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A PLEA FOR RATIONAL THERAPEUTICS.*

By Geo. Acheson, M.A., M.B., Galt, Ont.

A more suitable title for this paper, perhaps, would be "The Rational Use of Drugs for the Cure of Disease," as it is only with drug therapy that I propose to deal. And my remarks will be more suggestive than exhaustive, for I have no intention of presenting to you a treatise on materia medica and therapeutics.

At the outset I would make the statement that there is reason, and good reason, for the use of drugs in the treatment of disease; but they must be used in a rational way, and not in a haphazard, hit-or-miss fashion. I have no sympathy with the therapeutic nihilism that has become so fashionable in some quarters, and which is openly avowed by many "eminent authorities."

Medicine, especially in its practical aspect, is not yet an exact science, and indeed never will be, because all the factors in the solution of every problem can never be known; there will always be an X quantity, which will vary in each case. These problems, however, are being constantly reduced to simpler factors, the values of which are becoming definitely known, and, while there will always be an X, we are gradually arriving at greater exactness in the solution of the many-sided problems of disease.

For proof of the statement that there is good reason for the use of drugs in the treatment of disease I would point to such facts as the following: the value of quinine in malaria, mercury and iodine in syphilis, antitoxin in diphtheria, morphine as an

* Read at Meeting of the Ontario Medical Association.

anodyne, strychnine as a nervo-muscular stimulant, digitalin as a cardiac tonic, and many more that will readily occur to every physician. Many of these facts have been discovered empirically, and every day more and more of them are being rationally and scientifically explained. The field, however, for the scientific study of drug remedies is still largely uncultivated, and gives promise of a bountiful harvest to any who will earnestly undertake to work it. In the past, and even with many physicians yet, the basis of the therapeutic art has been almost exclusively empiric, *i.e.*, guided by experience or observation, rather than by scientific knowledge. Our knowledge of chemistry, physiology, pathology, etc., and our skill in diagnosis have wonderfully increased, but the development of the science and art of therapeutics has lagged behind. The reason for this for a long time was that the physician had but few reliable, definite, uniformly acting remedial agents. The remedies of the authoritative pharmacopœias were crude, uncertain, a conglomeration of incompatibles, or absolutely inert. The galenical preparations of the present day, of the vegetable drugs especially, *i.e.*, the tinctures, infusions, fluid extracts, solid extracts, and all preparations manufactured from crude drugs, are objectionable, and their use is unscientific, because they are uncertain and variable in their composition, strength and results, and their dosage is unreliable and misleading.

They are not of uniform strength, because (1) the plants from which they are derived do not contain the active principles in uniform proportions; these vary as do the conditions of temperature, moisture, sunshine, soil, locality, season, etc., in which the plant grows or the specimens are gathered; (2) the age of the crude drug; (3) the varying methods employed for extraction; (4) the constant changes going on in the preparation after being placed on the market—change due to decomposition, evaporation of menstruum, or of volatile active principle. Specimens of belladonna vary in their alkaloidal content from 1 to 50; opium varies in its morphine content from 2 to 18 per cent. Again, most plants contain more than one active principle the physiological effects of which are frequently diametrically opposite. From opium some 26 different active principles have been isolated, no two of which produce the same effect; at one end of the series we have morphine, purely sedative, and at the other thebaine, a powerful stimulant. Digitalis contains five glucosides, one of which is possibly inert, three others have in varying degrees the well-known effects of the one most commonly used, digitalin, a tonic to the heart, a contractor of the muscular coat

of the arteries, and a diuretic; while the fifth, digitonin, is a direct antagonist of the others, being a cardiac sedative and relaxor of the arteries. The quantity and proportion in which these are found in different samples of digitalis leaves vary considerably, and, therefore, the actual strength and composition of infusions and tinctures prepared from different samples of the drug will vary. So that from one preparation we may get a heart-tonic effect and from another that of a heart sedative. Digitalin gives us the maximum of heart-tonic effect with a minimum of vascular contraction, while digitoxin is a very powerful vascular contractor; digitonin, on the other hand, being a cardiac and vascular sedative. Hyoscyamus contains two active principles—hyoscyamine, which is a cerebral stimulant and deliriant, and hyoscine, a cerebral sedative and narcotic. Ipecac has two active principles, emetine—an expectorant, and cephæline—an emetic and irritant; and Carthagena ipecac is always richer in cephæline than Rio ipecac. Jaborandi contains 6 alkaloids, the principal one pilocarpine, which is a powerful stimulant of the sudoriparous, salivary, and mammary glands. But sometimes the alkaloid jaborine will predominate, which has an entirely opposite effect. Nux vomica contains strychnine and brucine. Cinchona bark, who shall say how many, though we have practically discarded all now except quinine. And so I might go on to enumerate most of the vegetable materia medica to prove the unreliability, uncertainty, and want of uniformity of their galenical preparations. The chemist, pharmacist, and physiologist, however, have been at work, and have supplied us with many uniformly-acting agents, and plenty of data concerning their actions, which constitute real scientific knowledge. I refer to the various definite chemical compounds, alkaloids, and active principles of drugs, a large number of which is now well known and has been thoroughly studied. What is required is, that this knowledge should be applied in the ordinary practice of the profession.

Now, the first requisite in the rational practice of therapeutics is that we make as exact a diagnosis as is possible, using every means at our command to determine accurately every mophological or structural, and physiological or functional departure from the normal. There is no room here for "snap diagnoses." The man of the broadest culture and the deepest scientific knowledge should be the best diagnostician, not the specialist, who has too often a tendency to refer everything to some derangement of his limited sphere. Exhaust every means of getting at "the truth, the whole truth, and nothing but the truth," physi-

cal, chemical, macroscopic, microscopic, biological, and psychological; and this must be done for every individual patient. It is the individual patient that is to be cured, not the disease; and the practitioner who asks, what is good for pneumonia, or peritonitis, mumps, or meningitis, is not working along rational lines. We must remember we have as yet but few specifics for diseases as entities; our definite remedial agents are specifics for conditions. In other words, our treatment . disease in any individual case must be mainly symptomatic.

The first essential, then, for the successful practice of medicine is diagnosis, and the second is treatment—what is wrong with the patient, and how are we to cure him? And all our knowledge and study of anatomy, physiology, pathology, symptomology, etc., is only to enable us to make a correct diagnosis, not to name his disease, but to recognize the departure from the normal in every organ and function of his body. Then with this knowledge we have to set about restoring the normal; and to this end we make use of our knowledge of the actions of remedial agents; and it goes without saying that unless we *know* what an agent will do under certain conditions, our use of it is irrational and unscientific, and we are merely experimenting. Indeed, the ordinary practice of drug therapy, the practice taught in many of our recognized text books and medical schools is uncertain, inefficient, wrongly directed, unpalatable, crude, irrational, and unscientific. Too many of the so-called "eminent consultants" seem to think, that when they have made an accurate and minute diagnosis, their duty ceases, and they have simply to fold their hands and allow the vis medicatrix naturæ to work out the cure. From the patient's point of view, however, the main thing is the treatment. What is he to do, be, or suffer to get rid of his ailment? And he wants this end accomplished *"cito, tute, et jucunde."* The practitioner who, when called in to a patient, finds he has had a severe chill, and has now an elevated temperature and rapid pulse, with pain in one side of his chest, dyspnœa, and a slight cough, makes, after a careful physical examination, a diagnosis of acute lobar pneumonia, and then tells the sufferer or his friends that this is a self-limited disease, which will run its course uninfluenced by any method of treatment, and proceeds to carry out this do-nothing policy, is not the kind of a physician the average patient cares to entrust himself to.

Having then determined what is the abnormal condition present, we proceed to apply the remedy which we know to be capable of antagonizing this abnormal state and restoring

the normal. And we may lay down three fundamental principles which govern the whole therapeutic art: (1) To stimulate or sedate, as may be necessary, the various vital functions; (2) to antagonize, directly or indirectly, invading organisms; (3) to aid in the elimination of waste products.

Most likely there will be several abnormal states which we wish to correct, and to this end we combine the appropriate remedies for each, endeavoring as far as possible to use single remedies or simple combinations.

These remedies must be in solution before they can be absorbed or exert any action; they must get into the circulation, no matter whether administered by mouth or hypodermically.

Then the question of dosage is an important one. For acute conditions the obviously rational method is to give small doses at frequent intervals, and repeated till the desired effect is obtained. In chronic cases give larger doses three or four times a day, but always in any case continue the administration until the required result is produced, or until it is seen by the absence of this that we are on the wrong track, and must go back and start afresh along some other line.

As autotoxæmia plays such an important role in nearly all diseased states it is imperatively necessary at the outset of treatment to thoroughly clear out the alimentary canal, and keep it clean, rendering it and its contents as unsuitable a habitat as possible for pathogenic organisms by the use of some safe, effective intestinal disinfectant.

As I have already stated, we have now many reliable remedial agents; and the advantages of the use of these definite uniformly-acting substances are:—

(1) We know their exact physiological effect,

(2) We know their quantitative effect, *i.e*, how much effect will be produced by a given amount of the remedy,

(3) Exactness of dosage,

(4) Rapidity of action, depending on their solubility and ready absorption,

(5) They may be used in many cases hypodermically as well as by mouth.

If these methods be followed in the early stages of many acute diseases we will be surprised to see how many of them will fail to run their natural course,, and we need not hesitate to say, that we are able to abort or cut short the duration of acute diseases like common colds, pneumonia, typhoid fever, etc.

I may now briefly summarize the points I have tried to bring out:—

The conditions of a rational drug therapy are:

(1) An accurate diagnosis.

(2) An accurate knowledge of the drug.

(3) A definite object in view in its administration.

(4) As far as possible it should be given uncombined.

(5) Enough, and no more than enough, should be given to secure the desired result.

The objections to the commonly used drug preparations are:

(1) They are uncertain and variable in their composition and strength.

(2) They are indefinite and unreliable in their effects.

These objections can be overcome, and a rational system of therapeutics evolved, by using single definite substances, alkaloids, or active principles of known composition, properties, and reactions, capable of producing definite results. The advantages of this method, which has been called the dosimetric or alkaloidal system, are simplicity, efficiency, accuracy, uniformity, safety, ease of administration, and palatability.

DISCUSSION BY V. E. HENDERSON.

Dr. Acheson's able plea for a more rational use of drugs in therapeutics has undoubtedly found among us sympathetic ears and widespread approval. It especially appeals to one, who, like myself, is especially interested in teaching pharmacology and therapeutics. I think, too, that all of us will agree with him when he urges the more exclusive use of drugs whose action is known. By known I would be understood to mean those drugs which have been thoroughly tested by competent pharmacologists and physicians. Daily new drugs are brought to the attention of each one of us by proprietary houses interested in their sale. Many of these preparations are said to have been carefully tested in the laboratories of the firms that have prepared them. I am far from decrying the chemists and pharmacologists in the employment of the more reputable of these firms; on the contrary, I would be the first to acknowledge the valuable and careful scientific work done in the laboratories of such firms as Parke, Davis & Co., or Borroughs, Welcome & Co. But I ask, is it fair to expect that employes of such firms should be entirely free from bias in the judgment of their own productions. Anyone who has spent months in the perfecting of any piece of work is naturally inclined to rate it too highly. Further, in many cases these drugs are accompanied by reports of physicians usually quite unknown to us, and often when known completely unsatisfactory on account of their evident

lack of critical care in selecting their cases and judging of the effect of the treatment. For example, I heard read before an important society last year a paper upon the effect of the administration of cacodylate of soda in cases of pernicious anæmia. Some three or four cases were reported upon, and all showed improvement when placed upon the drug. The author of the paper, however, seemed to have completely forgotten that many cases of pernicious anæmia show improvement quite as great when given simply rest without drug treatment, and indeed show often surprising remissions. Many of you will remember the very great vogue and praise which piperazine received when first introduced; everyone could see for himself that it had simply extraordinary powers of dissolving uric acid in the test-tube, and it is surprising how many physicians of high standing sung its praises, but unfortunately some mere pharmacologists studied its solvent action and found that disappeared completely in the presence of sodium chloride. Unfortunately at the time the quantitive excretion of uric acid under its use were carried out, and these, too, disclosed its inefficiency.

Further, I think that we are all in agreement with him in his statement of the necessity of an accurate diagnosis as a prelude to rational treatment. But unfortunately the best of us are at times unable to fulfill this condition. And having made our diagnosis aright, how often we have no drug which will fulfill Dr. Acheson's further three principles. In spite of the years, centuries one might say, of search, we have very few drugs which will attack organisms within the body in doses in which they do the body no harm. The examples of this class are, I think, quinine in malaria and possibly whooping cough and pneumonia, mercury, which alone kills off the spirochæta pallida, the cause of syphilis, possibly the salicylates in acute rheumatism, atoxyl and trypanred and its congeners in trypanosomiasis, urotropin and the salicylates which excreted in the bile serve to kill off the germs in the biliary tract, the urinary antiseptics, of which urotropin is one of the most important. To these one might add the antitoxins. Again, I fancy, many of us have some doubt as to whether we have any drug that will aid in the elimination of waste from the body, unless we consider water as a drug. Doubtless diuretics may help at times, but often are of no avail. This is especially true of gout, where neither water alone nor with alkalies nor diuretics seem to increase the excretion of uric acid. It appears as though water containing salt (sodium chloride) alone was efficient. Not as

yet have we the clue necessary to force the kidney to do our will in excreting increased quantities of waste. It seems that we are slightly more successful by purging, in bringing about increased elimination of waste by the bowel, while we know that the skin can contribute but slightly in this direction, except as far as water is concerned. No, it is but rarely that we can aid the body directly with drugs, more seldom perhaps than we can aid it with other means. But, as Dr. Acheson has so correctly pointed out, we can frequently aid it indirectly.

Dr. Acheson's scheme of dosage seems to me also to be open to much criticism. It seems to me to very largely partake of that empiricism from which we are so anxious to free ourselves. Why small doses repeated in acute diseases? In malaria the indication undoubtedly is to give a large dose immediately previous to the onset of the fever, so that as large an amount of the antiseptic may be in the blood at the time of sporulation. The same method seems to be indicated by our later knowledge of syphilis, and many observers claim that the method of large initial doses is the only successful method of giving salicylates in rheumatism. The method of treating acute or subacute failure of cardiac compensation by the intravenous administration of artophonthine, which has now given such od results in the hands of several good observers, and in which the entire amount needed in many cases to re-establish compensation is frequently given at once, is another instance which completely breaks the suggested rules.

Nor can I agree with Dr. Acheson's wholesale condemnation of galenical preparations. I think that any pharmacologist would prefer to prescribe the tincture of aconite for internal administration rather than the preparations of aconite at present upon the market, as he knows the difficulty in obtaining even by the same method samples of the alkaloid similar in chemical composition and strength. Nor would he care to see the galenical preparations of digitalis condemned in favor of the so-called purified glucosides which would have to replace them, because, again, he knows how greatly these preparations differ in composition and strength. All of you will recall that aloes is much more efficient than aloin, and no one would think of replacing balsam of Peru by its active constituents. There is, it is quite true, great disadvantages, and even dangers, in the use of galenical preparations of the very highly active drugs, and especially such as do not lend themselves to standardization by the chemical estimation of their active principles. The profession should doubtless demand the pharmacological standardization of such

drugs as ergot, digitalis strophanthus, and squill. Dr. Cronyn has lately been examining in my laboratory the preparations of ergot on the market, and it is simply astounding to see how they vary in activity—a variation doubtless as great as is expressed by the numbers 100 to 1.

I should like to join with Dr. Acheson in a plea for more rational therapeutics. But I think that the best way in which to obtain this end is to make a strong plea for a wider reading and a more thoughtful study of modern physiology and pharmacology. Will you ask yourselves: First, have I a good modern physiology and an equally good pharmacology? Secondly, do I ever consult them? Am I really trying to apply my knowledge of these sciences to the treatment of individual cases of disease. And might I make a further plea for a more careful critical consideration of the literature on new remedies distributed by the pharmaceutical houses, and under their influence contributed to the medical journals. Ask yourselves when a new preparation is suggested whether the claims for it are rational, and in scanning any series of cases, whether the percentage of recoveries would not have been as good without the drug.

DR. NORMAN WALKER.

I have used the alkaloids with success for a number of years. One experience with tr. aconite from the country drug store was that of a homœopathic physician, who had used tr. aconite with no result. On my using a few granules of aconitine prompt results were obtained. About the standardization of drugs, I believe that it was the coming of the alkaloids which has compelled the galenicals manufacturers to standardize their drugs.

DR. JOHN HUNTER SAID—

I wish to call your attention to the utterly illogical methods we generally adopt in treating diseases. Very properly we are striving to make as accurate a diagnosis of the disease as our intelligence and experience enable us to make. We endeavor to prescribe the most efficient drugs we know of. So far we are consistent and scientific? But are these all? We know that the nutrition of the patient is always an important factor, and in many cases the all-important factor. Now, what do we do? We ask for an educated druggist to put up the prescription, but we have, without striving to obtain any information as to the ability of the cook. The diet may be the most important factor, but yet we do not know that the cook has the requisite

knowledge to prepare the food in a palatable manner. An ignorant cook may destroy the virtue of the most scientifically prescribed diet. The only effort to remedy this blunder was made in a consultation with Dr. Allan Bain of Toronto. He thoroughly agreed with my diagnosis and treatment, but had not the same faith in the cooks, and he spent about an hour in teaching the mother how to prepare the food for her baby. Had I spent half the time in teaching the mother that I spent in confirming my diagnosis and treatment, I think the baby would be alive to-day.

DR. CRUICKSHANK SAID—

The only measure we have of the good we do a patient is the amount of his increased resistance to disease. If we do not confer a measure of immunity we do no good. I believe the superstition of the nineteenth century is the belief in drugs, to the exclusion or slighting of other means, such as suggestion and manipulation.

DR. D. MCGILLIVRAY SAID—

A few remarks as to the uncertainty of the common preparations found in our drug stores of the day. The great need of the standardizing of official preparations, under state supervision.

REPLY BY DR. ACHESON.

Accurate knowledge refers specially to knowledge of action gained from clinical evidence. Of course, we owe much to the laboratory workers, but as practical physicians, it is to clinical results we must look. The standardizing of glenical preparations, is a step in the right direction, but does not go far enough. They are standardized only for a single active principle, whereas many of them contain several.

THE IRREPARABLE LOSS OF UNRECORDED EXPERIENCE.

JOHN HUNTER, M.B., TORONTO.

The history of the world is a record of experience. This record has been perpetuated in many ways—in architecture, by the Pyramids, and by vast ruins; in art, by Grecian sculpture and Roman paintings; in music, by the majestic compositions of the great masters; in traditions, songs, folk-lore, costumes and habits. But none of these can compare with the records made possible by the art of printing. Without a printed Bible, the spiritual world would be in a chaotic state. The historian has enabled many to live over again in imagination the lives of the great actors who have played their part, and have passed off the stage in the world's drama. The printing press has reared an imperishable treasure-house, in which are stored many of the richest and rarest gems of literature, science, art, music—in brief, a collection of the words and works of mankind.

If the printed page has done so much for the needs of the laymen, it has been equally generous in its service to the members of the so-called "learned professions." Without his books, the lawyer would be shorn of that strength which is so much in evidence when he wishes to establish his plea by referring to weighty precedents in the statutes. Who has been a witness or a spectator at court, and not noticed the impressive pose and exultant look of the learned counsel, as he hands up the marked paragraph to the judge! The physician, since his patients accept his statements without having to be verified, may say, if inclined to be cynical, that this act on the part of the lawyer is rather a reflection on his veracity. However this may be, custom seems to have sanctioned the procedure, and reference to the printed statutes constitutes a most important factor in law courts. But, much as law is indebted to the printed records of the past, the science and art of medicine is no less a debtor, and this brings up for discussion the vitally interesting question of the "Irreparable Loss of Unrecorded Medical Experience."

The subject is a very large one, and any discussion, in a brief article, must be limited to two or three phases of it. The following three have been chosen:

1. Value of the historical records of experience to medicine.
2. Value of recorded experience to the profession.
3. Value of recorded experience to the physician himself.

Volumes could be written on the value of recorded experience to the science and art of medicine, but space only permits of a very cursory glance at this phase of the subject. Biblical literature contains many records of the art of healing. In Assyrian, Arabian, Egyptian, Hebrew, Grecian, and Roman myths, traditions, works of art and history, are to be found wondrous records of the healing potency of prayers, and sacrifices to the gods, and of the great virtues in charms and other psychic devices. But, coming to the records of the scientific achievements, and experiences, of the long line of illustrious physicians, who "blazed the way" through the dense masses of ignorance, delusions, dogmas, that confronted the medical pioneer, and what do we find? On nearly every page of historic medicine we have evidence of the beneficent results that have followed from recorded experience. In ancient days, it was a common custom in Egypt to place the patient by the wayside, that he might receive advice from anyone passing by who had experience to relate. The patient, when cured, repaired to a temple, where a record of his case was taken and kept. The attributes of Æsculapius, "the God of the Healing Art," acted as an inspiration to many generations of physicians. It is said of Hippocrates, "the Great Father of Scientific Medicine," that his culture, his keen and patient power of observation, accuracy of description and exalted ideals have left their impress deeply stamped on medical literature for all time. Of Galen, it is recorded that such was the high character of his attainments, and of his ideals, that his writings dominated medical thought for more than fifteen centuries.

Now, who could compute the loss to scientfic medicine if no written records had been kept during the first eighteen centuries of the Christian Era, of the experience of Linacre, Dubois, Vesalius, Paré, Harvey, Cullen, Morgagni, Hunter, Jenner, and a host of others? Generations yet unborn will render homage to these "immortals," and also to the records of a Morton, Simpson, McDowell, Beaumont, Virchow, Pasteur, Lister, Roenten, Finsen, and to our own lamented comrade, George Peters. The value to the Art and Science of Medicine, of its historical records of experience, can never be estimated, for it will go on increasing as long as disease is allowed to menace the human race.

"VALUE OF RECORDED EXPERIENCE TO THE MEDICAL PROFESSION."

This story is a long and interesting one. The most cursory glance over the pages of the history of medicine is sufficient to

rival the slow evolution of our calling. In prehistoric times, and in the "ancient of days," the power of exercising the "art of healing" was an attribute of the deities. Prayer and sacrifice were the fees paid for the service. One great advantage these ancient practitioners had over modern ones is that the fees were always paid in advance. Biblical and secular literature are full of the records of supernatural intervention in the cure of disease. One of the attributes ascribed to Christ Himself is that of "The Great Physician."

It is somewhat inspiring to know that, in the evolution of the medical profession, its devotees have been deemed worthy to occupy the place assigned by our forefathers to the deities. In the earlier centuries of the present era, the profession of medicine was a bi-partite calling, consisting of what has been facetiously called "The Angelic Conjunction"—priest and physician in one person. These dual personages had their consultation-rooms in the temples. There lie, in the catacombs of medieval medicine the remains of departed myths, creeds, superstitions, traditions, speculations, and disputations that inspired or perturbed the minds of these religio-medical cults.

A few decades later, on acount of an ecclesiastical edict, the clergy were forbidden to perform surgical operations. The effect of this edict was to create another "conjunction," viz., "the barber-surgeon," who "shaved, drew teeth, and breathed a vein." But the impetus given to the study of anatomy by the recorded experience of Vesalius, in his monumental work, "Fabrica Humani Corporis," induced the more ambitious of the barber-surgeons to lay aside the razor, and take up the scalpel. The result was that a final separation took place between the art of shaving and that of healing. Out of the elements of recorded experience was evolved the medical profession.

If our calling is so deeply indebted to the recorded experience of the past, what are the obligations of its present members to its status to-day, and that of coming ages? There are in the ranks quite a large number, who are not lacking in intelligence, industry, perseverance, or enthusiasm, and these, in every section of medical work, are making new discoveries, or bringing forward new theories and speculations. Now, the products of these virile minds may, or may not, be valuable. They may be true, or false, or a mixture of truth and error. As the crude ore is submitted to the flames to separate the pure metal from the dross, these new discoveries, theories and speculations must be tested in the crucible of experience. The status of the medical profession is not half as much impaired and menaced by the

lack of enthusiasm in research work as by the lack of intelligent, accurate, truthful records of the experience of its members. Any calling is heavily handicapped that is wanting in faith in its own art and science. Every physician can recall instances in his own experience, when, with a certain drug, mixture, or mechanical device, he has achieved marked success in the treatment of many cases. But just as soon as his faith in his remedy began to wane, it was thrown on the scrap-heap. Why this action? If an accurate written record had been kept, the virtue or worthlessness of the treatment would have been established. But, trusting to the illusive records of memory, the impression created by an unfavorable result or two caused his faith to vanish like the morning mist. Why are the middle and upper classes manifesting such a lack of faith in orthodox medicine? All our churches and social circles are filled with those who have gone after every conceivable cult and fad that ignorance, duplicity and avarice can organize or exploit. If these backsliders were composed of the poor and illiterate, it would not seem so strange: but they are the well-to-do, and in their ranks are to be found many of those who have won distinction for scholarship in colleges and universities. Can it not be said—after making due allowance for psychic, social and mercenary influences—that the most potent factor in this stampede from ethical medicine is to be found in the attitude of medical men toward the science and art of medicine, and toward their fellow-members, not only from the lips of the rank and file, but from those of the leaders, and from the printed page, are heard and seen the most skeptical utterances against much that is held sacred in medicine, and innendoes intended to injure the reputation of fellow-members. We cannot ask the public to have faith in us if we are wanting in faith in our own art and science and in confidence in each other. It would be almost impossible to meet a reputable physician who does not deplore existing conditions.

What are the means to be used to help restore both the public and mutual confidence that is so estranged? Higher literary attainments, better teaching, and wider clinical experience for our students would do much. There is a field in which every physician can help to elevate medicine, and that is by keeping as intelligent, accurate, and truthful written records of his experience as he possibly can. These records could be compared with those of confreres, and of his fellow-members of the medical societies. Statistics could be compiled from these that would be of inestimable value in either confirming or disproving the virtues of many of the means and methods now in use. What

a fund of information could thus be furnished by the general practitioner, who may attend two or three generations of the same family! The effects of racial and industrial influences, and of social customs, could be more accurately ascertained. If it were possible—and why should it not be so?—to have even a majority of physicians place intelligently, accurately and truthfully recorded experience on the altar of scientific medicine, there would be witnessed within the first half of the twentieth century one of the greatest evolutions in the whole history of medicine. The well-to-do and intelligent classes would not wait until driven by fear or suffering to leave the charlatan to consult the reputable physician. This one act of loyalty to his vocation by each member of it would help to elevate the status of medicine and to create more mutual faith between its members. The value of recorded experience would be inestimable to the profession itself. The loss of the experience of tens of thousands of its members, through their death, is one of the most lamentable of tragedies, since myriads of human lives have perished prematurely from the lack of knowledge reliable experience could have furnished.

Value of Recorded Experience to the Physician Himself.

It is an indisputable fact that, in the medical ranks, are to be found many who are endeavoring faithfully to discharge their duty. But there is one delusion that dominates the medical doctor almost universally, and that is "too busy," "haven't time." There is no falser or more subtle delusion, for that individual has not been born who has not been given time enough to do what his duty demands of him. This delusion has done more injury to medicine than all the other failings of medical men. Ignorance, indolence, intemperance, immorality, have destroyed the individual physician, but the "too busy, haven't time" delusion has impaired the effectiveness of the whole army.

It would be impossible to meet any progressive physician who has reached middle-age, and especially one who is reaching the lower slopes on the farther side of the hill, who would not acknowledge that a full and accurate record of his own experience would be the best volume he could place in his library. The young physician who has enough intelligence and courage to commence practice with the fixed determination to keep an accurate record of his experience, dealing just as fully and truthfully with his errors and failures as with correct opinions and successes, will assuredly achieve a success that will give

lasting enjoyment, that is, the approval of his own conscience and the approbation of all whose respect is worth appreciating.

The intrinsic value of keeping such a record is very great, in that it is a splendid mental discipline. It keeps the mind fixed on facts, instead of letting it brood over every medical *ignis fatuus* that flits before it. The discussion of medical questions between individuals, and at medical gatherings, would be vastly more profitable and interesting if men could speak from an accurate record of experience. The keeping of this would prove a potent aid in helping the young physician to rise in the ranks. In a competition where the struggle is so keen, he would have a great advantage. It also requires some such discipline to even keep abreast in the ranks. There is always the possibility of being a worse, rather than a better, practitioner at the end of each decade than at its beginning. This retrograde movement is too much in evidence, and it cannot be checked too soon. It is doubtful if a more potent remedy could be found to prevent retrogression, and to stimulate progress, than the keeping of full, accurate records of experience. It would create an insatiable thirst for reading, and for research work. It would create a saving faith in the vocation to which the young physician has consecrated his life.

MEDICAL THOUGHTS, FACTS, FADS AND FANCIES.

By James S. Sprague, M.D., Stirling, Ont.

As it is more or less natural, if, perhaps, illogical, for us of the profession to feel our hearts warm with pride in the achievements of our fellows in medicine, and even in interests scientific or literary, not classed as medical, it certainly is humiliating for us to learn, and such too often occurs, that when the life-work of many of our profession is presented in an obituary notice, but two or three lines report much done for medicine, and to the ordinary reader it would appear as if, in such numerous examples, medicine was but a side-show, and political and municipal affairs more weighty. If we who are duly qualified to practise medicine are publicly known to devote our working hours to interests not in any sense medical, and consequently not having our hearts beating solely and energetically for medicine, the dear people soon learn it—and we suffer; and, while we are thus engaged, quackery flourishes, new cults arise, patients abandon us, and old age approaches, and, with it, its companion, penury. The moral is—there are too many M.D.'s who, although known to be in practice, yet are not devoting their whole energy to the work; in fact, are interfering with the zealous, hard-working and really few safe and reliable men in practice; hence, the poverty of many doctors, the many failures, the heartaches, and the wrinkled pocketbooks.

When fully equipped with all parchments, as testaments of university honors and state or provincial licensure, our modern doctor, for many years, will necessarily be an easy mark for book agents and others equally anxious to secure his scantily and hard-earned silver, for no one of his professors has told him of those conditions which, in a busy and practical life, and among shrewd men, he must meet. And thus he, for at least five years, will take a post-graduate course, which will fit him for a wide-awake citizenship. Sad is it that those who taught him medicine were ignorant of country or town practice—mere professors, book-worms, non-practical men, considered wise only by those who were and are students, who, unless under salary, would starve if engaged in ordinary practice. However, most luckily, there comes out one instructor—only one—who, with several years' experience in country practice, instructs his class

and tells its members some stubborn facts. Are such lectures well received and considered of much importance? If you are in doubt, ask the student, and he, and every old doctor, will tell you without hesitation that the lack of such heart-to-heart talks on medical life-work has been, and is, disastrous to many young doctors.

Those who are graduated from our theological colleges, as a rule, are taught by practical men, who have preached Christ in every atmosphere and in diverse communities.

Those who practise as barristers, in their studies and during their whole student life are continuously surrounded by examples and instruction, fully qualifying them for entrance to practice, and with advantage to themselves and their clients.

In no other profession, or calling, or trade, does he who is pronounced qualified commence his life-work as ignorant of what may be termed ethics as the young doctor, whose profession is the most expensive to acquire, and whose work is the most exacting. No honorable interest or organization has ever existed, or can exist, unless those connected with it have been, or are, devoting their undivided attention to it, and have had practical experience of sufficient duration as to become awakened in knowledge to every condition existing or that possibly may exist, threatening or may threaten, and zealous to encourage those who look up and lift up.

Yes, those who are to sit in our Medical Councils should be those who are in practice, and know full well the views of their fellow-M.D.'s, for, it is said, too many there have been so connected who were absorbed in other interests, and in their homes were unknown as practising medicine as a means of living; hence the absence of unanimity in discussions and solidarity of our profession. Those connected with the church and with law, as a rule, have no side financial interest under nursing during professional life. However, in medicine, too frequently it is observed too many there are who, in the opinion of the public, are interested, most especially in concerns and hobbies purely non-medical. Medicine, like any other profession or calling, demands our best love; if divided or neglected, the people soon learn it, and we, not only personally, but professionally, suffer. One fact is this, that to those who are in active practice in the country we must look for the ideal doctor, for he is the type of those and of whose virtues all that which has been said is worth preserving, being "Cradled in story and nursed in song."

"Because the rose must fade,
Shall I not love the rose?"

says Gilder. If there ever was a title more rapidly losing its distinction, and becoming, in the estimation of the learned, and even of the uneducated, less significant of honorable keeping and respect, the title of Doctor commands the first mention. In this deplorable condition of the title the principal encouragers of its downfall are our universities that, for money, are establishing non-professional, catchpenny and meretricious faculties for the degree-crazed rabble, whose members want recognition and seats among the mighty, and want the university seal to cheap parchments. Formerly, joint-stock medical colleges were doing a land-office business in parchments, but the larger supply institutions —our universities—are, by absorption or federation, silencing the disgrace; but other faker institutions are rapidly arising, and the *Doctorate* is the cheap and gilded prize. The dignity of our universities, too, is equally and as rapidly losing its former standing, and the fellows of Oxford or of Cambridge lament the prostitution of the words, *university* and *doctor*. Queen's University, the Oxford of Canada, is to be congratulated, inasmuch as she is the conservatory for and of time-honored degrees, an exemplar of purity to many universities, so-styled, that are doing a departmental store business with bargain counters and bargain days announced.

The matriculation requirements for medicine, in the earlier days of Oxford and Cambridge, in fact of all European universities, were such as related to the possession of the degree of M.A., and a candidate not in the possession of this degree in arts was precluded from incepting as a doctor. Four years' devotion to medicine Oxford demanded of each M.A. candidate.

To-day, several of our universities, apparently considering pharmacy, dentistry, forestry and pedagogics as equivalents to medicine, demand from their students a matriculation equivalent to that for the arts course. However, Harvard and Yale, during recent years, have demanded what Oxford, in 1432, instituted, and by this act are placing medicine in its former honored position, an example worth adoption by all universities and licensing boards or colleges, if our profession is to be considered worthy to be enrolled and conserved as a learned profession, and to be freed from association with inferior callings, or those not recognized, even by the public, as equally learned or of equal standing, socially or professionally, or of similar worth to the commonwealth. Confirmation is afforded me of the desirability of an arts degree as a preliminary requirement for medicine by examination of fifteen hundred well-advanced students, among whom I found no great difficulty in the recognition

of those who had received classical training, or were pursuing studies embraced in the two courses—a fairly laudable alternative, yet, in semblance, savoring of mercantile life, wherein a silver spoon is presented the purchaser of a pound of baking soda.

"Consistency," says Emerson, "is the hobgoblin of little minds."

If medicine, and by it I mean the profession, is to occupy its time-honored position among men, and those honorably connected with it are to act as conservators of its hallowed name and interests, it certainly is the duty of our universities and members of the profession to offer encouragement to none but the best of young men towards entering the course in medicine. When, during my late examinations for our Medical Council, I experienced much regret to examine a score at least of applicants, whose facial expressions, conversation and general appearance were so repugnant as "wad spean a foal," or equally intimidate one as if "catched wi' warlocks i' the mirk." My reflections and opinions were that such candidates, or their guardians, had not too exalted opinions of medicine and its respectability. However, my heart rejoiced in many instances to see before me the very elect of manhood—and of womanhood—as an overwhelming majority, and I did feel satisfied the dear people and their dependents were willing, and proud of it, that the doctorate should be in their families, and that the future of medicine was safe in the zealous and safe custody of our future Oslers, Bakers, or Fergusons, for they evidently claimed the best of parentage, and were classical scholars of no mean order.

Selected Articles.

THE MODERN TREATMENT OF SYPHILIS.

By Dr. Martin Friedlander,
Director of Lassar's Clinic, Berlin.

Recent research in the domain of syphilis has real and considerable advance to show. The *Spirocheta pallida* is now generally recognized as the exciting agency of syphilis, and the significance of Wassermann's reaction, for establishing the presence of active syphilis, is now scarcely disputed. It would be impossible for an important institution, which desired to maintain its high standing; to allow these eminently valuable discoveries to pass unnoticed. And accordingly, it has now been adopted by the Lassar Clinic as an invariable practice in cases which are not unequivocally certain cases of syphilis, to search for the spirochete by means of the Giemsa stain, either in sections or in the dark field, and to test the blood of all patients coming under observation suffering from syphilis, to ascertain whether it reacts positively or negatively to the Wassermann reaction.

The success of these new methods of observation is truly astonishing. Thus, the microscope proves at one time an apparently soft chance to be specifically infected, and at another time an indurated ulcer is proved to be free from spirochetes; while a suspected case of syphilis may be established as such, so that its treatment can be begun without any need to await the appearance of the secondary manifestations, and the patient is spared both time and the diagnostic roseola. But the serum investigation proved itself of almost greater value than the microscope. Formerly, in cases where no obvious characteristics manifested themselves, we were compelled to give our subjective opinion to the patient, as to the nature of his malady, almost at hazard; but at the present day, basing our opinion on the chemico-biological reaction, we are enabled to say definitely, syphilis is, or is not, present.

It is impossible to enumerate and go into all the questions which arise as a result of this discovery. But, if we have out of a number of cases certain patients who desire to undergo a so-called precautionary treatment, we are enabled, by obtaining a negative reaction, to relieve them of the necessity of sub-

mitting to it; while, in other instances, after obtaining a positive reaction, we must insist on a thorough treatment being carried out even by patients who have regarded themselves as already cured. Further, it is possible in the case of a child to establish that it is suffering from an hereditary syphilitic affection, and to compel its parents, in spite of previous denial, ultimately to confess the infection, more especially when a positive reaction has also been demonstrated in them. How important is this test for young people on the eve of marriage, how valuable in medico-legal cases, and what a brilliant agent have we at our disposal to show us whether our treatment is, or is not, effectual!

And now with regard to treatment; have we in this respect obtained success commensurate with that obtained in the investigation of the disease itself? For the two agencies which for long have availed as specifics against syphilis we have to thank Empiricism; but they have proved their worth in the face of the most strict inquiry as to their usefulness, and we can indeed show that by their rational employment we can cause both the spirochetes and the positive reaction to disappear. But what do we mean by the term "rational" treatment? We mean that we do not employ mercury in a mechanical way, always in the same quantity, always in the same form, with the same intervals, but that we employ it with discrimination, either using it alone or in combination with other therapeutic agencies, such as baths, sulphur, sweating cures, rest or exercise, diet, decoctions of drugs, or other means. The forms in which we use mercury are either those of inunction or injection, with soluble or insoluble salts; or we employ the drug internally. The last method has hitherto, perhaps, not gained many supporters, because the agents utilized, as calomel or tannate of mercury, or iodide of mercury, have either irritated the alimentary canal too much or produced too many oral manifestations, and have, accordingly, been too feeble in efficacy. More recently, as we were compelled to make use of the internal treatment in a series of cases, our attention was directed towards a new preparation called mergal. This substance is a cholic acid-mercury oxide combined with tannate of albumen, and is dispensed in small easily taken capsules. It has already found numerous advocates, and we have ourselves used it in appropriate cases. We are able to state that it is well borne, has proved itself powerfully active against syphilis, although the inunction and injec-

tion methods remain the routine practice. This organic mercury preparation, mergal, has, however, the advantage over the other and inorganic mercury preparations that it is easily assimilable, and in no way irritates the alimentary canal. Patients can remain long under this method of treatment quite comfortably, and do not suffer from the disagreeable inconveniences attending other methods, and this, in the case of better-class patients, is a matter of the highest importance.

And what is the position of affairs as regards the activity of the iodine preparations? Formerly these used to be regarded as being devoid of importance, or, at the most, merely helpful in the matter of facilitating the diffusion of the ingested mercury more quickly through the body. This view has, however, been revised. Iodides are, on account of their own properties, of therapeutic value in syphilis. Unfortunately there stand in the way of their extensive use numerous disadvantageous circumstances, and, especially in certain persons, the tendency to acne and furunculosis, even when the smallest doses are taken, on account of the irritation of the sebaceous glands by the excreted iodine. Further, iodism may occur in the form of increased secretion and hyperemia of all the mucous surfaces, and finally the bad taste pertaining to the most commonly employed preparation, viz., potassium iodide, and its unpleasant action on the stomach and heart are also disadvantages. For these reasons there are many substitution preparations, but these have either the self-same drawbacks or possess less potency. After making many comparative tests we have therefore come to this in the treatment of cases by internal medication, that we order the effervescing preparations of iodine instead of potassium iodide when this drug is not well borne; and, if internal medication is not deemed advisable, or if we desire a particularly strong iodide action—and both these desirata are met with in the gravest cases of affection of the brain and spinal cord—we employ injections of iodipin in 25 per cent. solution directly into the muscles. Iodipin is a combination of iodine and sesame oil. This drug has proved beneficial in severe cases of syphilitic diseases, and has been employed with the best results in English hospitals, as I have recently read. Iodipin is also put up in the form of tablets, and is to be preferred to iodide of potash, just as in modern therapy the organic preparations are to be preferred on account of their greater readiness of assimilation.

To summarize, then, we may say that there has been definite

progress made in the therapy of syphilis, that success is only attained as a result of numerous comparative investigations to determine with exactitude the best preparations to use, their most appropriate forms, their combinations and modifications needful in each individual case; and also the duration of treatment.—*Folia Therapeutica.*

A NOTE ON CONJUGAL DIABETES

By Alfred C. Croftan, M.D., Chicago.

During the last three years I have had the opportunity of observing six instances of diabetes occurring together in man and wife. The first case was discovered by chance, because the wife, fearing that the disease might be contagious, brought her urine for examination. The other five cases were all discovered within the short interval of two years and three months, presumably because, interested by the discovery of the first case, I have since then, whenever possible, examined the urine of the consort of a diabetic for sugar; if no sugar was discoverable in a random specimen, then another test for alimentary glycosuria was made according to the usual method.

The six cases were found among a total of 241 diabetics, i.e., in 2.49 per cent. Inasmuch as forty-seven of the patients with diabetes were not married, or had lost their consort, my six instances of conjugal diabetes actually constitute approximately 3 per cent. of the married diabetics studied.

In looking through the literature on this subject, numerous instances of conjugal or "domestic" diabetes are found. All in all, I have been able to collect 162 cases; these are all instances in which the coincidence of diabetes in husband and wife was so striking that the possibility of a contagion was thought of.

That one is dealing in most of the cases with more than a coincidence is clear; such a thing may occur by chance; but in my series, for instance, in which glycosuria was regularly looked for in the consort, the proportion of instances discovered is far too great to warrant the inference that this is the case. One must think of common errors of alimentation obtaining in a family, or of common errors of living, of exposure to common nervous, mental, and emotional influences. One must think finally of con-

tagion. Syphilis and malaria can produce glycosuria; also certain other, contagious and infectious disorders of known type that cause vascular degenerations in important organs (liver, pancreas, nervous system) concerned in sugar metabolism.

It is not impossible that other infectious agents of unknown character and origin may be concerned in the transmission at least of certain types of diabetes. This subject is well worthy of further study: it is a corollary of the contagious theory of gout, that is gaining many adherents. To deny the possibility of a contagious diabetes on the one hand is precarious; to affirm its existence, on the other, altogether premature.—*New York Medical Journal.*

MYCOTIC INFECTION OF THE VAGINA

By Flora Pollack, M.D., Baltimore.

Although the presence of mycelium in the vaginal secretion of women is of rather common occurrence, 42 times in 685 vaginal examinations, or 6.90 per cent., its pathological importance is very low indeed. Von Herff and Hausman never found it in a virgin, and Von Herff in Frauen Poliklinik in Halle in a six-year service found but 24 cases in 13,283, or one in 553, and that has been about the experience in the Johns Hopkins Hospital Dispensary, in the Women's Venereal Department, in which but three cases with pathological symptoms were discovered; so that in a series of 685 vaginal examinations, 42 contained the fungi. Of these, but three had symptoms, one of these in a young (15-year-old) white virgin, and two in colored women, both parous, but not pregnant. Von Herff found that pregnancy and the summer heat predisposed to it, and that the infection was often conveyed to the mother from a child suffering with thrush. In an experience so small it is, of course, impossible to draw conclusions, as in Von Herff's interesting series. It is said to be at times intractable to treatment, though usually the acute cases recover promptly after the applications of mild antiseptics.

The symptoms are intense itching, burning or pains, with or without irritability of the bladder. The diagnosis is easily made microscopically, in which the dense white membrane, which may suggest diphtheritic membrane, consists of mycelium and spores,

and epithelial cells, is easily removed from the intensely injected mucous membrane of the vulva vestibule, or may cover the entire vaginal canal as a cast, as occurred in the young girl of 15 in my group of cases. It usually occurs as white or yellowish patches, which, as said before, can be easily removed without leaving bleeding areas. I have been able to grow the fungus in agaragar and glucoseagar and potato and milk, where it has grown luxuraintly for a short time, too short to isolate it from the other bacteria, in order to determine the species. Although it grows rapidly, it is soon killed by other organisms, which is one of the reasons which Von Herff gives for its rarity as a pathological factor.—*Maryland Medical Journal.*

VACCINATION AGAINST PLAGUE.

Fornario (*Annales de l'Institut Pasteur*), publishes the report of his attempts to immunize guinea pigs and rabbits by the administration of plague bacilli by the mouth and by the rectum. He comes to the following conclusions: (1) It is possible to immunise animals against plague by administering by the mouth small doses either of virulent cultures or of cultures warmed to 53 deg. for an hour and a half. Two-thirds of the animals thus treated resisted a subcutaneous inoculation fatal to control animals. (2) Limited immunity can be gained by rectal administration. (3) In animals thus vaccinated specific anti-bodies appear very rapidly in the blood. (4) The opsonic index remains higher in vaccinated animals than in controls when subjected to a virulent subuctaneous or intravenous inoculation. (5) The injected plague bacilli are almost completely destroyed in the digestive tract of the vaccinated animals.—*The Medical Press and Circular.*

Meeting of Medical Societies.

AMERICAN PROCTOLOGIC SOCIETY

(CONTINUED FROM LAST ISSUE)

"SIX CASES OF PROFOUND SECONDARY ANEMIA DUE TO BLEEDING INTERNAL HEMORRHOIDS; AND ONE CASE OF NECROSIS OF THE RECTUM AS A RESULT OF SELF-TREATMENT,"

were reported by Dr. Dwight H. Murray, of Syracuse, New York, who held that the profession was not entirely blameless for the serious results which occurred in this class of cases, because it is looked upon by the laity as a matter of no serious moment, and in many cases the physician does not insist upon a thorough examination and prompt treatment.

The first case reported was one of bleeding hemorrhoids, secondary anemia, delirium, amnesic aphasia and other critical symptoms. A good recovery was the result of the operation.

The second case was one of hemorrhoids and a villous polypus resulting in profound anemia, heart weakness and a general appearance resembling that of malignant disease. This case made a full recovery following operation.

The third, fourth and fifth cases resulted in profound anemia, weakness, melancholia, and invalidism, all making a good recovery after an operation.

The sixth case had been long neglected and died as a result of the profound anemia two days after he was first seen by the author and before the patient consented to an operation. The examination showed: Hemoglobin, 10 per cent., and red blood corpuscles 1,000,000.

The author held that in cases of bleeding internal hemorrhoids patients may lose more in ten minutes than can be recovered in as many days, and that surgeons were not justified in delaying an operation, also that it would be far better for the physician in charge to withdraw from the case, if such a patient refuses to follow his advice, when he believes that an operation is necessary.

The author believes that the primary cause in many cases of

secondary anemia can be found, if sought, in the last three feet of the intestinal canal.

The cases of necrosis of the rectum was caused by the injection of two-thirds of a teaspoonful of headlight oil, upon retiring every night, over a period of several weeks. The treatment was recommended to him by a fellow employee. The case made a good recovery, and at this time, five years after the operation, no stricture of the rectum has resulted.

"Spontaneous Intestinal Anastomosis."

By Dr. James P. Tuttle, New York City,

whose paper consisted in a discussion of the means by which nature overcomes intestinal obstructions through spontaneous anastomosis. Four cases were reported in which the obstruction suddenly gave away, and the patients lived for various periods, with more or less regular movements of the bowels. These movements were afterward shown in one case by autopsy, and in two cases by operative interference, to have taken place by spontaneous lateral anastomosis between different portions of the bowel. The fourth case was never operated upon, but being at the point of death, with great abdominal distention and inflammation, was relieved by some sort of giving away of the obstruction and eventually recovered. This patient had suffered from colitis and fecal stasis high up for a long time; since this experience, however, these symptoms have disappeared and she has remained entirely well.

"Mesosigmoidopexy with Reports of Two Cases,"

was the title of a paper by Dr. Louis J. Hirschman, Detroit, Mich.

After defining the different forms of prolapse of the rectum, the author called attention to the unsatisfactory results so far attained in the various suspension operations for prolapse of the third degree. He argued that as in operations on the retroverted uterus, the shortening of the natural supports of the womb has superseded the illogical attachment to the anterior abdominal wall. He hoped that the mesentery, the natural support of the bowel, will be used to replace the old fixation methods used heretofore.

He reported two cases suffering from prolapse of the rectum and sigmoid of the third degree, both of whom had had other operative measures performed without satisfactory re-

sults. These two cases were operated on with entire relief by the author's method of mesosigmoidopexy—the technique of which is as follows:

Under hyoscine and morphine anesthesia, fortified with a small quantity of chloroform, the abdomen was opened a little to the left of the median line, the incision paralleling Poupart's ligament. Nearly one-half of the sigmoid flexure was found telescoped into the rectum, and the space formally occupied by the uterus filled with the rest of the prolapsed sigmoid. The stump of the right broad ligament was found firmly attached to the sigmoid, thus holding the lower part of it in the prolapsed condition. The mesentery of the sigmoid was very much elongated, allowing the bowel to remain in the lower pelvis. The adhesion to the stumps of the ligament was separated, and the stump of the broad ligament covered over the peritoneum, the prolapsed bowel lifted out of the pelvis, and the outer surfaces of the mesentery of the large loop of the sigmoid lightly scarified. Beginning toward its deep attachment (about six inches from the bowel in this case) the two opposing surfaces of the meso-sigmoid were brought together by interrupted 20-day catgut sutures (No. 2). Three rows about an inch apart were placed in this manner, the upper row being three inches from the bowel. As the sutures were tied the sigmoid and the rectum were lifted from their prolapsed position.

For fear that the curve of the loop might be lessened, and possible kinking take place (a rather remote possibility on account of the strength of the adhesions), the longitudinal muscular band of the sigmoid, together with an eighth of an inch of the serous and muscular coats of the bowel on either side of the band, was rolled in upon itself by transverse interrupted catgut sutures, placed threequarter inches apart around the curve, and for two inches beyond at each side. This rolling in of the muscular band made a rib of firm, muscular tissue which materially increased the size of the curve, and greatly strengthened it.

The scarification of the sutured surfaces of the meso-sigmoid assured us of an adhesive surface of over 18 square inches, and yet allowed perfect motility of the organ. The abdomen was closed, the rectocele reduced and repaired, and the prolapsed anal mucous membrane resected.

In the after-care of these cases the patient is kept confined in bed on a restricted assimilable fluid diet, and the bowels not

allowed to move for about ten days. At the end of that time the diet is gradually increased but the patient not allowed to get out of bed and walk until the end of the fourth week.

In the two cases reported by the author in his paper, reports from the patients six and eighteen months afterwards respectively, evidenced the fact that they were in perfect health, and both having natural normal bowel movements without assistance.

While these patients were women, the same condition occurs in men and the same technique is applicable to them.

"PRIMARY MELANOTIC SARCOMA OF THE RECTUM AND ANUS, WITH REPORT OF TWO CASES."

Louis J. Krouse read a paper on the above subject, and stated that very little space or none at all has been devoted to this subject in works on general surgery. He quotes what the various authors on diseases of the rectum say in reference to this class of new formations. He has gathered together the reports of this disease, and has found altogether sixty cases.

In forty-five cases, in which the age and sex of the patients were specified, there were 28 males and only 17 females. No decade was exempt except the first—the youngest being a boy, aged seventeen; and the oldest, a man aged seventy-five. That it was more prevalent in the sixth decade, being a disease of the middle period of life and old age. The average age being forty-nine and five months.

He concludes his paper with the suggestion that as the course of the disease is so malignant, extirpation is the only rational thing to be done. Not only should the neoplasm be removed thoroughly but a good deal of healthy tissue should be sacrificed. Should the tumor be located at or near the anus, the sphincters as well as the inguinal gland should be extirpated.

"SOME COLONIC, SIGMOIDAL AND RECTAL CONDITIONS."

By Dr. Edwin A. Hamilton, Columbus, Ohio,

who stated that the ascending, and a portion of transverse colon have to do with absorption of the fluids of the digestive tube. The descending colon and sigmoid are concerned with storing fecal debris. There are changes in the intestinal wall of the descending colon, sigmoid and rectum which are due to

the function of these parts. On account of the stagnation, fermentation and putrefaction in the contained mass, toxins and bacteria, under conditions favorable to this process, pass through the mucosa into the wall of the bowel. The result of this permeation of the wall of the intestine is an irritation which brings on a round cell infiltration of its layers. This infiltration diminishes the elasticity of the viscus, and by its slow but inevitable contraction diminishes its lumen. This same process of round cell infiltration may attack the mesenteries of these various divisions of the bowel, and cause thickening and contraction of them. The main symptoms of this condition is prolonged and intractable constipation with all its morbid sequellæ.

After fibrosis has occurred the affected area may be palpated, if the abdominal walls are relaxed. It is needless to remark that all accessible viscera must be investigated, and every other cause of the constipated state must be eliminated. Treatment comes under the hygienic, in which diet and colonic lavage occupies a very prominent position.

Surgery must be invoked in the advanced cases when the fibrosis is marked. Any part or all of the colon except the part concerned in the absorption of fluids, may be removed. Metchnikoff is a prominent advocate of the idea that the colon is the territory from which most of the poisons which destroy the body originate, and that if man possessed no storehouse in which digestion debris may stagnate and putrefy he would be a much more physically perfect animal. So that we may not hesitate to remove any portion of the large bowel no matter how extensive that portion may be, when, it has already lost what little functional value it originally possessed.

"Rectal Diseases." A Report of Three Cases: "Condyloma, Lipoma and Foreign Body"

was the title of a paper read by Dr. Lewis H. Adler, Jr., who stated in reference to condyloma that two varieties were recognized—one being of syphilitic origin, called condyloma latum; and, the other condyloma acuminatum, due to irritating discharges of a non-specific source, such as gonorrhea, leuchorrhea and chancroid. The latter form was the variety concerned in the case reported; the patient evidently acquiring the trouble in the practice of sodomy.

The essential peculiarity of the case under consideration

being that the numerous cauliflower growths encircling the anus—some being large and others small—was the fact that not only had the growths involved the cutaneous surface, but also that they existed within the bowel upon the mucous membrane. The latter, it is true, were quite minute and might have been overlooked by a superficial examination. All of the excrescences, even the smallest, were pedunculated.

The treatment consisted in the removal of the larger growths by scissors and cauterizing their bases with a paquelin cautery. The smaller growths were destroyed simply by the application of the cautery point. To prevent pain due to the cauterization, the parts were sprinkled liberally with bicarbonate of soda, as recommended by Dr. Jas. P. Tuttle.

The patient made an uneventful recovery.

Case II.—The case of lipoma was not exceptional except for the fact of its occurrence in the ischio-rectal fossa, and that it could be pressed backward and forward through a ring of firm tissue, which ring could be distinctly felt surrounding the tumor, and through which it glided back and forth.

The growth was removed under ether anesthesia, and was found to extend well up in the ischio-rectal fossa on the right side. The redundant skin was excised, and the wound brought together with silk-worm gut sutures.

The recovery was uneventful.

Case III.—A very remarkable instance of a foreign body in the rectum was that of a woman, aged 42, who had consulted Dr. J. J. McLaughlin, of Philadelphia, and then through the doctor, the writer of the paper.

She had reason, about six years previous to seeing Dr. McLaughlin, to think she was pregnant, having most of the symptoms pertaining thereto—suppression of menses, enlarged abdomen, morning nausea, etc. For about six months she did not menstruate. At no time did she experience fœtal movements. About six months from the cessation of menstruation, the flow returned, and she again became regular in this respect. The physician she was then seeing, informed her that he thought she had a false conception. Two years later she went South and contracted a diarrhea which kept her under the care of physicians, almost constantly, but without experiencing any permanent relief. Six months prior to seeing the author of the paper she had experienced considerable tenesmus within the rectum—the pain being confined to no one point, but was experienced low down in the pelvis, and

about the rectum. Sometimes a dozen paroxysms would occur in a day. The diarrhea still continued, many movements occurring in the twenty-four hours.

At no time was there any bleeding from the bowel, and she was not affected with any protrusion, such as piles, etc. About two months before she saw the author of the paper, she passed from the rectum what she termed "a bunch of bones," and a month later a piece of skull.

Upon consulting Dr. McLaughlin the patient was carefully examined by him and a diagnosis made, which was subsequently confirmed by the author.

At the time of the examination the patient showed marked evidence of being poorly nourished, weighing about 75 pounds, her usual weight prior to this trouble being over 100. Digital exploration of the rectum revealed a mass situated about four inches up the bowel anteriorly, which felt very much like the united halves of an open clam-shell, the pieces being sharp and exposed. Extreme care had to be used to avoid cutting or injury to the examining finger. The tissues in which the mass was embedded were greatly hypertrophied. A few small pieces of bone were removed at this time, but it was soon evident that the larger mass could not be extracted except under general anesthesia.

The patient, therefore, was admitted into the Polyclinic Hospital, and under ether, the sphincter was dilated, and the mass of bones removed which proved to be in large part, frontal bones. It was only by the exercise of the utmost care and skilful manipulation of the fingers that some of the larger pieces were removed without injury to the patient or surgeon.

The after treatment consisted in cleaning the parts thoroughly several times a day, with a two per cent. creoline solution.

The patient made an uneventful recovery, and in six months gained about twenty-five pounds, and since the operation has had no diarrhea.

The cause of the condition was uncertain. Two causes naturally presented themselves—a dermoid cyst or the product of an extra-uterine fœtation. As the essential symptoms of the dermoid cyst were not present, and, in view of the previous history, the opinion was expressed by the writer that her condition was probably due to the latter cause.

Progress of Medical Science.

MEDICINE.

IN CHARGE OF W. H. B. AIKINS, F. A. CLARKSON, AND BREFNEY O'REILLY.

"Suprarenal Capsules."

The Oliver-Sharpey lectures, by E. A. Schafer, are published in full in the British Medical Journals of June, 1908, and deal with the present condition of our knowledge of the functions of the above organs.

Schafer just gives a brief account of the earlier investigations, beginning with Addison, who, in 1855, described the disease known by his name, and its pathology. Brown-Sequard in the following year removed these glands in animals producing symptoms identical with those described by Addison, minus pigmentation, which terminated fatally. Curiously enough many early observers were unable to produce the same results, as they used white rats, which animals apparently have accessory subcutaneous glands, and are able to withstand extirpation of the suprarenals.

Little experimental work was attempted until, in 1883, Pellacani and Foa injected an extract of the gland, but they supposed the results obtained were due to alteration in the coagulating power of the blood. It was not until Oliver and Schafer, in 1894, with the aid of instruments showed its effect on blood pressure. In the year preceding, Langlois and Chassevant demonstrated that the blood in the capsular vein contains more oxygen, plus an active principle, and less CO_2 than ordinary venous blood; also they found granules in the medullary sinus which gave the same reactions as those found in the chromophilic cells of the medullary parenchyma, strong evidence that a secretion is passed into the blood from the gland itself. As regards development it has been proved that the cortex is mesodermic in origin, and the medulla arises from the same blastema as the sympathetic ganglia. The researches into the properties of suprarenal extract culminated in 1901, when Takamine, a Japanese, isolated the active principle in

crystalline form (adrenalin); finally Stöltz, in 1907, synthesized a material ($C_9 H_{13} NO_3$), said to possess all the essential properties of suprarenal extract.

Oliver and Schafer in their experiments on the effect on blood pressure, showed a marked increase due to vaso-constriction, and increased rate and energy of the heart, even if minute doses only were administered, altogether independent of the nervous system, the substance is apparently not excreted in the urine but probably stored in the skeletal muscles; they also showed that an extract of the cortex is inert.

Its local action and therapeutic value were unrecognized until 1896. As far as Addison's disease is concerned the results have been disappointing, the amelioration of symptoms being transient.

The relation between diabetes and the function of the suprarenal yet requires investigation. Lowe finds that the extract dropped into the conjunctive in diabetics, with diseased pancreas, produces dilatation of the pupil, whereas in the normal individual no such reaction occurs, and suggests this test in pancreatic diabetes.

Shafer concludes his most interesting paper by a reference to "Hormanes." From analogy we have some justification for inferring that the cortex may yield a hormane which influences certain other organs; possibly Schafer suggests the generative organs as integumentary tissues.

Pseudo-Leukemia.

La Roy, from the clinical and histological study of six cases of pseudo-leukemia, enters into a minute description of this disease.

It may arise in any part of the organism where lymphoid tissue exists, but generally begins in the gangliowary system. A single ganglion becomes large and hard, but remains indolent and moveable. The neighboring glands are similarly affected, and become blended with the first in a large mass. This mass does not become caseous, but may ulcerate into the neighboring muscles and bones. The first glandular enlargement is generally in the neck, afterwards in the inguinal, mediastinal and axillary regions. The spleen is always much swollen. With the adenopathy, the fever appears. The blood presents no changes. The disease may lessen under a reconstructive treatment, or it may gradually lead to a serious cachexia.

At the autopsy one finds many ganglion masses. The spleen is

large, sometimes enormous, and hard. Histologically, the characteristic lesion seems to consist of nodules, rich in polymorphous cells. Some foci of caseification are seen; also, here and there, typical miliary tubercles.

The histological aspect of the lesions permits one to differentiate between this form of pseudo-leukemia and the true pseudo-leukemia, in which there exists a hyperplasia of the lymphoid tissue. There is also a difference in etiology between the two. The former is probably dependent on tuberculosis. The Roentgen rays, which are helpful in many forms of true pseudo-leukemia, do not produce any results in the tubercular form. In the latter, surgical treatment is preferable. An absolute or relative lymphocytosis is a sure sign of true pseudo-leukemia; in the other form there is an absence of lymphocytosis. In the latter there is generally rise of temperature. The hard lymphomata are tubercular. The hemorrhagic diathesis is rare in the tubercular form, frequent in the true pseudo-leukemia. Lesions of the retina, frequent in the true, are not found in the tubercular.—*Translated from Giornale Internazionale delle Scienze Mediche by Harley Smith.*

The Diagnosis of Diaphragmatic Pleurisy.

According to Schrwald (Dent. Med. Woch.), the chief points upon which is founded such a diagnosis are the following:

1. A lessened fulness of the diaphragmatic excursions, and, consequently, short, frequent respirations, dyspnoea, sometimes so intense as to amount to orthopnoea.

2. Frequently, violent pains, which are produced during the movements of the diaphragm (breathing, coughing, sighing, etc.). The pains are localized at the diaphragmatic insertion, and also at the whole lower opening of the thorax. Severe pain, on pressure, may be found at these four points:

(a) Anterior diaphragmatic point;

(b) Epigastric point;

(c) Along the twelfth rib;

(d) Posterior diaphragmatic point (in the eleventh intercostal space, near the vertebral column).

The pains may extend to the shoulder and the neck. Pressure between the two points of insertion of the sterno-cleido-mastoid may cause pain.

Sometimes there is pain during deglutition (due to passage of the food through the esophageal foramen of the diaphragm).

3. Cough is frequent. If the disease is on the left side, there

will occur gastric phenomena, as pain and vomiting. Sometimes one will discover the abdominal respiratory reflex, formed thus: In deep inspiration, at the end of the act, there is a rapid contraction in the upper portion of the abdominal rectus on the right side, which may extend as far as the fifth intercostal space.

4. One may find friction sounds over the diaphragm. Sometimes peritonitis is produced.—*Translated from Giornale Intern. delleScienze Mediche by Harley Smith.*

The Respiratory Murmur.

H. D. ARNOLD, Boston, (*Journal A. M. A.,*) criticises the modern teachings as to physical signs in the text-books, as failing to discriminate between unfounded theories and established facts and ignoring the physical laws on which their explanation should be based. There are, it is true, many points that we cannot thus solve at present, but we can be more truly scientific and less traditional in our ideas. To illustrate his views, he takes up the subject of the respiratory murmur, in regard to which there are contradictory opinions as to the reason why there should be two types of breathing sounds, a question that can be solved by physical experiments. more easily than the physiologist can investigate the digestive processes. The respiratory murmur with its modifications, he shows, is rationably explainable according to the laws of physics by recognising it as originating at two points, the glottis and the point where the minute bronchus opens into the air sac. From these its transmission depends on the structures and passages through which the vibrations are conducted, and with a knowledge of the physical laws of sound conduction and of the structural and gross anatomy, one obtains an understanding of the complex combinations of sounds in health and readily translates the variations that come with disease into terms of changes in the texture of the lung tissue. This is the real aim of auscultation of the respiratory murmur—to learn the texture of the lung tissue. Arnold gives his explanation in detail of the physical mechanism of the different changes in the respiratory sounds, and while he does not claim that it is necessarily correct, as it has not been experimentally demonstrated to be so, it is consistent with the laws of physics and offers an intelligent basis from which to carry out further investigations which shall confirm or disprove it.

Aneurism of the Heart.

J. B. McElroy, Memphis, Tenn., (*Journal A. M. A.,*) gives a detailed history of a case of aneurism of the cardiac wall, with autopsy. He concludes from his study of the literature and his observation in this case, that the most probable frequent cause is myocardial fibrosis resulting from interference with the circulation in the coronary arteries, which were sclerotic and had their orifices contracted in his patient. This, he says, also explains the most frequent seat of the aneurism, which is in the apical third of the left ventricle and the most frequently on the anterior surface. The death of his patient was due to cardiac insufficiency from myocarditis. There was also, in his case very extensive mediastinopericarditis, clearly recent in all parts except over the aneurism, indicating its secondary character. The aneurism was five inches in lateral width and three in depth and its communication with the left ventricle was marked by a well defined fibrous ring, two inches in diameter. The diagnosis of aneurism was made antemortem.

OBSTETRICS AND GYNECOLOGY.

IN CHARGE OF ADAM H. WRIGHT, K. C. M'ILWRAITH, FRED. FENTON AND HELEN MACMURCHY.

Treatment of Myoma of the Uterus.

1. Non-Surgical Treatment.

If a patient has only a small myoma, which is not growing, not causing pain, severe hemorrhage, or interference with her health or comfort we are not justified in advising her to undergo an operation.

It is important that a patient, with a troublesome myoma, should rest as much as possible. During the period, she should stay absolutely in bed. If there be a tendency to flooding, the foot of the bed should be raised, from twelve to

eighteen inches, on blocks. In the intervals between the periods, she must avoid all strain and fatigue.

The patient should be forbidden to wear corsets, as they tend to press the tumor down into the pelvis. On the other hand, the wearing of a light abdominal belt is sometimes beneficial.

The treatment of myoma by drugs is unsatisfactory, and resolves itself into the alleviation of symptoms. By far the most important of these is hemorrhage.

Ergot is our chief remedy for the control of the bleeding; and, in many cases, is of great value. It excites the contractions of the uterine muscle, and, by pressing together the opposing surfaces of the mucosa, checks excessive bleeding. To some extent, it also acts by causing contractions of the small arterioles. I know of many cases, where patients have taken ergot in drachm doses thrice a day for years; and I have never seen it produce ergotism. Its use, however, is not free from objection. As Dr. Thomas Wilson has pointed out, when the heart muscle is degenerated, ergot is contra-indicated. It contracts the arterioles all over the body, and so increases the resistance to the left ventricle.

Hydrastis is often prescribed with ergot in the form of tablets. It is an astringent to the uterine mucosa, and so helps to check the menorrhagia and leucorrhea due to the endometritis so often present. As far as I know, it has no direct effect on a fibroid.

A myomatous woman should keep her bowels well open, as constipation tends to increase congestion of the uterus, through scybala pressing on the ovarian veins.

Plugging the uterus and vagina is of great help in controlling dangerous bleeding. It may tide a patient over a bad flooding, and allow her to gain some strength before undergoing an operation. When called to a patient collapsed, blanched, and nearly pulseless from uterine hemorrhage, it is madness to attempt a big surgical operation such as hysterectomy. The best treatment is to put her on her side, pass a Sims speculum, and draw down the cervix with vulsella. If the cervix be found dilated, the uterine cavity should be firmly plugged with a long strip of iodoform gauze. The first few inches of gauze may be soaked, with advantage, in a solution of adrenaline. The rest of the vagina should then be firmly plugged with some antiseptic material, such as iodoform gauze, or dry boracic lint. A firm abdominal binder should be applied to exert counter-pressure on the uterus. The plugging should be re-

moved from the uterus and vagina every forty-eight hours, and fresh material reapplied. In this way, the bleeding is controlled, and the patient given time to rally. Should the myoma be submucous (and these are the cases in which there is most bleeding), the gauze packing slowly dilates the cervix, and renders easy the subsequent removal of the growth.

It is most unwise to apply styptics, such as alum or perchloride of iron, to the interior of the uterus to check bleeding. They lead to the formation of hard clots, which, decomposing, cause sepsis, and precipitate the onset of necrosis.

2. Surgical Treatment.

CONTRA INDICATIONS TO OPERATION.

I would not advise an operation:

(1) Where the tumor is smaller than an orange, is causing no symptoms, and is not growing.

(2) Where the patient is past the change of life, and the myoma is quiescent and causing no trouble.

(3) Where the patient is gravely ill from some other condition—such as phthisis, heart disease, or kidney disease—which will of itself prove fatal before long.

INDICATIONS FOR OPERATION.

On the other hand, an operation is called for:

(1) Where there is severe bleeding, uncontrolled by rest and ergot.

(2) Where there is rapid or persistent growth of the tumor.

(3) Where there are signs of degeneration, necrosis, or malignant disease.

(4) In many cases complicated with pregnancy.

(5) In cases complicated with gross lesions of the ovaries and tubes.

(6) Where there are marked symptoms of pressure on the urinary organs.

(7) Where the tumor is very large, and from its great bulk and weight becomes a burden.

(8) In some single women where the tumor, from its size, leads to unfounded suspicions of pregnancy, and causes the patient much unhappiness.

(9) In cases of sterility due to the presence of a myoma, which can be removed without sacrificing the uterus.—*Christopher Martin, Birmingham Med. Review (Abstract).*

Is Pubiotomy a Justifiable Operation.

At the last meeting of the American Gynecological Society, Professor Whitridge Williams read a paper on this subject, with the following conclusions:

1. In thirteen pubiotomies performed at the Johns Hopkins Hospital, there were no maternal and three fetal deaths, only one of which was attributable to the operation.

2. All patients were delivered immediately after the operation by forceps or version. There were no injuries to the bladder, three perineal, and only one deep communicating vaginal tear, notwithstaning the fact that nine of the patients were primiparæ.

3. The relative infrequency of injury to the soft parts is attributed to the employment of Doderlein's technic, but particularly to extensive, preliminary, manual dilatation of the vagina and perineum.

4. The after-treatment is not so onerous, as is generally stated and is greatly facilitated by the use of the Bradford frame. Immobilization of the pelvis is not necessary. The patients usually move spontaneously in bed on the third or fourth day, get up on the twentieth day, and are discharged on the thirtieth day with satisfactory locomotion. Healing generally occurs by the formation of fibrous tissue, and in at least one-fourth of the cases there is definite motility between the ends of the bone.

5. The maternal mortality should be less than 2 per cent., provided the operation is performed by competent operators upon uninfected women, who have not been exhausted by previous attempts at delivery.

6. It is indicated in contracted pelves, in which the conjugata vera does not fall below 7 cm., and after a test of several hours in the second stage of labor has shown that the disproportion between the head and the pelvis cannot be overcome, as well as certain cases of outlet contraction.

7. In multiparæ, with a history of repeated difficult labors, or in primiparæ presenting excessive disproportion, it is inferior to Cesarean section performed at the end of pregnancy, or at the onset of labor. In other cases it does not enter into competition with it, as it is the operation of choice in border-line pelves after the patient has been subjected to the test of labor, and at that time is five or six times less dangerous than Cesarean section.

8. It should replace high forceps, prophylactic version, induction of labor and craniotomy upon the living child in uninfected women.

9. It should not be employed in infected patients, or after failure to deliver by other means. It should be regarded as a primary operation, whose dangers are infection, deep tears and hemorrhage.

In the discussion that followed, Dr. Barton Cooke Hirst, of Philadelphia, said his experience led him to feel that pubiotomy would not retain a permanent place among operative procedures any more than symphyseotomy had. He predicted that, with some exceptions, in five years very few obstetricians would be doing pubiotomy. He thought Dr. Williams' objection to the induction of labor was largely theoretical, whereas those who had given it an extensive trial could not help but believe it was a most useful procedure, and ought not to be condemned, but employed more frequently than it had been. This statement was made on personal experience, including more than 200 cases, and he had had a great many more cases since. Without any special prejudice in favor of one operation over the other, his personal experience had taught him that the induction of labor was an exceedingly useful, valuable and safe procedure, and with good hygienic conditions which could be obtained in the best hospitals and private houses, with good nursing, he did not have any infant mortality when done within three weeks of gestation, as contrasted with the induction of labor at term.

Dr. Henry D. Fry, of Washington, D.C., mentioned fifteen cases of pubiotomy without a maternal death, or he might have had twenty-seven cases without a maternal death, but this did not tell half the story. It was the morbidity rate. He began this operation with a great deal of enthusiasm, and said it was one of the most gratifying operations to do in obstetric surgery. In fact, so far as the operation itself went, it was ideal. It was an easy thing to do. There were certain accidents which might happen during the operation. In the first place, tearing the anterior vaginal wall during the extraction of the child's head. Owing to the fact that the bones are not supported properly, the stretching of the tissues tore the anterior vaginal wall. One was liable to rupture the plexus of veins and get hemorrhage. The speaker would never select pubiotomy in preference to Cesarean section, provided the woman had any chance, and he would give her that chance if she had been in labor twenty-four or thirty-six hours. He would rather do it provided forceps had not been used or any efforts at version made. He would rather do Cesarean section in such cases, believing that the mortality would be no higher than that following pubiotomy, and convalescence would be much better. A complication which followed

these cases was septic phlebitis. In a series of twenty cases which he collected a year ago, twelve of them were primary, eight secondary, with four deaths in the secondary cases. If one could not do Cesarean section, then he might do pubiotomy, but he believed there was a limited field for it as a secondary operation.

Dr. Richard C. Norris, of Philadelphia, said that he was rather disposed to take a more favorable view of pubiotomy than most of the gentlemen who had spoken. He had watched its development with a great deal of interest, and in a paper he had discussed it along lines similar to those pointed out by Dr. Williams. He would differ with Dr. Williams in regard to the attitude taken by him with reference to the induction of labor. The essayist had started out with a fetal mortality for induced labor of 30 per cent., whereas, in thirty cases reported by the speaker in his own paper, the primary mortality was 10 per cent., and of that 10 per cent. there were at least four cases, if he had the matter to do over again, which he would not have subjected to induced labor, but to pubiotomy.—*American Journal of Obstetrics.*

Editorials.

FRENCH SCIENTISTS IN TORONTO.

The medical profession of Toronto had the pleasure of entertaining a very distinguished and charming party of scientists, mostly from France (twenty-three gentlemen and five ladies), on Friday, September 18th.

It happened, fortunately, that Dr. W. H. B. Aikins had a personal acquaintance with some of the delegates who live in Paris, and when there last June he heard that they had some intention of visiti ıg Canada on their way to the Tuberculosis Congress in Washington. He conceived the happy idea of inviting them to visit Toronto. After a correspondence they accepted the invitation, but were unable to fix the date exactly. Finally Dr. Magnin, one of the secretaries of the French delegation, sent a cablegram that they would reach Toronto Thursday morning. When Dr. Aikins received this intimation he at once informed the officers of the Academy of Medicine and the authorities of the University, and, although there was little time for preparation, all worked with a will and a programme was prepared for two days. On Wednesday a telegram was received that the party could not arrive until Friday morning. This, of course, necessitated a very radical change in the arrangements, but those in charge soon decided on the form of entertainment and a programme for the day. In the party, which arrived as expected, on the morning of September 18th, were Prof. Landouzy, Dean of the Medical Faculty of Paris; Prof. Arloing, Professor of Bacteriology, University of Lyons; Prof. Pierre Teissier, Prof. Leon Bernard, Dr. Triboulet, Dr. Du Fournier, Dr. Hirschberg, M. Augustin Rey and M. Braine, of Paris; Prof. Courmont, of Lyons; M. Piot, Bey of Cairo; M. Beaumevieille, of Bois du Four, Millau; Dr. F. Cornudet, Morbihan; Dr. Chaboux, Alpes Maritimes; Dr. Paul Gallot, Thouars; Dr. Guirauden, Cette; Dr. de Kerdrel, Montferrat; Dr. Kaufmann, Angers; Dr. Migmon, Nice; Dr. Sargiron, Mont-Dore; Dr. Servant and M. André

Servant, Royat; and the ladies included Mesdames Landouzy, Eugene Lambert, Courmont, Piot and Du Fournier.

Shortly after their arrival they were given a motor drive around the city. After this drive the gentlemen went to the Medical Building of the University of Toronto, where they were entertained at luncheon by Dr. R. A. Reeve, the Dean of the Medical Faculty. At the same time the ladies were entertained by Mrs. W. H. B. Aikins. In the afternoon a reception was tendered to the guests by the Academy of Medicine in the building of the Ontario Medical Library. In the evening Dr. J. F. W. Ross, President of the Academy of Medicine, and Dr. W. H. B. Aikins entertained the delegates and a number of gentlemen of Toronto at a banquet in the Toronto Club. In addition to the delegates and the two hosts, there were present from Toronto the following: Sir Mortimer Clark, Major Macdonald, Prof. Ramsay Wright, and Drs. A. H. Wright, G. S. Ryerson, W. P. Caven, Allan Baines, A. H. Garratt, J. Ferguson, W. A. Young, Geo. Elliott, W. Oldright, G. A. Bingham, J. O. Orr, E. E. King, J. G. Wishart, A. A. Macdonald, H. J. Hamilton, R. A. Reeve, C. J. Hastings, N. A. Powell, J. A. Amyot, T. McMahon, R. J. Dwyer, Rev. J. A. McDonald and Mr. J. S. Willison. The banquet was in all respects a great success and very enjoyable. The toasts were: "The King," followed by the singing of the National Anthem; "The French Republic," followed by the singing of the "Marseillaise"; "The Lieutenant-Governor, Sir Mortimer Clark." His Honor replied in a very happy vein; "The Dean of the Medical Faculty of Paris," Prof. Landouzy. Although there were many excellent speeches during the evening, it was generally considered that Prof. Landouzy ranked highest as an orator. "The Medical Faculty of the University of Lyons," responded to by Professors Arloing and Courmont. "The French Delegation," responded to by Professors Teissier and Leon Bernard. "Our Hosts," proposed by Dr. Beaumevieille, Bois-du-Four, Millau.

The guests, in responding to the different toasts, spoke partly in French and partly in English.

Many of them expressed great surprise and delight respecting

the generous hospitality of the physicians in Toronto and other parts of Canada. They also made several references to His Gracious Majesty the King of England, the great peacemaker, who had done so much to create a good feeling between France and England, that country they loved so much. This visit to Canada had opened their eyes as to the greatness of Greater Britain, and they hoped that in the future there would be more reciprocity between Paris and Toronto than there had been in the past. They hoped Frenchmen would frequently visit Toronto, and they asked Canadians, whether medical students or physicians, to visit them in France, where they would be cordially received.

The party left Toronto on Saturday morning for Niagara Falls. They intended, after visiting the Falls, to go to Buffalo and Albany, thence down the Hudson River to New York, and expected to reach Washington in time for the opening of the Congress, September 22.

The visit of these charming people will long be remembered by the profession and many of the citizens of Toronto.

Although great credit is due to many for the remarkable success of the different entertainments, it is generally considered that the chief credit is due to Dr. W. H. B. Aikins, Dr. James F. W. Ross and Dr. Richard A. Reeve. A. H. W.

CIGARETTES AND GROWING BOYS.

It is generally supposed that the use of tobacco in any form is especially harmful for growing boys. We quite agree with those who believe that boys should not become smokers. What are our reasons for such belief? As stated in our last issue, many of us think that tobacco, even when smoked in moderation, is at least sometimes injurious to the nervous and digestive symptoms.

There appears to be a singular prejudice against cigarettes in this country at the present time, and yet it is probable that the use of cigarettes is the least harmful among all the methods of

indulging in tobacco. It is thought by many that tobacco smoking interferes with the growth of boys. As numerous physicians concur it might be well to consider the grounds for such a supposition. We really do not know that there are any. It happens that this aspect of the subject has been studied in a practical way by Dr. G. L. Meylan, Physical Director of Columbia University, as we are told by *American Medicine*. Many of our readers will perhaps be startled to learn that he found that the students who used tobacco were taller, heavier, and stronger than those who abstained, and that the difference is more than would be accounted for by the slightly greater age of the former.

Of course, we do not consider that this proves that smoking is actually beneficial, but it certainly does prove that many of the statements made by anti-cigarette enthusiasts are incorrect.

The 21st annual meeting of the American Association of Obstetricians and Gynecologists was held at the Hotel Belvidere, Baltimore, Sept. 21-2-3, under the presidency of Dr. Gustave Zinke, Cincinnati.

INFECTION IN TUBERCULOSIS.

Sir William Whitla, Senior Physician of the Royal Victoria Hospital, and Professor of Materia Medica, Queen's College, Belfast, delivered the Cavendish lecture this year before the West London Medico-Chirurgical Society. An excellent summary of the same appeared in the *New York Medical Journal* of August 15th.

Sir William has carried out a large series of experiments in the laboratories of Queen's College, with the object of finding out the most likely channel of infection in pulmonary and other forms of tuberculosis. As a result he has reached the conclusion that the intestinal route plays a more important *rôle* in the production of this disease than has been hitherto recognized.

Professor Koch, on the other hand, believes that the lungs are the usual primary seat of tuberculous infection, and that the

bacilli usually passes into the lungs with the inspired air. He considers that the comparative rapidity of primary intestinal tuberculosis showed that the intestinal origin of the disease was improbable.

In the light of Sir William's experience, however, it would appear that the alimentary canal plays a very important part in the production of pulmonary tuberculosis. Sir William also believes that human and bovine tuberculosis are practically identical, and that the tuberculosis of bovine is transmissible to man, and *vice versa*, and he emphasizes the importance of recognizing that the milk of tuberculous cows is a common source of tuberculosis in children through the channel of the alimentary canal. In confirmation of this, he points to the fact that the bovine type of tuberculosis has been detected in a considerable percentage of cases of human tuberculosis.

TUBERCULOSIS IN NEWFOUNDLAND

The Newfoundland Society for the Prevention of Tuberculosis is carrying on a vigorous and necessary campaign this year in the Island. The death-rate from this disease in Newfoundland is very large. About one in every five of the total population dies of it, and, what is worse, in the last six years, the death-rate, which is stationary or decreasing elsewhere, has increased about fifty per cent. Such a state of affairs calls loudly for a remedy, and the Society for the Prevention of Tuberculosis has rallied the forces of society against the common enemy. As in too many places in Canada, fresh air seems to be dreaded in Newfoundland, and the people spend the long winter closely housed, and with little oxygen. The Government of Newfoundland has given the campaign a splendid start. It has made a grant of money sufficient to bring to St. John's all the teachers of the Island to attend a teachers' Tuberculosis Convention, so that every teacher in the colony will be a leader in the educational compaign. Mr. Alexander M. Wilson, formerly Superin-

tendent of the Chicago Tuberculosis Institute, and now Superintendent of the Chicago Bureau of Charities, visited Newfoundland in August to help on the campaign.

THE CANADIAN MEDICAL ASSOCIATION.

The next meeting of the Canadian Medical Association will be held in Winnipeg early in September, 1909, under the presidency of Dr. Blanchard.

As formerly announced, the annual meeting of the British Association for the Advancement of Science will be held in Winnipeg in the latter part of August, 1909.

We are glad to be able to announce that Dr. Blanchard, of Winnipeg, has, after some hesitation, consented to take the presidency. He has lately been in Great Britain, and on his return home visited Montreal and Toronto, and conferred with certain physicians in these two cities. He brings assurances from the Motherland that many distinguished members of the Science Association will take an active part in the proceedings of the Canadian Medical meeting. Dr. Blanchard and his friends expect large numbers from the West, and are anxious for a goodly number from the East to come to meet them.

THE ONTARIO MEDICAL ASSOCIATION.

The next meeting of the Ontario Medical Association will be held in Toronto, June 1-2-3, 1909, under the presidency of Dr. H. J. Hamilton.

We understand that considerable work has already been done in the way of preparation, especially by the Committee on Papers and Business. The general plan will be similar to that adopted at the last meeting of the Society in Hamilton. A certain por-

tion of the work will be done at the general sessions held each day, while other portions of the work will be done in the various sections. The different heads of these sections have already commenced to arrange their programmes.

THE INTERNATIONAL MEDICAL CONGRESS AT BUDAPEST.

The Sixteenth International Medical Congress will be held at Budapest, Hungary, under the distinguished patronage of the Emperor of Austria (King of Hungary), from the 29th of August to the 4th of September, inclusive, 1909.

A strong Canadian Committee has been formed, composed as follows: Drs. A. McPhedran (Chairman), W. H. B. Aikins (Secretary), A. H. Garratt, E. E. King, J. M. McCallum, G. R. McDonagh, H. J. Hamilton, G. S. Ryerson and A. H. Wright, of Toronto; Drs. H. S. Birkett and F. Shepherd, of Montreal; Dr. J. D. Courtenay, Ottawa; Dr. J. Third, Kingston; Dr. Ingersoll Olmsted, Hamilton; Dr. J. D. Wilson, London; Dr. S. T. Tunstall, Vancouver; Dr. O. M. Jones, Victoria; Dr. H. Halpenny, Winnipeg.

The next Annual Meeting of the British Medical Association will be held in Belfast, August, 1909.

The Fifth Congress of the Pan-American Medical Association was held August 6th to 13th. The next Congress will be held at Lima, Peru, August, 1911.

The Ontario Graduated Nurses' Association has been granted incorporation by the Provincial Government. Its objects are to advance the educational standard of nursing; to maintain the honor of the profession; and to offer legislation in the interest of the public, the physician and the nurse.

INTERPROVINCIAL REGISTRATION

Members of the medical profession throughout the whole Dominion were greatly disappointed that the efforts of Dr. Roddick to secure a system of Dominion Registration proved unsuccessful. It seems now that nothing will be done by federal legislation to bring about the desired result. There remains, however, the possibility of reciprocity in medical registration between the provinces, and for this there seems to be no great difficulty in the way. The first step has already been taken.

Regulations of the Provincial Medical Board of Nova Scotia, 1907-1908, Chapter III., Section 24 (2), reads as follows: "When and as soon as it appears that there has been established in any other province of Canada, or in the Northwest Territories of Canada, an examining board similar to that constituted by the Medical Act of Nova Scotia, or an institution duly recognized by the legislature of any such province or of the said Northwest Territories, as the sole examining body therein for the purpose of granting certificates of qualification for the practice of medicine, and whereof the curriculum is equivalent to that established by the Act, the holder of a certificate of qualification from any such examining body or institution shall, upon due proof, and upon payment of the registration fee, be entitled to registration by the Board, if the same privilege is accorded by such examining board or institution to those holding certificates of qualification from this Board." This is an offer of reciprocal registration on a perfectly fair basis.

A comparison of the regulations and requirements of the medical boards of the various provinces will be of interest in helping to determine whether there is any similarity of standards or any possibility of similarity being attained. This enquiry will have reference to (1) Matriculation, (2) Curriculum, (3) Professional Examinations.

Matriculation.

The regulations of British Columbia, Alberta and Saskatchewan make no reference to a preliminary examination or standard of education. In all other provinces a matriculation is necessary, and the details are very fully given. A certain degree of reciprocity exists in regard to matriculation certificates. Thus, Nova Scotia accepts the examinations of New Brunswick and Prince Edward Island; the examinations of the education departments

of the provinces, and the examinations of any licensing board or council in His Majesty's Dominions, with 50 per cent. in each subject. New Brunswick accepts the examinations of Nova Scotia and Prince Edward Island. Prince Edward Island reciprocates with Nova Scotia and New Brunswick, and offers to do so with other provinces. Manitoba accepts the examinations of the Ontario Council, of the Quebec Council, and of the Ontario Education Department. Ontario and Quebec do not accept other examinations than their own.

The General Medical Council of Great Britain requires that candidates for registration must have passed in all subjects of the preliminary examination at one time. No Canadian Council has such a rule. Ontario and Manitoba require that matriculation be completed before beginning medical studies. Nova Scotia, New Brunswick and Prince Edward Island allow one year for the completion of matriculation under certain conditions. Quebec regulations do not refer to the matter.

As to the subjects of examination:

(1) English,

(2) Mathematics,

(3) History and Geography,

(4) Latin, are much the same in all the regulations.

(5) Experimental Science (Physics and Chemistry) is required in Manitoba, Quebec, New Brunswick and Prince Edward Island. It is not mentioned in the regulations of Nova Scotia.

(6) In Ontario, any two of Greek, French, German, Experimental Science.

In Quebec French is compulsory.

In Nova Scotia any one of Greek, French, German.

In New Brunswick two of Greek, French, German.

In Prince Edward Island any two of Greek, French, German.

There is also a difference in the percentages required to pass.

Ontario requires 40% in each and 50% aggregate.

Quebec requires 50% in each.

New Brunswick requires 40% in each and 60% aggregate.

Nova Scotia requires 50% in each.

Prince Edward Island requires 50% in each.

Manitoba requires 40% in each and 50% aggregate.

Fees vary as follows:

Ontario—Examination, $5. Registration, $20.

Quebec—Examination, not stated. Registration, $20.

New Brunswick—Examination, $5. Registration, not stated.

Nova Scotia—Examination, $10. Registration, $10.

Prince Edward Island—Examination, $10. Registration, not stated.

Manitoba—Examination, $7. Registration, $2.

From all these a common standard might easily be selected that would be acceptable to all concerned. For example:

1. Matriculation to be completed before registration.
2. Examination to be upon the following subjects:
   (1) English.
   (2) Mathematics.
   (3) History and Geography.
   (4) Latin.
   (5) French,
   (6) Experimental Science.
3. Percentage required to be 50% in each subject.
4. Fee to be for examination, $5; for registration, $20.

What alterations in the Ontario regulations would be necessary to bring them to this standard? In place of the student having the option of any two of Greek, French, German, Experimental Science, he would be required to take French and Experimental Science. As a matter of fact, the student usually does this anyway. Then he would require to make 50% in each subject in place of 40% in each and 50% on the whole. There can be no serious objection to raising the standard in this way. In regard to Nova Scotia, the necessary changes would be to add Experimental Science to the subjects, and to make French compulsory in place of any one of Greek, French, German; to make the rule that matriculation must be completed before registration, and to advance the fee. Manitoba would require to add French to the subjects, change the percentage from 40% in each and 50% on the whole to 50% in each, and advance the fee. Uniformity in regard to fees would, however, be unnecessary, and with this factor eliminated the changes necessary should be readily agreed upon. There is no real difficulty in the way of uniform matriculation.

Curriculum.

The differences here are in regard to the time to be spent in medical study. The subjects of study so far as specified are much the same in all.

Ontario requires five years' study, four sessions of eight months each, and a fifth year of clinical work, for which three options are permitted.

Nova Scotia intimates that five years will be required after July 1st, 1908. Details not given.

Quebec requires four terms of nine months each.

New Brunswick requires four terms of six months each.

Prince Edward Island requires four sessions of eight months each.

Saskatchewan requires four years.

Alberta requires four years of six months each.

British Columbia requires four years.

From this it appears that Ontario, Manitoba and Nova Scotia are agreed in regard to curriculum, and that reciprocity might be established between them in this respect without alteration of the present regulations. The other provinces will no doubt soon add the fifth year to their requirements.

Professional Examinations.

The differences here are mainly in the arrangement of the examinations and in the fees. Subjects are much the same, and the usual percentage is 50. A comparison of the papers set will show that there is not much difference in the standard. The examinations and fees are as follows:

Ontario—(1) Primary, at the end of the second year. Fee, $30.
(2) Intermediate, at the end of the fourth year.
(3) Final, at the end of the fifth year.
Fee for (2) and (3) is $50.

Quebec—(1) Primary. Fee, $20.
(2) Final. Fee not stated.

New Brunswick—One examination. Fee, $10.

Nova Scotia—New regulations for five-year course not yet published.

Prince Edward Island—One examination. Fee, $15.

Manitoba—One examination. Fee, $15. License, $75.

Saskatchewan—One examination. Fee, $50. Registration, $52.

Alberta—One examination. Fee, $50. Registration, $52.

British Columbia—One examination. Fee, $100.

It must be evident to anyone who has gone over these comparisons that there is no serious barrier to beginning interprovincial registration. If Nova Scotia and Ontario were to enter upon this relationship it would not take long to complete the arrangement with the others. If there is any real desire for it on the part of the profession generally, it can be brought about, without either provincial or federal legislation, by the medical boards themselves. If it were possible to bring together representatives from the medical boards of the various provinces, a conference would determine whether any essential points of difference exist, or prepare the way for a uniform standard and interprovincial courtesies. The Medical Council of Ontario should lead.—*Queen's Med. Quarterly.*

Personals.

Dr. Crawford Scadding returned to Toronto from Europe September 6th.

Dr. Herbert A. Bruce, after a visit to Europe, returned to Toronto September 26.

Dr. Walter McKeown has been appointed Associate Professor of Surgery in Toronto University.

Dr. Skinner Gordon (Dr. Lelia Skinner) has removed from Carlton Street to 467 Spadina Avenue.

Dr. Graham Chambers has been appointed Associate Professor of Medicine in the University of Toronto.

Dr. William Britton, Isabella Street, is convalescing after a serious illness, which confined him to the house for a month.

Drs. J. Milton Cotton and George McDonagh, who went to New York with Dr. Riordan, returned to Toronto September 27.

Dr. Trebilcock, of 722 Spadina Avenue, Toronto, announces that in future he will confine his attention entirely to ophthalmic practice.

Dr. Jno. T. Fotheringham, of Toronto, returned from London August 31st. He will in future confine his work to office and consultation practice and diseases of children.

Dr. Alfus E. Bennett returned to Toronto July 31st, after spending about 15 months in the hospitals of London, Edinburgh, and Dublin, and is now practising at 36 Melbourne Avenue.

Dr. Clarence L. Starr, of 224 Bloor St. W., returned to Toronto the latter part of August, and since Sept. 1st has confined his practice exclusively to general and orthopedic surgery, and will continue to do so hereafter.

Dr. Charles M. Stewart, who has been doing post-graduate work in London the last six years, has returned to Toronto and opened an office at 142 Carlton Street. He will confine his practice to diseases of the ear, nose, and throat.

The American Public Health Association met in Winnipeg on the 25th, 26th and 27th of August. Among the Canadian practitioners who attended were Drs. P. H. Bryce, Chas. A. Hodgetts, Roberts, John A. Amyot and W. T. Connell.

Prof. G. Sims Woodhead, M.A., M.D., F.R.C.P., Professor of Pathology, Cambridge University, England, will deliver the opening lecture of the twenty-second session of the Faculty of Medicine of the University of Toronto, October 5th.

Dr. Thomas McCrea (Tor., '95), of Johns Hopkins Hospital, Baltimore, was married to Miss Amy Marian Gwyn, in Dundas, Ont., September 16th. Among the ushers were Dr. Thomas B. Futcher, of Baltimore, and Dr. N. Gwyn, of Philadelphia.

Dr. Bruce L. Riordan of Toronto was bitten by a pet dog in his own house, September 15. As the dog had rabies, according to Dr. Amyot's report, Dr. Riordan went to New York for treatment in the Pasteur Institute. At the time of writing reports are favorable.

As stated in our last issue, Drs. Bruce Smith and J. N. E. Brown, of Toronto, left London July 22nd to visit some of the newer hospitals in provincial towns. We learn that they are very much interested in what they saw and heard respecting hospital construction and management.

Dr. Edith Beatty has been appointed Superintendent of Grace Hospital, Toronto, in the place of Miss Patton, resigned. She graduated M.B. from the University of Toronto in 1905, and received her license from the Council in 1906. Before coming to Toronto she practised for a time in Guelph.

The Hon. Dr. Pyne, Minister of Education for Ontario, returned to Toronto after his visit to Great Britain September 12th. While abroad he spent some time looking into the question of technical education in many of the cities of Great Britain. He found, however, that they are in much the same position as in Ontario, and are seeking information as to the best methods of procedure. In a number of cities technical education deals chiefly with the predominant local industries.

Obituary.

FRANCIS C. MEWBURN, M.D.

Dr. Mewburn practised for many years in the Niagara Peninsula, and was well known and highly respected in that district. After retiring from active work he came to Toronto, nearly 20 years ago. He died at his late residence, July 30th, in the 92nd year of his age.

GEORGE M. EDEBOHLS, M.D.

Dr. Edebohls, of New York, died August 8th, aged 54. He was widely known on account of his advocacy of the operation of decapsulation of the kidney as a remedy for Bright's Disease.

CHAS. H. BRERETON, M.D.

Dr. C. H. Brereton, of Bethany, Ont., died at the residence of his son, Dr. T. C. Brereton, Carnduff, Sask., on Sept. 6th. He graduated M.D. from Victoria University in 1868.

CHARLES ERASTUS HICKEY, B.A., M.D.

Dr. Hickey, Medical Superintendent of the Hospital for Insane, Cobourg, died suddenly September 19, aged 70. He graduated, B.A. from Victoria College in 1863, and M.D. from McGill University in 1866 He represented Dundas County in the Dominion Parliament about ten years. He went from Morrisburg to take charge of the Hospital in Cobourg about three years ago. He was highly respected by all classes, and much beloved by his intimate friends.

GEORGE HODGE, M.D.

Dr. Hodge, Professor of Clinical Medicine in the Western Medical College, London, Ontario, died August 26th, of pneumonia, aged 68. He received his medical education in Kingston, and graduated from Queen's University in 1870.

LIEUT.-COL. WM. NATTRESS, B.A., M.D., M.R.C.S., (ENG.)

Dr. Nattress died at his late residence, 42 Carlton Street, Toronto, September 14th, in his 56th year. He graduated from the University of Trinity College M.B. in 1882, and M.D.C.M. in 1884. After graduating he took a post-graduate course in Great Britain and received the qualification of M.R.C.S. On his return to Canada he commenced practice in this city. After devoting himself to general practice for a few years, he took a very active interest in military matters, and for the last few years was principal Medical Officer for Western Ontario.

While taking part in the tercentenary celebration at Quebec he developed pleurisy about August 20th. This unfortunately ran an unfavorable course and terminated in empyema. On September 6th he had a serious embolism, from the effects of which he never rallied. He was well and favorably known among all classes of citizens in Toronto.

SIR JOHN BANKS, M.D.

Sir John Banks, Physician-in-Ordinary to the King in Ireland, died July 23rd, aged 95. He became President of the Royal College of Physicians of Ireland in 1869, and was for a time Regius Professor in the University of Dublin, and had for many years a high reputation as alienist.

Correspondence.

A VALUABLE DISCOVERY—A NEW HYPNOTIC.

Editor of CANADIAN PRACTITIONER:—

Sir,—Please allow me to call attention to the discovery that apomorphine hydrochloride, when administered hypodermically in doses just short of the emetic dose, is an ideal hypnotic. In doses of the 1-30th of a grain, it may be used with safety in all cases in which a hypnotic or antispasmodic is indicated, but is of special value in the treatment of acute alcoholism and delirium tremens. This valuable discovery was made by Dr. C. J. Douglas, of Boston, in 1899, but, strangely enough, the discovery remains almost unknown, and the boon, of course, not taken advantage of as it doubtless will be when this important property of apomorphine becomes fully realized. We know how promptly this drug acts when administered as an emetic in emetic doses of the 1-10th or the 1-8th of a grain. With almost equal promptness is its action when administered as an hypnotic. The alcoholic, however wild or noisy, will, as a rule, be peacefully sleeping in ten or twelve minutes after the 1-20th or the 1-30th of a grain is administered subcutaneously. This sleep may last several hours, when the patient awakens refreshed and sober. Douglas employed the remedy, with these doses, in over 200 cases, mostly alcoholics, including cases of delirium tremens, and with gratifying results. Drs. Coleman and Polk, of Bellevue Hospital, New York, used it in over 300 cases of alcoholism, also with gratifying results. Dr. Rosenwasser, inebriatist to Newark Dispensary, Newark, N.J., has also used apomorphine in the same manner and for the same purpose, and with equally satisfactory results. The dose administered was from 1-30th to 1-20th of a grain. With these doses, the hypnotic effect is secured in 67 per cent. of the cases. Even the 1-40th of a grain, in my experience, is effective with some patients.

There are vagaries in the conduct of apomorphine that should be noted, viz., it is inert when administered in a solution of boracic acid; it is almost inert as a hypnotic or centric emetic when administered by the mouth. It should also be noted that the crystaline form only should be used, and also that, in cases in which the pulse is feeble, strychnine should be given in association with the apomorphine.

This important discovery will surely mark the commencement of a new era in the management of cases of acute alcoholism and delirium tremens. In many hospitals, at present, these troublesome cases are far from being welcome guests, but when it becomes generally known that we have at command an hypnotic, safe and prompt in its action, and peculiarly adapted to the management of these perplexing cases, this reluctance to their reception should be entirely removed. It is doubtless pretty generally known to the members of the medical profession of this Province that a bill was prepared several years ago for the Ontario Government for the economic treatment of indigent inebriates. This bill was drafted by a joint committee, representing the Ontario Medical Association and the Prisoners' Aid Association, respectively. From various causes, this bill has never been presented to the Ontario Legislature, but a special effort will be made to have it introduced at the next session. In this bill, as will be remembered, it is proposed, with a view to economy, to utilize the wards of the general hospitals of the Province for the reception and treatment of indigent inebriates of the more hopeful class. This discovery of the hypnotic property of apomorphine, and the facility with which it brings alcoholic patients under control will, doubtless, help very materially in clearing the way for the introduction of the bill, and when the bill is adopted and its provisions faithfully carried out it should go a long way in cutting off the supply of recruits for the jails of the Province, as well as for the combined reformatory and farm colony about to be established by the Ontario Government.

In this connection I would add that in the proposed bill provision is also made for combining the Massachusetts probation system of prolonged supervision with medical treatment, and this medical treatment may be carried out, according to the nature of the case, either in hospital or in the form of dispensary or home treatment. This system of combining the probation system with medical treatment has been in operation in Toronto, by the Ontario Society for the Reformation of Inebriates, for over two years, on a small scale, with encouraging results.

Yours truly,

A. M. ROSEBRUGH,

Secretary Ontario Society for the Reformation of Inebriates.

Toronto, August 22, 1908.

Book Reviews.

A Treatise on the Principles and Practice of Gynecology. By E. C. Dudley, A.M., M.D., Professor of Gynecology in the Northwestern University Medical School, Chicago. Fifth edition, thoroughly revised. Octavo, 806 pages, with 431 illustrations, of which 75 are in colors, and 20 full-page colored plates. Cloth, $5.00 net; leather, $6.00 net; half-morocco, $6.50. Philadelphia and New York: Lea & Febiger. 1908.

We have much pleasure in stating our belief that Dudley's Gynecology is most admirable for general practitioners, specialists and teachers. Dr. Dudley was first to see the advantage of presenting gynecology along natural lines of cleavage, by causes, rather than regions. With the cause or nature of a disease in mind, the reader can readily follow it to any region it may invade, and understand and treat it, but the labyrinth cannot be so easily traversed the other way. Some years ago the author gave this book further distinction by making all its abundant illustrations original, each drawn for its special place and purpose, and therefore exactly fit. He also saw his reader's advantage in showing him the steps of operations, a clinic on paper, and better than a clinic, because the details could be studied at leisure. Now Dr. Dudley again responds to popularity by bringing out a new edition (the fifth in ten years), thoroughly revised to date, with everything obsolete in text or picture eliminated, and with still more original drawings added. It is the strongest issue yet of a very strong book.

The Ready-Reference Handbook of Diseases of the Skin. By George Thomas Jackson, M.D., Chief of Clinic and Instructor in Dermatology, College of Physicians and Surgeons, New York. Sixth edition. 12mo., 737 pages, with 99 engravings and 4 plates, in colors, and monochrome. Cloth, $3.00, net. Philadelphia and New York: Lea & Febiger. 1908.

Since the previous edition of this work its author has been elected to the full Chair of Dermatology in the College of Physicians and Surgeons, of New York, a tribute both to the man and to his book. An examination of his pages affords some insight into the reasons for this appreciation. The most obvious charac-

teristic is directness. The author clears the ground in his opening sections on Anatomy, Physiology, General Diagnosis and Therapeusis, and disposes of the moot subject of classification and nomenclature in the briefest and clearest way by means of a table, displaying the various diseases arranged in the most rational system, with the prominent primary lesion mentioned. The reader is now qualified to take up skin diseases in any order, and the most natural and practical is according to the alphabet. Herein lies the "Ready Reference" feature embodied in the title. Each disease is considered in full, beginning with synonyms and proceeding through the symptoms to the etiology, pathology and diagnosis, and to especially full sections on treatment covering all varieties and complications. The book is rich in formulas of proved value in this very trying class of cases. Answering the needs of students, as well as physicians, this work has merited the demand for six editions in sixteen years. It is well established in favor and repays it by frequent revisions, enabling its readers always to keep posted to date.

MEDICAL GYNAECOLOGY. By Howard A. Kelly, A.B., M.D., LL.D., F.R.C.S. (Hon. Edin.), Professor of Gynaecological Surgery in the Johns Hopkins University, and Gynaecologist to the Johns Hopkins Hospital, etc. Pp. 662; 163 illustrations, for the most part by Max Broedel and A. Horn. New York and London: D. Appleton & Company. 1908.

This recent production of Dr. Kelly's should do much to satisfy a need that is pressing. It is especially adapted for the use of the general practitioner, into whose hands practically all gynaecological patients first come. Dealing, as it does, with the various diseased conditions and their management up to the point where the gynaecological surgeon, as such, becomes essential, it is not burdensome. For the student at college it is excellent, though insufficient as a work on gynaecology, because it does not treat of the surgeon's work in respect to gynaecological conditions—the students of to-day being expected by slave-driving medical educationists to attain a specialist's knowledge in all and sundry departments of medicine and surgery before graduation. A careful and complete perusal of its pages from cover to cover convinces one of the high capabilities of the writer, both as a surgeon and as an instructor in the science of gynaecology. The information contained in the book is vast, valuable and of a practical kind. Reading it has been a profit-

able pleasure. It is true that a certain amount of plodding was necessary to get through with "Affections of the Sacro-Iliac Joint" and the description of the syphilides, but, no doubt, their importance deserves the space given to them.

The illustrations are of high order, though, perhaps, somewhat more profuse than is necessary to clear understanding. Nothing would be lost by the omission of such an one as appears on page 48, "Toilet Accommodations for Twenty-two Families," or of that on page 462, in which the careworn, despondent attitude is anything but soul-inspiring.

In all places and at all times references to "gynaecological tinkering" abounds. Dr. Kelly's valuable book should hasten the demise of such detrimental practice. F. W. M.

THE DEVELOPMENT OF OPHTHALMOLOGY IN AMERICA. 1800 to 1870. A contribution to Ophthalmologic History and Biography. An address delivered in abstract before the Section of Ophthalmology of the American Medical Association, June 4th, 1907. Revised and enlarged. Illustrated by selected portraits and cuts. By Avin A. Hubbell, M.D., Ph.D., Professor of Clinical Ophthalmology in the University of Buffalo, etc. Buffalo, New York: W. T. Keener & Company, 90 Wabash Avenue. 1908.

Originally an address, this is now a book of 197 pages. Classing Canadians as Americans, the author shows what America has done to advance the science of ophthalmology in the period mentioned. The work covers the ground under the headings, "Factors of Development—Institutions and Surgeons," "Biographical Sketches," "American Ophthalmologic Literature to 1850," "Special American Contributions," "Transition Period . . . to the Ophthalmology of the Specialist," "The Pioneer Specialists," "An Era of Rapid Change after 1850," "Other Factors of Advancement," "The New American Ophthalmology."

The first institution in America for the treatment of diseases of the eye was opened in New London, Conn., in 1817, by Dr. Elisha North. The second was opened in New York in 1820 by Dr. Edward Delafield and Dr. Rodgers. The first Canadian institution for the treatment of the eye and ear was opened in Montreal, in 1846, by Mr. Henry Howard. Drs. Rosebrough and Reeve, of our own city, are spoken of as pioneers in the science of ophthalmology.

The plan of the work necessitates a certain amount of repetition, but it is clearly written and of absorbing interest to all connected with ophthalmology. Its value is enhanced by a number of excellent portraits of ophthalmologists and others, and the book must prove a veritable gold mine to future workers in this field. It is also a work which medical men generally will find of much interest.

THE PRINCIPLES OF PATHOLOGY. By J. George Adami, M.A., M.D., LL.D., F.R.S., Professor of Pathology in McGill University, and Pathologist to the Royal Victoria Hospital, Montreal; late fellow of Jesus College, Cambridge, England. Vol. I., General Pathology, with 322 engravings and 16 plates. Philadelphia and New York: Lea & Febiger. 1908.

This is a work for which we have long waited. For some years those who were interested in pathology have known that Prof. Adami was laboring upon a book which was to make a name for himself and for the university which he represents—a prophecy which is now amply fulfilled. In a book of 926 pages Prof. Adami has covered the whole ground of general pathology, so that his work ranks with that of Ziegler, in spite of the fact that many important parts were destroyed by the fire in McGill University and had to be re-written.

Everywhere the book is readable; the sentences are clear and concise, and the writer holds the attention, and thus avoids the great drawback of nearly all works translated from a foreign language.

We might mention in passing that Prof. Adami has made full use of his classification of new growths, notice of which has been previously taken in this journal. We eagerly await Vol. II.

Messrs. Lea & Febiger, of Philadelphia, announce the new edition of Gray's Anatomy. The revision of the new work has occupied the last two years.

Miscellaneous.

Edinburgh University and Medical Education.

"Nothing," as an American politician once declared, "Nothing is ever settled until it is settled right," and much comfort is to be derived from this common-sense consideration, both by the victors and the vanquished in many a well-fought field. To the victors, who are doubtless in many cases, at least, as well-intentioned as the vanquished, it is a comfort to think that if they have unhappily been on the wrong side, the battle will be fought over again, and the right will prevail, perhaps by the help of themselves grown wiser, and now on the right side,

"In thine, win another's day."

To the vanquished, if they are on the right side, it is an adequate, and more than adequate, consolation for defeat that the matter is not yet settled, and will in the end be "settled right." We can imagine these considerations to occupy at present the mind of many in Edinburgh and elsewhere, who, since the year 1860, have looked forward to a just settlement of a difficult question—the Medical Education of Women in Edinburgh University. No one now defends the action of Edinburgh University. Indeed, then, as now, everyone wondered at it. The stream of time, which turns so strangely, has reached a place where the old decision must be met again. A public meeting of the citizens of Edinburgh, distinguished alike for the influential character of the audience, the moderation of the arguments and statements made, and the quiet tone of conviction which pervaded the speeches, was held in Freemasons' Hall on July 8th, 1908.

For some years, the Scottish Association for the Medical Education of Women has provided classes for women in medicine at Minto House, so that they might be there prepared to pass the examinations and receive the degrees in medicine of Edinburgh University. It was only a temporary plan. It has never been very satisfactory, as is illustrated by the fact that last session, of the twenty-five women who presented themselves for the second professional examination, twenty-four failed. When we remember what happens in similar seats of learning in other countries and the average character of Scottish brains, it must be evident that there is only one explanation of this phenomenon—these twenty-five students were

under some serious disadvantage and that disadvantage, it seems, was the inadequate equipment and apparatus of Minto House, especially in the departments of anatomy and physiology.

The present crisis may be expressed in one word. Without the knowledge of those interested, Minto House has been sold. The present arrangement, unsatisfactory as it is, is ended. There is now no means by which a medical student who is a women may study medicine at Edinburgh. And what is the function of a university? The citizens' meeting unanimously passed a resolution expressing regret at the failure of the University Court to provide medical education for women, and asked that body to make "such arrangements as will afford an equality of opportunities for training to all to whom it offers its degrees." The *Edinburgh Scotsman* says:

"This protest and appeal is well-timed and well-put. The situation into which the medical education of women has been allowed to drift in Edinburgh is unjust to the women students, and not creditable to the University authorities. As it concerns the efficiency and the reputation of the University, it must concern also the city and the community in which the University is placed. The claim that is made for adequate medical education and for equality of opportunities for the women who come up for degrees can be put on bare grounds of justice. The University has undertaken responsibilities which it is apparently not prepared to discharge. It has, indeed, through the action or inaction of the Court, fallen into a position that is not inconsistent only, but unreasonable and untenable. If not now, at some near date, it will be forced to choose between giving up any pretence of taking oversight and direction of the medical education of women, and complying with the claims moderately put forward at last night's meeting. Either of these courses may be justifiable. But if the first be adopted, and Edinburgh University ceases to grant degrees while refusing to provide the necessary training to female students in medicine, account must be laid with the loss of prestige and repute which Edinburgh would thereby sustain as a school of medicine. Even financially, this alternative has aspects which cannot be regarded lightly. It has been stated that the fees from the women students of medicine amount to some £2,800 a year. The claims of the University in appealing for funds to the Government and to the Carnegie Trust would be gravely weakened if it decided to have nothing