself prevents displacements. The operation is simple. Two transverse elliptical incisions are made cleanly exposing the neck of the sac and the aponeurotic structures for several inches above and below it. The neck of the hernial protrusion is cleared as high as the aponeurotic structures extend, the sac is then

opened, and any contained intestine returned into the abdomen. The contained omentum, if any, is ligated in sections on a level with the abdominal orifice and the stumps returned into the abdomen. The sac, with all adherent omentum, including the skin, is cut away without further manipulation. A stout curved needle threaded with strong celluloiden linen is passed from without in through the aponeurotic structures and peritoneum from two to three inches above the margin of the opening. A large table-spoon to guard the needle as it enters the peritoneal cavity is a valuable aid. The needle and thread are drawn down and out of the hernial opening. A firm mattress stitch is then caught in the upper edge of the lower flap about one-fourth of an inch from the margin, the needle is then carried back through the hernial opening into the peritoneal cavity and made to emerge one-third of an inch lateral to the point of original entrance. On each side of this is introduced a similar mattress suture of strong chromicized catgut. These three sutures are drawn tight, pulling the entire thickness of the aponeurotic and peritoneal structures behind the upper flap. The margin of the upper flap is now retracted to expose the suture line, and what gaps exist are closed with catgut sutures. The upper flap is now sutured to the surface of the aponeurosis below by continuous chromicized catgut suture and the skin and superficial fat closed. The patients are kept in bed for from twelve to twenty days. It is thirteen years since this operation was first performed, and of the 88 patients operated on between 1894 and 1895, 75 were traced. One had a partial relapse described by her physician as a boa-shaped stretching at the site of the former operation, but giving no inconvenience. Another patient, supposed to have suffered a relapse, was operated on and a second opening found to exist above and lateral to the umbilical opening, which was found closed.—*American Journal of Surgery*, Aug., 1907.

THE METHOD OF CLOSING THE WOUND.

Dr. Leroy Broun, of New York, said it was of the greatest importance that we should use some means to approximate the fascial edges, so that they could be retained in apposition for at least two weeks. It was the experience of all that at one time or another, with wounds that healed primarily at the end of the first week, in the ninth or twelfth week, under a sudden jar, the result of coughing or sneezing possibly, the abdominal wound was opened. This had occurred once in his practice, and on instituting inquiries and looking up the literature, he found that this accident had occurred with almost every surgeon, namely, that after the surgeon regarded the wound as having primarily healed and in excellent condition, under some sudden jar, resulting from sneezing or coughing, the

wound might open in part or entirely. He thought the cause of this was some blood condition influencing the reparative changes, the exact nature of which was not known. His custom in closing the wound was to bring together the fascial edges with chromicized catgut. He did not depend on this, however, but introduced, at the same time, some safety sutures of silkworm-gut at say an inch and a half apart, and to see that they were kept in for at least two weeks. This would guard against the possibility of the accident he had referred to.—*Surgery, Gynæcology and Obs.*, Aug., 1907.

OVARIAN INFLUENCE UPON THE UTERUS.

F. H. A. Marshall and W. A. Jolly (*Edin. Med. Jour.*, March, 1907) believe that the existence of ovarian tissue is essential to normal uterine nutrition, and further that the nature of the ovarian influence is chemical rather than nervous. It is extremely probable that the uterus is dependent for its proper nutrition upon substances secreted by the ovaries, not merely at the heat periods and during pregnancy, when they show their greatest activity, but throughout the whole of the estrous cycle.—*Am. Jour. Obs. and Diseases of Women and Children*, Sept., 1907.

THERAPEUTIC USES OF APOMORPHINE.

In the *Medical Record*, Sept. 28th, Fisk discusses the uses of apomorphine, which should be used in the form of the crystalline hydrochloride. Hypodermically it is an emetic by direct action on the centre, the average adult dose being 1-10 grain, or in smaller doses it is an anti-spasmodic. When given to children or to debilitated subjects, its depressant effect must be borne in mind. By the mouth its centric effects are uncertain and it is useless as an emetic on this account, but it serves a valuable purpose as an expectorant, in an adult average dose of 1-8 grain in syrup of wild cherry or lactarium.

THE SENSIBILITY OF THE HUMAN PERITONEUM.

The *Medical Record*, Oct. 5th, has an article by Beer of New York, in which he takes exception to the report of Meltzer and Kast to the Academy of Medicine of New York, in which they suggested that there was sensibility of the visceral peritoneum, applying the results of experimentation on animals to the case of the human. While admitting that there is room for error in cases treated by local cocaine or infiltration

anæsthesia, evidence can be adduced from cases in which no anæsthetic has been used. He has examined nine large reducible hernia, of long duration, in which the contents could be easily removed or replaced by others, and in all cases there has been a complete absence of sensation of pain or pressure. But by introducing the finger into the ring and making pressure on the parietal peritoneum pain is felt, showing that this is an adequate stimulus. Since this time there are reported two cases operated on under saline anæsthesia, in which the peritoneum was found insensitive.

OBSTETRICS AND DISEASES OF CHILDREN.

Under the charge of D. J. EVANS, M.D., C.M., Lecturer on Obstetrics, Medical Faculty,
McGill University, Montreal.

THE USE IN PRACTICE OF THE THEORETICAL RESOURCES PROVIDED BY PERCENTAGE FEEDING.

Charles Hunter Dunn (*Arch. of Ped.*, Oct., 1907,) makes a strong plea for the use of whey in infant food mixtures. The two difficulties encountered in the artificial feeding of infants with cow's milk are, first, the inherent unsuitability of cow's milk to the digestion of the young infant, and, second, the variable digestive power of different infants. Both these factors must receive attention if success is to be obtained. Only too often the cow's milk is blamed when failure is met with, instead of the child's digestive power.

The author makes a plea for the so-called split proteid as being based solely and entirely on the imitation of nature. The fact that in human milk two-thirds of the proteids are soluble and consist chiefly of lactalbumin, while in cow's milk, on the other hand, but one-fifth is the soluble whey proteid, and four-fifths are caseinogen. The use of whey in our modifications lets us rearrange the relative percentages of these two proteids so as to form a close imitation of human milk. By this means the coagulable proteid is reduced to any desirable limit, yet the total proteid in the food mixture may be maintained at the considerable level by the use of the soluble albumin whey.

The objection that the method of preparation is too cumbersome for home modification is certainly not well taken. Any fairly intelligent mother or nurse can easily learn how to make the whey, and its substitution for boiled water either altogether or in part does not impose much additional burden.

The author suggests that in a difficult case a low formula should be used at the start such as fat 2.00, sugar 5.00, whey proteid .25, caseinogen .25. Then as the symptoms improve, without gain in weight, the soluble proteid enables us to increase the caloric value of the food without

increasing the fat or the caseinogen, which ingredients are the most likely to account for the untoward symptoms. The proportion of whey proteid is gradually increased to its maximum, and then the fat and the caseinogen can be alternately increased by small successive steps, until the limit of tolerance of each is definitely determined.

In Boston, where this system has been used for some time, all agree as to its immense value. Striking results have been obtained in a large number of cases.

The author argues against the use of starch diluents in the early months of infancy. The use of such cereal diluents has been advocated for the purpose of breaking up the curd in the food mixture. The answer to this is, "why give so much curd?" The use of whey mixtures enables us to imitate nature and to meet the child's full proteid requirements without giving it large quantities of caseinogen.

The use of alkalies, and the study of the chemistry of digestion with the object of making easier the digestion of cow's milk, is, in the author's opinion, a highly artificial method of overcoming the difficulty, and is in great part unnecessary, in view to our ability to use nature's method of dealing with this question.

The same considerations apply to peptonization.

LARYNGOLOGY AND RHINOLOGY.

Under the charge of PERRY G. GOLDSMITH, M.D., O.M., Toronto, Fellow of the British Society of Laryngology, Otology and Rhinology.

RELATIONS BETWEEN TONSILLITIS AND ACUTE ARTICULAR RHEUMATISM.

Gürich (*Münchener. Med. Wochenschr.*) noted evidence of tonsillitis in thirteen out of seventeen cases of acute rheumatism. This special form of tonsillitis was always a chronic desquamating inflammation, with the yellowish-white foul "tonsil plugs" which form in the tonsil follicles. He thinks acute rheumatism may be prevented in such cases by excising and cauterizing the follicles and eventually excising part of the whole tonsil. He thinks that the virus of acute rheumatism first causes an acute tonsillitis, then later, along with other agents, a chronic tonsillitis which harbors the rheumatic virus and enables it to enter the body during an exacerbation of the chronic tonsillar disease.

This department of THE CANADA LANCET has on many occasions drawn attention to tonsillar affections and their treatment. One could hardly quote an article which bears out what has been said regarding a more thorough removal of tonsils, than the above. There is no doubt

whatever that many infections not infrequently gain entrance to the system through diseased tonsillar tissue, with or without hypertrophy. Among such one might associate the following diseases: Rheumatoid arthritis, rheumatism tubercle, quinsy, exanthemata, and various types of auto-intoxication noted in many cases of large soft tonsils, the centres of which may be a cesspool. It is not easy to completely remove those tonsils which, while projecting but little beyond the faucial pillars, are bound very thoroughly to the pillars themselves and are so often partially covered over by the plica semilunaris. If the tonsil is pulled toward the middle line the pillars move with it so it is necessary to dissect the tonsil free, and when this is done the gland is easily pulled out free from the faucial pillars. The gland is not as firmly bound down at the base as one is likely to think, but is easily separated from its basal attachment and severed with the *capsule intact*. If one has removed the gland completely a probe passed into the crypts does not go clear through, but is arrested at the intact capsule. True, every tonsil that projects beyond the faucial pillar does not require removal, but in cases wherein it may be a factor in systemic disease or subject to periodical attacks of inflammation it should be removed and, Ballanger very aptly puts it, if operation is indicated complete removal alone is good surgery. On the other hand, more conservative writers, among which are Semon and Killian, incline to the view that tonsillar tissue may serve a purpose the nature of which we do not know, and are therefore not so free to advise complete enucleation.

SARCOMA OF THE NOSE.

Walker Downie (*Glasgow Medical Journal*, Aug., '07), discusses the clinical history of several cases of intra-nasal sarcoma. His experience is that there is not the same rapid and serious systemic deterioration in the case of sarcoma of the nose—in fact, in several of his cases the patient was in apparently robust health, despite the fact that the sarcoma in the nasal cavity had been present and steadily advancing for many months.

Treatment. The successful treatment of these cases depends on two things: (1) The early recognition of the condition; (2) Radical removal of the new growth where that is possible.

He says nothing of the treatment of those cases originating in the antrum, body of the superior maxilla, or in the sphenoid, as the invasion of the nose is of secondary importance in such cases.

Where the new growth, however, is wholly intranasal, having its origin in the lateral masses of the ethmoid, middle turbinal or naso-antral wall, it should be removed through the nares by punch forceps, curettes,

etc., followed by the free use of the electric cautery. The repetition of such operative procedures may be necessary time and again until the affected structures are extirpated. These procedures are only possible, perhaps, in the minority of the cases met with, chiefly because the gravity of the condition has not been recognized in its early and curative stage. When the disease is recognized early and is treated in this fashion the prognosis is more favorable.

Where the septum is involved, and where the area from which the new growth springs is widespread, its eradication may be made more easy and more satisfactory by having recourse to Rouge's operation, the method Downie employed with very satisfactory results, in the case of a child 13 years of age.

BLINDNESS FOLLOWING INJECTION OF PARAFFIN FOR NASAL DEFORMITY.

Various accidents following the injection of paraffin have been recorded. Among the most serious of these must be regarded two cases of blindness caused in this way, referred to in *Arch. f. klin. Chir.*, Berlin, Bd. lxxiv. S. 922, and to these Mintz (*Centralbl. f. Chir.*, Leipzig, 1905, No. 2), adds a third. His patient was a woman, æt. 25, suffering from nasal deformity due to syphilis. In September, 1903, 1 grm. of paraffin was injected with benefit to her appearance, but a year later she returned for further treatment. On the second occasion Mintz injected about one-third of a gramme of paraffin, melting at 43° C., from two punctures, right and left, on the nose. In a few minutes the patient complained of pain in the left eye, and this was quickly followed by complete loss of vision in that eye. On the following day œdema of the eyelids, exophthalmus, chemosis, and corneal opacity appeared, and some skin over the injected paraffin sloughed. The ultimate result was complete and permanent blindness in the left eye. Mintz infers that the injection caused thrombosis in the external nasal veins which spread by continuity to the ophthalmic veins and the cavernous sinus, the direct cause of the blindness being the accompanying thrombosis of the central vein of the retina. He was unable to attribute the accident to any fault in the technique of the injection, and holds that the possibility of such accidents must always be taken into account and represented to patients who wish paraffin injected for cosmetic purposes.

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EDITORIAL.

MEDICAL COLLEGES IN CANADA.

The *Montreal Medical Journal* has of late been saying some pretty plain things about some of the medical colleges of this country. It had some rather hard comments to pass upon the medical college in Halifax. Now we have always thought that this college was doing good work, and we are still of this opinion. The students receive very good didactic teaching, and the clinical facilities are all that could be desired. Socrates taught a class of one and that class was Plato. The usefulness of a medical college is not to be measured by its buildings, the number of its teachers, the size of the classes, but by the quality of the teaching, both theoretical and practical. Some of the great medical schools are not found in the largest cities.

Coming to Queen's Medical College, in Kingston, in the November issue we read: "Queen's Medical School must find another reason for existence than that which lies in theological protest. We agree unreservedly that the student 'must study at the bedside of the sick' and that opportunity must be difficult of access in a city of 17,000 inhabitants." A glance at the Government returns of the hospitals in Ontario shows that in the Kingston General and the Hotel Dieu there was a daily average of 140 patients last year. This is ample for clinical purposes, so that it matters little whether Kingston contains 17,000 or 34,000, provided there is enough clinical material for bedside teaching. But records speak well for the work done in Kingston. The students from this college acquit themselves well when placed side by side with those from other colleges. It is quite wrong even to suggest that "Queen's Medical School must find another reason for existence than that which lies in theological protest." Queen's Medical College is a medical college pure and simple, and exacts no other test than that of a thorough knowledge of the subjects in the medical curriculum.

Also in the same issue of our contemporary we are told it would be folly for McMaster University to establish a medical college in opposition to the one now in existence. "If McMaster University can equip and train better physicians than the strong, well-equipped University of To-

ronto, there is reasonableness in their idea. We know they cannot, because the University of Toronto has a strong hold on the clinical facilities of 'the city.' This is, again, an expression of opinion from one who may not be familiar with all the facts. It is true that the University of Toronto has a strong and capable staff of teachers, and has much clinical material at its control, and gives a thorough course, both theoretical and practical. But, while all this is true, it would be possible to arrange for a second teaching staff of able physicians and surgeons, and competent incumbents of the scientific subjects. As for clinical material, there are three available hospitals in Toronto with a total bed accommodation of at least 325, and under the control of thoroughly trained physicians, surgeons, specialists, and clinicians. McMaster University has now over 200 students in the general Arts course.

The medical colleges in London and Winnipeg have been doing good work for many years. While we have nothing but words of praise for the splendid work that is done in the medical departments of the Universities of Toronto, McGill and Laval, we cannot stand by and see any asperse criticism offered upon the teaching in Halifax, Kingston, or other Universities, without raising a voice of protest.

SOME ADVANCES IN MODERN MEDICINE.

In an address by Sir R. D. Powell (*Lancet*, Nov. 9, 1907), much attention is paid to the rapid growth of some phases of medical knowledge during the past thirty years. One of these advances is the knowledge we now possess of the bacterial diseases, such as inflammations, suppuration, sepsis, and infections. He referred to the great work of Pasteur and Lister in their study of bacteriology in its application to medicine and surgery. In 1876, not one disease was known to have a bacterial origin. Now almost every acute specific disease has its definite bacterial cause. This has laid the foundation for many advances both in treatment and prevention.

In the case of consumption we now recognize the tubercle bacillus as the real cause, but this is often preceded by a catarrhal condition the result of unsanitary conditions. By the proper application of healthful methods of living, the ravages of this disease can be greatly reduced. Avoid dust, dirt, and foul air with their accompanying quota of streptococci, staphylococci, and pneumococci, and the respiratory organs will be in a better condition to resist the invasion of the tubercle bacilli. But this advance has only become possible since these organisms were discovered.

The nature of another group of diseases has been revealed also within comparatively recent years, namely, the protozoal. Of this group may

be mentioned malaria, Texas fever, sleeping disease, kala-azar, syphilis. These diseases are almost as important as those of bacterial origin from the vegetable kingdom.

Sir Douglas Powell referred to a case of chronic Bright's disease that had derived benefit from the operation of decapsulation, and pointed out that it was a bold conception of Edebohl's in 1898 to attempt such an operation.

Attention is directed to the fact that medicine has become very surgical. The perfection of technique and the value a sepsis has made operations possible that could not have been entertained thirty years ago. In the words of Lennander, "surgical procedure and antiseptics have at the present time attained to such a stage of safety that in many cases the narcosis may be regarded as relatively the most dangerous factor in an operation."

The lecturer also referred to the marked advances that had taken place in our knowledge of abdominal diseases and conditions; and the importance in heart affections of the bundle of His and its influence on cardiac rhythm.

Another address in the same issue of the *Lancet* is by Dr. J. Kingston Fowler. He recalls that when he graduated he was house surgeon to Sir William Ferguson, whose dexterity as an operator had made him famous, but the ravages of pyæmia and septicæmia were terrible. At that time a successful ovariectomy was a wonder.

The lecturer mentions that in those days the operator wore an old dirty coat at his operations and often had his ligatures in his button-hole ready for use. But if surgery has made great strides since 1877, so has medicine.

The lecturer sketched the growth of knowledge of infectious diseases, of immunity and serum treatment. In the management of tuberculosis the two factors were fresh air and good food. This was a marked change from the old plan of coddling these cases. Following this comes graduated exercises as against a life indoors over a fire or in a stuffy room.

In 1876 typhus fever from time to time visited every European country. But now it is almost banished. Is it not possible that the next thirty years will see a similar change in the matter of tuberculosis?

The discovery of the spirochæta pallida of syphilis by Schaudinn, the introduction of diphtheria antitoxine, and the Pasteur treatment of rabies, were epoch-making discoveries. In the matter of typhoid fever much was yet to be done both in prevention and treatment. The vaccine of Sir A. E. Wright was not yet perfected. It was a decided advance when it was shown that diarrhoeal diseases and dysentery are of bacterial nature. In the case of Malta fever, Col. David Bruce has shown that the

chief source of the disease is the milk of the goat. In the case of cerebro-spinal meningitis the organism had been discovered, and its principal method of entering the body detected. This was of value from the preventive standpoint. It should also be noted that Councilman and his associates had discovered the organism of smallpox in the cytorictes. It is present in vaccinia, but in a less developed form than in smallpox.

It should be mentioned that pneumonia has for some time been definitely classed among the acute infectious diseases. Then much advance has been made in the tropical infectious diseases and how they are spread, as malaria and yellow fever by the mosquito, the plague by rats and fleas, and the sleeping disease by the glossina palpalis fly. The lecturer thought that the diplococcus rheumaticus will prove the true organism of acute rheumatism. Myxœdema, and the cretinoid conditions, the diseases of the pancreas, and our knowledge of blood states are all practically of quite recent date. Our knowledge on these subjects thirty years ago had almost no existence.

CARE OF THE HEALTH OF SCHOOL CHILDREN.

The question of the medical inspection of the children attending our public schools has been raised on a number of occasions within recent years. In Britain a few months ago a congress was held on the subject of school hygiene; and in Germany there was a very important conference on the same subject. This all goes to show that the public and professional mind is being aroused to the necessity of caring for the health of the boys and girls in school.

We have discussed this topic frequently, and gladly return to it once more, hoping that by constantly agitating the matter some definite steps may be taken.

It goes without contradiction that all over Canada there are very many schools of extremely defective construction, with poor ventilation, lighting and heating. There is no need for this. Material is plentiful in this country and a good building does not cost much more than a poor one. Every care should be taken that each child would have an easy seat to sit on, a sufficient amount of fresh air to breathe, and the proper temperature to work in. These are fundamental necessities, and can be secured without adding to the cost of our school houses.

A medical inspector of public schools has been appointed in some countries which are not regarded as being as far advanced in methods looking towards the betterment of the masses as is the case in Canada. In New York city a system has been adopted of employing trained nurses, who are well qualified to detect the usual diseases and take the first steps

necessary by way of excluding the child from school and reporting the case. Homes are frequently visited with the object of introducing proper home care and sanitation. The effects of such inspection in New York and Boston has been of the utmost value.

This is a question that all the Provincial Legislatures might well take up. The cost to a Province of a few properly qualified medical inspectors would be almost nil as compared with the good results that would accrue to such Province in the prevention of disease and suffering, and in the early attention to morbid conditions in many of the school children. In some of the large cities in Britain such an inspection has proven that it was not called into operation a moment too soon.

The value of preventive medicine to a State is admitted on all hands. The death rate from the infectious diseases has been markedly reduced, and measures are taken to safeguard the lives of those employed in our various industries. Why should there not be taken wise precautions to preserve the health of the great army of young persons who are daily engaged in our schools, learning to be useful and competent citizens? From this point of view our schools are the most important industry in the country. They are manufacturing the citizen out of the raw material.

In the city of New York last year there were 65 nurses employed. These made 71,000 visits to schools and homes, and administered to children 300,000 treatments for various ailments, mostly of an infectious character. In Montreal a year ago some medical men were appointed to visit the schools. It is well known to most of our readers, from what we have said on former occasions, that a most deplorable state of affairs was found to exist.

Our contention is that Ontario should set the lead in this matter.

INAUGURAL MEETING OF THE TORONTO ACADEMY OF MEDICINE.

Already the Academy of Medicine in Toronto bids fair to being a great success. The Toronto Medical Society, the Clinical Society, the Pathological Society, and the Library Association have joined forces and formed the Academy of Medicine.

The inaugural meeting a few weeks ago was well attended. It might be looked upon as a sort of red letter event. The president, Dr. J. F. W. Ross, delivered his presidential address. We give it to our readers in another portion this issue, and would ask for it a careful perusal, as much that he says is applicable to every part of the country.

There were two other very agreeable features of the evening. The local members of the British Medical Association presented Dr. R. A.

Reeve with his portrait. The presentation was made by Mr. I. H. Cameron, who was chairman of the local committee of the British Medical Association, which met in Toronto a little over a year ago, on which occasion Dean Reeve was the President of the Association. The presentation was made in very felicitous language. Dr. Reeve, in a very neat speech, accepted the portrait and then handed it over to the Academy of Medicine.

The other event was the presentation of an oil portrait of Dr. R. B. Nevitt by the former members of the faculty and students of the Women's Medical College. Dr. Nevitt had acted as dean and professor of surgery in the Women's College for many years. Dr. J. T. Duncan made the presentation and read the address which accompanied the portrait. Dr. Nevitt replied and also handed the portrait over to the Academy of Medicine.

We understand that a portrait of Dr. W. B. Geikie, former Dean of Trinity Medical College, will be presented at a meeting of the Academy in the near future.

It will thus be seen that the Academy is doing good work. The meetings of the Academy and its sections this year have been well attended. The library is growing steadily. The improved income, due to all the societies being united and a higher fee being charged, is having a good effect. It is more than likely that the Academy will be able to publish each year a volume of its transactions. This we would strongly recommend, as it would give the work of the Academy a permanency which it could not secure in any other way, and do much for Canadian medical literature. These transactions could be used to exchange with the transactions of other similar societies. In this way the publication of the transactions could be made a good investment.

While this is true, we think that the papers as they are read should be at the disposal of the various medical journals. This would give the work of the Academy a publicity in the country, while the annual volume would give it permanency.

We take the liberty of again remarking that all the medical societies of the country, and the staffs of the hospitals, should arrange for a co-operative effort to further the ends of scientific medicine and the formation of local libraries.

ALCOHOL IN RELATION TO MEDICINE.

Few subjects in medicine have been the object of more study, experiment and discussion than that of alcohol. The extremes of opinion held on the question are that it is invariably injurious as a beverage and very

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rarely useful as a medicine; or that it may be taken in moderation by almost everyone as a beverage, and that as a medicine it is very valuable and may be employed in the treatment of many affections.

In the *Scottish Medical and Surgical Journal* for December, 1907, David W. Findlay, professor of medicine in the University of Aberdeen, contributes a lecture upon this subject. Professor Findlay reviews that famous manifesto which appeared in some of the British journals some time ago. With such statements in that manifesto as "in prescribing alcohol, the requirements of the individual must be the governing rule," "in disease, alcohol is a rapid and trustworthy restorative," and "life preserving, owing to its power to sustain cardiac and nervous energy," he finds himself in accord. With the statement, however, that "as an article of diet the universal belief of civilized mankind that the moderate use of alcoholic beverages is for adults usually beneficial is amply justified," he does not agree. He does not think that healthy people are benefited by the use of alcohol, and there is the risk of forming the drinking habit.

Professor Findlay refers to the days of Todd, of King's College, who was such a bold advocate of the heroic employment of alcohol, up to 30 ounces daily in typhoid fever and pneumonia. This was in 1857. This position was met and ably controverted by the late Sir William Gairdner, in his book, "The Physician as Naturalist," which appeared in 1860. Dr. Todd said: "I wish to caution you against the morbid fear of over-stimulation, which leads many to adopt an opposite or a vacillating course, and to allow their patients to die from exhaustion." To these teachings, Gairdner was strongly opposed and taught most cases could be treated without "one drop of wine or spirits being given from beginning to end of the fever, except in the rarest casualties." And, again, he was "strongly persuaded that to the young, in typhus, and very probably in most other fevers, stimulants are not less than actively poisonous and destructive, unless administered with the most extreme caution and in the most special and critical circumstances."

Professor Findlay thinks that at the present day "we have not gone far enough in the non-alcoholic road in treating disease." He expresses himself strongly that stimulants are still used far too freely and in cases where they are not required. He sums up his views thus:

1. Regard alcohol as a drug, a very valuable and dangerous one, and put it in the same category as morphine, strychnine, atropine, and the like. If you look upon it as a drug you will probably not go very far wrong.

2. Prescribe it with a due sense of responsibility, and not after a routine method, having regard to each case on its own merits, and con-

sidering such points as the state of the pulse especially, the age, previous health and habits, and the severity and period of the attack.

3. Young patients of good constitution are better without it, except in presence of heart failure or crisis of some kind.

4. Use the smallest doses possible, and give strict injunctions as to time and mode of administration. Watch its effects carefully, and omit it when the critical condition has passed.

5. Be especially sparing in chronic diseases, where in most cases it does not the slightest good, but only leads to waste.

MOSQUITOES AND LEPROSY.

Dr. E. S. Goodhue, of Holualoa, Hawaii, is doing excellent work in establishing the connection between some diseases and insects. One of his recent contributions on this subject is to the effect that leprosy is communicated through the bite of the mosquito. After careful research the bacillus lepræ (Hansen) has been found in the bodies of the mosquito, *Culex pungeus*, and the bedbug, *Cimex lectularius*. It has long been a belief in Japan that leprosy is spread by the mosquito. From the investigations of Dr. Goodhue there comes definite corroboration of this. We offer our congratulations to the author of this important discovery.

PERSONAL AND NEWS ITEMS.

ONTARIO.

Dr. G. H. Bowles has removed from Woodhill to Toronto.

Dr. Kennedy has been appointed surgeon to the C.P.R. at Wingham.

Dr. Niddrie, of Creemore, had a narrow escape in a runaway accident a short time ago, and was rather severely shaken up.

Queen's University, Kingston, has instituted original research work in the opsonic theory.

Dr. F. J. Ball, of Rugby, has decided to locate in Regina, Sask., for the present, and has already gone out West.

Dr. Galbraith, who has been in Dundalk for a couple of years, has gone into business in Western Ontario.

Dr. A. K. Gifford, formerly of Wingham, has entered upon his duties as resident surgeon of the London Asylum.

Dr. P. D. McLean, of Woodbridge, is the Liberal candidate in Centre York for the Federal House.

Dr. A. S. Bingham, formerly of Cannington, has located on Dovercourt road, Toronto.

Dr. H. J. Hamilton has removed from Church street to his new residence at 220 Bloor street east, Toronto.

Dr. W. J. Robinson, of Guelph, has been mentioned for the position of superintendent of the Asylum in London or at Penetanguishene.

Dr. Robert Barnes, of London, Ont., has been appointed by the Dominion Government inspector under the Meat Inspection Act.

Dr. P. J. Gibson is a candidate in the District of West Algoma for the House of Commons.

Dr. A. L. Webb, of Wooler, has sold his practice to Dr. S. Anderson.

London, Ont., has donated \$20,000 for a hospital for consumptives at that place.

Dr. E. G. Hodgson has located in Toronto, after his post-graduate studies abroad.

Dr. A. S. Garrett, of Carleton Place, has gone to Regina, where he has located.

The annual banquet of the Medical School, London was held on 19th December, 1907, and was well attended and highly successful.

Dr. Cawthorpe, of Tiverton, has purchased the practice of Dr. Kilbourne, of Parkhill, to which place he has removed. The latter has located on Dovercourt road, Toronto.

Dr. R. B. Forbes, F.R.C.S., of Stratford, Ont., has been appointed house surgeon on the West London Hospital (Eng.). He is a graduate of McGill.

Dr. W. T. Connell, who has been appointed Government pathologist, has resigned the secretaryship of Queen's Medical Faculty, and has been succeeded by Dr. Etherington.

Dr. John L. Bray, Registrar of the College of Physicians and Surgeons, has been presented with a handsome pair of curling stones by his friends of the Curling Club, Chatham.

Dr. A. B. Wright has removed from Gerrard street to Church street, Toronto, having purchased the residence recently occupied by Dr. Hamilton.

It is announced that Dr. McCallum of the London Asylum has declined the offer of the superintendency of the institution at Penetanguishene.

Sir Charles Tupper, the veteran statesman, has been made a Privy Councillor. This is high honor for a Canadian doctor. Dr. R. M. Coulter has been made a C.M.G.

Dr. Reaume, Minister of Public Works, underwent an operation a short time ago. He is doing well and it is hoped the disease in his nose is under control.

Dr. John McMaster and Mr. I. H. Cameron, both of Toronto, have been seriously ill with septic infection of the hand, in each case while doing an operation.

The medical practitioners of St. Catharines and district are still holding out firmly in their demand for a \$5 fee for all life insurance examinations.

Dr. Forrester, of Mimico Asylum, has been appointed assistant medical superintendent of the Asylum at London, in place of the late Dr. Buchan.

During the past few months there has been a very serious outbreak of typhoid fever in Hull. The cause is bad water, as the new pipe is not yet completed.

It is stated that there are requests for graduates of Queen's University Medical College to fill the position of house surgeon in various hospitals in Canada and the United States quite in excess of the available number of last year's class.

Miss Smedley has resigned her position as Lady Superintendent of the Toronto Western Hospital. It is announced that she will soon be married to Dr. Shaw of Montreal. Miss Woodland succeeds her as superintendent.

Smallpox has been very prevalent in some portions of the Province lately. Dr. Hodgetts claims that the neglect to enforce vaccination by the various municipalities has cost the Province at least \$2,000,000 during the past ten years.

The Nicholls Hospital in Peterborough has come into the balance of the estate of the late Mrs. Nicholls. The donations now received raise the endowment fund to \$200,000 in addition to \$30,000 for building purposes. The benefactions of the late Mrs. Nicholls amount to \$580,000.

MANITOBA AND WEST.

Dr. A. M. Campbell has resigned the superintendency of the General Hospital in Winnipeg, and has been succeeded by Dr. Gunn.

Winnipeg city council has decided to increase its grant to the General Hospital from \$30,000 to \$40,000.

The Dominion Government will make a grant of \$25,000 towards the expenses of the British Association for the Advancement of Science, which will meet in Winnipeg in 1909.

BRITISH COLUMBIA.

Dr. Joseph Gibbs, who has been doing post-graduate work in Vienna on genito-urinary surgery, has returned to Victoria, B.C.

Dr. Montizambert, Director-General of Public Health, has been in British Columbia, taking precautions to prevent bubonic plague.

Dr. Babty has received the appointment of assistant health officer to Dr. C. J. Fagan.

At the recent examinations of the College of Physicians and Surgeons, twenty-two out of thirty-three were successful.

Dr. Harvey Clare has accepted a position in the Hospital for the Insane, British Columbia. He formerly held a position in the Toronto Asylum.

The Hospital Board of Vancouver has appointed a collector to look after the bills of transient patients. There has been a good deal of trouble over patients who have been imposing upon the hospital.

The residents of Ashcroft are asking the Provincial Government to grant some assistance to induce a doctor to locate in the place. It is contended this should be done, as there are so many Indians in the place.

The health authorities in British Columbia are taking active steps to prevent the spread of plague. Dr. Fagan, the Medical Health Officer, has ordered that all Orientals report regularly for inspection.

The Institution for Consumptives at Tranguille, B.C., has been opened. Dr. Irving is medical superintendent. He was for some time at the Gravenhurst Sanitarium. Dr. Fagan urged that there should be accommodation for advanced cases. The Government had promised \$10,000 for this purpose.

FROM ABROAD.

It will be a pleasure to many Canadians to note that Professor Clifford Allbutt was made a K.C.B. on the King's Birthday.

Professor C. A. Ewald has just retired from the editorship of the *Berliner Klinische Wochenschrift* after a service of 27 years.

Professor Robert Koch, on his return from his investigations on tropical diseases in Africa, was tendered a great banquet in Berlin. In drinking to German science, he said, *Vivat, cheseat, floreat.*

Our contemporary, the *Medical Press and Circular*, very clearly points out that priority of claim for the introduction of the trypsin treatment of cancer belongs to Dr. J. A. Shaw-Mackenzie, and not to Dr. Beard.

The Nobel prize of \$40,000 is to be awarded to Professor Laveran in recognition of his great work on the study of malaria. So it seems that mosquitoes do pay!

It will be interesting to learn that at last Mr. Labouchere, of *Truth*, has won in the libel suit brought against him and his paper for exposing what he regarded as a notorious institution for the treatment of deafness.

Dr. Niall, in his report on the school children in the schools he inspected, states that the following percentages of defects were found: Vision, 19.8; hearing, 7.7; physique, 27.5; speech, 5.25; mental, 9.75; tonsils and adenoids, 31.5; cervical glands, 14.5; discharge from the ears, 3.5.

In the presence of M. Briaud, the Minister of Public Instruction, and a brilliant assembly of savants, Dr. Jean Charcot, son of the famous J. M. Charcot, handed over to the Salpêtrière Hospital the entire library of his father, together with all the furniture of his library as he used it in his lifetime.

Professor Kirchner, of Berlin, has just written a book on the prevention of typhoid fever. He admits that the disease is spread by water and milk; but he contends that direct personal contact is a common means of its spread. Persons coming in contact with typhoid fever patients get the bacilli on their hands or clothing, and in this way become infected.

Cancer research is becoming a matter of widespread interest. Germany, Denmark, England, Japan, Norway, Austria, Portugal, Russia, Sweden, Spain and the United States, have committees doing research on this disease. There is now an International Association for Cancer Research.

In the recently published volume of the Royal Commission on Tuberculosis, Dr. Cobbett contributes a valuable series of experiments. He rendered a number of cows tubercular by using a virulent strain of human tubercle bacilli. Of six calves born of these cows, three were the victims of congenital tuberculosis.

The Victoria Hospital for Consumptives, Edinburgh, was founded in 1887 by Dr. Philip. Recently it opened a large new wing. Hon. A. J. Balfour took part and spoke of the change of view since the discovery of the bacillus. In this institution patients are admitted as day patients for treatment and proper meals, but sleep at home for lack of hospital accommodation. Use is made of convalescent patients to perform certain duties in the hospital, and thereby reduce the cost of maintenance.

Professor Thorkild Rosing, of Copenhagen, has been employing a new method of diagnosing appendicitis. With his right hand he presses his left hand, palm downwards, against the integument of the *left* iliac fossa, and lets it glide up the descending colon to the left flexure. This compresses the gas in the colon towards the cæcum and gives rise to sharp pain in McBurney's point if the appendix be inflamed.

The relationship between human and avian tuberculosis was up for discussion at the Royal Society of Medicine, London. Drs. Shattock, Dudgeon, Panton, and Seligman contributed papers. Dr. Shattock concludes: 1. The human tubercle bacillus is pathogenic to the pigeon in a

very limited degree; 2, the avian tubercle bacillus is pathogenic to the guinea-pig in a very limited degree; 3, human tubercle bacilli are not convertible into the avian by inoculation into the bird.

Florence Nightingale, O.M., is a name so well known as to need no introduction to the people. One of the most worthily bestowed of the King's birthday honors was that of conferring upon this grand old woman the Order of Merit, for truly she merits it. It is now more than fifty years since she organized a band of faithful workers, and, at their head, went to the Crimea to dare all sorts of dangers and endure all sorts of hardships. At nearly ninety years of age she is almost regarded as a saint. She is the first woman to receive the title of O.M.

THE IMPORTANCE OF CLEANLINESS.

Editor CANADA LANCET :

Sir,—I have sometimes wondered how many of us have really realized how important is cleanliness of body and mind in the prevention and curation of disease. I would alter the old saying, "Cleanliness is akin to godliness," and in this case make it "Cleanliness is akin to health."

Am I wrong in saying that had the proper degree of cleanliness been observed in the washing and feeding of children during the past summer more than half the deaths would not have had to be recorded? By cleanliness in feeding I mean the giving of good milk, which, if it were strictly clean, would be pure chemically and bacteriologically. Clean bodies and clothes, clean pure food and clean fresh air would keep nearly all children in good health.

Again, in adults, clean, that is, pure, food, free from bacteria, would prevent that dread disease, typhoid fever. A food, milk or water, that is contaminated with the typhoid germ has simply had some dirt (sewage) deposited in it in one way or another. If all foods and beverages were handled in a thoroughly cleanly manner, and if dirt or sewage were prevented entrance to water supplies, we would have practically no typhoid fever.

Once more, in that most dreaded of diseases, the white plague, consumption, or tuberculosis of the lungs, cleanliness would prevent its propagation in the following manner: Gradually the idea is gaining ground that tuberculosis is not hereditary, but that one inherits only the weak lungs or other weak part which predisposes to consumption, and that each patient contracted it from some other patient, or possibly took the germs into his system in his food or drink. Then suppose that all foods were pure and that the sputum of each consumptive was disposed of in a proper manner, that is expectorated into some receptacle from which it

could be taken and properly destroyed, it should practically dispose of the danger of others contracting tuberculosis and gradually lessen its prevalence. This is simply cleanliness again, which prevents consumptives from spitting carelessly about and so disseminating the disease.

Then again, in the contagious or infectious diseases the proper cleanliness in the care of the patient, and in the disposal of the excreta, prevents epidemics being continuously in our midst.

How much more quickly any severe epidemic sweeps over the dirty quarters of a city or country than over the cleanly parts, where water supply, sewage and ventilation are all given more attention. Not by some charm, as the uneducated of the laity used to think, but by washing ourselves with soap and water and keeping our clothes free from contagion by a proper gown and sometimes by disinfecting our clothes and bodies, which is only cleanliness in another form, for if we disinfect our own clothes or those of people affected with some disease, we simply put these clothes into the clean state in which they originally were by freeing them from germs.

I could easily go on still further and elucidate the fact which I am trying to make, namely, that cleanliness is so important in prophylaxis or the prevention of disease, but I have a few other points to make.

Now I will try to show you that in the treatment of disease cleanliness is just as important as in its prevention. Take the disease I began with, or children's diarrhoeas, and the principle of cure is the cleansing of the whole alimentary tract from the stomach to the lower end of the intestine of the toxins and other irritants which they contain and then the proper feeding to preserve the *primæ viæ* in its normal or clean state, and all authorities will agree that if we do not perform the preliminary cleansing by purgatives and irrigation we will not save the life of the patient. In typhoid fever it is the same so far as putting the alimentary canal in a clean condition, free from germs and toxins, which we attempt with antiseptics and proper feeding, for only when this has been accomplished will the patient begin his convalescence. In consumption it is important also, for we can cure the disease only by removing from the lung its germs and putting it in its normal clean, healthy state, and since we cannot cut in and remove the focus of infection we have to depend upon fresh air, sunlight, nourishing food and tonics to so build up the patient as to give him the power to throw off the germs and thus cleanse his lungs.

In the different ailments of the stomach irrigation or washing the organ is very important. This is particularly so of that common disease, dilatation of the stomach, which is cured by this treatment alone.

In the cure of almost any disease, the first act of a competent physician or surgeon is the giving of some purgative to clean out the bowels, as we all realize that this materially assists nature to bring the patient back to health.

And I could go on through practically all the medical diseases and show how this first principle, cleanliness, if properly applied, would either prevent disease, or if too late for that would cure it. In the catarrhs of the nose or pharynx we first clean the parts by some alkaline spray and then use medicaments, and I venture to say that the first step is by far the more important one. In the running ears of children proper syringing to cleanse them is generally all that is necessary. In the different inflammations of the eye, particularly that very dangerous one, gonorrhoeal ophthalmia, the most important step is the bathing to clean it. And, in other diseases all over the body, this first great principle is important for in the case of most of the organs if they are put into a cleanly state nature will do the healing, for we cannot.

And in speaking of the principle I do not need to limit myself to medical subjects, because I think it is of still more importance in surgical ailments.

The great ideal which we all aim at in surgery is asepsis, and what is asepsis but cleanliness? We are unanimous in the opinion that soap and hot water, if it could be used thoroughly enough and if it could be made to reach every crevice or crack in the hands of the operator and in the skin of the patient, would prevent any possible danger of infection during operation, of course always understanding that the instruments, sutures and so forth are in as cleanly a state. And we all agree that if all wounds, large and small, were made perfectly clean with soap and water, it would remove the possibility of such diseases as septicæmia, tetanus, or hydrophobia, and not only that, but the wounds would heal rapidly so long as they are kept in a cleanly state without the necessity of applying any antiseptics, ointments, lotions or other assistants to the great healer, Nature. Even could this principle be carried out, the surgeon would be of still more use than at present in the stopping of bleeding, coaptation of proper parts, prevention of deformities and in general in helping Nature to perform good work.

And not only is this cleanliness of which I speak important in the healing of wounds and operations, but if it could be utilized it would cure most surgical disease just as it would most medical diseases. In that now common disease, appendicitis, the disease begins by the appendix becoming impacted with dirt of some kind, germs perhaps. If we could in some manner clean out the appendix the patient would be better, but of course liable to another attack at a later day. Nature sometimes

cleans the appendix for us, and so we get recoveries without operations, and in the cases where nature cannot perform its duties the surgeon removes the offending appendix since he cannot cleanse it.

The cure of an abscess simply means cleaning out the pus and Nature heals the part.

The worst cases of cellulitis are benefited most by continuous immersion in a cleansing bath of pure water after freely opening the parts.

Ulcers are healed by cleanliness, more particularly in their early stages, but no disease either in its early or late stage will be cured without cleanliness.

It would be easy to enumerate other surgical diseases which the application of this principle would cure, and I think we would find that it applied to the great majority, excepting those diseases in which some tumor has developed or some organic change has occurred which it is impossible for Nature to overcome. I think we would find these latter constitute a small minority, and even in the treatment of these we would find its application an important accessory.

One last point I feel it my duty to touch upon in order to complete my subject according to my limited ability. This last point is the importance of cleanliness of the mind. According to many of our most learned alienists, a goodly percentage of the diseases of the mind or insanities are caused by uncleanliness of the mind, by impure thought going on to impure action, and so bringing about the overthrow of a probably already more or less unstable mental capacity; and add to this danger of insanity the danger, with which all are very familiar, of the loathsome physical diseases which may arise from the acts originating in an impure mind, and we can all easily realize the importance of cleanliness of the mind in the prevention of disease.

In closing, I will simply say that I believe if we could use only clean foods; if we could utilize only the cleanest of water supplies, and if we could preserve clean minds in bodies which were clean, internally and externally, we would prevent a large percentage of the ills which man is heir to.

Yours, etc.,

MUNDITIA, M.D.

OBITUARY.

J. A. HOWITT, M.D.

Dr. Howitt, whose home was originally in Guelph, died in Etonnami, Sask. He was a son of Alfred Howitt, of Guelph, a Provincial land surveyor.

M. J. C. NAFTEL, M.D.

After successfully treating his father, Mr. Thomas Naftel, a retired farmer of Goderich, who was ill with typhoid fever, Dr. M. J. C. Naftel, one of Toronto's youngest practitioners, contracted the disease and died on 13th December. The young man went to Goderich on October 12th last in response to a telegram that his father was ill, and he was constantly at his parent's bedside till his recovery was assured. He was preparing to come back to Toronto again, when he was taken ill. Miss Maud Naftel, a sister, also succumbed to the disease. Mrs. Naftel, their mother, was also dangerously ill with typhoid fever. Dr. Naftel was a graduate of the University of Toronto, and had only established his practice at 961 Dundas street, Toronto, when he was called away to attend to his father. The funeral of the young physician took place at Goderich.

WILLIAM BETTRIDGE, M.D.

Dr. Bettridge died at Strathroy, on October 15th, 1907, in his 79th year. He was born in England and was a graduate of Toronto and Trinity Universities in 1855.

J. A. STEVENSON, M.D.

Dr. Stevenson died at Ridgetown, Ont., where he had practised his profession.

J. W. CONSIDINE, M.D.

Dr. Considine was a graduate of Trinity College, Dublin. He practised for many years in the Niagara District. For a number of years he has lived in Port Dalhousie, where he died, 12th November, 1907, in his eighty-eighth year.

DANIEL McNEIL PARKER, M.D., L.R.C.S., EDIN.

The late Dr. Parker was born at Windsor, Nova Scotia, April 28th, 1822, and was in his eighty-sixth year when he died on 4th November, 1907. He received his preliminary education at Windsor, and later at Horton College, where he met Charles Tupper. Their friendship became very intimate and lasting. He graduated as M.D. from the University of Edinburgh in 1845. He returned to Halifax and settled in active

practice there. In 1870 he paid an extensive visit to Edinburgh to study the methods of Lister at first hand. On his return to Halifax he limited his work to that of a consultant. He retired from active practice in 1895. In 1870, he was the second president of the Canadian Medical Association. He held many other medical positions of honor, and contributed a number of valuable papers to medical journals.

J. H. COLLINS, M.D.

Dr. Collins graduated in 1889. He was appointed one of the house surgeons of the Toronto General Hospital. He practised for some time in Toronto, and then took post-graduate work abroad. He took up eye and ear work. For many years he has practised in Chicago. A short time ago he attended the funeral of his mother in Toronto. On his return to Chicago, he broke down with nervous prostration. He was a medallist and an honor graduate of the University of Toronto.

BOOK REVIEWS.

SYPHILIS IN THE ARMY.

Syphilis in the Army and its Influence on Military Service; its Causes, Treatment, and the Means which it is Advisable to Adopt for its Prevention. By Major H. C. French, Royal Army Medical Corps, Fellow of Royal Institute of Public Health; Associate King's College, London; member British Medical Association; War Office Specialist Appointment in Venereal Diseases and Dermatology, Royal Herbert Military Hospital, Woolwich. London: John Bole, Sons, and Danielson, Limited, Oxford House, 83-91 Great Titchfield Street, Oxford Street, W. Price, 6 shillings net.

This is a most interesting and instructive book. The author writes upon a subject with long years of wide experience which enable him to do so with strong claims to receive close attention. Under the main headings of causation, prevention, and treatment, he tells us much about the ravages of venereal diseases, especially syphilis, in the army. On the prevention he lays down strict rules for the cure of the infected. With regard to treatment, the author is strongly of the opinion of the value of hygienic treatment, regular habits of life, and sobriety. As to drugs, there is not much advance from the usual administration of mercury and the iodides. He advocates the employment of mercury for a year interruptedly. Of this period he contends that the first six months are by far the most important. He is rather in favor of inunction. The hypodermic method does not find much favor. Good results can be secured by the oral administration of the drugs.

A TEXT-BOOK OF PHYSIOLOGY.

A Text-Book of Physiology: for Medical Students and Physicians. By William H. Howell, Ph.D., M.D., LL.D., Professor of Physiology, Johns Hopkins University, Baltimore. Second edition, thoroughly revised. Octavo volume of 939 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$4.00 net; half morocco, \$5.50 net. Canadian agents, J. A. Carveth & Company, Toronto.

Professor Howell is well known as a writer on physiology. The second edition of this work follows the same plan as that adopted in the first volume. The author discusses the various problems of physiology under the respective headings of the several tissues, organs, systems, and fluids of the body. The work is well illustrated and got up in attractive book form. It is of a convenient size to make both an excellent work for both the student and the practitioner. There is everything in this work that the student will require for the most advanced examinations, while the busy practitioner could have no better work for reference. We can speak in the highest terms of this text-book on physiology.

 THE INTERNAL SECRETIONS AND THE PRINCIPLES OF MEDICINE.

By Charles E. DeM. Sajous, M.D., Fellow of the College of Physicians of Philadelphia; member of the American Philosophical Society, the Academy of Natural Sciences, of Philadelphia, etc.; Knight of the Legion of Honor and Officer of the Academy of France; Knight of the Order of Leopold of Belgium, etc.; formerly Lecturer on Laryngology in Jefferson Medical College and Professor of Laryngology and Dean of the Faculty of the Medico-Chirurgical College; formerly Professor of Anatomy and Physiology in the Wagner Institute of Science. Vol. II., with 25 illustrations. Philadelphia: F. A. Davis Company, publishers.

It has long been known that Dr. Sajous has been working upon the very important subject of the influence of the secretions from the internal glands. These glands include the thyroid, thymus, adrenals, the pituitary, the ovaries, etc. Of late years the part played by these glands in their normal and pathological conditions has occupied a great deal of attention. As a result we are now beginning to realize what a wonderful laboratory the human body is. The adrenals prepare a product which raises arterial tension, while the thyroids prepare one that lowers tension. The loss of the parathyroids appears to cause tetanus, while the thymus has much to do with the development of the body. All this is made the subject of a most elaborate study by the author. We had the pleasure of reviewing the first volume some time ago, and then noted the importance of the work that the author had done along this line of medical research. The present volume follows up these researches and carries them into new fields. The effects of drugs are carefully studied on these glands. The

work pays much attention to the diseases caused by their perversion. It is here that the author becomes most interesting, and his teachings are most likely to be fruitful of good results. We have had much pleasure in reviewing this work. It covers a portion of medical study on which no doctor can afford to be ignorant. The book is a most stimulating one. It makes the reader think and wonder.

DISEASES OF THE SKIN.

A Treatise on Diseases of the Skin. For the use of advanced students and practitioners. By Henry W. Stelwagon, M.D., Ph.D., Professor of Dermatology, Jefferson Medical College, Philadelphia. Fifth edition, revised. Handsome octavo of 1,150 pages, with 267 text-illustrations and 34 full-page colored and half-tone plates. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$6.00 net; half morocco, \$7.50 net. Canadian agents, J. A. Carveth & Co., Limited, Toronto.

It is always a matter of much pleasure to review a thoroughly good book. The author of this treatise on skin diseases has left nothing undone to give his readers a truly useful work on his specialty. That he has succeeded, a careful examination of its pages abundantly proves. The illustrations are numerous and of a high class, and aid the text very much in conveying a true conception of the condition under discussion. The suggestions on treatment are many and reliable. With such a work as this in his possession, the practitioner of medicine may feel himself ready for any dermatological difficulty which can come his way.

A TEXT-BOOK OF THE PRACTICE OF MEDICINE.

By James M. Anders, M.D., Ph.D., LL.D., Professor of the Theory and Practice of Medicine and of Clinical Medicine, Medico-Chirurgical College, Philadelphia. Eighth revised edition. Octavo of 1,317 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$5.50 net; half morocco, \$7.00 net. Canadian agents, J. A. Carveth & Co., Limited, Toronto.

Dr. Anders needs no introduction as an author. In rapid succession one edition follows another, until this excellent work on the practice of medicine has reached its eighth. This in itself would stamp the book as one of unique merit. When a work on any medical subject is as popular as this one is, there are good reasons for it. In this case the reasons are that it is written in clear language, gives expression to accurate views, and covers the field of practice fully. The author and publishers may well be congratulated upon the continued popularity of this work in the practice of medicine.

A TEXT-BOOK OF PRACTICAL GYNÆCOLOGY.

For Practitioners and Students. By D. Tod Gilliam, M.D., Emeritus Professor of Gynæcology in Starling-Ohio Medical College, and some time Professor of Gynæcology, Starling Medical College; Gynæcologist to St. Anthony and St. Francis Hospitals; Consulting Gynæcologist to Park View Sanitarium, Columbus, Ohio; Fellow of the American Association of Obstetricians and Gynæcologists; member of the American Medical Association, of the Ninth International Medical Congress, etc. Second, revised edition. Illustrated with 350 engravings, a colored frontispiece, and 13 full-page halftone plates. 642 royal octavo pages. Extra cloth, \$4.50 net; half morocco, gilt top, \$6.00 net. Sold only by subscription. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia.

The author has well named his work "practical." He has been careful to keep out of his pages all extraneous matter, and what goes to make up a big book in many instances. This work is full, complete, and trustworthy, but not made-up nor padded with unnecessary details. The subject of gynæcology is a very important one and a useful book upon it is always a requisite in every practitioner's library. To meet the needs of the doctor in his efforts to relieve women suffering from pelvic disease, Dr. Gilliam's book may be often and safely referred to.

A MANUAL OF THE PRACTICE OF MEDICINE.

By A. A. Stevens, A.M., M.D., Professor of Therapeutics and Clinical Medicine in the Women's Medical College of Pennsylvania. Eighth edition, revised. 12mo of 558 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Flexible leather, \$2.50 net. Canadian agents, J. A. Carveth & Co., Limited, Toronto.

This handy manual of Dr. Stevens appears in a new edition. It does not pretend to supplant the larger works, but rather to give an accurate epitome of the subject, included in most books on the practice of medicine. In this the author has succeeded very well indeed. There is scarcely anything omitted from its pages that is found in the larger works, but this matter is more condensed. For students reviewing for their final examinations, and the busy practitioners who wish to quickly find what they require in a reliable form, we can recommend this book as one of the very best manuals in print.

THE PANCREAS.

Its Surgery and Pathology. By A. W. Mayo Robson, D.Sc. (Leeds), F.R.C.S. (Eng.), of London, and P. J. Cammidge, M.D. (Eng.), D.P.H. (Camb.), of London. Octavo volume of 546 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$5.00 net; half morocco, \$6.50 net. Canadian agents, J. A. Carveth & Co., Limited, Toronto.

With the names of Mr. Mayo Robson and Dr. Cammidge as sponsors for a work on the pancreas, the reader naturally looks with expectation

as to its contents. In the work before us we have one of undoubted merit. It is the outcome of no mere desire to make a book, but is the embodiment of long study and much observation and experience. This is a book that will give an impetus to the study of diseases of the pancreas for some time to come. This organ of late has been receiving some of the attention which its important functions merit. We are glad to be in a position of being able to recommend this work, and say that it ought to be in the hands of every practitioner, whether medical or surgical.

DISEASES OF THE GENITO-URINARY ORGANS AND THE KIDNEY.

By Robert H. Greene, M.D., Professor of Genito-Urinary Surgery at the Fordham University, New York; and Harlow Brooks, M.D., Assistant Professor of Pathology, University and Bellevue Hospital Medical School. Octavo of 536 pages, profusely illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$5.00 net; half morocco, \$6.50 net. Canadian agents, J. A. Carveth & Co., Limited, Toronto.

The authors manage very well to tell what is important about diseases of the genito-urinary organs in this book of medium size. This work appears before the medical profession to ask for a share of its attention. That it will receive that attention there can be no doubt, as the inherent merits of the work will command attention and win favor and readers. We have perused its pages with much pleasure, and can with confidence say to our readers that this is a good guide on the important diseases coming within the range of the authors' purview. We wish for it a wide circle of readers. The publishers, as usual, have done well.

OPHTHALMIA NEONATORUM.

With Especial Reference to its Causation and Prevention. The Middlemore Prize Essay of the British Medical Society, 1907. By Sydney Stephenson, M.B., C.M., Ophthalmic Surgeon to Queen Charlotte's Hospital, London. London: George Pulman and Sons, Limited, The Ophthalmoscope Press, 24-26 Thayer Street, W., 1907.

One could hardly imagine how important the subject of ophthalmia neonatorum is until the pages of this volume are perused. The vast amount of blindness caused by it in all the civilized countries is altogether too great, since it is so largely a matter of prevention. The author goes very fully into the causation and treatment and discusses the various kinds of organisms capable of producing the disease. The treatment is

trustworthy and very ably set forth. We congratulate the author on the results of his labors.

PROGRESSIVE MEDICINE.

A Quarterly Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by H. A. Hare, M.D., and H. R. M. Landis, M.D. September, 1907. \$6.00 per year.

This volume takes up diseases of the thorax, dermatology, and syphilis, obstetrics, and the nervous system. These sections are prepared respectively by Drs. W. Ewart, A. S. Gottheil, E. P. Davis, and W. G. Spiller. Each section is very carefully edited, and fully up to date. The best literature for the quarter is placed under contribution in the preparation of this volume. The respective contributors are undoubted specialists in their respective departments.

PROGRESSIVE MEDICINE.

A Quarterly Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by H. A. Hare, M.D., and H. R. M. Landis, M.D. Vol. IV., December, 1907. Philadelphia: Lea Brothers & Co. \$6.00 per annum.

This volume covers diseases of the digestive tract, by Dr. J. D. Steele; those of the kidneys, by Dr. John Rose Bradford; the surgery of the extremities, by J. C. Bloodgood; genito-urinary diseases, by W. T. Belfield, and practical therapeutic referendum, by H. R. M. Landis. These articles are well written and furnish a careful review of the subjects discussed as they are known at the present day. These volumes form an excellent working and reference library, and can be most cordially recommended.

MODELLING OF HUMAN BONES.

By Vilray Papin Blair, A.M., M.D., Associate Professor of Anatomy, Medical Department, Washington University, 1906. Published by the Co-operative Association of the Medical Department of the Washington University, St. Louis, Mo.

For such as may have laboratory work to do in the modelling of bones in clay, this little pamphlet will be found to contain the requisite information. The author has expended a great deal of labor in the perfection of his methods. Anatomists will be glad to have at their command such excellent rules and instructions.

OSLER'S MODERN MEDICINE.

Modern Medicine, its Theory and Practice, in Original Contributions by American and Foreign Authors. Edited by William Osler, M.D., Regius Professor of Medicine in Oxford, England; Honorary Professor of Medicine in the Johns Hopkins University, Baltimore; formerly Professor of Clinical Medicine in the University of Pennsylvania, Philadelphia, and of the Institutes of Medicine in McGill University, Montreal, Canada. Assisted by Thomas McCrae, M.D., Associate Professor of Medicine and Clinical Therapeutics in the Johns Hopkins University, Baltimore. Vol. III., Infectious Diseases (continued); Diseases of the Respiratory Tract. Illustrated. Philadelphia and New York: Lea Brothers & Company, 1907. Price, per volume, cloth, \$6.00; leather, \$7.00; half morocco, \$7.50.

The third volume of this magnificent publication has just appeared. It finishes the study of the infectious diseases and then takes up the diseases of the respiratory organs. The infectious diseases discussed in this volume are Malta fever, beriberi, anthrax, rabies, glanders, tetanus, gonococcus infection, leprosy, tuberculosis, syphilis, and infections of doubtful nature. The respiratory diseases are those of the naso-pharynx, the tonsils, hay fever, the larynx, the bronchi, the lungs, the pleura, pneumothorax, and diseases of the mediastinum.

It will be interesting to note that Professor Mazyck P. Ravenel groups rabies with the infectious diseases. This is clearly where it should belong. He defines it as "an acute, specific, rapidly fatal malady, communicated to man from some lower animal." Further on he says: "The exact nature of the virus is unknown. The behaviour of the disease makes us certain that it is caused by a specific micro-organism." This is a clearly defined opinion.

On the other infectious diseases the views are sound and well stated. The articles on tuberculosis are particularly full and valuable. It is held that the main source of the spread of the bacilli is the sputum. The bacilli do not escape in the breath, and if all excreta and discharges are properly disposed of the risk of spreading the infection is almost removed. The keynote is, therefore, cleanliness. Beyond the sputum, the greatest danger lies in bovine milk.

The article on syphilis will be read with more than usual interest, as it is from the pen of Professor Osler. In this article we have the mature views of the distinguished author on one of the most important of all the diseases. It is very pleasing, indeed, to read Dr. Osler's opinions. The spirochæte pallida is discussed to its being the cause. While this is now almost settled in the affirmative, it would be well to withhold final judgment in the matter. Tabes and general paresis are admitted as being for all practical purposes of syphilitic origin. The congenital forms of the disease are gone into with care. The prophylaxis is discussed at length. The treatment is summed up in a clear and satisfactory manner. The

methods of employing mercury by the mouth, by inunction, by injections, and by fumigation are well stated. The diseases is regarded as curable, though not always cured.

The section on diseases of the respiratory organs is full and erudite, and may be regarded as containing the latest and best views upon these diseases, but we cannot enter into details.

The contributors to this volume are J. M. Anders, E. R. Baldwin, H. S. Birkett, T. R. Boggs, Lawrason Brown, T. R. Brown, David Bruce, H. A. Christian, J. W. Churchman, R. I. Cole, W. P. Dunbar, Isadore Dyer, H. A. Hare, M. Herzog, W. B. James, F. T. Lord, W. G. McCallum, A. McPhedran, W. Osler, F. R. Packard, and Mazyck Ravenal.

DISEASES OF THE NERVOUS SYSTEM.

Edited by Archibald Church, M.D., Professor of Nervous and Mental Diseases and Medical Jurisprudence, Northwestern University Medical Department, Chicago, Ill. An authorized translation from "Die Deutschö Klinik," under the general editorial supervision of Julius T. Salinger, M.D. With 195 illustrations in the text and five colored plates: pages 1,160. Cloth, price \$7.50. London and New York: D. Appleton & Co.

In this excellent volume (Modern Clinical Medicine Series), Dr. Church presents to the profession one of the most valuable works on diseases of the nervous system ever published. The list of contributors is composed of some 21 of the most prominent neurologists in Germany and Vienna.

The translators of this volume have conferred a favor upon the English-reading members of the profession by their excellent rendering of the text. The first two sections, on the "Macroscopic Anatomy" and the "Normal Pathological Histology of the Central Nervous System," form an excellent introduction to the work, and are especially valuable for clear, accurate and well ordered description. The section on "General Neurological Diagnosis" is most instructive and is of special value to the student. Quincke's method of lumbar puncture is a very important and practical contribution; also the sections on myelitis and tabes dorsalis are especially exhaustive and helpful.

Contrary to what we would expect from a work by German authors, the therapeutic side of the subject has been taken up in a most practical manner.

The typography and plates of this work are all that can be desired and are of great value to the reader.

This book will prove of great service to the physician and student, and to the specialists in this branch of diseases it is invaluable. E. C. B.

SYPHILIS.

In its Medical, Medico-Legal, and Sociological Aspects. By A. Ravogli, M.D., Professor of Dermatology and Syphilology in the Medical College of Ohio, Medical Department of Cincinnati University; Dermatologist to City Hospital of Cincinnati; member of Ohio State Board of Medical Registration and Examination. New York: The Grafton Press, publishers.

Of late there have been appearing in the medical journals many articles dealing with the prevention of syphilis. The subject is of vast importance. The amount of harm done to all civilized communities by syphilis cannot be expressed in figures. The first part of the book deals with the general medical aspects of the disease and its treatment. This portion is well worth reading, as it gives the most accepted views in a precise form. The second portion of the book discusses syphilis in relation to marriage, degeneracy, public health, and its prevention. The chapter on prophylaxis is of exceptional interest. The laws and regulations of ancient and modern times are given. The author adopts the position laid down at the International Congress at Brussels for the prevention of syphilis, namely, "Prostitution must be regulated by law." The author holds that prostitution should only be regarded as a crime when "society is offended by the demoralizing conduct of the prostitute."

THE PHYSICIAN'S VISITING LIST.

Messrs. Blakiston & Company again place in the hands of the profession their well known visiting list. It is replete with ready information on a number of topics. The memorandum part is well arranged for keeping the records of one's daily calls. It is well bound in limp leather, the paper is first class, and the size such as to suit the coat pocket. This visiting list is so well known that it needs no special recommending, other than to say that, if possible, this year's edition is better than that of any former year. The price is \$1.25.

CHICAGO HEALTH REPORT, 1906.

This volume contains a very considerable amount of information. It differs from most volumes of a similar character in being both readable

and enjoyable. It is not merely a book of figures, tables, and diagrams. It is a book of interesting reading matter.

NEW JERSEY BOARD OF HEALTH.

The annual reports of the State Board of Health for the State of New Jersey is always welcome. It contains this year, as usual, many excellent papers on hygiene and public sanitation. Those interested in public health will find much in this volume of value.

MISCELLANEOUS.

INTERIM REPORT OF THE COMMITTEE OF THE BOARD OF TRUSTEES OF THE TORONTO GENERAL HOSPITAL ON STAFF REORGANIZATION.

Your committee was appointed by resolution of the Board dated November 7th, 1906, for the purpose of considering the question of reorganization of the staff of the Hospital. Fully realizing the great importance of the subject, your committee has earnestly endeavored to obtain all available information and advice and has given full and prolonged consideration to all the recommendations embodied in the plan of reorganization herewith submitted for your approval.

Your committee in reaching its conclusions has borne in mind the object of creating an efficient organization which will give the best possible service to the patients for whose care the Hospital is responsible and at the same time afford adequate facilities for promoting the interests of medical education and clinical and scientific research.

Your committee has been fortunate in having had before it for its general guidance the recommendations of the staff of physicians and of the staff of surgeons and specialists of the Hospital, as set out in their respective reports of last year on the subject of reorganization. The leading features of these recommendations will be found to have been incorporated in the findings of the committee.

In seeking to understand the requirements of the University in connection with clinical education, your committee has had the advantage of a meeting with the members of the Medical Faculty, when some important aspects of the question were fully discussed. Your committee has also

been privileged in being able to confer at several of its meetings with the President of the University, who most courteously consented to attend for the purpose.

Your committee has thought it advisable to present as an interim report for the approval of the Board the following recommendation as a basis of reorganization, considering that it would be better that the question of governing principles should be settled before proceeding to deal with the further question of the personnel of the staff.

Respectfully submitted,

(Signed) J. W. FLAVELLE,
Chairman.

RECOMMENDATIONS OF THE COMMITTEE OF THE BOARD OF TRUSTEES OF
THE TORONTO GENERAL HOSPITAL ON STAFF REORGANIZATION.

Appointments.

In making appointments to the visiting staff the Board of Trustees shall regard especially the previous training and record of the applicant, his capacity to render service to the sick in the Hospital, his scientific attainments, his teaching capacity, and the promise he gives for future work.

All appointments shall be made annually.

There shall be no remuneration to members of the visiting staff.

In making appointments to the staff, sex shall be no bar.

The members of the visiting staff shall not be allowed to serve on the staff of any other General Hospital.

Services.

The following shall be the services in the several departments of the Hospital:

In Medicine (including Dermatology and Neurology) three co-ordinate services.

In Surgery, three co-ordinate services.

In Obstetrics, one service.

In Gynæcology, one service.

In Ophthalmology, one service.

In Otology, Rhinology, and Laryngology, one service.

With respect to the above recommendations as to co-ordinate services in Medicine and Surgery, it is understood that the decision reached by

the committee at the present time and with regard to the existing situation is not to preclude the Board at a future time from re-opening the question and considering whether a different system might not better serve the interests of the Hospital and of medical education.

Each of the services in the several departments shall be under a head with such associates and assistants as may be found necessary.

It is the intention that the divisions now existing in the Hospital by which the eye and ear work constitutes one department and the nose and throat another, shall be abolished, and that, instead, there shall be an eye department separate and distinct from a department which shall embrace the ear, nose and throat.

The several services in all departments shall be so organized as to include both indoor and outdoor patients, and the heads of such services shall be responsible for the treatment of all such patients.

The heads in Surgery shall retire from their position at the age of 55 and the heads in Medicine at the age of 60 years. The Board of Trustees, however, may decide by a majority of the whole Board to extend the age limit to 60 years in the case of surgeons and 65 years in the case of physicians for special reasons. The age limit for surgeons shall apply to the heads in the departments of Obstetrics, Gynæcology, Ophthalmology, Otology, Rhinology, and Laryngology.

The term of service of heads of the several services in all departments shall be ten years, this term to be extended for five years for special reasons if a majority of the whole Board of Trustees so decides. This term limit shall apply only from the date of appointment under the present reorganization.

The three heads in Medicine shall not engage in general practice, but shall confine their work outside of the Hospital to consultation.

The three heads in Surgery shall practice surgery only.

The head of the service in Obstetrics shall practice obstetrics and pediatrics only.

The head of the service in Gynæcology shall confine his work in the Hospital to gynæcology only, but may outside engage in surgery, but not in general practice.

The head of the service in Ophthalmology shall confine his work in the Hospital to ophthalmology, but may outside practise the three other specialties of otology, rhinology, and laryngology.

The head of the service in the Ear, Nose and Throat department shall confine his work in the Hospital to these specialties, but may in his outside practice also treat diseases of the eye.

There shall be a department of Pathology and Bacteriology, and a department of Pathological Chemistry. These two departments shall be placed in charge of professors of the University, it being understood that the University is willing to assume payment of the salaries of such professors.

The department of Anæsthetics shall be under the supervision of one head.

General Regulations.

All public ward patients shall be entered under the care of heads of services, and shall be available for the clinical instruction of students of the Medical Faculty of the University of Toronto.

Members of the medical profession who are not on the staff of the Hospital shall have the privilege of attending patients in the private, semi-private and semi-public wards.

There shall be a Medical Board, the work of which shall be advisory only. This Board shall consist of the heads of the various services.

Seniors who, by reason of the age or length of service limit, will be obliged to sever their connection with the active staff, may be given positions on the consulting staff.

The appointments to the reorganized staff shall be made at the earliest possible date, but the Board may decide not to give them effect until the close of the present college year.

Having regard to the requirements of Sec. 20 of Cap. 59, 6 Edward VII., "An Act respecting the Toronto General Hospital," which provides that the Trustees shall allow any medical student of the University of Toronto to visit the wards of the Hospital and to attend them for the purpose of receiving instruction from the members of the Faculty of Medicine of the University of Toronto, the committee recommends that in order to make adequate provision for such clinical instruction being given the Board of Trustees should appoint a committee to confer from time to time with a committee which it is suggested the Board of Governors of the University should similarly appoint for the purpose of determining from time to time the facilities which shall be offered for such instruction and proper regulations with reference thereto.

ALEXANDER MACTIER PIRRIE.

A MARTYR TO SCIENCE.

A career of great promise has been cut short by the untimely death of Mr. A. Mactier Pirrie.

The son of the late Mr. Alexander Pirrie, C.E., he was born on October 2nd, 1882. He obtained his B.Sc. with honors in anthropology

at Edinburgh University in 1904, and qualified as M.B., Ch.B., in 1906. He obtained the Carnegie Research Fellowship in anthropology and was appointed anthropologist to the Wellcome Research Laboratories at the Gordon Memorial College, Khartoum. He went out to the Soudan in the autumn of 1906.

Under the direction of Dr. Andrew Balfour, the Director of the Laboratories, Dr. Pirrie made his first expedition up the Nile to the southern limits of the Soudan and penetrated to remote parts of the Bahr-el-Ghazal. His second expedition took him to the borders of Abyssinia. On both occasions he passed through some of the most pestilential regions of Africa in connection with certain anthropological and physiological researches, appertaining to tropical diseases, upon which the Laboratories are engaged.

Unfortunately he contracted tropical fever (kala-azar) and was so prostrated as to be compelled to return to England, leaving Khartoum on June 17th last.

He rallied from the effects of the fever from time to time, but was compelled to enter Chalmers' Hospital, Edinburgh, in October. His death took place on November 12th.

He was interred at the Dean Cemetery, Edinburgh, on November 15th. The Gordon Memorial College, Khartoum; Sir William Turner, Principal and Vice-Chancellor of the University; Mr. Wellcome, and others were represented, and sent wreaths. A resolution of sympathy has been conveyed to the relatives from the trustees of the Gordon Memorial College, and other expressions of sympathy have been received from the Liverpool School of Tropical Medicine, etc., etc.

It is of interest to note that the first case of kala-azar found in Africa, except a case in Tunis referred to by Laveran, was reported by Dr. Sheffield Neave, pathologist to the Wellcome Research Laboratories, Khartoum. Dr. Neave found the Leishman-Donovan body, the parasite of kala-azar, in the splenic blood of a patient in the Omdurman Civil Hospital. The discovery is noted by the Director in the second report of the Laboratories.

Dr. Pirrie presented a paper on his African expeditions at the last meeting of the British Association for the Advancement of Science, but was prevented from being present on account of his illness. He brought back a most valuable collection of objects of scientific interest.

At intervals during his illness he was engaged on his report to the Carnegie Institute and the Wellcome Research Laboratories, Khartoum, for which institutions he acted jointly in the important work he carried out in the Soudan.

ALVARENGA PRIZE OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA.

The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Señor Alvarenga, and amounting to about one hundred and eighty dollars, will be made on July 14, 1908, provided that an Essay deemed by the Committee of Award to be worthy of the prize shall have been offered.

Essays intended for competition may be upon any subject in Medicine, but cannot have been published. They must be typewritten, and must be received by the Secretary of the College on or before May 1, 1908.

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

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

The Alvarenga Prize for 1907 has been awarded to Dr. William Louis Chapman, Providence, R.I., for his essay entitled, "Post-operative Phlebitis, Thrombosis and Embolism."

THOMAS R. NEILSON, M.D., Secretary.

CANADIAN HOSPITAL ASSOCIATION.

At a meeting of the Executive of the Canadian Hospital Association at the Hospital for Sick Children, it was decided to hold the next meeting of the Association in Toronto in the Parliament Building (if the rooms can be obtained) on Easter Monday, and the following Tuesday, 1908. The meeting will open at 2 o'clock on Monday; the Tuesday session will be held at 9.30 a.m. and 2 p.m.

A reception will be given by the President, Miss Louisa Brent, in the Nurses' Home of the Children's Hospital on Easter Monday evening at 8 o'clock.

Dr. S. S. Goldwater, Superintendent of the Mount Sinai Hospital, New York, and President of the American Hospital Association; Dr. C. K. Clarke, Superintendent of the Toronto Hospital for Insane; Del T. Sutton, Esq., editor of the *National Hospital Record*, Detroit; Dr. W. J. Dobbie, Superintendent of the Toronto Free Hospital for Consumptives, and Henry M. Hurd, Esq., Superintendent of the Johns Hopkins Hos-

pital, Baltimore, have promised to give papers. A number of the Canadian superintendents have also been invited to contribute to the programme.

APPOINTMENTS AT THE TORONTO GENERAL HOSPITAL.

In connection with the reorganization of the staff of the Toronto General Hospital, the Board of Trustees met at the City Hall and adopted the report of the committee in charge of making the selection of the heads of the surgical and medical services. The report reads as follows :

Your committee recommends that the senior professor in Medicine and the senior professor in Surgery in the University of Toronto shall be ex-officio members of the active staff of the Hospital. In the event of these professors being heads of services in the respective departments of Medicine and Surgery in the Hospital, they shall be subject to such regulations as apply to the heads of services, but at the termination of their terms of service as such heads they shall continue as ex-officio members of the active staff.

With regard to the headship of the services in the several departments, your committee makes the following recommendations :

(1) That Drs. A. McPhedran, W. P. Caven and G. Chambers be appointed as heads of the services in Medicine.

(2) That Mr. I. H. Cameron, professor of surgery in the University of Toronto, be appointed, ex-officio, a member of the active staff of the Hospital, and that Drs. G. Bingham, A. Primrose and H. A. Bruce be appointed as heads of the services in Surgery.

(3) That Dr. J. F. W. Ross be appointed head of the service in Gynæcology.

(4) That Dr. Kenneth McIlwraith be appointed as head of the service in Obstetrics.

(5) That Dr. George McDonagh be appointed head of the service in the Ear, Nose and Throat department.

(6) That Dr. R. A. Reeve be appointed head of the service in the Eye department. With regard to this recommendation, your committee considered it in the interests of the Hospital to infringe on the rule as to the age limit adopted by the Board, by reason of Dr. Reeve's special qualifications for the position. It is recommended, however, on account of such rule, that the appointment, if made, shall come up for special consideration annually.

WEST TORONTO SCALE OF FEES.

At a meeting of the Western Territorial Medical Association the following minimum medical fees were adopted for West Toronto: Office consultation, with or without medicine, \$1; first or single day visit, \$2; subsequent visits, \$1.50; hurried emergency visits, \$3; night visits, 8 p.m. to 8 a.m., \$3; vaccination, \$1; urinalysis—chemical \$2, microscopical \$2, both \$3; consultation with another practitioner, \$5; anæsthetic, general, \$5; labor, normal, including ten days' after attendance, \$15; miscarriage, \$15; delivery with forceps, extra, \$5; suture of perineum, \$5; for all together, \$20; fracture—nose, \$5; maxilla, \$15; clavicle, \$15; humerus, \$25; scapula, \$25; ulna, \$20; radius, \$25; radius and ulna, \$40; ribs, \$5; femur, \$50; fibula, \$15; tibia, \$40; finger, \$5; dislocations, \$10; minor operations under anæsthetic, \$10; anæsthetic, paid extra, \$5; major operations, \$50.

ONTARIO MEDICAL ASSOCIATION.

The Vice-Presidents of the Ontario Medical Association with the Chairmen of the Committees on Papers and Business and on Arrangements, Drs. R. R. Wallace and A. B. Osborne met at the home of the President, Dr. Olmsted, in Hamilton, December 15th last, to inaugurate the work for the year.

Dr. Olmsted reported a personal canvass of several portions of the Province to stimulate an interest in the coming meeting, which will be held in Hamilton May 26th, 27th and 28th next.

The Chairmen of the two local committees have active campaigns on the way looking towards a successful year's work. If the Hamilton members are supported by the men in the Province with an earnestness in any degree approaching that with which they have thrown themselves into the work the next meeting is already an assured success.

The Committee on Papers have secured the promise of Dr. Charles G. Stockton of Buffalo to deliver the address in Medicine, while Dr. Charles L. Scudder of Boston will deliver that in Surgery.

The Association decided at its last meeting to stimulate a wider and more sympathetic interest among the Practitioners of the Province in its work, and one of the steps to that end was to carry the meeting of 1908 away from Toronto, where it has been called for so many years. The movement seems a wise one, and its success depends solely upon the efforts of the individual members scattered everywhere in Ontario. One or two men in each county who will interest themselves sufficiently to occasionally call the attention of their fellows to the Hamilton meeting with its promise of a good time both intellectually and socially, can give us the best year, in point of numbers, yet. Five hundred active members

would be less than 20 per cent of the physicians of the Province, and surely not too large a number to have in annual attendance, for the western half of the Province could send as many, and a successful meeting this year will insure a repetition in a different section.

MEDICAL PREPARATIONS, ETC.

OXOLINT.

The Sterling Debenture Company state that by the Mudge process a perfect absorbent linen can be produced from flax in twelve hours which requires sixteen to thirty weeks by ancient methods. Samples would lead one to regard the product as a highly satisfactory one.

RELIEF IN RHEUMATOID CONDITIONS.

Dr. Pettingill, of New York city, under the head of "Intestinal Antisepsis," reports some excellent experiences, from which the following is selected:

"Every physician knows full well the advantages to be derived from the use of antikamnia in very many diseases, but a number of them are still lacking a knowledge of the fact that antikamnia in combination with various remedies, has a peculiarly happy effect. Particularly is this the case when combined with salol. Salol is a most valuable remedy in many affections; and its usefulness seems to be enhanced by combining it with antikamnia. The rheumatoid conditions so often seen in various manifestations are wonderfully relieved by the use of this combination. After fevers, inflammation, etc., there frequently remain various painful and annoying conditions which may continue, namely: the severe headaches which occur after meningitis, a 'stitch in the side' following pleurisy, the precordial pain of pericarditis and the painful stiffness of the joints which remain after a rheumatic attack—all these conditions are relieved by this combination called 'Antikamnia and Salol Tablets,' containing $2\frac{1}{2}$ grs. each of antikamnia and of salol and the dose of which is one or two every two or three hours. They are also recommended highly in the treatment of cases of both acute and chronic cystitis. The pain and burning is relieved to a marked degree. Salol neutralizes the uric acid and clears up the urine. This remedy is a reliable one in the treatment of diarrhœa, entero-colitis, dysentery, etc. In dysentery, where there are bloody, slimy discharges, with tormina and tenesmus, a good dose of sulphate of magnesia, followed by two antikamnia and salol tablets every three hours, will give results that are gratifying."

BROMIDIA IN SLEEPLESSNESS.

For nervousness, sleeplessness, and sexual excitement, characterized by erections or even chordee, various authorities vary in their recommendations. Ringer recommends the use of aconite and camphor. Bartholow and Phillips both advise the administration of lupulin. The value of hyoscyamus has been appreciated by many medical men for a long time, and is quite valuable. Bromidia is to be highly recommended, since it consists of chloral, bromide, hyoscyamus and cannabis indica, and acts as a somnifacient, spinal sedative, and hypnotic. The dose is a drachm to two drachms an hour before bed time.—*American Journal Dermatology.*

TREATMENT OF UTEROVAGINAL CATARRH.

Fifteen months ago Mrs. X. came to me for treatment, giving the following history: Six years previous she had a miscarriage, since which she had been troubled with a profuse leucorrhœa of a very foul odor. At her menstrual period she suffered greatly and flowed excessively. On examination the cervix was found to be nearly four times its normal size and so badly eroded as to have every appearance of a cancer and had been mistaken for such by one physician. The uterus was soft and boggy and very much enlarged. She had been to the hospital on two occasions and each time had been curetted, but this seemed only to aggravate the general condition. For over a year I treated her with every means at hand, but to no purpose. I was making preparation for an operation, which would have meant the removal of the uterus, when my attention was drawn to Glyco-Thymoline and I determined to give it a thorough trial before operative measures were to be further indicated. An intra-uterine douche of Glyco-Thymoline in 25 per cent. hot solution was administered and lamb's wool tampons saturated with Glyco-Thymoline pure were used. She began to improve from the first application. The leucorrhœa became less and the odor disappeared entirely. The cervix took on a healthy look. The uterus decreased in size and became firm; in fact she is now nearly well after nine weeks' treatment with Glyco-Thymoline.

SOME OF THE INDICATIONS FOR SANMETTO.

Vesical irritation and atony; enuresis due to atony; incontinence of urine in children due to a weak bladder; dribbling of the urine in the aged, not due to paralysis or growths; urine expelled upon exertion, as coughing; cystitis; catarrhal discharges from bladder or genitalia of male or female; seminal emissions; prostatitis, enlarged prostate and pre-senility.