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Original Articles

ADDRESS IN MEDICINE.—CANADIAN MEDICAL ASSOCIATION.*

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Mr. Chairman and Gentlemen,—In asking a member of the profession residing in the far West to deliver the address in medicine, I feel that a compliment has been paid, not so much to myself, as to the West. To demand that we, living so far away from the centres of learning, from the great teaching institutions of the East, should nevertheless be expected to keep ourselves abreast of the times and in touch with the latest discoveries, is surely expecting a great deal; and then to expect that one, living under such barren influences, should be able to give you an address equal to this occasion, containing some food for thought and pointing out the pathway of duty and practice, is to look still further for a miraculous manifestation. But the genius of the West is ever equal to all occasions. It has grown accustomed to the knowledge that the best wheat in the world grows in our North-West; that our forests can supply the hugest sticks of timber known to commerce; that our fisheries can supply the world with illimitable quantities of salmon, halibut and other

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delicacies; always the best, the hugest and the illimitable, ever the superlative. So it is not strange that a strong egotism has developed out here, sufficient even to accept this task, and hoping, but with misgivings, that its self-sufficiency may not suffer in the attempt. Personally, I feel that a great honor has been conferred on me, and I most sincerely thank the Association for its kindness, and trust that its confidence may not have been misplaced.

As to-day we seek to adapt treatment according to the cause of disease, so, looking back to the remotest ages, we find the human instinct groping along the same pathway. But in the early ages of the race science was unknown, and miracle was seen in every unexplainable phenomenon. Hence disease was attributable to the wrath of a good being or the malice of an evil one, and treated accordingly. Among the ruder tribes the Medicine-man has ever held sway; but even in higher civilization we find that in Egypt the priests of Osiris and Isis claimed powers over disease; in Assyria, the priests of Gibil; in Greece, the priests of Æsculapius; in Judea, the priests of Jehovah. While these have ceased to exist with the decay of their respective religious systems, the ruder primitive tribes have persisted. They are found among the aboriginal tribes of Africa to-day, as also on this side of the Atlantic. Parman, in discussing the customs of the Hurons, says: "A great knowledge of simples for the cure of disease is popularly ascribed to the Indian. Here, however, as elsewhere, his knowledge is in fact scanty. He rarely reasons from cause to effect, or from effect to cause. Disease, in his belief, is the result of sorcery, the agency of spirits or supernatural influences, undefined and indefinable. The Indian doctor was a conjurer, and his remedies were to the last degree preposterous, ridiculous or revolting."

Among the Coast Indians in British Columbia the practice is still kept up, and it may interest you to hear me relate what I saw not forty miles from here only three years ago. In the Indian villages are to be found huge barnlike structures called rancheries, each consisting of one immense room and capable of accommodating twenty or thirty families. Living close to nature, the floor, of course, is mother earth. Rough stalls, arranged along the walls, separated by screens of rush matting and open towards the centre, form the none too private retreats of the individual families. Each lights its own fire on the earthen floor opposite, whereon their rude cooking is done. The smoke escapes through the shingles, as there is no chimney, and in the absence

of windows the light comes in through the cracks in the wooden walls. I went down one evening to such a place to see a sick Indian woman. It was dusk, and the waves of the sea were lapping the beach close at hand, while dusky children flitted by in the twilight, engrossed in some pastime. On entering the only door in the rancherie, I found it in utter darkness, excepting for a small fire burning at the extreme end of the building. Here was presented a study in light and shade, to have suited a Rembrandt. Around the fire was arranged a circle of Indian women (it is always the women who are closest to the mysteries of nature), while at one side was the patient, too weak to sit up, but supported by a couple of sympathizers. Facing her was the Indian Medicine-man, trying to cure her disorder by directing his energies to overcome the supposed cause of her disease. My diagnosis was tubercular pleurisy with effusion, but my Indian confrere had diagnosed possession by an evil spirit, and as he was in charge of the case, I could only look on. Each woman, with a stick in either hand, was beating on a piece of wood before her, making as much noise as possible, and adding blood-curdling explosives to the incantations of the Medicine-man, in a vain endeavor to drive out, to scare out, the possessing spirit. But unfortunately this kind comes not forth by such rude wooing. And so, from the gray dawn of time, down to what we imagine is the mid-day splendor of to-day, such forms of practice have persisted through all the ages.

But let us not imagine the air clear yet; the fog is only getting thinner. In other times the sun has attempted to shine through. Five hundred years before Christ, Hippocrates broke away from the old traditions of healing, the supernatural methods, and laid the foundations of medical science on experience, observation and reasoning. Later his teaching influenced the school of Alexandria, where positive knowledge was developed by the adoption of anatomic studies; and centuries later, under Moslem patronage, the medical sciences reached their highest development in the Middle Ages. But Europe was less fortunate under Christian influences. There was a return to the belief in the supernatural origin of disease, and in the practice of supernatural methods to combat it. Retrogression prevailed over progression. Still believing in demoniacal possession, the various phases of exorcism was practised, even combined with such practical methods as the following: "To disgust the demon with the body he was tormenting, the patient was made to swallow or apply to himself unspeakable ordures, with such medicines as the livers

of toads, the blood of frogs and rats, fibres of the hangman's rope, and ointment made from the body of gibbeted criminals." For myself I would prefer the simpler methods of the British Columbia Medicine-man. Cures effected by relics, by pilgrimages and sacred observances obscured the horizon, while even the Divine Right of Kings gave the world the blessings of the Royal touch for King's Evil. All these practices were injurious to the development of medical science, for "why should men seek to build up scientific medicine and surgery when relics, pilgrimages and sacred observances, according to an overwhelming mass of concurrent testimony, had cured hosts of sick folk in all parts of Europe?" But finally the tide turns. The discoveries of Galileo, Kepler and Newton had their reflex on the sister science of medicine, and investigators made bold to pry into the secrets of life and learn her vital processes, to seek the true causes of disease and endeavor to find the cure. Relapses have occurred. As fanatics opposed the introduction of the fanning-mill because it infringed on the divine prerogative, which furnished the wind to winnow the wheat from the chaff, similarly, opposition arose to the introduction of inoculation, vaccination and the use of anesthetics. And as supernatural agencies were invoked to cure diseases supposed to be of supernatural origin, so to-day we have the various sects of faith-healers, magnetic healers and what not.

But, as Carlyle says, "Only what is true will persist. Out of the merciless fire of modern criticism truth, like asbestos, will come forth purified; but vain theories, gaseous, will be dissipated among the waste winds forever."

But where do we stand to-day? Have the fogs all lifted and do we now see clearly? Unfortunately not. Investigators to-day are not numbered by tens but by hundreds, pursuing many diverse threads of thought, and giving to the world their conclusions, fully formed or immature, probable or fantastic, relevant or irrelevant.

The search for the causes of disease still continues as actively as ever, but disappointments are far more numerous than successes. Concerning sarcomata, Stimson, in this month's *Annals of Surgery*, says: "We are absolutely in the dark as to etiology, and no further advanced in prognosis and treatment than were our colleagues a quarter of a century ago."

Dr. Snow, Chief of the London Cancer Research Committee, has come to almost identical conclusions regarding carcinoma. As regards these two classes of diseases, we are, therefore, forced to be content, at present, with increased ability to diagnose them,

and have to thank the surgeon largely for the groundwork of this advance.

In 1882 Koch proved tuberculosis to be due to a specific bacillus, and in 1890 startled the world with the announcement of a cure. We all remember the reaction, the tremendous disappointment, felt not only by the laity, but even more keenly by ourselves, when slowly, unwillingly, we were forced to admit that our expectations were not realized. Early in 1903, Behring delivered a lecture before the Vienna Medical Society, detailing his experiments on animals with his own special serum, and speaking very hopefully as to the future. Perhaps he, who with Roux, discovered in diphtheritic antitoxin the greatest remedial agent of recent times, will unravel the puzzle.

More recently, Marmorek, of Paris, has staked his great reputation by giving to the world the results of his labors in a new serum, and we can only trust that time will prove that it possesses some definite value. Later still, that our professionally agnostic brethren may not starve for want of food, an Italian professor has enunciated that Koch's tubercle bacillus is not the cause of phthisis, but rather an uncouth octapoid micro-organism of his own finding. Well may the general practitioner raise his hands in despair and wonder what he can believe.

But experience has shown that in tuberculosis, as in other things, prevention is better and surer than cure. Statistics are piling up year by year, adding proof where now none is needed, that, recognizing tuberculosis as an infectious disease and treating it accordingly, a definite gain can be recorded. Education of the public has already advanced so far that more positive steps should be enforced. Compulsory notification, as in other infectious diseases, proper disposal of infected excreta, disinfection of infected dwellings, etc., should be rigidly carried out, and the same positive results would be attained throughout the country at large as already obtain in the few places far advanced enough to follow this self-evident line of action. A resolution should be passed by the present meeting, urging the various Provincial Governments to introduce the necessary legislation, and I venture to affirm that, coming from so influential a body of scientists, the suggestion would be adopted. And, if adopted, as I have already said, the educated sentiment of the public would not obstruct, but rather would uphold the action of the authorities. Perhaps this body has already taken such action, but until the various authorities have adopted the suggestions, I consider it the duty of this Association to yearly reiterate the advice. Then

finally will begin an era of diminution, until, as some of our more optimistic brethren affirm, fifty years will see the extinction of the Great White Plague.

Councilman's pronouncement as to the causative agent of variola still remains unchallenged; while more recently Mallory, of Boston, has described a protozoan which he has named *cyclaster scarlatinalis*, and which he believes has a causal relation to scarlet fever. In the winter of 1902-3, Mosher, of the Kinderspital in Vienna, announced the discovery of an anti-scarlatinal serum prepared from a coccus constantly found in the throats of subjects of that disease. His statistics, covering several hundreds of cases, both mild and severe, were, as such statistics usually are, certainly favorable; but he failed to prove his coccus as the cause of the disease, and the consensus of opinion inclines to believe that the favorable results were due to the combatting of the influences of a mixed infection. The same favorable results can also be obtained by the use of antistreptococcal serum, which reagent, in other forms of infection, has not the wide use among the profession that its virtues demand.

To turn to another field, where surgery and medicine meet, we find that some definite progress has been made. Numerous operations on the stomach have shown that ulceration is more common there than formerly suspected. The physician of to-day must not expect to find all the classical symptoms, for we can have ulceration without pain as we also can have it without hemorrhage. Brilliant results have been obtained in most inveterate cases, by operative methods, results such as medicine has not afforded. Under these circumstances we have the added responsibility of advising some of our patients to submit to the risks of an operation, a responsibility which will often tax our courage to the utmost, but which we, as true men, should not shirk when the occasion arises.

In diseases of the biliary tract, surgery has also disclosed many new features. The post-operative biliary fistula, in cases of obstruction of the common duct, affords a positive means of correctly estimating the quantity and qualities of the bile. The use of cholagogues has an established place in our practice, but now our faith is rudely shaken. Although the term cholagogue has been in use for more than two thousand years, and is apparently as firmly seated as the everlasting hills, recent investigations have caused it to tremble, and it may eventually disappear as did many a mountain in some prehistoric cataclysm. Mayo Robson, in estimating the effects of certain so-called cholagogues,

found that the old reliable calomel caused a diminution instead of an increase in the flow of bile. Enonymin gave the same result, while rhubarb and podophyllin, turpentine and benzoate of soda gave negative results. His conclusion is: "The supposed cholagogues investigated seem to rather diminish than increase the amount of bile excreted." Perhaps the most of us feel like saying as the fox to the grapes, "We did not think they were much good, anyway."

As regards cholelithiasis we have also learned a great deal, and have had to revise our views as to etiology, and must consider the typhoid bacillus and the bacillus coli the primal cause for the majority of the cases. The French school go so far as to affirm that, without infection at some stage of the disease, we will not have cholelithiasis. Legars says: "The infectious origin of biliary lithiasis is proved, for the following reasons: If we have shown that gall-stones do not depend on general and obscure humoral conditions, but on a local infectious process, the disorder becomes for the most part also a local matter, and as such accessible to direct local means. If the calculi are once formed, they increase and multiply, and we can still be sure that they are due to a single attack of lithogenous infection. At a given moment, microbial invasion of the gall-bladder took place, and these microbial invasions, of intestinal origin, depend on various causes and may occur in the course of different acute disorders; at any rate the calculous disorder comes from this primordial lithogenous cholecystitis. Once more, it is a complaint of the gall-bladder and ducts, not of the bile, and lithogenous cholecystitis is comparable to many other localized infections, such as appendicitis, for instance. By removing the calculi, or the gall-bladder, recovery may be complete and final. Finally, we find infection not only at the origin of lithiasis, but also at all stages of the disorder; it is the leading factor of the various complications as well as of the prognosis of the complaint."

Deaver says: "It can be emphatically stated that gall-stones are always the result of precipitated salts and tissue debris, following in the wake of bacterial infection, mild or severe in degree. Furthermore, the complications of chronic gall-stone disease, adhesions, ulceration, fistulæ, liver and pancreatic disease, are also due to infection." He also says: "The treatment of chronic gall-stone disease, its complications and sequelæ, can only be surgical. Gall-stones are formed through the aid of infection, and therefore the disease is local and requires local treatment,

that is, operation, and not solvents or chologogues to relieve a condition resulting from faulty metabolism."

Therefore, the same application can be made here as was made in reference to gastric ulceration. We should realize the impotence of medicines. Solvents do not dissolve, and the old treatment was merely that of temporizing, with the hope that Dame Nature would aid our misguided efforts by expelling the offending bodies through the natural passages. Such expectancy is often dangerous. Surgery holds out a positive cure in a large proportion of cases, but too many of us fear the responsibility of advising such radical treatment, and our patients suffer from our timidity.

Let us now return to a consideration of the work being done by our great army of investigators. In reviewing their work, not only that of the past year, but of recent years, we see labor multiplied, mountains heaped on mountains in the attempt to scale the heights of the unknown, until, considering the results attained, we might be forgiven for inquiring, "What avails so Titanic a struggle?" The causes of disease are so intricate that they are reached only after ages of scientific labor. Yet a few successes have made us impatient of the coming of complete victory. Some successes have proved to be stars of the first magnitude, others but the smallest flint sparks to illuminate the truth, whilst many so-called discoveries have given no more light than when wax is struck on wax, idle theories, thoughts written on the brain and now, let us hope, rubbed out forever. Looking at the workers as constituting an army, one searches in vain for a controlling spirit, one which will concentrate the tremendous and apparently never-tiring energies of this mass of workers into a well-directed assault on the stronghold of the unknown. Modern investigators are, to quote a phrase of Carlyle's, "like a hapless servant gone masterless, unfit for self-guidance." To give an idea of the varied subjects being studied, let me quote the titles of a few of the papers published during the year in but one publication, *The Journal of Medical Research*: "On the Appearance and Significance of Certain Granules in the Erythrocytes of Man," "The Influence of Certain Bacteria in the Coagulation of the Blood," "The Relation of Specific Gravity and Osmotic Pressure to Hemolysis," "The Bacteriolytic Complement Content of Blood Serum," "The Agglutination of the Pneumococcus with Certain Normal and Immune Sera," "Cat's Blood: Differential Counts of the Leucocytes," "A Study of the Agglutinating Hemolytic and Endothelialitic Action of Blood Serum in Variola," and so

on. I do not wish to speak slightingly of the labors which these titles of so diversified investigations portray, but I do affirm, that if the workers of some one strong school were under one sole control, their campaign planned against one enemy, and their work properly correlated, more progress would be made in a given time than by the independent, uncorrelated work of all the schools combined.

Such a view is perhaps too Utopian. The world will "gang its ain gait," and our workers will continue to work as before. Truths will gradually be unfolded and science will be developed in the medical field as in the other realms of science. As Marconi did not have to wade through all the drudgery of elaborating the data he needed, but utilized the work of others in perfecting his discovery; as Roentgen needed to win but a single step in advance of others in the race to gain the palm, so, too, can we confidently look forward to the appearance of a master from among our members, one who, building with the bricks made by others, will erect the edifice of truth containing the key which will unlock the secrets of nature and give us command over our most illusive foes. We all feel that that day is near at hand, and when it dawns we will join unselfishly, without a trace of jealousy, in crowning that master with the everlasting laurel.

In conclusion, Mr. Chairman and gentlemen, I thank you for the patience with which you have listened to this address, and wish you every success in your labors in the Section of Medicine.

It is now just seven years (A. D. Rockwell, in the *Medical Record*) since the Roentgen ray was made known to the world, and in that time its development has gone on uninterruptedly, except for a short time, when the public were up in arms at its dermatological "offences." But it was this very "offence" that gave to the scientific investigators the impetus necessary for the discovery that the rays were rich in curative as well as damaging effects. The outcome of which is that thousands of persons are now perfectly well and strong, who prior to this time had been suffering from chronic disturbances. Who can tell what the future of such an all-powerful agent is to be? Was it not many years after the actual discovery of electricity that the benefits began to be felt? Is not electricity still in its infancy? If such is the case, what are we to think with regard to the development of the Roentgen rays.

IS THE PRESENT METHOD OF EDUCATING GIRLS
CONSISTENT WITH THEIR PHYSIOLOGICAL
DEVELOPMENT? AND IS IT FOR THE
WELFARE OF THE RACE?*

BY A. LAPHORN SMITH, B.A., M.D., M.R.C.S., ENG.

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As the highest aim of our profession is to prevent disease by teaching the people the laws of health, the writer felt that it was a duty as well as a pleasure to comply with the request of the American Academy of Medicine to write a paper on this topic. The mere fact that this question was chosen as the subject for a symposium or group of papers, shows that there was in the minds of the members of the committee, all of whom are doctors with a large experience of human ills, a grave doubt whether the present tendency towards pushing the education of girls to the highest possible point is consistent with their physiological development and for the welfare of the race. The task was an agreeable one, for the writer's own professional experience had already forced him to the conclusion that the health of the future mothers of the race was not as good as it should be, and that there were causes for the same which could and should be removed. That there is more sickness among the women of to-day than there was among their mothers and grandmothers, seems to be the general opinion of a great many physicians who give special attention to this branch of medicine. In fact, it is notorious among the laity themselves that there is a great deal more ill-health among women now than there was fifty years ago, and the patients, both male and female, are constantly asking us what is the reason that there are so many sick and complaining women. I say, patients in general, and not female patients alone, are making this inquiry, for young men by the hundreds of thousands, who should be married and at the head of happy homes full of children, and who are remain-

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ing single long after the age at which they should be married, and who are doing so at an enormous loss to their moral and physical welfare, give this as their principal excuse, that the average experience of their friends who have married, has been that the educated women of the present generation are physically unfit to be wives and mothers.

The writer recognizes several sources of error which must be allowed for before making sure that this conclusion is correct.

First, the men who, by great care in selecting, or by chance, have secured a healthy wife, say nothing about their happiness, for they take it as a matter of course, as if it were something that should be so, instead of being something remarkable; while the men whose wives begin complaining a few days after their marriage, and continue to complain until death comes to their relief, are almost sure to tell their friends about their misfortune, and in return for the sympathy which they deserve and receive, they advise their bachelor friends to remain single.

The other source of error arises with the specialist for women, who, because all the women who come to him are sick and give a history of never having had a day's health since their marriage, would come to the conclusion, therefore, that all married women are ailing. In other words, that because he never sees or knows any women, professionally, who are not ailing, well women do not exist.

There is another source of error coming from the married state itself which must not be charged to the woman or her education, but to the men, for no matter how perfect a woman's health may be before marriage, she may still prove a failure as a wife and a mother if she acquires gonorrhoea, with its pus tubes and pelvic peritonitis.

There is still another source of error, which may or may not be due to the woman's education, namely, the inducing of abortions. These, of course, wreck a woman's health, and make her a failure as a wife and mother, but in the majority of cases it is because she is already a failure in health that she resorts to this crime, for, with few exceptions, it is only sick married women who dread pregnancy and the raising of a happy family.

Now, after making due allowance for these sources of error, the writer still believes that the majority of educated women on this continent reach a marriageable age in such a poor condition of health that it is a real hardship for them to perform the normal natural duties of wifedom and motherhood, and of raising an ordinary-sized family.

We need hardly spend any time in arguing that the cheerful and happy performance of these duties is the manifest destiny of woman, and that any general disinclination to undertake them, or any attempt to shirk them when undertaken, will inevitably throw the whole world's machinery out of gear, and bring disaster upon her and upon the race. Nature indeed has a summary way of punishing either men or women, who from motives of selfishness, or from physical inability, do not marry and raise a family; she simply extinguishes that breed and replaces it on the earth by a race of people less highly educated, but which knows enough to propagate itself.

It is true that an infinitesimal number of people, mostly women, deny that it is the destiny of women to become wives and mothers, and would even lead them in a rebellion against nature, telling them that these duties are degrading, and that they should abandon the profession of homemaking and launch out into political or business life. But the whole common-sense of the world is against them, because it sees that when they do succeed, as they undoubtedly do, their success absolutely fails to bring them the happiness and the satisfaction which the poorest laborer's wife obtains from her houseful of hungry but happy little ones.

The writer admits that every child should receive an elementary education, which should, up to puberty, be the same for boys and girls, provided that it be given in such a manner as to not interfere with their physical development. A large part of every day should be spent in the open air, either at drill or in play, and there should be no homework to keep them up late at night, which is one of the great mistakes in modern methods of bringing up children. Our mothers and grandmothers, when children, were in bed at eight o'clock at the latest, while our children are allowed, on various pretexts, to remain up until ten or eleven. Does it not seem folly to allow, or urge, a child to fill its brain so full of work during the evening that it keeps on working all night, even repeating its lessons during its restless sleep? A great improvement has taken place during the last few years by the introduction of manual training, or Sloyd, for boys, and in a few schools the girls are being taught cooking and domestic science. Of this, however, I will have more to say later.

At the age of puberty, boys and girls should have a different course of education. The menstrual function makes great demands upon a girl's strength, and if her brain is worked up to its

fullest capacity, then the organs of generation must suffer, and the foundation is laid for lifelong female troubles, such as ovarian neuralgia, etc. This is the experience of most of the gynecologists with whom I have spoken on the subject, namely, that the average girl has not enough blood to meet the enormous demands of the brain required by modern education, and at the same time to allow her organs of generation to grow as they should. This seems to the writer to be the explanation of the large number of cases of infantile uterus we meet in grown up women. This infantile uterus either will not conceive, or if it does it will almost surely be torn at the first labor. In my opinion, therefore, every month girls should be excused for a few days, during which they should either rest, if they are in pain, or stay out in the sun or fresh air without anything to call the blood away to the brain. According to present methods of education nothing is allowed to interfere with the process of developing the brain by rigorous attendance at classes and the study of a multiplicity of unnecessary subjects. According to the method the writer and many of his colleagues would advocate, nothing should be allowed to interfere with the girl's physical development, *all the education in the world being of no account whatever compared with the possession of robust health.* It is a pleasure to notice that in many schools on this continent a great deal of attention is being given not only to the teaching of hygiene, but also to the practice of it by allowing the girls to engage in outdoor games, which are of the greatest possible value in developing the muscles. In the writer's opinion there should be a complete change in the subjects taught to girls during the last few years at school. Algebra, euclid, botany, chemistry, mythology, astronomy, Greek and Latin, should be cut out, and the time devoted to dressmaking, millinery, cooking and domestic economy, including the care of the baby, the making of the home, and even the care of the husband. In fact, when a girl leaves school at sixteen or seventeen she should be thoroughly prepared to become the best possible wife and mother at eighteen. In the writer's opinion this is the age at which every woman ought to be married, instead of waiting until twenty-six or twenty-eight. What has made the average marrying age gradually rise from sixteen to twenty-eight during the last hundred years? What has made the divorce rate gradually increase during the same time? Simply because women have been gradually educated to want more and to be able to do less, so that marrying a poor young man for love is

no longer possible or even desirable. A highly educated woman of eighteen has intellectual and other requirements which few men under thirty-five or forty can afford to give her; the consequence is that for the next ten years she ruins her remaining health by all-afternoon card parties and all-night dancing parties, in darkened and badly ventilated rooms, under the idea that she is having a good time, while the man whom she should have been glad to marry is losing not only his body but also his soul in the many ways which are only too well known to all. When such an old maid and such an old bachelor get married, which they unfortunately sometimes do, what do they want with children? They have been living for themselves all their lives, and it is too late to learn to live for others now. If they had been married at eighteen and twenty-five respectively, they could have adapted themselves to each other, and the six or eight children would have been so many bonds to unite them until they were parted by death. The writer knows several hundred women with large families who are perfectly happy, but not one of them is highly educated. Is it any wonder then that he is in favor of less high education, more manual training, simpler methods of living, earlier marriages and more children. It may be justifiable for men to exchange a little of their health for higher education, although even in their case it is doubtful, for many of our most successful men left school with much health, but little education. But so far as the race is concerned, health is not so important for the man as for the woman, for in God's providence she has to furnish all the material for the growth of the child before birth and for a year after. If her own brain requires an extraordinary supply of phosphates, there will be none left for her little one.

I have already shown how higher education renders wifehood and motherhood distasteful, owing to defective development of the sexual organs, let me now call attention to the fact that it is making these duties and privileges exceedingly difficult. Higher education of women is making motherhood more difficult, not only because it is increasing the ability of the nerves to perceive pain more keenly, but because the pains of labor are actually greater than they were a century ago. As I said, in the words of Dr. Herman, of London, in my paper before the Southern Surgical and Gynecological Association some ten years ago: "Under civilization, a new type of disease has sprung up among women who are accustomed to have everything done for them and to do little themselves; persons who think and feel a great deal, but act little.

Over-sensitive nerves and weak muscles are partly inherited and partly the result of training: of a training, which instead of making a child into a good animal, has been, perhaps not intentionally, directed towards developing the mind and hindering the growth of the body; a training which develops complexity of nervous structures instead of nervous energy. It is the result of a childhood spent in learning a great deal and doing a very little." Instead of training women to be strong, tall and muscular, with good appetites and the power of sleeping well, the whole tendency of modern education is to depress and mortify the flesh in order to exalt the spirit. The result is that anything the muscles have to do is done with great difficulty, while whatever the nerves have to do is done well. It is not surprising then that such a complex process as labor, depending as it does upon the nervous and muscular system, should be affected injuriously by an education whose sole aim seems to be to exalt the nerves and depress the muscles. The process of dilatation of the os uteri, which among uneducated women goes on quietly and without sufficient pain to prevent them from attending to their occupations, becomes in the highly educated woman a long and agonizing process, owing to the increased sensibility; there is a great outcry with very little work. Owing to defective nutrition, the membrane breaks at the very beginning of labor, so that the waters escape and dilatation must take place by the direct pressure of the child's head, instead of by the beautifully equalized hydrostatic pressure. The pressure of the child's head being greater at certain points than at others, the stretched cervix is lacerated. In the writer's opinion, laceration of the cervix could not possibly occur if the cervix were normal, and if dilatation were performed by the bag of water, and if neither fingers nor instruments were introduced within it. If the bag of waters were strong enough to remain intact until the perineum is also dilated, as he has seen it occur among the uneducated classes in Canada, rupture of the perineum would not happen either. This too early spontaneous rupture of the amniotic sac means a dry labor; and a dry labor is a very exhausting one, and too often followed by the application of the forceps, before dilatation is complete, and this, in turn, generally means a badly ruptured perineum.

At the Boston meeting of the American Gynecological Society a few weeks ago, one of the speakers with a large obstetric practice, admitted that it was impossible for the

majority of his patients to have a normal labor, on account of the severity of the pain and the weakness of the muscles.

There is yet another way in which the sedentary life which the higher education of women entails, renders maternity difficult, and that is by reducing the size of the pelvis. It is a law of physiology that the more that muscles are used, the larger they grow, and not only the muscles, but the bones to which those muscles are attached, also develop. When children are kept many hours a day sitting at a desk, their abdominal muscles are not used, and consequently they atrophy; in girls this is a serious matter, for the round muscles of the uterus only contract when the abdominal muscles do so, being supplied by the same nerves. As the keeping of the uterine fundus forwards where it ought to be depends upon the contractile power of these little cords, and as the slightest exertion will push the uterus back if these cords fail to do their work, weakness of the round muscles almost surely entails retroversion. Of course, retroversion means that the bowels come upon the anterior surface of the uterus and drive it downwards, until it is lying on the pelvic floor, almost at the outlet of the vulva. If, on the other hand, the round muscles are used hundreds of times a day, as they undoubtedly are when girls are running and playing and jumping, they would be well developed, and so strong that they could pull the fundus forward in normal anteversion, until it touched the pubic symphysis, before the bowels had time to be forced by intra-abdominal pressure in front of it. The uterus can stand an unlimited amount of pressure on its back, because the symphysis pubis then receives the weight of it, while it can bear very little on its anterior surface because there is nothing to stop it from falling backwards, until it is lying helplessly on its back on the pelvic floor. As a rule retroversion incapacitates a woman from performing her duties, and yet how common this condition is may be judged from the fact that the writer has had to operate on over five hundred cases, besides five hundred others whom he has cured by pessaries and other means. That the trouble is increasing as education increases may be inferred from the fact that twenty-five years ago it was so rare for a young girl to have any disease of the womb, that we seldom felt justified in making a vaginal examination; while now, so large a proportion of the cases are young girls, that we are justified in examining them whenever hygienic treatment fails to cure them in a reasonable time.

In conclusion, I am happy to say that, owing to recent im-

provements in methods, my remarks do not apply with so much force to the great colleges for women, such as Bryn Mawr, Vassar and Wellesley, where special attention is paid to the physical development of the girls. But even they have at least the defect of making the women who graduate from them superior to the men whom they should marry, so that, failing the realization of their ideal, they do not marry at all, while if they do, the husband is not the head of the family, which is a misfortune. My remarks apply with greatest force to the girls in the High Schools, many of whom are competing for positions as teachers, and of whom the mental strain is making physical wrecks. It would be far better, in the writer's opinion, for those girls to qualify themselves for becoming wives and mothers, and to leave the teaching of boys at least to men, who would then be paid much better salaries, enabling them to marry, and have happy homes.

248 Bishop Street.

THERAPEUTIC HINTS FROM BACTERIOLOGY.*

By G. R. CRUICKSHANK, B.A., M.D., L.R.C.P. (EDIN.), WINDSOR, ONT.

By immunity is meant resistance to disease. It may be absolute or partial. I propose to mention, very briefly, typical experiments with reference to immunity, and, from the standpoint of the general practitioner, to comment on their bearing upon treatment.

Infection, inoculation, vaccination remain the best means to experimentally cause immunity.

Rats are immune to anthrax, but if fed upon a strictly vegetable diet they become susceptible. If fed upon meat their immunity is increased. If a meat diet overcomes anthrax, may we not expect the twentieth century scientists to evolve a diet inimical to tubercle?

Repeated injections of small amounts of toxin sometimes render an animal immune to hundreds of fatal doses.

Heat modifies bacilli anthracis so as to make them harmless

*Read at meeting of Canadian Medical Association, Vancouver, B.C., August 23rd to 26th, 1904.

to a cow while rendering her immune to lethal doses. In a similar manner rabies and symptomatic anthrax are disposed of. Vaccinations have been elaborated to protect against cholera, plague and typhoid. Vaccination for typhoid might interest us in circumstances similar to those at the siege of Ladysmith.

If rabbits are infected with anthrax and then injected with a culture of bacillus prodigiosus, they will recover. Attempts to apply this principle to the treatment of cancer and other diseases have proved futile. This still promises much.

Immunity can be developed experimentally by serum from immunized animals. This has been the greatest triumph of the laboratory. The success of diphtheritic antitoxin was the medical achievement of the end of the century. Antistreptococcic serum is useful in septicemia and mixed infections generally. Anti-tetanus serum merits a trial.

If a portion of crushed spinal cord be suspended in saline solution and mixed with tetanus-toxin, its fatal power is lost. I have not heard of any application of this principle, nor of the experiment where carmine is mixed with tetanus-toxin, 5 gm. to 10 c.c., ten fatal doses being injected into a guinea-pig without harm.

These are practically all the experiments to increase immunity. Is it not strange that we cannot feed some drug to an animal to increase its resistance to disease? No medicine that I have heard of has such an influence over a bacterial disease as quinine has with malaria.

There are many ways of lessening immunity. A fowl is immune to all the tetanus-toxin the germs can produce in its body, but dies if an unlimited amount of toxin is introduced. A guinea-pig under bad hygienic conditions dies with a smaller dose than one with healthful surroundings. Rabbits confined to a cage over a privy died from a dose of typhoid bacillus that was harmless to a fresh-air rabbit. The white rat is immune to anthrax, but after being exhausted in a treadmill becomes susceptible. Fowls are immune to anthrax, but become susceptible after a cold bath. Removal of the spleen or other organs reduces an animal's immunity. I wonder has the fashionable removal of organs any such influence? Diabetes favors carbuncles. Typhoid favors pneumonia. Traumatic injury makes infection possible. Rabbits kept drunk on alcohol die with a smaller dose of streptococcus pyogenes than would have any influence on a sober rabbit. Frogs, pigeons and dogs, immune

to anthrax, become susceptible under the influence of curare, chloral or alcohol.

Immunity, then, is decreased by excessive amounts of toxin, bad hygiene, bad air, bad diet, fatigue, cold, operations, trauma, mixed infection, drugs, and is experimentally increased by infection, inoculation, habituation, vaccination, antitoxin, different germs, crushed tissue, inert substances and diet.

In a bacteriological laboratory it cannot be shown that drugs help an animal to resist disease, but it can be shown that they sometimes reduce this power. Experimentally, there are many means which profoundly modify immunity, and I, as a family physician, believe these are the very means we should use in the treatment of bacterial diseases, and that the giving of medicine is often a bad habit. Never before were such diseases as scarlet fever, typhoid or pneumonia so well treated, and they are best treated by the physician who attends to the points emphasized by experiments on immunity. Now, there is only one cure for diphtheria, one way to manage small-pox. The consummation of research and experiment places fresh air as the best treatment for tuberculosis. Until further discoveries are made in bacterial diseases, the only medicine of much use is one that is a food or a wash to cleanse a nidus of infection. I mention these experiments as an excuse for saying that we use too much medicine. Dr. H. H. Wright, late Professor of Medicine, Toronto Medical School, told me that he had not prescribed a cough mixture in twenty years.

The nineteenth century physician asked a few questions, felt the pulse, looked at the tongue, and charged from fifty cents to two dollars. He of the twentieth century will examine his patient for half an hour for two or three days, will call to his aid several laboratories, and then give his patient careful advice, for which he will charge from twenty-five to one hundred dollars. In both cases the patient pays exactly for what he gets.

Public opinion of disease and treatment is what is learned from physicians. There can be no doubt the virtue ascribed to drugs by the public is often a gross superstition.

ABSTRACT OF PAPER REPORTING 615 CASES WITH
OPERATIONS DONE AT THE ALBANY HOSPITAL
FROM MARCH 1, 1902, TO MARCH 1,
1903, WITH REMARKS.*

BY ALBERT VANDERVEER, M.D., OF ALBANY, N.Y.

This paper is intended to illustrate a service of ten months at the Albany Hospital, in which I was aided by my assistant attending surgeon, Dr. Edgar A. VanderVeer, although not including any of his own operations; also to present an example of the variety of cases that come under the observation and treatment of the general surgeon, as we understand his work to-day. Other surgeons connected with the hospital as members of the staff are doing the same line of work. Time is so limited that I can only give a synopsis of the points that seem to be of greatest interest in the classification of these cases. If we take up the more important groups as they present, I feel that we will make the best use of the time allotted.

I shall make no effort to refer to cases of fracture, except in a general way. Fractures of the thigh are invariably treated by extension and coaptation splints. Fractures below the knee are usually treated with plaster-of-Paris dressing. Colles' fractures and fractures of the forearm are usually treated with anterior and posterior splints and extension; fractures of the elbow-joint, with internal angular splint. Fractures of the shoulder-joint and of the humerus, with the shoulder cap and internal lateral splint of felt or other like material. Fractures of the skull are treated promptly. When there is a suspicion of depression, trephining is done; hemorrhage is treated, gauze-packing used, if necessary, and with a rubber drainage-tube to afford drainage. In fractures of the upper and lower jaw, most decidedly satisfactory results have been attained by employment of the interdental splint, used by dental surgeon, Dr. Leroy Blatner.

There was a total of eighteen tumors of the neck; three of the thyroid required thyroidectomy, and the patients made a good recovery; seven of tuberculous glands, these patients made a good recovery after thorough removal of the glandular struc-

*Read at the annual meeting of the New York State Medical Society, January 26, 27 and 28, 1904, and published by courtesy of writer and *American Medicine*.

tures; there were two cases of lympho-sarcoma and six cases of chronic adenitis requiring operation; all of the patients recovered. There was a total of nineteen tumors of the breast, thirteen true carcinomas, four adenomas, one round-celled sarcoma and one true fibroma; all the patients recovered. In operations for malignancy, we are very thorough in removing the axillary and subclavicular glands, and in most cases the pectoralis major and frequently the pectoralis minor muscles. This number of operations for tumors of the breast is not up to the average of other years.

There were 168 cases of abdominal section in which the peritoneum was opened. Of this total there were twelve gall-bladder cases, eight of them gall-stones, in which cholecystotomy was done, each patient recovering; three cases, two of which gave symptoms of gall-stone trouble, yet upon exploration no stones were found. The gall-bladder was attached to the incision, drainage established, and, ultimately, these patients made a good recovery, with relief of their former pain. An exploration was done in the remaining case of this group of three, the gall-bladder was found very much contracted, deep, underneath the liver, and with many adhesions, but no stones were found. The patient died afterward of hemorrhage, but with no evidence of malignant disease. There was a case of biliary sinus in which curetment was done, and an application of full strength carbolic acid made, the sinus ultimately healing. I would say that I have seen most excellent results in the treatment of biliary sinuses by the use of full strength carbolic acid, introducing from five to ten drops into the sinus once in three or four days. Of this group of gall-bladder cases there was an exceedingly interesting one, the history of which is as follows:

H. E., aged sixty-two, native of Germany, and tailor by occupation. A gastroenterostomy was done for carcinoma of the pyloric end of the stomach; the gall-bladder, which was found distended and containing a number of gall-stones, was brought up into the median incision, the same as in an ordinary case of cholecystotomy, and drainage was established in this way. The patient ultimately made a most excellent recovery. At present, June, 1904, he has gained in flesh and is very comfortable.

There were four uncomplicated cases of gastroenterostomy done for carcinoma of the pyloric end of the stomach, and of these three resulted in good recovery, the other patient dying at the end of the fourth day from exhaustion, her condition being very serious at the time of the operation. There was one

case of gastroptosis, three cases of exploratory incision, in which the liver was implicate.d with the carcinoma of the stomach to such an extent that it was impossible to proceed to any further operative intervention, and these patients all recovered from the incision.

There were thirty-three operations for uterine fibroids, three patients dying. In connection with these thirty-three cases there were three of complications in the form of gall-stones, in which cholecystotomy was done at the same time, all the patients recovering. Of the patients who died one had a very large tumor, one was in a feeble condition, and the third, while not having a large tumor, was evidently suffering from typhoid fever at the time of the operation, and died from this latter complication. This case presented many strange features. In reference to operations for uterine fibroids I would say that I usually tie the ovarian artery, then the vessels of the broad ligament, the uterine artery on each side, and remove the uterus as low down toward the cervix as possible, closing the stump with interrupted silk sutures and suturing over the peritoneum from one side to the other of the width of the incised tissue. I prefer to leave the cervix if it is healthy, and in this way preserve the vault of the vagina. I believe that patients do better in their permanent convalescence.

The following cases I believe are of sufficient interest to report at this time:

Mrs. C. G. S., aged sixty, native of United States, and housewife by occupation. Diagnosis papillomatous ovarian cyst, with gall-bladder complications. Ovarian cysts first removed. Gall-bladder explored and found to contain a large number of stones, ninety-six in all. She had been ill for about six years with no diagnosis or supposed symptoms of gall-stones. Papillomatous cyst returned in less than a year, when another operation was done, and later, Coley's fluid was used very thoroughly, but death finally resulted. This was the third or fourth case of sarcoma in her family of sister and nieces. Dr. MacDonald and myself have since operated upon another sister for double papillomatous ovarian cyst, this patient making a good recovery.

Mrs. G. F., aged thirty-five, native of United States, housewife by occupation. Diagnosis myoma of uterus. She has had attacks of biliary colic since a child, but not so severe until four years previous to present illness. History of fibroid of about two years standing. Gall-bladder distended with stones. Chole-

cystotomy done and patient had a long convalescence, suffering from many hallucinations, but now is in good health.

In these cases of uterine fibroid and other conditions complicated with gall-stones, after one has made the median incision and completed the operation, it is a very easy matter to pass the hand up to the gall-bladder, discover the true condition there, and, if desirable, operate. A quick incision may be made through the abdominal wall and the gall-bladder easily reached, simplifying the operation quite decidedly.

Of cases of ovarian cysts there are fourteen in which the tumor sprang from one ovary only, and ten cases in which both ovaries were implicated, these being cases of double ovarian tumors. This is rather an unusual average. All of these patients, twenty-four in number, recovered.

There were fifteen operations upon the ovaries for pus tubes, all of the patients recovering. There were fifteen operations upon the appendages for removal of the ovaries and tubes, due to previous pelvic peritonitis and abscesses, all of the patients recovering.

There was a total of fifty-six cases of appendicitis. Of the acute cases, in which the symptoms had lasted from one to two and four days, there were twenty-nine. These cases were made up of perforations, foreign bodies in the appendix, gangrenous condition of the appendix, with pelvic and general peritonitis, and of these twenty-eight patients recovered, the one death being due to general peritonitis.

There were nine cases of subacute appendicitis, *i.e.*, cases in which the operations were done soon after recovery from an attack, and in which there was yet a condition of inflammation present, all of the patients recovering. There were eighteen cases of the relapsing, chronic form of appendicitis, all of the patients recovering.

Of operations for hernia there were thirteen direct and indirect inguinal, two femoral and three ventral. In the latter, abdominal section had been done; one, my own case, and the other two belonging to other surgeons; all of these patients recovered. The usual operation has been that of the Bassini method and no truss worn afterward.

There were two cases of bicornuate uterus, the histories being as follows:

Mrs. W. S., aged thirty-seven, native of the United States, and house-wife by occupation. Patient gave no unusual history. She had suffered from supposed stomach trouble for some time,

but eructations of gas always afforded relief. She was operated upon for lacerated cervix at St. Luke's Hospital, New York, just previously. She came to Albany Hospital, January 8th, 1903, presenting symptoms as follows: Endometritis, fibroid and gall-bladder trouble. The patient was placed on the table in the lithotomy position. Left side of external os was very badly lacerated. Uterus was curetted out in the usual manner, a V-shaped piece removed from the left side of the cervix, and the incision brought together by means of three chromicized catgut sutures. Median incision was then made for supravaginal hysterectomy. Upon opening the abdomen a careful examination of the pelvis disclosed a double uterus, right—which was supposed to be the fibroid—evidently containing a fetus of about six weeks. The right ovary and tube, as well as the left, were so badly damaged that supravaginal hysterectomy was required. Examination of gall-bladder revealed gall-stones. Usual incision, 4 cm. long, parallel with border of the ribs, was made. Several gall-stones were removed in the usual manner. Patient made a good recovery.

Upon examination the appendix was found normal. Examination of double uterus showed a fetus of about six weeks in the right side. Left uterus contained packing from curetment.

Miss H. W., aged twenty-eight, native of the United States, and teacher by occupation. In September, 1902, the patient had had the appendix and right ovary removed. She came to the Albany Hospital January 28th, 1903, with symptoms of a floating kidney. Exploratory incision for floating right kidney was done February 2nd, 1903. Upon opening the abdomen and exploring the old incision, the point of a hypodermic needle was felt and removed from the right side of the abdomen. This had evidently penetrated into the peritoneal cavity. Stump of appendix was in normal condition; right ovary and tube absent; left ovary and tube rudimentary. Bicornute uterus was also discovered, but not removed. Movable kidney was found on the right side. Gall-bladder and liver were in normal condition. All adhesions were broken up, and remnants of the old scar dissected out.

The patient's strength permitting, February 17th, 1903, the usual lumbar incision 4 cm. long, was made. Kidney fat was exposed, a large amount removed, and the right kidney brought up into the wound. The capsule was split, edges fastened with interrupted catgut sutures to fascia, and the wound closed in

the usual manner. The patient made a good recovery, and later reported happy and free from all pain.

Case of Undescended Testicle.—Mr. R. E. J., aged fifty-one, native of Wales, and a slate maker by occupation, entered the Albany Hospital, January 19th, 1903, complaining of inguinal hernia and undescended testicle. Patient gave the following history: For six months previously he had some trouble in the right groin, with pain and distress in the region of the testicle. He is the father of nine children, alive and well; prior to present illness patient's health has been good. There was much tenderness in the region of the right testicle, and examination showed an undescended testicle on the right side, with hernial mass in the inguinal canal. Operation, January 21st, 1903. Usual incision for inguinal hernia, 6 cm. long, was made. Upon opening the inguinal canal the testicle was found very adherent to the inguinal sac. The cecum protruded into the hernial sac, and the appendix was also found in the sac. The appendix contained a fecal concretion midway of its length, and was in a state of chronic inflammation. The appendix was separated from the cecum and hernial sac with difficulty, and removed in the usual manner. The hernial sac was dissected out as much as possible, and the undescended testicle and cord then dissected off from the hernial sac and removed in the usual manner. All three were so matted together that dissection was very difficult. The cecum and remnants of the sac were reduced into the abdomen and the wound closed with layer sutures, number three catgut being used in deepest sutures. Standard dressings. Pathologic report showed subacute appendicitis with chronic periorchitis. The patient made an uninterrupted and complete recovery.

Of diseases of the vagina there were five cases of cystocele and rectocele.

There was an unusual number of cases of epithelioma of the vulva and walls of the vagina—eight in all; most of these patients I operated on successfully, so far as the primary results go. In this class of cases I do not know of any condition more fatal. Although the glands and surrounding tissue may be removed with ever so much care, yet the disease returns or metastasis takes place. There were two cases of vaginal hysterectomy for cancer of the cervix; both patients recovered. For some time we made use of the angiotribe in doing this operation, but of late we are returning to the use of the ligature more especially.

Time will not permit me to speak of the eighty-five cases of

endometritis, complicated with laceration of the cervix and of the perineum, or the different flexions, together with stenosis of the external os.

There was an unusual number of cases of tuberculous disease of the bones and joints—thirty-two in all. In regard to the operation in these cases, we are greatly in favor of free incision into the medullary portion of the bone, making thorough use of iodoform.

In cases of sarcoma we have made thorough use of Coley's fluid, and perhaps with some success in one or two cases. In secondary deposits of carcinoma the Roentgen ray treatment has been followed out very thoroughly, with disappearance in many cases of the secondary deposits, but as yet we cannot report a case of absolute recovery.

It will be noted there was a mortality in the cases of uterine fibroids, but the percentage of recoveries is so markedly increased compared with five or ten years ago, that we have every reason to be encouraged, and to continue this line of work. The mortality list is largely associated with cases that have been delayed too long, in which the tumor has grown to great size; large venous trunks developing in the broad ligament; pressure upon the ureters; distention of the pelvis of the kidneys; pressure upon the rectum; in some cases producing pelvic peritonitis and increasing the number of adhesions. At times these cases become complicated with appendicitis. Then, in other cases, continued loss of blood brings the patient to us in such an anemic condition that while she may bear the operation and come off the table safely, and transfusion in some form is done, or the infusion of normal salt solution, still she dies from shock, or within a few days, the heart being unable to continue its work. In the cases in which large venous trunks develop, these patients sometimes suddenly die from venous thrombosis. While apparently doing well, sudden death ensues. As a result of pelvic peritonitis these large fibroids, and also fibroids connected with the broad ligaments often become adherent deep down in the pelvis, and are exceedingly dangerous to attack. In these latter cases the ureters are likely to become implicated at the time of the operation. Although my group of cases escaped any such complications, yet it is one of the serious results arising from delay in operating.

In all these cases of pelvic surgery it is becoming more and more my practice to examine the appendix, and if there is the least suspicion of disease, or if it is at all abnormal, to remove

it, so that in the cases of operations upon the appendix the number would be increased to something like seventy, had I reported the individual cases in which, while removing the fibroid, pus tubes, or ovarian cysts, I also removed the appendix.

As stated, time does not permit my speaking of congenital deformities, treatment of hemorrhoids, prolapse of the rectum, fissure and other surgical lesions of the rectum; diseases of the genito-urinary tract, such as urethral stricture or vesical lesions; the various operations upon the kidneys; operations upon the nerves for relief of neuralgia, etc.; also the various abscesses connected with the cavities of the body; varicocele and tumors of the scrotum in the male. No reference can be made to the various amputations that come with the surgical lesions and present in hospital practice.

**DR. WILLIAM OSLER, THE NEW REGIUS PROFESSOR;
HIS LIFE AND WORK AT JOHNS HOPKINS.**

That Dr. William Osler, of Baltimore, whose recent appointment by King Edward as Regius Professor of Medicine at Oxford University, has awakened national interest in two countries, at least, will within a few months, or possibly a year from the time he enters upon his new duties, be knighted, is whispered in the circles where the great physician's intimates are to be found.

More than that, it is understood that the peerage will, in him, be given another member ere many years have flown by.

Dr. Osler, it is definitely announced, will sever his connection with Johns Hopkins Hospital next June, and will assume at once his new office under the patronage of His Majesty.

In several ways Dr. Osler may be called the first physician in America. By many he is considered the greatest medical man in the United States, and in his own particular line, that of consultant and teacher, as the greatest in the world. He is the first American physician upon whom has been bestowed an honor like that approaching the regius professorship by any foreign country. The distinction which comes to him by favor of the King of England is the very greatest that can come to any medical man in the world, and it is gratifying to the recipient and his friends that not a word of criticism, in any country, has been uttered, and this in the face of the fact that Dr. Osler's name will lead the

list of all the great names in the medical profession of England during the remainder of his life.

Among medical men everywhere, the regius professorship of Oxford is considered the highest reward, and the consummation of the loftiest ambition a physician may aspire to. Aside from the great honor there is a material side to it which any physician might well covet. The salary attached to the position is relatively small—\$10,000 per year—but medical men say that the practice which comes unasked to the chair holder is worth ten times as much.

DUTIES OF REGIUS PROFESSOR.

Beyond the mere money question, however, is the congeniality of the life it embraces for a man of the scholarly ambitions of Dr. Osler. At his disposal is not only the time but the opportunity for research work that he so highly prizes. He, as regius professor, is practically a free lance. He comes and goes as he sees fit. He is not held down by arbitrary rules or regulations. He is the chairman of the faculty, subordinate to no one on earth—not even the King. He conducts either personally or by deputy all examinations and no one may receive a degree that is not signed by the regius professor. He is considered throughout the British Empire as the highest medical authority, not only of the King's realms, but of the entire world. He is the one the King most delights to honor when occasion demands.

Dr. Osler, in a letter to a friend recently, said: "If success consists in getting what you want and being satisfied with it, my life has been a success." This will do away with the idea that Dr. Osler was at any time averse to accepting the honor King Edward has bestowed upon him.

ALWAYS A BRITISH SUBJECT.

The new regius professor was born in Canada and has ever maintained his loyalty to the British Government. His son was registered at the British consulate in this city. He married the widow of the famous Dr. S. W. Gross, of Philadelphia, who, before her first marriage was Miss Grace Lindsee Revere, of Boston. Most of his later professional career has been divided between Philadelphia and Baltimore.

Dr. Osler is not an old man—he is 55—and as his constitu-

tion is of the rugged kind that means great longevity, he it is hoped will long enjoy the fruits of his patient energy. The departure of Dr. Osler from Johns Hopkins will be a heavy blow, and the faculty will have the greatest difficulty in the selection of his successor.

Dr. Osler was born at Bondhead, Ontario, July 12, 1849. His father was a clergyman of the Church of England, Rev. F. L. Osler. The son has always been a member of that church. His earliest school life was passed in the school of his native village, and then he went to Port Hope, Canada, for a term or two in the Trinity College School at that place. Later he entered Trinity University at Toronto where he took his academic degree. As a student in those early days Dr. Osler was a hard worker during working hours, but when the time came for recreation none was more enthusiastic than he in those pursuits. Dr. Osler was in no wise a precocious child, but he won the regard of his teacher and fellow pupil alike by his honesty, industry and singleness of purpose, with which were combined well-maintained ability to grasp the subjects as taught. Vacillation has been foreign to his character always.

WORK DAY BY DAY.

In after life, when he taught others, he has consistently maintained by precept and by practice that to succeed one must do well what lies at hand without thought of what may confront one on the morrow. "Love to labor" has been one of his favorite maxims, for his own as well as for the guidance of his students. He is a firm believer of doing one thing at a time and doing it well, and by doing nothing in a matter that is not worth one's best efforts. Addressing a body of students recently, Dr. Osler said:

"As to your method of work I have a single bit of advice which I give with the earnest conviction of its paramount influence in any success which may have attended my efforts in life — 'take no thought of the morrow.' Live neither in the past nor in the future, but let each day's work absorb your entire energy and satisfy your wildest ambition. The student who is worrying about his future, who is anxious about his examinations, doubting his fitness for the profession, is certain not to do as well as the man who cares for nothing but the matter in hand and who knows not whether he is going."

HIS CAREER AT MCGILL.

After leaving Trinity College, Dr. Osler decided upon the medical profession as his life work, and he entered the office of Dr. Bovell at Toronto as assistant and student. Here he remained three years and then entered McGill University in Montreal, where he graduated in 1872. He then went to London, Berlin and Vienna, taking special courses in physiology and pathology. Upon his return to Canada in 1875, Dr. Osler was elected to the chair of the Institute of Medicine at McGill University. Twenty-four years later, addressing the faculty of that college, Dr. Osler referred to his appointment in the following terms:

"A quarter of a century ago this faculty, with some hardihood, selected a young and untried man to deliver the lectures of the Institute of Medicine. With characteristic generosity, the men who had claims on the position by virtue of service in the school, recognizing that times were changing, stepped aside in favor of one who had had the advantages of post-graduate training in the subjects to be taught. This experiment on the part of the faculty, enthusiasm and constitutional energy on my part, led to a certain measure of success.

"My first appearance before the class filled me with tremulous uneasiness and an overwhelming sense of embarrassment. I shall not forget the nice consideration of my colleagues and the friendly greeting of the boys, which calmed my fluttering heart. One permanent impression of the session abides—the awful task of the preparation of about one hundred lectures. After the ten or twelve with which I started had been exhausted, I was on the treadmill for the remainder of the session. False pride forbade the reading of the excellent lectures of my predecessor, Dr. Drake, which with his wonted goodness of heart, he had offered. I reached January in an exhausted condition, but relief was at hand. One day the post brought a brand new work on physiology by a well known German professor, and it was remarkable with what rapidity my labors of the last half of the session were lightened. An extraordinary improvement in the lectures was noticed; the students benefited and I gained rapidly in the facility with which I could quote the translated German.

"Four years later I was appointed on the visiting staff of the Montreal General Hospital. What better fortune could a young man desire! I left the same day for London with my dear old friend, George Ross, and the happy days we spent to-

gether working at clinical medicine did much to wean me from my first love. From that date I paid more and more attention to pathology and practical medicine and added to my courses one in morbid anatomy, another in pathological histology, and a summer class in clinical medicine. I had become a plurist of the most abandoned sort, and by the end of ten years it was difficult to say what I did profess, and I felt like the man to whom Plato applies the words of the poet:

“ ‘ Full many a thing he knew;
But knew them only badly.’ ”

“ Weakened in this way. I could not resist when temptation came from pastures new in the fresh and narrower field of clinical medicine. After ten years of hard work I left Montreal, a rich man—not in this world’s goods—for such I have the misfortune, or the good fortune, to lightly esteem, but rich in the goods which neither rust nor moth have been able to corrupt—treasures of friendship and good-fellowship, and those treasures of widened experience and a fuller knowledge of men and manners which contact with the bright minds in the profession necessarily entails. My heart, or a good bit of it, at least, has stayed with these treasures.”

This charming bit of speech, besides containing interesting biographical material, indicates the modesty and cordial nature of the great physician.

Dr. Osler’s reputation as a teacher spread beyond the confines of the Canadian University, and the bright star of fame had already appeared above his horizon before he rounded out the fifth year of his professorship at McGill. The first bright ray came in 1883, when he was elected fellow of the Royal College of Physicians of London, England, and this was followed in 1884 with his selection as Galstonian professor. Honors came to him fast, but he remained the same sensible, cool-headed and affable gentleman that he is to-day.

HIS VISITS TO EUROPE.

Almost every summer Dr. Osler takes a trip abroad and travels leisurely about the Continent. This habit began as far back as 1882, and on one of his numerous visits to London he met Dr. S. W. Gross, of Philadelphia. Dr. Gross was at that time famous as a consulting physician, and was at the head of the Jefferson Medical College at Philadelphia. A strong friend-

ship sprang up between Dr. Gross and Dr. Osler, and in October, 1884, the former sent for Dr. Osler to go to Philadelphia. He complied and was then informed that on recommendation of Dr. Gross he had been appointed to the professorship of clinical medicine at the University of Pennsylvania. Dr. Osler promptly accepted.

A few years later, Dr. Gross died. In May, 1893, Dr. Osler married his old friend's widow. Mrs. Osler comes from the very best of the older families of Boston. She is a woman of more than usual beauty and as charitable as she is beautiful. To her efforts largely the women of Maryland were interested in the fight that has been inaugurated against the dread tuberculosis. Due to her efforts, many rich women were interested in the situation and gave liberally in support of her project to build and maintain, in the Blue Ridge Mountains, a number of model homes for consumptives, whose means did not permit the environment needed in their cases. Dr. and Mrs. Osler have one son.

GOES TO JOHNS HOPKINS.

Dr. Osler remained at the University of Pennsylvania until October, 1889, when he was invited to create the chair of Professor of the Practice and Principles of Medicine at Johns Hopkins Medical School, and promptly accepted. At that time the new methods of instruction in the matter of original research by the students of Johns Hopkins, which were an innovation in university teaching in America, were attracting world-wide attention. Dr. Osler's reputation had, at that time, placed him in the front rank of medical men, and seeing the great field that lay before the Baltimore University, and recognizing the opportunity presented to those who desired to explore new fields and carry scientific investigation as far as it was possible to carry it, he took up his residence in Baltimore so as to be near the scene of his work.

His success at Johns Hopkins immediately attracted world-wide attention. He soon took a place in the very front rank of the greatest medical men of his time. In 1898 he was elected dean of the Medical Faculty of Johns Hopkins. Apart from his numerous duties at the school his practice rapidly assumed such vast proportions that he was compelled to adopt a system as strict and arbitrary as governs the management of a large corporation. His hours of consultation are crowded as full as possible and every day people who wish to see him are turned away disappointed. The only sure way to secure an audience with Dr. Osler is to

make an appointment several days ahead. The demands from other cities upon Dr. Osler are many. Scarcely a case of unusual importance appears in America that effort is not made to secure at least the advice of Dr. Osler. After the shooting of President McKinley, Dr. Osler was called to Buffalo.

HIS LITERARY WORK.

This great amount of work to which have been added his literary labors, has proved a mighty strain upon his physical resources, and it is considered well from this point of view, at least, that he should go to the quiet walks of the venerable institution to which His Majesty has summoned him, and where his work will be less exacting.

"A fitting end to a great career" is the way several of his colleagues refer to Dr. Osler's new work. It means for him a longer and quieter life than he could hope to find in America where the conditions are so different.

Great things are expected of Dr. Osler in a literary way during the next decade. This will be the opportunity of a lifetime devoted to study, to put into enduring form the ripest and best experiences and the deepest knowledge which have come to him.

As a writer, Dr. Osler is forceful and polished. He prefers the simplest and most easily comprehended words, and his essays make beautiful and refreshing reading. His published works are as follows:

Cerebral Palsies of Children, 1889.

Principles and Practice of Medicine, 1892.

Teacher and Student. (Address), 1892.

Oliver Wendell Holmes. (Address), 1894.

Last June Dr. Osler delivered the lecture on the Ingersoll foundation at Harvard. His lecture was "Science and Immortality." This lecture will be published in book form shortly, and is eagerly awaited. To his students, however, Dr. Osler is generous with his time and never fails to be with them at their smokers or entertainments when it is possible. He has a way of jotting down his ideas from day to day so that he is always ready, with the boys, to present to them something new. Another evidence of his generosity in this regard is that when invited to be present, and it is told him that the boys would like a short talk from him, that he prepares his remarks with the same care as though he were to address the highest group of authorities in the world. In a word, Dr. Osler believes in and practices thoroughness in everything he does.

HIS METHOD OF TEACHING.

Dr. Osler's method of teaching is unique. He believes the greatest thing a doctor can know is to be able to tell what ails the patient, quickly, so that remedial effort may not be delayed. His lectures to the senior class which come under his personal care at Johns Hopkins are often filled with epigrams, but each emphasizes the point he desires to make clear.

Dr. Osler is not a genius in the sense of being an originator and discoverer, but he is a genius in being able to impart to others the results of the investigations of the medical fraternity. Once a week he takes his class through the hospital wards and asks it to diagnose the cases there met. He quizzes the boys and seeks to impress upon each the various indications and phases of each case and does it in such a manner to create a lasting impression. The greatest privilege known to the students of Dr. Osler's classes comes with each Saturday evening when they go in a body to his beautiful home and there sit about a miniature banquet table while the host talks by the hour upon various subjects. He has a charming way of getting at each student's ambitions and from the vast fund of his experience offers many timely and valuable suggestions as to how to do with this or that phase. Dr. Osler's magnificent library is ever open to the demands of his class. It is no wonder that he is idolized by his boys, as he affectionately calls them.

The famous physician is as free from fads as the most democratic gentleman of this day. He loves to dress well and he does. He is extremely particular about the fit of his garments and has a love for fresh ties and immaculate waistcoats. There is no false dignity about Dr. Osler. He loves a joke as well as the next man and can tell a good story in splendid style. He detests practical jokes and practical jokers. His favorite story is of the Irishman, brought to the hospital after his peculiar case had been abandoned by several of the leading physicians of the leading infirmaries of the country. Dr. Osler's approached the cot, and gazing at the peculiar growth on the man's chin, said:

"What is the matter with your chin, Mr. Hennessy?"

"Just as I expected," replied the patient. "I knew it was a waste of time and money to come here just to be asked what ails me. What in blazes are you here for?"

Dr. Osler is not one who believes in all work and no play. He frequently speaks to the student in this vein. "Do not become too deeply absorbed in your profession to exclude all out-

side interests. Success in life depends as much upon the man as the physician. The more you see of life outside the narrow circle of your work the better equipped will you be for the struggle. While medicine is to be your calling, see to it that you have also some intellectual pastime which will keep you in touch with the world of art or letters. Cultivate other pursuits, in moderation, outside of your profession. No matter what it is, have an outside hobby. When tired of anatomy, refresh your minds with Oliver Wendell Holmes, Keats, Shelley, or Shakespeare."

Upon the question of religion he has often said, "The only way to take the Bible is by simple faith. When you begin to reason it out you will surely become confused." Dr. Osler despises littleness and narrowness, and has often said that he devotes a half hour daily to communion with great minds of the present and past lest he fail to remember that broad mindedness should be a cardinal principle with every man. He loves the poets. Shelley and Shakespeare are his favorites.

Dr. Osler's hobby is the running down of first editions of old books. He will chase one of the species across the continent and never rest until he has gotten it. One of his chief delights is to rummage through the old book-stores of London. The result is a rare collection of the most famous books on earth.

Dr. Osler has a profound regard and admiration for the old style country doctor. Speaking on this subject one day to his class he said: "Many of you have been influenced in your choice of a profession by the example and friendship for the old family doctor or of some country practitioner in whom you have recognized the highest type of manhood, and whose unique position in the community has filled you with laudable ambition. You will do well to make such a one your example, and I would urge you to start with no higher ambition than to join the noble band of general practitioners. They form the very sinews of the profession—generous-hearted men with well-balanced, cool heads, not scientific always, but learned in the wisdom of the sick-room, if not in the laboratories."

At the present time Dr. Osler is engaged upon the gigantic task of translating and editing Nothnagel's "Encyclopedia of Medicine." The series is to comprise twenty volumes. Six have been completed.

Selected Article

THE USE AND ABUSE OF PESSARIES.

BY A. M. LEONARD, M.D., PHILADELPHIA, PA.

There is no doubt that the medical profession is prejudiced against the use of the pessary. There is also no doubt that the abuse of this instrument in years gone by has been the cause of this dislike. Still it has proved itself so valuable an agent in properly selected cases in my hands that I write in its defence. I will say at the outset that this prejudice is largely confined to the younger members of the profession. When I graduated ten years ago I had a contempt for the pessary, and secretly thought that the man who used it was necessarily incompetent; but severe necessity has taught me otherwise. Eminent gynecologists are in favor of its use; for example, Mann has said: "There is a great deal of incredulity in the medical profession at large with regard to the good results which can be obtained from the use of the pessary. Without pessaries I should not know what to do for a considerable number of the cases that come to my office, and I should almost have to give up gynecology, although I might continue to do laparotomies.

Goodell in his lectures has placed great confidence in the use of the pessary, while Emmet has stated that the man who gets bad results from the use of the pessary does not know how to use it, the fault lying with the man, not with the instrument. Thomas has devised and recommended several forms of pessaries, and Skene does not give them up, although he devotes much attention to their abuse.

In the first place we must know what we can do with the pessary, and not attempt to accomplish wonders. The pessary will not loosen adhesions or put back a uterus in its proper place. It should never be used as a repositior. This is the first mistake. It should never be inserted into a vagina where the uterus is bound down by adhesions, nor even where the uterus is in malposition. It is a cardinal working rule that the uterus must be in proper position before the pessary is inserted.

Again, great care must be exercised in the selection of the form of pessary and its size in the various cases. An ill-fitting,

awkward pessary can be the source of great harm. If the uterus is bound down by adhesions, there is absolute evil in the use of the pessary. It is necessary to place the uterus in proper position before its insertion. The common mistake is the use of a pessary which is too short. To understand this we must study its mechanism. Mann illustrated this fault very well some years ago, as follows:

"Let me illustrate by this sound a uterus in retroversion, my fingers representing the place at which the ligaments are attached. I can tilt the sound forward either by pressing forward on its upper portion or backward on its lower portion; in case of the uterus I cannot do this, for I cannot get my fingers behind the fundus to tilt it up without performing a laparotomy. But we can use the cervix as a handle to replace the organ, provided the uterus is rigid enough. The pessary goes in behind the uterus; it does not, however, as might appear, press upward on the fundus, for it is anatomically impossible for the pessary to push up so high in the posterior fornix of the vagina. I have opened the abdomen when the uterus was held in place by a pessary, and have been able to demonstrate that the pessary was not in contact with the uterus at all; I could even put my finger between the uterus and the pessary. The pessary acts simply by pulling up on the posterior vaginal wall, and thus indirectly drags the cervix upward and backward so as to act in the same way as if we had pushed on the front of the cervix. Now, you will understand from this explanation why it is that when a pessary is too short it will utterly fail to do good, for it does not pull the cervix backward and upward far enough. Moreover, if the pessary is not long enough, its upper bar does not reach high enough to push the uterus past its centre of gravity, and the version will be converted into a flexion; the uterus, so to speak, being doubled over the bar of the pessary. But if the uterus is pulled over far enough, this cannot occur. The pessary must be adapted to the vagina, and this organ differs as much in different individuals as any other organ.

"Do not rely on the pessary to replace the uterus; first reposit the uterus and then insert the pessary, having it long enough to keep the uterus in its normal position. One of the roughest-looking specimens of the medical profession that I ever saw was a country practitioner who knew more about the use of pessaries than almost any other physician I have ever met. He failed in one case simply because he did not know he could get a pessary large enough. He understood perfectly what the trouble was, and he was delighted when I opened a drawer in

which my pessaries are kept and handed him one not quite as large as a horse-collar. I gave him a few like it, and he was enabled to meet the indications in his case. A man must have a little natural mechanical skill and taste in order to use pessaries properly; and, in fact, a man without mechanical ingenuity ought not to undertake gynecological practice."

According to Goodell, and it is true in my own work, the best pessary is the old-time Hodge's closed lever pessary, or its modified form, Smith's; this pessary properly used is better than the cup and stem pessary, or that wretched instrument, the ring pessary. The reason for the excellent action of the Smith-Hodge pessary are seen if we will study its mechanics; when properly adjusted one end of the pessary impinges upon the anterior vaginal wall, while the other rests behind the cervix on the posterior wall of the vagina. While the pessary has a lever action, its powers are really two-fold: as it stretches the vagina upward and backward, it acts similarly on the cervix. The womb turns as a pivot on its ligamentous attachment at its central point, and hence the body of the womb is tilted forward. This makes the uterus itself a lever, with its fulcrum the attachment to the bladder. This tends to overcome retroversions, although not retroflexions unless associated with retroversion.

The lever action of the pessary itself is due to the fact that the power of pressure is applied to the long arm or lower limb of the lever by the visceral pressure on the anterior vaginal wall, while the fulcrum is the posterior vaginal wall, the short arm behind the cervix directly pushing up the weight of the body of the uterus. It is better for the lower limb to rest on the soft anterior wall of the vagina than against the posterior surface of the symphysis or the rami of the pubic bones. If the pessary is too large or wrongly curved, this is likely to happen, but not so commonly with the Smith modification.

With the respiratory act the descending diaphragm forces the abdominal viscera down upon the bladder, which in turn forces down the anterior vaginal wall and cervix; hence there is a gentle rocking movement to the pessary which is excellent in result. But it is obvious that the pessary should not injure the structures over bony points, and it should not be too large; if it is, it really becomes a ring pessary.

There are two curves in both the Hodge and Smith pessaries—one large, one small, suggesting the letter S; but Smith makes the small curve sharper than the Hodge, and hence the large curve should be introduced first and its end placed behind the cervix.

Goodell formulates the following rules, which the writer learned as a student and knows their value:

1. The uterine or upper end must rest always behind the cervix.

2. Always in the Smith pessary, and generally in the Hodge, the uterine end has the large curve.

3. The concavity of the large curve must always look toward the anterior wall of the vagina, and the convexity rest upon its posterior wall.

4. When *in situ* the pessary should fit so loosely as to be freely movable and to admit the finger very easily between its anterior bar and the pubic symphysis.

5. In retroflexions the pessary must be long enough to span the angle of flexure in the womb and to press on the uterine body above the angle; otherwise the bent womb straddles the pessary and the flexion becomes worse.

6. After the introduction of a pessary the womb must always be put into its proper position either by the sound or by double palpation, viz., by a finger of the left hand in the vagina pushing the cervix backward, and by the fingers of the right hand hooking the fundus upward and forward through the wall of the abdomen. If this is not observed, more harm than good may be done.

7. If the womb does not stay in its proper position but falls back, the pessary is either not long enough or not curved enough, and it must be changed until a suitable one is found.

The best method to insert a pessary is as follows: Place the patient on her back across the bed as near to the edge as possible, with her knees drawn up. The physician then passes the fore and middle finger of his left hand just within the vulva, gently separates the lips, and presses downward cautiously on the perineum. He should hold the tips of the fingers of the right hand so that the concavity of the pessary looks toward the woman's left thigh. This end of the pessary is then slipped in between the fingers of the left hand, which are then removed, and the whole instrument enters the vagina by a steady pressure downward on the perineum. As it enters the fingers of the right hand should turn it half around on its long axis, making the concavity of its large curve look forward. The pessary now may be quite immovable, with its upper bar pressing the cervix in front. This position is more or less painful, and the physician should quickly introduce the index-finger of his left hand, and hook down the curve of the pessary until it slips over the cervix into the cul-de-sac behind. This can be facilitated by elevating

the anterior bar of the pessary with the other hand. Examine everything carefully before withdrawing the finger.

No pessary should hurt or abrade the surface. To prevent this latter occurrence it is well from time to time to remove the pessary and examine the vagina. Abrasions are generally found at the point of union of the cervix with the posterior vaginal wall. The patient should always take a daily douche of tepid water, and report to her physician at once if anything seems amiss.

The removal of a lever pessary is most simple: simply hook the forefinger over the lower bar and make gentle traction. The pessary will, as it were, guide itself out, rotating spontaneously on its long axis.

There are, of course, a variety of pessaries. The intra-uterine stem pessary is intended as a splint to straighten out the flexion either backward or forward. Unfortunately the lining membrane of the uterus, delicate in character, is often injured by the action of such a body. In the form of smooth glass or hard rubber it may not do such harm, yet it is a dangerous procedure which to-day has been largely discarded.

Cutter's retroversion pessary and the Thomas modification have an extra vaginal base of support, being kept in position by a perineum strap, buckled to a waistband. They can be removed and replaced by the patient, and the pressure carefully regulated. They may be tried when intra-vaginal pessaries fail, but they are generally a source of annoyance and chafing. Ring-and-stem pessaries and cup-and-stem pessaries are stiff and unwieldy, but are useful in those cases where there is complete prolapse of the uterus and vagina with the absence of the vaginal portion of the cervix; or in severe cases of tears of the vagina and perineum, preventing the use of the ordinary pessaries, they are demanded.

It is a cardinal rule to remember that every pessary needs watching, producing, if neglected, deep ulcerations. I examined a woman some years ago who had worn a pessary for over a year unattended. The condition of her vagina was almost indescribable, foul-smelling to a degree, with deep ulcerations. The pessary, neglected, unclean, had been left to its own devices. There are cases on record where these instruments have been found embedded in the soft parts, requiring an operation to get them out.

In conclusion I would state that properly used the pessary is a most valuable adjunct to every physician's armamentarium, which should not be neglected or despised.—*The Medical Age.*

Therapeutics.

Pessaries : Giles (*Medical Press*), says pessaries are indicated in the following conditions: Hernia of the vaginal walls—that is, cystocele and rectocele; prolapse and procidentia of the uterus; backward displacements of the uterus.

Granulating Wounds: To secure rapid epidermization, Schley uses (*Medical Record*), finely powdered boric acid abundantly. This is then covered over with rubber tissue, held in place by adhesive plaster, then gauze and bandaged. Change dressing from five to seven days.

Hay Fever: Relief can be obtained in hay fever attacks (Parsons, in *Medical Record*) by the application of cold spinal douche, from fifteen to thirty seconds. Or another excellent method is the application of an ice bag, partially filled with cracked ice, applied to the back of the neck and upper part of the spine.

Diarrhea of Consumption : Opium in the form of Dover's powder, five grains, with ten grains of bismuth subnitrate, often checks the obstinate diarrhea of consumption.—Zederbaum in *Colorado Medical Journal*.

Sprain : G. Nostrom advocates early massage and active and passive motion in cases of sprain. If physicians paid more attention to this method of treatment they would keep many patients out of the hands of "bone setters" and other quacks. Properly applied massage often cures in one or two days cases that under the old treatment by immobilization would consume weeks. The massage first applied should be very gentle, so as not to cause irritation or too much pain, and then gradually be increased as the tension of the tissues subsides. Not until the inflammation has become less intense is it advisable to introduce real frictions. At first the sittings should be protracted, of at least twenty minutes' duration, and should, when possible, be repeated several times a day. The

treatment may be summed up as follows: (1) At the initial stage, in the presence of classical phenomena, including a great deal of pain, effluage. (2) When the pain has decreased a great deal, frictions and passive movements; later, active movements. Walking at the beginning ought not to be permitted. (3) In all sprains of the lower extremities, after every seance, application of a gauze bandage, a precaution all the more indicated when the patients are allowed to use their legs and walk. (4) In order to prevent real relapses, as well as to prevent the inflammation taking on a chronic character, the treatment ought to be kept up until complete restitution has taken place.—*Medical Record*, November 19, 1904.

Falling Hair: Walsh (Abstract, *Jour. A. M. A.*, Oct. 8, 1904), recommends the following combination to prevent falling out of the hair:

R. Acid salicyl. ℥ij.
 Acid carbol. ℥j.
 Olei ricini. ℥ij.
 Spiritus vini rect. q. s. ad ℥vj.
 M. Sig.—Apply to the scalp freely once or twice daily.

Journal des Practitiens, May 21, 1904, advises:

R. Acid Acetic. ℥ xv.
 Chloral. gr. lxxv.
 Ether. ℥j.
 M. Sig.—Apply in the morning after a shampoo with soap.

Tsakiris (Abstract, *Canada Pract. and Rev.*, March, 1904), makes use of the stimulating properties of the refrigerating spray in the treatment of baldness. The spraying is performed once a week, and usually within a month the bald areas are covered with fine hair, and the falling out of the hair diminishes.—*Therapeutic Review*.

Alopecia Areata: The following formula is given in the *Med. Record*, March, 1904, for alopecia areata:

R. Hydrarg. chlorid corrosive. gr. ij.
 Tr. cantharidis. ℥iv.
 Aquæ q. s. ad ℥viij.
 M. Sig.—Apply freely to affected area each night, after shampooing and drying.

F. H. Dillingham (*American Medicine*, March 12, 1904) believes that alopecia areata is parasitic in origin, and that the treatment should consist in the application of local remedies of

which he considers chrysarobin the best. He mentions that the discoloration it produces is one of its great disadvantages. It should not be used over too large an area at one time, and should be kept out of the eyes. The best results are obtained when the remedy is compounded with vaseline. The strength should be varied according to the sensibility of the skin, children and light complexioned persons requiring a weak preparation. In using it, an effort should be made to produce a mild dermatitis. When the trouble has been brought to a standstill, a mild sulphur ointment should be substituted.—*Therapeutic Review*.

Phimosis: The bloodless treatment of phimosis (Gehring, in *Interstate Medical Journal*), is as follows: Retract the skin on the penis until the redundant part, which is in front of the glans, disappears, and the meatus urethralis, and the meatus preputialis are exposed. Then insert a blunt and flat instrument like the eye part of a needle, probe between the foreskin and glans down to the sulcus, and sweep this around the glans from one side of the frenum to the other side of the same. The foreskin being thus released from these pseudo-adhesions, all that remains to do is to squeeze the glans out of the prepuce, a process somewhat similar to squeezing the stone out of a cherry. The sulcus must be completely exposed and the smegma thoroughly removed; the entire exposed part well oiled and the foreskin returned to its former place. The retraction and oiling should, on account of the soreness of the parts, not be repeated before forty-eight hours.

Hydrastis: Especially in alcoholic gastric catarrh, Blair Stewart (*Jour. A.M.A.*), has found hydrastis a valuable remedy. He combines it as follows:

R. Ext. hydrastis can. fld.	℥ iiss.
Bismuthi subgallatis.....	gr. iiss.
Glycerini acidi carbolici.....	℥ ss.
Spiritus chloroformi	℥ iv.
Elix. lactopeptin	q.s. ℥i.

M.

This dose is repeated every one-half to two hours. He states the results are remarkable. Stimulant is entirely cut off in delirium tremens, and after a few doses, there is abhorrence at the mere mention of them.

The Physician's Library

The Medical Epitome Series.—Toxicology. A Manual for Students and Practitioners. By EDWIN WELLES DWIGHT, M.D., Instructor in Legal Medicine, Harvard University. Series edited by Victor Cox Pedersen, A.M., M.D. Lea Brothers & Co., Philadelphia and New York.

This practical volume is intended as a brief compendium of the facts in connection with Toxicology. Students will find it in every way suitable to the requirements of their courses in this direction.

International Clinics. Vol III. Fourteenth Series. 1904.

This volume is an exceptionally good production, well illustrated. Syphilis is a subject admirably taken up in a series of twelve papers. Besides this there are well prepared papers on Treatment, Surgery, Medicine, Gynecology, and an interesting clinical lecture on paralysis agitans, by F. W. Langdon, M.D., delivered at the Cincinnati (Ohio) Hospital. These are valuable quarterly additions to make to one's library on current medicine.

H. M. Caldwell Co., Boston, have just published a new authoritative work on Physical Culture by Dr. Dudley Allen Sargent, under the title of "Health, Strength, and Power." Dr. Sargent has spent thirty-five years of his life in the advancement of Physical Culture, twenty-five of which as the director of Harvard's Hemenway Gymnasium. His numerous articles and papers on physical training are well known, as well as his many inventions of the Modern System of Gymnasium Apparatus, which have been adopted all over the world. In this work of 280 pages, Doctor Sargent has aimed to make physical training more popular by devising a series of exercises which require no apparatus whatever. It is profusely illustrated with half-tone illustrations from original photographs furnished by the author. The book does not appeal to the athlete or student in whose life physical activity plays a considerable part, but to those who lead a sedentary life, whether man or woman. At this time, when the benefits of outdoor living and breathing pure air are being agitated, the simple exercises, when followed as here described, cannot but be found beneficial to the highest degree, and the work should be in every household.

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COMMENT FROM MONTH TO MONTH.

An important and decided step has been taken in Toronto and Ontario when was organized the Inebriate Reform Society of Ontario. Backed by representative and influential men, both within and without the medical profession, the new organization can make itself a power towards promoting wise legislation looking for the reformation of the unfortunate inebriate. It is now some time since a Bill was drafted by no less a personage, we understand, than the Premier of the Province himself, but either from lack of push from behind or disinterestedness amongst those who should zealously prosecute its promotion, it was never introduced into the Legislature. We are pleased to accord to Dr. Rosebrugh much praise for the unselfish way he has clung to a most worthy object, and trust that in the no very distant future he will see the complete success of his efforts. The need of proper institutions for the care of both acute and chronic alcoholics as well as for those unfortunately addicted to the cocaine and morphine habits, is apparent to all medical men; and it is to be hoped that the new society will be able to exercise the proper influence with the Government so that we may soon see the establishment of these much-desired institutions.

The initial step in the establishment of municipal sanatoria for the care and treatment of cases of tuberculosis has been taken in Ontario, when a short time ago representatives of the municipalities of Waterloo, Wellington, Brant, Oxford and Perth, the leading central counties of Western Ontario, met at Galt and discussed the proposal for the erection of a sanatorium which would receive their joint support and patronage, and at the same time care for the cases of tuberculosis arising amongst them. This idea is heartily to be commended, and it is a wonder that it has not been acted upon long ago when the Government has generously promised to aid counties or groups of counties in the erection, establishment and maintenance of these self-same sanatoria. The campaign against tuberculosis must not be allowed to lag. We would respectfully make the suggestion to these five municipalities that they follow suit in this matter of looking after part of the health of their different communities by organizing and looking after the health of all by having a properly appointed health officer, which they could afford to do at a comfortable salary.

Montreal medicine recently lost in the person of Dr. Duncan Campbell MacCallum at the age of 81 years, a gentleman who up to a few years ago had much to do with educating the medical undergraduates of McGill. No sooner had the late Dr. MacCallum been graduated from the institution which he subsequently came to serve so faithfully, than he was picked out for high honors. After graduation in 1850 he continued the prosecution of his studies in London, Edinburgh and Dublin, and was admitted to the degree of M.R.C.S., Eng., in 1851. Returning to his native province he was at once appointed Demonstrator of Anatomy at McGill, which was followed in 1856 by appointment to the chair of Clinical Surgery which he relinquished in 1860 for that of Clinical Medicine and Medical Jurisprudence. This he held up to 1868, when he became Professor of Obstetrics and of Diseases of Women and Children, an appointment he held up to the time of his retirement in 1883, when the University appointed him emeritus professor, retaining his precedence in the University. Dr. MacCallum was held in high esteem by the profession generally, and had attained to an age not usually granted to the disciples of Æsculapius.

We are given to sorrow more for the loss of a man in the full enjoyment of fame and success, while yet young, and with the

prospects of a very useful life still before him. The medical profession all the world over knew of the Allinghams, father and son, and the announcement of the tragic death of the latter shocked the entire medical community. The late Dr. Herbert William Allingham was but forty-two years of age, but in the space of his short life had attained to the top rung of the ladder of fame, as it is known in the medical profession. Like others he was the victim of an unfortunate accident, which may happen to the bravest and at the same time the most careful surgeon. Possessing the knowledge of what this meant, no doubt he often shuddered at the thought of what fate might have in store for him, which, with family bereavement, imposed too hard a strain upon his over-taxed mental and physical strength.

But "the world does not discriminate well in crowning its heroes," said a Portland, Oregon, preacher, not long ago to a congregation of medical men. If it did the profession of medicine would be more fittingly recognized. "Is it not strange," he said, "that the heroism of an hour is often recorded and rewarded while the heroism of a life is passed by unnoticed?" But the medical man is not looking for honors. Those are better left to the chicanery and trickery of unsavory and unsanitary politics, as rewards for corruption and wrongdoing. We wonder how that congregation of medical men felt when they had this launched at them from the Portland pulpit: "The medical profession is the highest, the most difficult, the most important, the most ancient, the most honorable among the merely human avocations of men." With a testimonial like this in its pocket the medical profession should exercise eternal vigilance in guarding well the portals thereof.

"If a man die shall he live again?" was the key note in Dr. Osler's now, somewhat, famous Ingersoll lecture on Science and Immortality. After a cursory reading of the lecture one is rather surprised to find that the pith of it is but just the simple faith of childhood which first commences to reason upon these matters. "Some of you will wander through all phases, to come at last, I trust, to the opinion of Cicero, who had rather be mistaken with Plato than be in the right with those who deny altogether the life after death; and this is my own *confessio fidei*." Believe in a hereafter, you lose nothing; disbelieve, you lose all. Whether that be an honest rendering of the matter we leave it to our good friends of the cloth to argue out.

When a man grows gray and attains to the ninth decade of life in the medical profession and continues to hold the confidence, love and regard of his confreres, it is something for which all feel grateful. Partaking of all this we can heartily congratulate Dr. James H. Richardson of this city, who on October the 16th attained his eighty-first year. We are pleased to learn, and equally pleased to announce, that Dr. Richardson is in the enjoyment of most excellent health, and that he can yet "draw" well.

Montreal furnishes splendid evidence on behalf of vaccination as seen in the annual report issued by the Medical Health Officer of that city. On the 1st of January, 1903, there were five persons in the Montreal Smallpox Hospital. During 1903 there were ninety other cases. There were two deaths, and there remained in the hospital on the 1st of January, 1904, one patient. Out of the ninety cases which were admitted during the year, not even one person suffered from the disease, who had been vaccinated during the past five years. There were thirteen who had been vaccinated some years ago, and there were seventy-seven who had never been vaccinated at all. This simply adds another proof to the long list of confirmatory evidence in favor of vaccination, and it emphasizes as well that continuous immunity can only be secured through repeated vaccinations. It is most unfortunate that now and again some one dies not from vaccination but from some disease which follows either directly or indirectly upon the operation; and we would conceive that wherever this occurs it should be the duty of the health officer in whose district such death or deaths occur, to make the most careful and impartial investigation as to the cause thereof; for in these enlightened days there still live some who would choose to walk in darkness rather than in light. As concerns the city of Montreal, itself, there is now very little opposition experienced there when officers of the health department go the rounds of the schools vaccinating the pupils.

Canada is annually turning into the ranks of the medical profession some four or five hundred young men and women, most of whom before they entered upon their medical studies were students of algebra, geometry, arithmetic, etc., in the various High Schools and Collegiate Institutes of the different provinces. With a splendid medical training they go out to seek for themselves a livelihood and honor and success in practice. They have

got into a profession which prides itself on its ethics, which is the strictest profession in this respect upon earth, and which is a profession which frowns down hard and sore any departure from the rules they order their professional lives by. Such conditions prevailing, is it not time that the authorities in our medical colleges recognize that they are more than derelict in their duty in not providing for a course of lectures to train these young men in the honorable conduct of themselves in professional life? Will not some one who has a "say" in the innermost sanctums of these institutions take it upon himself to advocate a course in medical ethics?

Teething, convulsions and the gum lancet is a subject which we would like to have some of our subscribers give us their opinions on. We would like to know the present-day practice so far as the general practitioner in the country is concerned, whether gums are lanced very often, whether convulsions are caused very much by teething, or if ever they are the result of teething at all. These thoughts have occurred to us at this time, not but that they have occurred to us before and to others, but by reason of seeing in the November "Archives of Pediatrics" a discussion bearing on the subject before the Pediatric Section of the New York Academy of Medicine. Convulsions in the second half of the first year are of frequent occurrence; and Dr. Spratling, of the Craig Colony for Epileptics at Sonyea, N.Y., apparently holds to the belief that "teething" convulsions in infancy lead to epilepsy in later life. It would be very interesting and valuable matter to publish whether these so-called "teething" convulsions, were actually caused by the eruption of teeth or whether they were due to other causes. Teething is a physiological process, and why it alone should cause such an alarming condition as a convulsion, we do not think has been sufficiently elucidated. We sincerely hope that our readers and others will give their opinion of the entire matter.

Thank you! We have no commission business amongst us in Canada. We are in this position in this country that when we recognize that we cannot do for our patient all that we would like to see done for him that we advise his consulting one giving his whole and undivided attention to diseases of different organs, such as the eye, the ear, etc. And we do not ask him for a commission in referring any of these cases to him; and we sincerely hope that no such disgraceful, selfish, unwarrantable practice will

arise amongst us. These remarks are called forth by reading of what has been taking place in Chicago where eighteen physicians or surgeons, we are not quite sure which they were, offered an apparent young practitioner from a distance a commission if he would refer his "mythical" patient to them for treatment. He had written to one hundred, and it is nice to know that only eighteen wanted to give him anything. If a patient calls a general practitioner to attend him in a disease requiring special knowledge more than he thinks he possesses, if he is conscientious for the welfare of that patient, he will advise some one in whom he has confidence. Why should he continue to attend that patient any longer, when he knows, for instance, that he requires an operation for appendicitis, and that he does not want to do it himself; or that he requires an iridectomy, and he knows he has never done a iridectomy, and would not care to undertake it now? His plain duty to his patient is to advise him to consult with one who can relieve him. This ought to be the great, good thing in the practice of medicine—your patient's interest alone. It is because of this unselfish interest that we consider that we are used very badly when beaten out of our rightful fees. No! We hope that the commission business will never be seeded in Canadian soil. We hope that we esteem our specialists more than that than to ask them for a commission—shame on the word!—for sending them a patient we are incapable of attending ourselves. The most eminent specialist on diseases of the eye need not care whether he knows anything of gynecology or not; he does not want midwifery cases, and, of course, would not take them. The general practitioner knows more about children, midwifery and general diseases than all the eye or ear specialists put together. His knowledge is broader, his sympathies are broader, and he need not fear; he is as good a man as any specialist. But we do not all recognize this. The man who attends to a baby in convulsions and carries it through to life and health is just as good a man as one who can remove a cataract or scrape out a mastoid. General practitioners are wont to think that the specialist is away and above him, but he is not, and he does not need to ask for, and should certainly spurn anything that savors of a commission. The specialist has got to say that he cannot treat anything outside his own small sphere. Why should not the general practitioner say that he cannot treat a patient with a disease requiring special knowledge?

NEWS ITEMS

DR. J. M. LEFEVRE, Vancouver, B.C., has gone to England.

THE birth rate in Montreal, during 1903, was 36.08 per 1,000 of the population.

DR. J. F. UREN, Toronto, has removed to the corner of Church and Maitland Streets.

DR. W. J. CLARKE, Orangeville, Ont., has moved to Toronto, to practice, on Dovercourt Road.

DR. MCKEOWN, of the Vancouver General Hospital, has resigned, and will resume private practice.

DR. GEO. E. EAKINS, of Toronto, formerly of Belleville, has accepted a position in a doctor's office at the Soo.

DR. THOMAS DOUGLAS, of Hamilton, has purchased the medical practice of the late Dr. Mallory, at Colborne.

DR. J. N. ELLIOTT BROWN, Secretary of the Gold Territory, Dawson, and formerly Secretary of the Ontario Medical Association, is visiting, with his wife, in Toronto.

TORONTO FIREMEN AND FIRST AID TO INJURED.—Dr. Sheard, Toronto's Medical Health Officer, will prepare a set of first-aid instructions for the Toronto firemen to commit to memory.

DIPHTHERIA IN MONTREAL.—There were thirty-one cases of diphtheria reported in Montreal during the week ending November 26th.

MONTREAL BIRTH RATE.—The mean birth rate of Montreal for the past sixteen years, without distinction as to nationality, was 39.10 per 1,000 of the population.

WILL LESSEN SPREAD OF CONSUMPTION IN MONTREAL.—The Montreal City Council will pass a by-law prohibiting spitting on the streets and in public places, as well as in public conveyances.

DR. L. G. STEWART, son of the late George Stewart, of Aurora, has sailed for Glasgow from Montreal. He hopes to visit the hospitals of Edinburgh, London, and Dublin before returning.

DR. R. T. MACKENZIE, a native of Almonte, has been appointed physical director of the University of Pennsylvania. He was one of McGill's greatest athletes.

DR. A. YALE MASSEY, well known as a former house surgeon at the Huntsville Hospital, has sailed for England, where he will take a post-graduate course in the hospitals of London.

DR. E. E. LATTA, of Castleton, has rented offices in the Yeomans' Block, Colborne, and will occupy a suite of rooms at the Brunswick House. Dr. Latta is a graduate of Trinity University, and a Fellow of Trinity Medical College.

STRONG EVIDENCE FOR VACCINATION.—Of the ninety cases admitted to the Montreal Smallpox Hospital last year, seventy-seven had never been vaccinated; thirteen had been vaccinated some years ago; none had been vaccinated within the past five years.

SMALLPOX IN MONTREAL IN 1903.—On January 1st, 1903, there were five patients in the Montreal Smallpox Hospital, and there were admitted during the year ninety cases. The deaths numbered two, and in the hospital on January 1st, 1904, there was one patient.

DR. A. L. HORE has arrived lately at the Rainy River District, near Fort Francis, where he will be employed to doctor in the lumber camps of the Graham & Horn Co., of Fort William. Dr. Hore is a graduate of the faculty of medicine in the University of Toronto.

TWO SCHOLARSHIPS FOR BRITISH COLUMBIA STUDENTS.—Through the generosity of one of Victoria's public-spirited citizens, two scholarships, each of the annual value of \$250, are open to British Columbia students, tenable during the third and fourth years, in arts or science, at either Toronto or McGill Universities.

VANCOUVER GENERAL HOSPITAL.—The house surgeon's report for the month of October shows that there were remaining from September 59 males and 11 females; admitted during the month, males 54, females 15; cured, males 44, females 14; died, 2; remaining in hospital at the end of the month, 47 males and 12 females. Drs. G. D. Johnston and Glen Campbell were appointed to act as ophthalmologists, otologists, and laryngologists.

VACCINATION POPULAR IN MONTREAL.—Civic officials who now go the rounds of the schools, vaccinating, in Montreal, meet with no opposition to the performance of the operation. Two years ago, when the officials visited the schools, over one thousand pupils refused to be vaccinated.

DR. ERNEST CURRAN, Orillia, Ont., who has been taking a post-graduate course at Edinburgh since last spring, successfully passed his examinations last week, and took his degree of L.R.C.P. and S., Edinburgh. He will probably not return home till next year, taking a course in the London hospitals meanwhile.

DR. R. R. HOPKINS, who is about leaving Grand Valley, Ont., was presented with a set of regalia by the members of Scott Lodge, A.F. & A.M., and with a gold-headed ebony cane by the A.O.U.W. Dr. Hopkins has been a resident of Grand Valley since 1887, and has been an efficient member of both the school and library boards.

PROVINCIAL HOSPITAL OF NEW BRUNSWICK.—The Provincial Hospital for the Cure of Nervous Diseases is overcrowded, there being some 554 inmates, and a commission is at work examining all patients, the object being to remove all harmless cases to other quarters. Those comprising this commission are the new superintendent, Dr. J. V. Anglin, Dr. G. A. B. Addy, and Dr. A. F. Emery, of St. John.

EXAMINING BOARD OF BRITISH COLUMBIA MEDICAL COUNCIL.—The Examining Board of the British Columbia College of Physicians and Surgeons for the current year are: Dr. J. C. Fagan, Victoria; Dr. W. J. McGuigan, Vancouver; Dr. R. Eden Walker, New Westminster; Dr. A. P. Proctor, Kamloops; Dr. J. M. Lefevre, Vancouver; Dr. J. C. Davie, and Dr. O. M. Jones, Victoria.

BRITISH COLUMBIA MEDICAL EXAMINATIONS.—Out of thirteen candidates who came before the Examining Board of the College of Physicians and Surgeons of British Columbia, nine passed with honors. These were: Dr. Eliza Anderson, of New Westminster, who will practise in that city; Dr. R. McCaffrey, of Toronto; Dr. J. N. English, New Westminster; Dr. F. J. Hacking, Minnesota; Dr. William Stephen, and Dr. R. P. McKenzie, of Rossland; Dr. F. C. Bishop, Crow's Nest Pass; Dr. William Workman, and Dr. R. J. Cairns.

DR. TYE, who has practised in Chatham for the last ten years, has disposed of his practice to Drs. J. S. Agar & Agar, formerly of Dover Centre. Dr. Tye will continue active practice until the first of the year, when he leaves for Kansas City, Mo., where he will continue the practice of medicine.

MONTREAL GENERAL HOSPITAL.—For the three months ending September 30th, there were 829 patients treated to a conclusion in the Montreal General Hospital. There were 57 deaths, 21 of which occurred within three days of admission. In the out-door department, there were 10,235 consultations, as compared with 9,692 for the corresponding period of 1903.

MONTREAL WATER COMMISSION.—The following commission has been appointed by the Montreal City Council to pronounce upon the quality of Montreal water: Dr. R. Ruttan, Professor of Chemistry, McGill University; Dr. A. Bernier, Professor of Bacteriology, Laval University; Dr. J. E. Laberge, chemist, bacteriologist, and Director of the Montreal Civic Hospital; Mr. Milton Hersey, chemist, and city analyst.

TORONTO GENERAL HOSPITAL.—The report of the Toronto General Hospital for October, shows a total number of patients in the hospital of 245 on October 31st, as against 244 the month previous. During October, 229 persons were admitted, and there were seven births, while 212 were discharged, and 23 died. The total number treated was 480. Over 30 patients received outside treatment, and 200 cases were attended at the Emergency Hospital.

ASYLUM CHANGES.—Dr. R. W. Bell, Second Assistant Physician at the Asylum for the Insane, London, has been transferred to the position of Medical Inspector of the Provincial Board of Health. His position at London has been filled by the transfer of Dr. W. C. Herriman from Kingston, and Dr. MacNaughton, of London, has been transferred to Kingston to succeed Dr. Herriman. Dr. W. P. St. Charles, of the Mimico Asylum, has been appointed to the position of relieving officer to the public institutions, and Dr. Geo. M. Biggs has been appointed assistant to the superintendent at Mimico. Dr. W. T. Wilson, third assistant physician at the Hamilton Asylum, has been transferred to London to succeed Dr. MacNaughton.

Special Selection

THE CORRECTION OF ABNORMAL CONDITION OF THE BLOOD RELATIVE TO SURGICAL OPERATIONS.

BY S. C. EMLEY, A.B., M.D., WICHITA, KAN.

Late Pathologist Augustana Hospital, Chicago, Ill.

Frequently the surgeon is called upon to operate on patients who, when they first present themselves, are in no condition to stand an operation on account of deficient quantity of blood or the poorness of its quality. On the other hand, it is desirable that the patient regain his normal condition as soon as possible after operation, whether the abnormal condition of blood is due to the operation or not.

The ideal remedy is that which will restore the normal condition of the blood in the shortest time with the least disturbance to the rest of the body, the digestive system particularly. Less necessary are palatability and cost of the remedy. To determine which of several preparations best fulfilled the above conditions was the purpose of this investigation.

All of the preparations used being recognized as good, Dr. A. J. Ochsner gave me permission to prescribe them as I saw fit to certain of his patients in Augustana Hospital. Only those cases were selected whose appearance indicated the need of a hematinic. As often as possible similar cases were paired off, one patient being given one preparation and the other patient another, and the results compared. The cases were paired according to pathological condition, age, sex, general condition and the condition of the blood as to hemoglobin and erythrocytes at the beginning of treatment. The preparations used were malt with iron and manganese; malt with iron, quinine and strychnine; Bland's pills, and the preparation known as pepto-mangan (Gude).

After watching the effect of the medication on the patients, and observing the records, it is seen that Bland's pills acted quickly, but constipated; the malt combinations caused nausea in a few patients, and the malt, manganese and iron combinatio:

caused constipation in nearly all. The pepto-mangan, given in milk, was agreeable to take, and in no case did it cause nausea or constipation. While in two cases the Bland's pills acted more quickly than pepto-mangan in two similar cases, on the whole the latter gave better and quicker results than any of the others, and at the same time caused no digestive disturbances in any of the cases.

Although the investigation was undertaken for the purpose of finding the best hematinic for surgical cases, it was tried in one case of chlorosis and in several obscure medical cases.

The following table shows the results obtained in all those cases where Gude's preparation was given. One to four drams were given in milk to each case, three times a day. The hemoglobin was estimated with Von Fleischel's hemometer, and the erythrocyte count made with the Thoma-Zeiss apparatus. The first blood count was made previous to operation in all surgical cases, and the last a short time before the patient's discharge from the hospital. The second count was never made immediately after the operation because of the temporary derangement due to the anesthetic and the loss of blood.

In the nineteen cases tabulated there is an average increase of 800,000 erythrocytes and of 14.5 per cent. hemoglobin. This improvement was during forty days on an average. The usual time a patient stays in the hospital is twenty-one days when the case is of ordinary severity from a surgical standpoint. Such cases were placed on tonic treatment and showed rapid improvement, but of such cases only one (Case 16) is noted because it might be urged they would improve equally fast with or without a tonic.

It is seen from the above table that even in the cachexia of carcinoma there is a temporary improvement, which shows that in the use of this tonic we are dealing with a powerful hematinic. In Case 17 there was no improvement, the patient dying shortly after the last count. At the autopsy I found a pyogenic abscess in the liver as large as an orange and about 200 c.c. of pus below the right kidney, which explained the retrogression. In all of the other operated cases the improvement was steady and marked, especially in uterine diseases accompanied by loss of blood. In the case of chlorosis (number 9) the improvement was remarkable, the patient being discharged cured in a little over a month, at which time all the symptoms had disappeared.—*Medical News*, September 24th, 1904.

Name.	Age.	Diagnosis.	Date.	E-ythrocytes per c.c.	Per cent. of Hemo-globin.
1. G. N.*	53	Carcinoma of stomach.	9-20-03	2,920,000	33
			10-12-03	3,100,000	43
			10-25-03	3,260,000	42
			11-8-01	2,520,000	36
2. Mr. L.*	49	Carcinoma of stomach.	10-20-03	2,615,000	27
			11-23-03	2,900,000	28
			12-5-03	2,510,000	27
			12-19-03	2,300,000	26
3. Miss J.	17	Acute menorrhagia.	12-1-03	2,310,000	36
			12-20-03	3,565,000	41
			12-27-03	4,160,000	40
4. Mrs. E. K.	33	Menorrhagia.	12-7-03	4,310,000	41
			1-10-01	3,565,000	61
			1-18-01	5,100,000	82
5. Mr. S.	23	Neurasthenia (?)	12-16-03	4,060,000	60
			1-7-01	4,600,000	65
			1-14-01	4,560,000	75
6. Mr. K.	35	Tuberculosis of mesenteric glands.	11-15-03	3,825,000	42
			12-10-03	4,826,000	68
			1-1-01	4,716,000	66
7. Mrs. F.	23	Pelvic abscess.	10-25-03	4,040,000	60
			11-23-03	5,100,000	60
			12-11-03	4,975,000	78
8. Mrs. A.	34	Pelvic abscess.	12-10-03	3,185,000	53
			12-29-03	4,293,000	58
			1-11-01	4,560,000	78
9. Miss A. J.	16	Chlorosis.	10-25-03	3,010,000	45
			11-12-03	4,950,000	65
			11-28-03	5,676,000	80
10. Mrs. H.	40	Myoma of uterus.	7-15-03	2,100,000	42
			8-17-03	3,900,000	55
			9-15-03	4,500,000	80
11. Johnny L.	13	Tuberculosis of hip.	12-1-03	2,680,000	45
			12-29-03	3,600,000	55
			1-20-04	4,100,000	62
12. Mr. E. P.	21	Tuberculosis of ankle.	10-29-03	4,310,000	66
			11-10-03	4,850,000	71
			1-23-04	5,166,000	75
13. Johnny F.	9	Extensive burn and infection of surface.	11-9-03	3,560,000	50
			11-25-03	3,900,000	55
			1-23-01	4,362,000	68
14. Miss E. B.	17	Perforative appendicitis.	11-25-03	3,600,000	55
			12-26-03	4,000,000	65
			1-22-04	4,250,000	69
15. N. N.	29	Suppurative appendicitis.	12-20-03	4,200,000	60
			1-2-04	4,400,000	66
			1-20-04	5,120,000	75
16. Mr. B.	28	Chronic appendicitis.	1-2-04	3,565,000	55
			1-10-01	4,320,000	70
			1-23-01	4,800,000	78
17. Mr. S.	37	Gangrenous appendicitis.	10-10-03	3,300,000	45
			10-27-03	3,350,000	45
			11-27-03	3,010,000	40
18. Miss W. J.	29	Empyema.	11-20-03	2,740,000	44
			12-20-03	3,070,000	52
			1-22-01	3,820,000	60
19. Mr. F.	44	Cholelithiasis; Chronic appendicitis.	11-23-03	3,560,000	57
			12-4-03	4,100,000	68
			1-12-04	4,610,000	78

*Incurable.

Obituary

DUNCAN CAMPBELL MacCALLUM, M.D.

Dr. Duncan Campbell MacCallum, who for upwards of thirty years was actively engaged in the teaching of his profession in connection with McGill University, died last month at the advanced age of eighty-one years.

Dr. MacCallum, who was a man of very wide sympathies and interests, was born at Isle aux Noix, Que., November 12th, 1825. He pursued his medical studies at McGill University, and graduated M.D. in 1850. He continued them in London, Edinburgh, and Dublin, and was admitted M.R.C.S., Eng., 1851.

Upon his return to Canada he was appointed demonstrator of anatomy, the duties of which he discharged in connection with the practice of his profession. In 1856 he was appointed to the chair of clinical surgery, being, in 1860, transferred to the chair of clinical medicine and medical jurisprudence, and in April, 1868, received the appointment of professor of midwifery and the diseases of women and children, which position he held until his resignation in 1883, on which occasion the governors of the university appointed him professor emeritus, retaining his precedence in the university.

Dr. MacCallum was elected visiting physician to the Montreal General Hospital, February, 1856. He discharged the duties of that position until 1877, when he resigned, and was placed on the consulting staff. From 1868 till 1883, he had charge of the University Lying-in Hospital, and for a period of fourteen years he was physician to the Hervey Institute for Children.

Dr. MacCallum always took a warm interest in the literature of his profession, and articles from his pen appeared in the *British-American Medical and Surgical Journal*, and *Canadian Medical Journal*. In 1854, he, in conjunction with Dr. Wm. Wright, established and edited the *Medical Chronicle*, which had an existence of six years. He published, in 1901, for private distribution, his addresses delivered at various functions. His essay, printed in the *McGill University Magazine* last year, "Reminiscences of the Medical School of McGill University," also attracted a great deal of attention.