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THE PROFESSION.*

By SIR JAMES GRANT, M.D., K.C.M.G., Ottawa.

GENTLEMEN,—A response to the noble sentiment "The Profession" is a source of pride and pleasure. At no period in the history of the profession, was there such unmistakable evidence of progress and advancement all along the line of scientific research, "Small talk may be said to be part of the social equipment of a successful doctor," but, on the present occasion, I will advert to a few of the leading problems of scientific thought within the past few months. The Wellcome Research Laboratory at Khartoum, established at the Gordon Memorial College, the result of the able advice and assistance of Lord Kitchener, is a great advance in the Far East towards promoting the study of technical education, bacteriology and physiology, all leading to a more comprehensive knowledge of tropical diseases, in fact infectious diseases, of man and beast, peculiar to the Soudan. This is certainly a broad and comprehensive scheme of work, which will be productive of great service to the State. Dr. Balfour, of Edinburgh, is in charge, and already research work has commenced in the line of malaria, and the anopheles in which Dr. Ross established a world wide reputation.

It is most important that Egypt and the Nile should thus become the cradle of science, and advanced civilization which will, in time, add greatly to the work now in hand, by the schools of tropical medicine. The Medical Department of the St. Louis Exposition has brought to light exceedingly interesting and instructive data by master minds in the profession. The value of the Physiological Principle in the study of Neurology by Dr. Putnam, of Boston, is an exceedingly able and comprehensive paper. The Anatomical Principle, in the study of diseases, is quite as evident for the department of neural pathology, as for any other. The signs of readjustment of disease constitute about all we can learn in the study of disease. Neither disease nor health is a definite condition, in fact, both are movements towards some relatively enduring equilibrium. The biographical principle, as applicable to the problem of disease, is no longer set aside by the conservative physician. Doubtless, the able contributions made by physiologists, psychologists and biologists have thrown much light upon the clinical problems of compensation and adaptation. According to Putnam in no department of pathology is it so difficult to arrive at satisfactory conclusions, by the aid of the anatomical method alone, as in the

*Reply to the toast of "The Profession," at the banquet of the Ottawa Medico-Chirurgical Society, Russell House, Ottawa, January 5, 1905.

department of neural pathology. The remarkable paper is an object lesson to the profession, and worthy of the most careful consideration. The next paper to which I shall refer briefly is by Dr. Webster, of Chicago: "Some Fundamental Problems in Obstetrics and Gynecology." He considers carefully and ably the following subjects, determination of sex, structure of the ovary, function of the ovary, antagonism between maternal organism and ovum, and lastly the functions of the placenta. Dr. Clarence Webster is a Canadian and, when a student in Edinburgh, distinguished himself by original researches on Uterogestation, and made an extensive and instructive pathological collection, which, unfortunately, was destroyed by fire. For a time he held an important position in McGill University, and a few years ago was called to fill a chair in Gynecology in Chicago.

As to sex, Dr. Webster states that all attempts to regulate the production of sex in the human foetus in utero have certainly met with failure. He favors the idea that in the great majority of cases the placenta is the sole route by which micro-organisms and toxins reach the foetus. The entire paper is historic in character, and gives evidence of most careful and matured deliberation. To our profession, the paper of Dr. Robert Saundby, of Birmingham, on "The Indications for Operative Interference in Diseases of the Stomach" is of great moment. He states that all chronic stomach diseases, not amenable to medical treatment, and which cause serious interference with nutrition, are within the field of surgery. Robin, of Paris, says that "No physician of experience in diseases of the stomach would accept the opinion expressed by Maylard, at the Paris Congress, that every case of severe and persistent dyspepsia, justified an early exploratory incision." The paper of Saundby, *British Medical Journal*, Dec. 17, 1904, is a careful exposition of this subject, and an undoubted evidence of advancement in surgical science.

Recently death has called from the ranks of the profession, two able men, Finsen and McCallum, to whom I shall refer briefly. The former, when laid at rest in Copenhagen, was followed to the grave by representatives of three Emperors, and three Kings, besides many regal personages, thus attesting the place he occupied, by the men of the world, learned, titled and professional.

For years he was an invalid and devoted himself almost entirely to laboratory work. The regurgitation of his heart could be heard several feet off, according to Dr. Hopkins, of New York, and he carried in his abdomen several gallons of fluid, for which he was tapped several times. How under such trying circumstances, he conducted his "Institute" was a puzzle to many. In lupus, rodent, ulcer, carcinoma, birth marks, eczema, and cicatrices after operation for malignant disease, the opinion expressed by those able to judge was that his treatment had no equal.

By the death of Dr. Duncan Campbell McCallum, November, 1904,

not alone Montreal, but Canada, lost one of her ablest and most common sense practitioners—a man of sound judgment, careful observation, and reserved deliberation. He held with honor several chairs in McGill University, in all of which he discharged the duties and responsibilities devolving upon him with marked ability. Of the entire staff of my Alma Mater, McGill, of fifty years ago, not one is left. As a physician he was a trusted friend and counsellor, who always brought cheer and encouragement into every household in his rounds of professional duty.

Culture is an important factor in the life history of the physician, and cannot begin too soon. The brain like the stomach requires a change of diet to keep it strong, active and vigorous. In this progressive age, the profession should keep in touch, not only with the current literature of the day, but as well, be fortified by the intellectual friction of the older masters.

A western physician, travelling abroad, met the distinguished Charcot in Paris to whom he spoke in high terms of his preceptor. What has he done, I have not seen any of his writings. He never wrote anything I am aware of, but he had a most extensive practice. Said Charcot, is that the proper estimate of professional excellence?

Many are proud to be called practical with no spare time to write. Such men do not rise to the highest standard of the profession. Large incomes and bank books are of little account, when contrasted with the careful record of passing events, in the life history, and discharge of the honorable duty and responsibility of the trusted physician. Nothing leads more to establish a good reputation than method and system in defining disease and its manifestations, all of which I would most strongly recommend to my young friends. In conclusion let me ask you what were our great grand parents doing about one hundred years ago. In 1805 England feared a Napoleonic invasion. Pitt was then at the helm of affairs, and Prime Minister of England at 24 years of age. His rival, Fox flourished about the same time and died shortly afterwards. In the exact line of literature, seldom has there been a time, when so many master minds flourished. Sir Walter Scott, Wordsworth, Lamb and Coleridge, had then established their intellectual power, and almost marvelous personality. The very schoolroom was then honored by Macaulay, Carlyle, and Shelly, who have since given the world a literature, the pride and admiration of all thinking people. Before resuming my seat, let me recall an event in the life of Michael Angelo. In Venice, he said, his mission was to take "The Angel" out of a large block of marble, placed in front of him, which he hoped to accomplish.

Our mission is to remove disease as far as possible, which is frequently like the angel of Michael Angelo, concealed from view, but gradually and steadily, through the advancement of science, is placed in clearer light.

THE RELATION OF MYOCARDIAL AND ARTERIAL
CHANGES TO VALVULAR LESIONS.*

By HOBART A. HARE, M.D., of Philadelphia.

Professor of Therapeutics and Materia Medica, Jefferson Medical College.

I know of no better theme on which to address you this evening than the somewhat well-worn, but, nevertheless, interesting subject of cardiac disease, excluding valvular lesions. It is a theme of interest, because with advancing years, every one of us who lives to early old age will probably develop in some degree, at least, certain changes in his heart muscle and in the blood vessels themselves which will sooner or later modify his capacity for work and even, perhaps, for the enjoyment of life; and, again, it is a noteworthy fact that no pursuit in life so commonly brings on these pathological states as does that of the physician. Our ranks are yearly thinned at the top by the onslaughts of cardio-vascular degenerative changes, and we find men like Pepper and Da Costa dropping suddenly out of the forefront from true angina, having suffered, as only such cases can suffer, from attack after attack of the malady before the fatal one appeared upon the scene. The reason for these facts is not so far to seek as would seem at first glance; for it is certain that it is in those who earn their bread by their mental powers that these affections are wont to develop, whereas in those who live by manual labor, angina is very rare. In a large hospital and dispensary experience of twenty years I have no recollection of seeing more than a few cases of true angina pectoris in the working classes, although false angina, neurotic or due to aneurism has been more common. On the other hand, every one knows that the class that works with its hands presents to us constantly the most extraordinary degree of atheromatous changes in the sense of thickening of the vessels, the deposit of calcareous matter in their walls and the development of cardiac hypertrophy or cardiac breakdown. It would seem that the coarse changes just spoken of, rarely produce the actual high tension seen in the mental worker, in whom, as a rule, at least in my experience, the deposition of lime-salts in the vessels of the periphery is as rare as vascular spasm is common. The primary cause of the frequency of cardio-vascular lesions in the well-to-do is, aside from high living and lack of exercise, the stress which is thrown upon the circulatory system by great and prolonged nervous and mental effort, which not only disturbs the nerve supply of the circulatory system but calls upon those organs to provide blood to a brain which, because of its activity, requires a large supply of blood delivered to it in rapid flow and under high pressure—a pressure which is far in excess of that produced by severe physical effort, which is usually followed by a period of sound sleep and complete rest; whereas, the former is as commonly followed by disturbed rest or insom-

*Read before the National Association of United States Pension Examining Surgeons, Atlantic City, N.Y., June 6 and 7, 1904. From the Medical Examiner, Dec., 1904.

nia. Nervous tension soon produces arterial tension, and arterial tension soon results in cardiac strain and weariness.

Closely connected with these questions is the employment of many stimulants which are largely resorted to in modern life for the purpose of enabling the individual to accomplish work requiring mental activity, when nature, if left to itself, would demand rest, and if the rest was refused, would render the patient incapable of performing the labor which he attempted to carry out. In other words, it is by no means an uncommon thing for persons in middle life, and, indeed, at all periods, to perform an excessive amount of nervous and mental work, and when their powers begin to fail, to force themselves to still greater efforts by the use of drugs which possess the ability of unlocking and setting free nervous energy, which ought to be maintained as a necessary reserve. There can be no doubt that tea, coffee, alcohol and similar substances such as cola and coca, all of them permit a man to trespass upon his reserve energy, and there can also be no doubt that they are largely responsible for many of the nervous wrecks which are commonly met with, although in many of these persons it cannot be discovered that these substances have been used in excess, but have rather been employed at times when excessive weariness would have otherwise forced the patient to rest and recuperate. There comes a time, however, in which if the nervous system does not fail, the circulatory system, finding itself unable to meet the demands of the nerves as to blood supply, undergoes changes which are really those of premature age; the arteries become thickened and fibrous; their muscular coats also become thickened and are continually in a condition of spasm, and at this time it is by no means uncommon for both the physician and the patient to misinterpret the symptoms which the patient manifests, and reach the conclusion that excessive business activity has not only impaired his health, but that exercise and fresh air are the *sine qua non*. I say "misinterpret his symptoms" not in the sense that fresh air and exercise are not what he needs, but in the sense that the physician fails to recognize that the symptoms are primarily circulatory in origin, and, therefore, the patient is urged to take an amount of exercise which is far in excess of that which his circulatory system is able to stand. Indeed, it is the most common of observations to see the overworked business or professional man resorting to long bicycle rides, tennis, golf and other manly exercises with a vigor which is as mistaken as it is plucky, with the result that an attack of cardiac failure or other evidence of circulatory upset is precipitated sooner or later. The cardiac failure may be represented by a more or less well-developed angina, by albuminuria due to congested kidneys, by a bronchitis, or hypostatic congestion of the lungs, or again by attacks of vertigo due to a disturbed cerebral circulation. Indeed, it may be well said that there is no more pitiful sight than the man who is prematurely aged by overwork who thinks that he can rejuvenate himself by resorting

to the sports which brightened his mind and quickened his circulation in earlier life.

Again, the laity always, and the profession too often, fail to remember that every vital function is carried out at the expense of nervous energy and circulatory activity. The amount of energy which is expended daily in cardiac action, respiratory movement and digestive function is startling when it is estimated, and this energy can only be provided by an active circulation in the nerve centers and in the organs which are at work. Many of the circulatory failures which we meet with are seen in persons who resort to the pernicious habit of attending to business at the same time that they are taking food and carrying on digestion. And I have more than once seen active business men carry on some important financial problem, take food, and resort to violent muscular exercise in walking from office to office, during the same hour, thereby throwing a strain upon their circulation which was extraordinary. Often under these circumstances they unlock the reserve energy to aid their digestion by strong coffee or alcohol. Surely we should advise patients coming to us with early evidences of circulatory impairment to put aside these evil habits and should impress upon them the necessity of doing only one thing at a time and that in moderation, and where the circulatory change is quite manifest, a more or less prolonged period of rest should be insisted upon; for in the vast majority of instances we are too apt to prescribe digitalis or other stimulants for a failing circulation, and thereby whip it up to increased endeavor when in reality we should prescribe absolute rest and no medicine. The very drugs which we give for the purpose of improving the patient's condition only serve to use up the reserve to which we should be adding additional units. In many instances, too, the use of nitroglycerin to diminish the blood supply to the nervous system and to decrease the work of the heart is very much more strongly indicated than the use of cardiac stimulants.

There is still another condition of circulatory feebleness in which patients are wont to abuse themselves, and in which physicians all too frequently permit them to do so, namely, in the return to one's duties after a brief or prolonged acute illness, before the heart and blood vessels are qualified to meet the increased circulatory demands which such activities require. In certain instances, as in the case of acute rheumatism and influenza, the circulatory breakdown so speedily manifests itself under circumstances such as these, that he who runs may read, and perceive the folly which has been committed. But there are other conditions not so marked in their fulfillment which are constantly overlooked and which nevertheless bear equally evil fruit, although it may be at a later date. Almost every physician of large experience can look back and remember cases which he has seen where there was a history of typhoid fever, pneumonia, or other acute malady several years before, after which the patient speedily returned to work, and some months later began to show signs of circula-

tory feebleness, it being forgotten that mental activity demands quickened and more powerful circulation quite as much as does increased muscular movement, and while running may precipitate an attack of dyspnoea or palpitation which forces the patient to be prudent; brain work, which does not throw such an acute but a more prolonged strain upon the heart, ultimately produces more serious cardiac consequences.

In connection with these cases of cardio-vascular strain it may not be out of place to once more reiterate a fact which is becoming more and more recognized by the profession day by day; namely, that an intact vascular system, intact physiologically as well as anatomically, is as important to the life and welfare of the patient as is an intact heart, it being borne in mind that, after all, the heart is nothing but a dilated and modified portion of the blood vessels. In the treatment of many of these cases of cardiac feebleness, the patient not only needs rest more than drugs, but iron and arsenic more than digitalis and strophanthus. It is quite remarkable to notice the improvement which will take place in overworked men and women when they are given rest with these two reconstructive remedies, the cardiac stimulants being excluded; and second thought certainly shows that digitalis and similar drugs cannot be expected to markedly improve the nutrition of the heart if the blood itself which nourishes that viscus is relatively poor in cells and hemoglobin.

Finally, it may not be out of place for me to urge the employment of smaller doses of digitalis than are commonly used. It is perfectly true that where the heart is in serious difficulty, the administration of full doses of this drug is often most advantageous, but it is one which certainly tends to produce a cumulative effect, and, therefore, after it has been given in full doses for a day or two, it can, in my experience, be better administered in doses of from 3 to 5 minims of a physiologically tested digitalis three times a day than in the larger amounts so often used—the small doses maintaining the influences primarily produced by a larger one.

THE KINSHIP OF THE SKIN.

By J. LESLIE FOLEY. M.D., L.R.C.P., Lond., Physician to the Skin
Department, Western Hospital, Montreal.

THE skin is in touch with every organ of the body. It certainly covers them all. Like the crowned heads of Europe they are all related. Without the skin the functions of the body could not very well be carried out. Anatomically it is wonderfully and beautifully made. Its innumerable complexus of nerves, arteries, veins, lymphatics, et cetera, are admirably adapted to the carrying out of the perfection of its functions. The skin regulates the heat of the body. It keeps one in touch with the universe.

The study of dermatology is an intensely interesting one. To those artistically inclined its variegated colors, innumerable pathological lesions, anomalous cases, and the rare and new conditions continually cropping up add a zest to its study. It offers ample scope to the artist, draftsman, photographer, et cetera. Its beautiful and innumerable lesions can all be studied by the naked eye, but unfortunately the skin frequently goes out of the even tenor of its way and sets up a cutaneous disturbance, to wit, its sebaceous glands may become blocked up and set up an acne vulgaris or rosacea, or its sudoriferous glands may become clogged setting up a miliaria, sudamina, milia, or a hair may set up an inflammation within its follicle, a folliculitis, or some irritation from without may set up a dermatitis on its surface. It may be that an excess of blood, or a deficiency or a hyperæmia, or an exudation may so press upon the delicate tendrils of the cutaneous nerves and set up a pruritus, that pathognomonic sign of so many cutaneous diseases; or, perchance, some inward trouble, kidney, liver, stomach, may produce it. Then, again, by the process of suppuration, exudation and desquamation, resolution takes place and we again have the normal cutis.

A blow may set up a traumatic dermatitis, or perchance a scratch or exposure to wet or cold, or some digestive disturbance or other influences may arouse the otherwise normal skin into a diseased inflammatory state, to wit, a young infant may over-eat and immediately a erythema roseola may be set up. One may take a ramble through the country and set up an erythema solare; or, again, one may by accident touch the poison plant and set up a poison-ivy eruption. Then, again, the stomach, liver, kidney, the nervous system, the circulatory system, the heart, et cetera, may set up cutaneous eruptions, acne, eczema, pemphigus, herpes zoster, et cetera. It is an undoubted fact that a cutaneous eruption is often diagnostic of some internal trouble, to wit, sugar in urine is often indicated by a zanthoma diabeticorum, liver disease, by zanthoma, et cetera. Heredity and climate often have their influence. Race, too, has its influence, to wit, why are keloid and leucoderma so prevalent amongst the colored race? The Pacinian corpuscles give us the sense of touch. The skin is cognizant of the different atmospheric changes, alterations of temperature, et cetera. The skin is related to all the other ologies of medicine. The specialist may shake hands on common ground.

Hyperidrosis localis, dysidrosis, pompholyx, keratosis palmaris et plantaris, et cetera, may be set up by unstable vascular equilibrium. The genito-urinary system, both in men and women, often give rise to a dermatosis, to wit, masturbation acne, sexual excitement often makes acne or eczema worse.

The sexual changes peculiar to women, pregnancy, lactation, periodical menstruation, often makes the eruption worse during these periods.

These disturbances may set up pruritus vulvae, eczema, erythema, psoriasis, urticaria. Sexual hygiene should be observed in these cases and pure, chaste, elevated thoughts inculcated. Some skins, on the slightest provocation, will give rise to bullæ. A slight scratch, et cetera, may set up an epidermolysis bullosa. It is a well-known fact that one can write one's name on some urticarial skins.

Gonorrhoea has produced a purpura, though not as yet noticed in the dermatological text books. Recently a case was described before the Montreal Medical Society by Dr. Hamilton.

Ptomains and leucomains have their influence on the skin. Some years ago, in an article I wrote on "Diet in Skin Diseases" in the *Canada Medical Record*, I said that in the skin domain many dermatosis would be produced by the ptomaine. In recent years, Brocq, of Paris, has described many dermatosis produced by auto-intoxication and auto-infection, producing the toxic erythemata. Still more recently, Schamburg has described dermatosis produced by food poisoning, meat, cheese, milk, vegetable foods, et cetera. The vegetable food poisoning may produce ergotism and palagra. Osler says purpura and erythema multiforme may be produced by ptomaine and leucomaine poisoning. Purpura and erythema by liver disease, cirrhosis of the liver, Bright's disease, et cetera. Albumenuria frequently produces erythema. Leube says that it will produce erythema.

Dermatology invades the dental region, and we meet with syphilitic laryngitis, gums, leucokeratosis of the tongue. It is essential to have good oral antiseptics. One dermatosis frequently runs into another, to wit, a psoriasis may turn into a pityriasis rubra. Psoriasis may turn into an epithelioma, et cetera. The skin, therefore, is in close relationship with all the different organs of the body, it is not a poor relation either. its place in the medical universe is important, unique.

Fifty years ago, dermatology was an unknown science, today it is one of the most important and progressive of the medical sciences. It is related not only to the internal organs of the body, but also externally to the atmosphere and climate. Not only is it affected by the innumerable microbes and bacilli which are in the skin itself, but by those microbes which float in the surrounding air.

O, shade of Willan and Bateman, what would they think if they looked down upon the present state of dermatology today. It would be an unalloyed pleasure to them to discern new skin diseases every day. The field was then a new one. Willan and Batman brought order out of chaos by dividing the different eruptions into primary and secondary lesions, the macule and papule, et cetera. How pleased they would be to attend a modern dermatological meeting. The days of the old humoral pathology are gone. Virchow, Rokitansky, the great Hebra, taught dermatology along the line of pathological anatomy. Unna follows the line of histological pathology. The French, the Dartos idea. Although derma-

tology owes much to histology, bacteriology and pathology, the line of modern dermatology runs along the physiodynamic, the force of nature. Electricity has already done much for dermatology, in electrolysis, hypertrichosis, naevus, et cetera, and the X-rays in malignant disease. Finsen's treatment, the ultra-violet rays, has done a great deal for lupus vulgaris. The trend of modern dermatology is along these lines.

The skin also acts as a detective, incriminating criminals, by its development of warts, moles, scars, which help to identify him.

Dermatologists go on in the even tenor of their ways, observing and reporting clinical cases, rare pathological specimens, and treating and curing cutaneous diseases.

In England we are indebted to Willan and Bateman, Sir Erasmus Wilson, Tilbury Fox, Crocker, Colcott Fox, Jamieson; in Germany to Hebra, Neumann, Kaposi; in Prussia to Lassar; in France to Besnier, Brocq; in America to White, Durhing, Hyde, Morrow, Fox, Stelwagon, Corlett.

American dermatologists have produced a rich literature on this department of medicine.

Upon whom will the mantle of Caposi fall? While we are indebted to Willan and Bateman for giving us the macule and papule, we have got past the macule and papule stage and have reached the patchy stage, but, unfortunately, to our notice come many patches which exhaust our dermatological lore, no doubt. Who is to bring order out of chaos, to unlock the treasure of modern dermatology, solve its unsolved problems, unravel its Gordian knots, and, perchance, enter into the sacred precincts of a new discovery? What new metal, mineral or physical force, as yet undescribed, will be found to shake terror into the heart of the innumerable microbes and bacilli which go to make up so many of the diseases of the skin, or to cure malignant disease in it of all forms?

SOME CASES OF PLACENTA PRAEVIA.*

By W. C. HEGGIE, M.D., Toronto.

I PUT these cases before you, not because of any new method of dealing with this rare complication of pregnancy, but because, in my last hundred obstetric cases, I have been unfortunate enough to have had three cases. In some twenty years I have had six cases of Placenta Praevia which I can recall, as I have lost the record of the first three, and as they happened prior to 1891, I cannot give the histories only to say, in passing, that the first case of complete Placenta Praevia, at seven months in the recovery of mother and a living child who had grown into a fine boy ten years old when I last heard of him. The

*Read before The Toronto Medical Society.

two other cases were partial Placenta Praevias. In each case the mother lived; in only one did the child live.

Case 4, Mrs. W., primipara. I was called in September 2nd, 1903, on account of hemorrhage. I found the patient flowing profusely, no pain, rapid pulse, and very anxious. She was in bed, the foot of which I elevated, before preparing my hands for vaginal examination. She was about eight months pregnant. On examination the os was found to be dilated to admit one finger and the placenta could be felt at times. I plugged carefully with iodoform gauze and gave ten drops tr. opii dead. I waited an hour and, as the patient felt comfortable with a good pulse, I left her, with instruction to call me at once if labor pains came on, or any unfavorable symptoms developed. The child was then living.

I saw her again in six hours when the patient was doing well. Six hours later I removed the packing very slightly stained, and os not so much dilated. Put in fresh packing, which was again removed in twelve hours, no fresh stains and the os was contracted, so I left her without any packing, but the foot of the bed was still elevated. I kept her in that position for four more days and as there was no more flow allowed her up.

On the 22nd of October, 1903, I was again called and found the patient in labor, the os dilated two fingers, slight hemorrhage, the placenta separated about two inches at lower border and the head presenting in L. O. A. position. As the hemorrhage was slight and the os dilating rapidly with powerful contractions, I did not interfere until nature completed the first stage, when I applied the forceps and delivered safely a healthy twelve pound boy. I at once separated and delivered the placenta by hand. Patient made a normal recovery. The foot of the bed was kept elevated throughout labor and for three following days.

Case 5. On September 7th, 1903, I was called in a hurry to Mrs. G. —mother of two children—and found her in bed with all the symptoms of collapse. I was told that, while standing in front of her house, suddenly, without warning, she felt something warm running from her, and she almost fainted. Friends carried her to bed and elevated the foot of it while waiting for the doctor.

She said she was seven months pregnant. She was having signs, face blanched and pinched, pulse rapid and feeble. As the external hemorrhage was not in my opinion sufficient to account for the severity of the symptoms, I suspected concealed hemorrhage. I could detect no foetal heart sounds or any sign of foetal life though an hour before the mother had felt life.

I determined to induce labor at once, but, on examination per vaginam, made a discovery which changed my views entirely. The cervix was torn on each side clear up to the inner os, which was not dilated enough to admit the finger. I at once packed the vagina with

sterile gauze and told those present that, on account of the tears in the womb, I could do nothing else because of the danger of rupturing it, excepting to watch and wait developments. I also told them that I suspected a placenta praevia which had separated at both the upper and lower border destroying the child from shock of asphyxia. At once there was trouble, both husband and wife saying their was no tear, as they had been assured of that fact by the physician who attended her in her last confinement. For my protection, I at once told the man to telephone for Professor Adam Wright and that if he did not corroborate my statement, I would quit the case.

Professor Wright arrived within an hour after I first saw the patient. After examining the patient and hearing what I had done, he said that as she was rallying nicely to go on as I was doing. I did not mention the lacerations, but said I wished him to make a vaginal examination. Not knowing my reasons, he thought it unnecessary but consented. I removed the packing when Professor Wright examined, but almost immediately told me to repack the vagina as any interference would probably rupture the uterus, on account of the several lacerations which of course was what I wished him to say. The packing was removed in six hours slightly stained, and iodoform gauze introduced. This was changed every twelve hours stained each time, until the evening of the 9th, when at 7 p.m., contraction came on. I removed the packing and found the head presenting in L.O.A. position with os dilated and placenta separated for about three inches at lower border. Labor was quick with slight hemorrhage, so I allowed nature to complete the birth of the child when I separated the placenta at once, which was found adherent only at centre with a clot, beneath the upper portion, the size of an ordinary saucer. The child was dead. The uterus contracted nicely, there was very little increase in the flow, and the woman made a normal recovery.

The collapse, in this case, was due, not to the loss of blood externally, but to the concealed hemorrhage, or as Dr. Wright put it on mentioning the case to him afterwards, "the collapse was due to shock from pressure of the clot and sudden enlargement of the uterus."

Case 6. Mrs. S., mother of five children, was seven months pregnant. Had been feeling poorly for a week, but before that had been remarkably well.

On the night of June 28th, 1904, after retiring, had hemorrhage without any warning. Could find no sign of foetal life and patient said she had not felt any for four days. The os was dilated three fingers. The placenta on lower segment of uterus was separated slightly. With very little difficulty, I got a foot and delivered rapidly a dead child and at once separated and delivered the placenta by hand. The patient made a normal recovery. In each of these cases, I attribute much of the beneficial results

to the position of the patient, as in all, the foot of the bed was elevated, thus relieving blood pressure and giving rise to less hemorrhage.

I think these three cases, Nos. 4, 5 and 6, will show the folly of trusting to any one line of treatment and that the expectant treatment is not so bad as painted, and also that in at least one case, No. 5, it was the only safe and rational treatment.

In the six cases, the maternal mortality was nil, the foetal 50 per cent.; or putting it the reverse way, maternal recovery 100 per cent., foetal recovery 50 per cent. Since writing the above I have noticed an article in the New York and Philadelphia Medical Journal of September 17th, 1904, by Dr. Alfred King, Portland, Oregon, recommending elevation of the hips during the delivery in Placenta Praevia.

The idea of elevating the foot of the bed, in the treatment of Placenta Praevia, was not original with me; it was simply utilizing an old remedy, used by every old woman in uterine hemorrhage, while waiting for the physician.

SYPHILIS—A RESUME OF TWO SYMPOSIA APPEARING IN VOL. III., THIRTEENTH SERIES, INTERNATIONAL CLINICS; AND THE SPECIAL JULY NUMBER OF THE PRACTITIONER (LONDON).

By A. J. MACKENZIE, B.A., M.B., Toronto.

THE subject of Syphilis is of constant interest to the practitioner, no matter to what branch of medicine or surgery he devotes his attention, for the multiplicity of its lesions spare no organ, and its victims are found of all ages and in all walks of life. A vast deal of work has been done in this field, and is being done, but there is a great "terra incognita" and it is the purpose of this paper to call attention to some of the work of the later explorers as it has been described by them in the two publications mentioned above.

Etiology. Many investigators have tried to determine the exact causal agent in syphilis, but it cannot be said that their efforts have met with success. Various micro-organisms have been brought forward and for some time the most likely aspirant was Lustgarten's bacillus which was found in syphilitic lesions and apparently nowhere else but it was impossible to prove its specificity, and it is not now generally believed to be the true agent. De Lisle of New York and Jullien have proved that the blood and the blood alone contained the vehicle of contagion, and that the blood was contagious only before coagulation, there was developed coincidentally with the process of coagulation an "alexine" with highly bactericidal properties which destroyed the active syphilis agent. Coagulation of the

blood could be prevented by transferring it to a neutral potassium oxalate solution of a strength not exceeding one in 1000. Examination of the blood plasma obtained by this method revealed the presence of non-motile bacillus, and a large number of small round bodies which seemed to be in constant motion. The microbe was polymorphic and varied from five to eight microns in length; sometimes these measurements were much increased, it became granular after ten days and assumed the appearance of the small round body seen in the culture.

The great difficulty in following out the life history of the suspected agent has been the fact that animals have proved to be practically immune to inoculation with the virus, symptoms indeed had been reproduced but differing widely from the manifestations in the human species, but recent experiments by Roux and Metchnikoff have been more hopeful. They inoculated a young female chimpanzee at the Pasteur Institute with virus from syphilitic lesions and there was developed on the twenty-seventh day at the site of one of the inoculations a vesicle which developed into an ulcer accompanied by indurated but non-painful inguinal glands, which Fournier among other authorities diagnosed as a typical syphilitic chancre. The animal lived for nineteen days afterwards and died from other causes without developing other lesions. A similar experiment was made some twenty-one years ago with a monkey by Martineau and Hamonic in which the development of secondary lesions was observed, and the second of these observers has since continued his experiments. Apparently it is in animals akin to the human species that this disease must be studied in the future but all the evidence seems to support the view that it is a microbic infection. The reason for the well-established non-infectivity of tertiary lesions is supposed to be that the germ has become attenuated, but this is no more than a surmise.

Pathology.—The phenomena connected with the primary sore still await explanation though it is well established that excision thereof has no effect in arresting the course of the disease; it would seem as if the infective agent has spread as far as the glands and there goes through a second incubation stage of no fixed period before it is capable of causing a general infection. The tertiary lesions are still more difficult of explanation, some of the bacteria may remain dormant and suddenly awake to activity owing to some lowering of vitality. The variations in the virulence of the infections and their relations to the severity of the original sore has been the subject of much discussion, the consensus of opinion would appear to support the view that serious succedanea follow a very slight primary lesion in many cases because the patient has not been impressed with the importance of vigorous treatment, but doubtless there are forms of hereditary immunity and general health has a direct bearing on the activity of the virus.

Diagnosis.—The gravity of the social and domestic issues that depend upon the diagnosis of syphilis, to say nothing of the vital bearing it may have on his life and that of others, makes the recognition of this malady one of the most serious problems for which the medical practitioner must be prepared. The absolutely typical cases are perhaps easy, although in the absence of secondary lesions his diagnosis is often set at naught by the quack, but many are atypical in appearance or position and wrongful decision prove mortifying to both patient and physician. Williams discusses some of these puzzling forms in *Int. Clinics*, and first, the minute superficial penile ulcer looking as if it had arisen from a chafe or the rupture of a herpetic vesicle; it is shallow and may show little induration or involvement of the glands, the slowness with which it heals may give the only indication of its character. Second, there is a small fissure or crack situated on the glands, prepuce or fraenum—if it seem. to rise into a ridge, the minute sloping sides of which give a suspicion of induration, withhold diagnosis for a week when the increase of the elevation will be a positive sign. Another form that presents a difficulty is a big pin-head sized papule which has not the distinctive color and which does not advance to a chancre, sometimes on picking it up it feels as if it contained a grain of sand and in this position a papule is always suspicious. Then there is the parchment sore of Ricord, situated on the dry sheath of the penis, it begins as a papule and enlarges into a plaque forming a superficial ulcer, which on healing or occasionally when it does not form an ulcer, gives the sensation as if one were picking up a piece of paper or parchment.

Again the invisibility of the lesion owing to its position inside the urethra may prevent diagnosis, here there is a characteristic brown, dirty, grumous, serous fluid, while digital examination would reveal an indurated mass or the indoscope will reveal the lesion.

Genital lesions in women are usually less noticable than in men, partly for anatomical reasons and because they are not sought for within the vaginal canal, but also because they are as a rule not so severe.

Extra-genital lesions are not regarded with the suspicion that attaches to those in the positions we have described and so are likely to be missed. The most common digital forms are the simple crack beneath the nail or the appearance of the ordinary whitlow and while the glandular condition condition may give a clue, we may have nothing to depend upon but the progressive increase or the stationary condition of the sore in spite of the usual treatment for a septic condition. The primary lesion may appear in almost any position and will frequently be missed or mistaken until other more characteristic signs appear.

The differential diagnosis of syphilitic eruptions is treated in the *Clinics* by Ohman-Dumesnil, with a series of plates illustrative of the most typical, among which are:

Roseola, the first eruption which appears, is a rose-colored and manifests itself in the form of a number of light-reddish macules irregularly distributed upon the thorax and abdomen, with lesions of the size of the little finger nail. It is sometimes seen upon the limbs, most frequently upon the flexor aspects; there are no subjective symptoms and it may often pass unnoticed. It may be mistaken for the ordinary febrile roseola, measles, the beginning of the scarlatina, or a medicinal rash, but attention to accompanying features should prevent error.

The miliary syphilide has a similar distribution, and consists of fine conical, discrete, papules of a red which suggests a mixture of sepia, just sufficient to tone down the scarlet.

The papular syphilide may be mistaken for the papular stage of variola, but the shotty feeling is lacking, there is a tendency to a distribution in circles, and there is an absence of subjective symptoms.

The varioliform syphilide is usually a mixed papular and pustular eruption, and corresponds very closely to small-pox, especially as some of the lesions may be umbilicated, but the essential point of difference is that in variola the vesicles are umbilicated, while in syphilis it is the pustules that are so marked, and the vesicular stage is lacking in the latter disease. The subjective symptoms are marked in small-pox and will always serve to confirm our diagnosis.

The acneiform syphilide closely simulates the papulo-pustular acne and its distribution is very similar; the points of difference are the color which is a dull red, there is no pain on pressure, and the lesions do not all develop in the duct of a sebaceous gland.

The circinate syphilide has an interesting resemblance to ring-worm and is composed of very small papules arranged in a circle with a clear centre, but there are no small scales present and there is no itching, while the lesions appear simultaneously instead of in succession as in ring-worm.

The psoriasiform syphilide, or the squamous syphilide, bears a close resemblance to psoriasis but may be distinguished by the lack of the silvery appearance of the scales and the pathognomonic bleeding point and it is not as a rule as indolent as the non-specific lesion.

The eczematiform syphilide should not be mistaken by a close observer, as Hebra's classical signs are all lacking with the exception of the primary lesions—there is no exudation, redness, edema or itching.

The scarlatiniform syphilide is often mistaken for the acute exanthem from which it derives its name, inasmuch as it may be accompanied by a fever, but the color is not so bright, the glands are harder, it is infrequent in children, and Koplik's spots are not found.

The lupiform syphilide may be distinguished from the verruculous affection by treatment of a mild character, whereas true lupus needs caustic applications.

The ecchymaform, furunculiform and dermatiform syphilides must be studied in the light of their history and subjective manifestations and thorough investigation should lead to the correct diagnosis. The same may be said of "alopecia syphilitica"; in the latter specific treatment will speedily be followed by the renewed growth of the hair, a result which is not to be looked for in the cases due to trauma.

Syphilitic Fever.—This very uncommon manifestation of the disease is treated by Carriere, of Lille, in the "Clinics." He believes it is more common in women than in men, probably owing to the fact that the initial symptoms are frequently undetected in the former and so treatment is delayed. Twenty-five cases are found in the literature and the nature of the condition has frequently led to the diagnosis of typhoid; after a week or two of elevation of temperature a serious point of hyperthermia is reached, there is nausea, the abdomen is tense and painful with gurgling, and swollen spleen, the pulse is rapid and there is insomnia. This condition generally precedes the appearance of the eruption but may accompany the syphilides or even follow them. It yields rapidly to specific treatment; if this were not instituted the course might be fatal, but the diagnosis determines the therapeutic indications. Some writers have maintained that it is merely a form of syphilis with a predominance of gastro-intestinal symptoms, others that it is an association of the syphilis with typhoid, but the fact that it yields only to one form of treatment leads our writer to think that it is a separate disease. The similarity of typhoid is very marked, but we need nothing more than the serum test to distinguish typhoid from other affections, while the history will give a clue to the real cause.

Various causes have been assigned for the appearance of this condition in some cases, special virulence, secondary infection, and the condition of the patient; none of these are satisfactory to Carriere, but the cases have been so infrequent that no valuable conclusion can at present be reached.

Treatment.—Among all diseases syphilis is one of the few for which there is a definite therapeutic indication which is almost universally accepted and the discussion of treatment consists generally in a study of the various methods of the administration of mercury, and the course to be followed in so doing. The continuous method of Jonathan Hutchinson, consisting in the continuous administration of the drug for so long a period as is necessary for the cure of the disease, has been generally followed, in it the system is kept permanently under the mild influence of the drug which is increased to combat special symptoms as they arise. Recently, however, it has been held that this method leads to the patient acquiring a mercurial tolerance so that our weapon is blunted and too, presupposing as this method does, auto-administration, it is difficult to follow it out satisfactorily. Gottheil, of New York, believes that the "modified ex-

pectant method," as he calls it, is more effective; the mercurial medication, whilst practically continuous during the entire active stage of the disease, is moderate in amount, while the symptoms are quiescent, and is interrupted at times for periods sufficient to permit the system to recover from the effects of the drug and to retain its susceptibility to its influence.

Three methods of administration are used each of which has its special indications and its advocates. The ingestive method is used in 90 per cent. of cases, and probably will always be the favorite in ordinary circumstances, as it is the simplest and easiest, but it has the objection that the amount ingested does not represent the absorption, that it tends to derange the stomach, and it is notorious that even the most intelligent patient will almost certainly neglect his treatment after the disappearance of objective symptoms. The endermic method, including inunctions, fumigations and baths, are peculiarly efficacious for the local treatment of lesions of the skin and mucosae, and is largely used as a means of general medication especially in Germany, but it is dirty, troublesome, and the quantity absorbed is even more uncertain than in the former method.

The hypodermatic method is regularly used by many of the most noted syphilographers, especially upon the continent, and they claim for it many very evident advantages, it is absolutely definite in dosage, it is the most effective where important structures are threatened, it is cleanly and safe, but the most important of all, in the opinion of Gottheil, is that the patient is under the control and observation of the physician. But, opinion is not all in its favor, and there are grave objections urged against the method.

Choice of the Preparation. There are a variety of salts of mercury used in the treatment of syphilis, those used for injection are of two classes, the soluble and the insoluble. The former are more readily absorbed and so have to be given in frequent small doses, corrosive sublimate is most frequently used, none of the newer soluble preparations such as the albuminate having met with acceptance; but while soluble salts are less painful and are easy of absorption the necessity of frequent repetition has been an insuperable objection to their use for injection. Of the insoluble forms calomel has been used much more than any other, but Gottheil uses now the neutral salicylate in the formula :

Neutral salicylate of mercury	1 part.
Liquid alboline	10 parts.

Wickham, in the Practitioner, calls attention to the fact that we must determine for each patient the dosage of the drug which is the greatest that he can take without reaction in the form of malaise and fever, and this should be done by slowly raising the amount of the dose. Then, too,

we must not lose sight of the fact that the different salts vary in the amount of metallic mercury they contain, as follows :

Calomel	84.9 per cent.
Cyanide	79 "
Corrosive Sublimite	73 "
Benzoate	45 "
Biniodide	44 "

The technic is practically the same no matter what salt we choose.

Fournier uses :

Sublimed Calomel50
Sterilized Olive Oil	10.00

Wickham prefers what is known as "grey oil" :

Purified Mercury	20 grm.
Sterilized lanoline	12 grm.
Sterilized Fluid Vaseline, q.s. to make 100 c.c.	

The injection is made deep in the muscular tissue of the buttock, high up near the intergluteal fold, it is repeated once a week, the site being varied, and all possible precautions are taken to procure asepsis. Wickham and Gottheil each give minute directions of the apparatus and technique which need not be repeated here.

Not all those who have practiced this method give it unqualified support and when we find that Fournier, who has used Calomel injections for many years and who is one of the greatest living authorities on this disease admits, even emphasizes, the objections, we must discount the statements of enthusiastic advocates who claim complete success and no drawbacks that can not be overcome by proper technique. The objections are the fever, inflammatory swelling and pain.

The fever following the injection of an average dose, five centigrams of calomel is moderate when it appears at all; 100 to 101 and generally passes off in a few days. In most cases the injection is followed by a certain amount of inflammatory reaction in the form of either abscesses or nodes; even with a faultless technique only a small proportion of cases escape these sequelae, but while swelling with redness and induration take place in the majority of cases, this is followed by the formation of abscess in but a small percentage of cases. Fournier says that nodes follow in two out of three cases, in size up to an orange, painless and disappearing in a variable time up to some months. Pain has been the greatest enemy of the treatment and peculiarly enough the statements with regard to this symptom have been in absolute opposition; turning to Fournier again we find that in a series of 1185 injections studied by him, 637 were either extremely painful, very painful or moderately painful, that is more than 50 per cent. while more than 25 cases were reported as intolerable.

So minor or, at least, less frequent sequelae or accompaniments have to be mentioned, viz., pulmonary embolus, hematoma, primitive haemorrhage in haemophilia or localized neuritis in the neighborhood of the injection. Then, too, the nodes left may be the site of gummatous growths.

It would seem then, that this is not a method suited for the routine treatment of the disease, but that it should be relied upon when we are confronted with a condition demanding immediate and powerful saturation with the drug, as iritis, optic neuritis or brain lesions or destructive lesions of the tongue, throat or larynx, but should we try to apply it to all cases we will find as Fournier says, "Your patient will drop you and your injections, neither more nor less."

Special Forms of Treatment.—At Wiesbaden the mercurial treatment—the inunction method, as is generally used in Germany—is associated with warm baths in a saline spring, and the director advances the theory that the drug is much more active in this way, not only on account of the effects upon elimination and general health which follows the use of the baths, but also because of the formation of the double chloride of sodium and mercury which is the form in which all salts of mercury are absorbed into the system.

At Aix-la-Chapelle the combination of bath and inunction is used, but here the spring contains sulphur, and its opponents have contended that the formation of the sulphide renders inert a considerable part of the drug used. The authorities of the institution claim especial advantages from the opening and freeing of the pores which follows the thermal sulphur bath, and as it is pretty well determined that metals cannot be absorbed by the skin, no doubt the heat assists in the process of inspiration on which the effect must depend.

Zittman Treatment.—Sir Alfred Cooper in the Practitioner describes a form of institutional treatment for tertiary syphilis where the ordinary course of mercury and iodide has been unavailing. The principal of the treatment consists in eliminating the poison from the system by sweating and purgation; the course lasts fourteen days; the patient is kept in a room at a temperature of 80 F. The evening before commencing the treatment two of these pills are administered:

R. Hydrarg. Subchlor grs. ii.
 Ext. Col. co. grs. v.
 Ext. Hyoscyam grs. ii.
 M. ft. pil ii.

The diet is devoid of sugar, spices, fruit, etc.

For the first four days of the treatment the patient drinks half a pint of the following decoction as hot as possible at 9, 10, 11 and 12 a.m.

Decoction No. 1.—*R. rad. sarsae contus, iv. ; sem. anisi contus ; sem. foeniculi contus, aa. oz. i. scr. i. ; fol. sennae, oz. i. ; rad. glycyrrh, contus. iv. Add in a linen bag : Sacchar. alb. ; alum sulph., aa dr. i. scr. i. ; hydr. subchlor, dr. i. scr. i. ; hydr. bisulph. rub., scr. i. ; aquae, Cong. iii.* Boil down to one gallon.

On the same day at 3, 4, 5 and 6 p.m. the patient drinks half a pint of decoction No. 2 cold.

Decoction No. 2.—To the dregs from Decoc'n No. 1 add: *Rad. sarsae contus., oz. ii. ; cort. limon. contus. ; sem. cardamom. contus. ; rad. glycyrrh. contus., aa dr. i. ; aquae, Cong. iii.* Boil down to one gallon.

The patient is kept in bed except for one hour every evening. On the fifth day he is allowed to get up and dress. In the evening two pills are administered as before and the next day the decoctions taken again and this goes on until the 15th day. The whole description and the formulæ suggests miracle-working institutions from across the line, but we have Sir Alfred Cooper's authority for the claim that it is efficacious, not only in intractable cases of tertiary syphilitic lesions, but also in gout, rheumatism, and similar affections.

FIVE CASES OF SARCOMA SUCCESSFULLY TREATED WITH X-RAYS.

By JOHN McMASTER, M.D., C.M., Toronto.

CASE 1.—A lad, age 14 years. The disease began in the region of the right superior maxilla in April of 1902. It grew rapidly and soon presented a large mass, pushing the nasal septum to the left as well as all the nasal structures, and partially closing the right eye. The roof of the mouth was pushed down level with the teeth and it was difficult to open the mouth sufficiently to receive food. X-ray treatments were begun in June and fifteen vigorous applications were made in 42 days. The treatments were made quite wide of the limits of the growth and were given both on the outside and through the mouth. A decided reaction followed the raying, causing a superficial desquamation and some destruction of superficial tissues. At this stage there was some perceptible diminution in the size of the growth with a decided relief from the constant boring pain. The burn caused but slight discomfort and made rapid progress towards recovery. Two weeks after the fifteenth treatment, Dr. Teskey removed the superior maxilla bone, entirely dissecting off the overlying skin and muscles of the cheek and replacing them in situ, retaining these superficial structures in position by sutures and dressings. The doctor made the remark after the operation that "it would relieve him for a while, but would not cure him." A profound anaemia resulted from the shock of the operation and as soon as possible the raying was

begun again. Half a dozen more treatments were given as close together as I considered safe without producing a burn. Gradually the face healed up and the deformity resulting continued to diminish till at the present time it is not much more than noticeable. The boy has now developed into a fine big fellow, and he has had a suitable plate made which not only enables him to eat satisfactorily, but also gives symmetry to the outlines of the face. It will soon be three years since this case was discharged and there is no sign of recurrence yet. On examination it proved to be a round celled sarcoma. The question arises what was it that stayed the growth in this case? The operation or the X-raying or both? There were no Coley's toxins used. The technic used in this case was not what I would employ in the same case now. The radiance was abundant and the tube about the right vacuum, but the distance of the tube was not great enough and the time of raying at fault. However, great destruction was done to the superficial parts of the growth by the raying, and I believe the vessels were closed and the capillaries obliterated in the overlying tissues which were dissected from the cheek bone. If any cells of a sarcomatous nature remained after the operation these were destroyed by the after raying, but the metastasis was prevented by the raying prior to the operation. Without the operation this case could not likely have been successful as the growth was concealed in the antrum and behind plates of bone through which it could hardly be conceived that the rays would produce the metamorphosis required.

Case 2. Mr. W., age 48. A large robust man, a farmer by occupation. A small lump appeared in the region of the parotid gland in October of 1902. In November, under cocain anaesthesia, it was removed by Dr. Bruce. On examination by the microscope it proved to be a round celled sarcoma. Dr. Bruce on learning this at once performed a more extensive operation under general anaesthesia, removing as much of the surrounding tissues as possible. Considerable disability resulted from this operation—paralysis of the muscles of expression, inability to open the mouth beyond a very limited degree, ptoses of the eye lids, want of sensation in the region adjacent to the excision. As soon after this radical operation as he was able to come, X-ray treatments were begun. He received in all fifty treatments between December 1st, 1903, and the following October. At first they were given three per week and after six weeks two per week. The technic was the best adapted for the case known. No injury was done at any time to the tissues. There was some breaking down of tissue a few weeks after the raying began, but the discharge soon ceased and the wound healed kindly. The stiffness about the jaw improved as the treatments went on and the scar tissue, at first quite prominent, melted away, till to-day you could scarcely tell that there had been an operation.

Four months after the raying began a small abscess appeared quite deeply situated in the region of the parotid. It was evident that some of the underlying tissues had broken down and suppuration was imminent. I opened into the affected part and evacuated a small amount of matter and drew out a portion of suture with a knot on it. Over two years have elapsed and there is no sign of metastasis or return in situ. Hope is arising that this man is cured. These are the facts and every one can draw his own conclusions. I will state my experience. I have watched a considerable number of sarcoma cases of the parotid region and I cannot recall one that has been cured by operation alone. I can count up a large number that have been operated upon but they are all dead. Several prominent surgeons of America have stated that operations on such cases are uniformly unsuccessful as recurrence and metastasis will follow in all cases of sarcoma of the neck.

Case 3.—Mr. R., age 54, strong vigorous man. In the fall of 1902 a lump began to make its appearance in front of the ear. It caused considerable discomfort and rapidly increased in size. It was quite deeply situated beneath and below the zygoma, reaching up into the temporal region. His family physician in the country referred him to Dr. Teskey, who excised the growth as perfectly as possible by removing the arch of the zygoma. A long incision was made and a very careful dissection of what appeared to be infiltrated tissue done. The wound healed rapidly, but, unfortunately, a new development resulted within a few months in the site of operation. The excised growth was found a small celled sarcoma by microscopic examination. Further operation was thought inadvisable and in January, 1903, Dr. McCullough, of Alliston, sent him for X-Ray treatment. He received about a dozen energetic treatments when there was marked evidence of softening in the growth. I advised the use of Coley's toxins in conjunction with the rays and they were begun about this time and pushed to the limit of tolerance. The softening progressed and began to appear high up in the temporal region. When it was evident that there was fluid in the location it was opened and drained, several ounces of matter being evacuated. The raying was continued at intervals up to March, 1903. Several times a transient erythema that scarcely amounted to a dermatitis was produced. Great relief was soon experienced after the raying was begun, and this continued the whole time with the exception of a few weeks before the abscess was evacuated. The result is all that could be desired now, the scar tissue is scarcely noticeable and the disability of the jaw and muscles is greatly improved. As the time is gradually passing in since the discontinuance of treatment, a cure is being hoped for with increasing confidence.

Case 4.—Mr. C., age 67, a very strong and vigorous man for his years. A diffuse swelling began to form about the angle of the jaw extending down the neck to the clavicle and up behind the ear for about two inches. This was in the spring of 1904. It grew very rapidly and became very hard, almost as hard to the touch as a bone. There was little or no pain from it only that the jaw was fixed and with great effort could be opened sufficiently to admit of food taking. Dr. Bruce considered the case inoperable and referred him for X-Ray treatment. It seemed hopeless at the start to begin raying such a large and apparently solid mass. The case was faithfully rayed for four months and it was only a few weeks when a marvelous change began to come over it. In its upper part softening and suppuration took place and the growth melted away rapidly. Later on the same result was brought about in the lower part of the growth. About the third month of treatment the use of Coley's fluid was begun and continued for five weeks. It appeared to have no effect whatever on the patient and was discontinued. A very superficial dermatitis was produced several times but an intermission of four or five days always cleared it up. An application of stercate of zinc was made repeatedly to the part with ichthyol. This, it is believed, enables the skin to endure more raying. The discharging sinuses healed up under the treatment and the mass disappeared and the stiffness with it. During the breaking down process all the emunctories were kept active and the patient was put upon an alterative and tonic course of medication. There was but slight evidence of any toxæmia from absorption while the growth was breaking down. After the suppuration had ceased his health improved and his body weight increased. A microscopic examination of some scrapings from the edge of the suppurating sore was made and the growth pronounced a round celled sarcoma. This was Dr. Bruce's diagnosis months before this examination was made. The case reported last week for inspection and examination and there is not the slightest evidence of anything ever having been wrong with his neck. No trace of the openings which discharged freely for weeks and no lack of function in the jaw or ear.

Case 5.—Miss H., age 21, consulted me in December, 1902, for a growth in her face and neck. She gave the following history: A small lump appeared on the side of the head in front of the ear. It was about the size of a hazel nut in September 1900, when it was removed by a surgeon of this city. On examination it proved to be a small round sarcoma. In a few months it recurred in the same location when it was again removed, but by a much wider and more extensive operation. In a few months it returned again and grew more rapidly than before. Discouraged with the result of operations she went to Markham and had it removed with plasters. This took between three and four months to completely destroy the growth which was as large as a cocoon. This case is still

under treatment and improving. 'It will be fully reported on a future occasion.

In none of these cases did auto-intoxication present any difficulty. The healthy tissues in all possessed a remarkable degree of resistance to the destructive action of the rays. In all of them X-Rays irritation was difficult to produce and being produced they reacted promptly. They tolerated large doses of radiation for a protracted period of time. High expectation of success was not looked for by either the patients or myself. The patients, however, were favorable ones, inasmuch as they gave implicit obedience to all requirements. These cases are presented because they naturally fall into a class which shows the fullest degree of affirmative evidence of the X-Ray when properly and persistently administered in recurrent sarcoma. These cases were undoubtedly sarcoma of the most malignant type. Both clinically and histologically they showed this.

While the toxines were used in some of the cases towards the end of recovery, there is complete evidence that the results obtained were due to the X-Radiations. It seems to me, therefore, from the treatment of these cases that we are justified in believing that in this agent, when intelligently applied, we have a curative measure that is entitled to the respectful attention of the medical world. They demonstrate that the emanations from a properly excited Crookes tube in such intervals and quantities constitute a therapeutic agent in the most desperate cases known to the profession. The report of the fifth case will be given more fully at some future time and it is more remarkable than any of the above.

SOME POINTS IN THE ADMINISTRATION OF ANAESTHETICS.

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AFTER an experience of twenty years in the administration of anaesthetics, I offer these suggestions in the hope that some few of them may be valuable to beginners in this important branch of medical work. During that time no patient has been refused and no death has taken place, either at the time of administration or afterwards from the effects of the anaesthetic.

Choice of Anaesthetic. On account of the nervous temperament of patients in this country and the safety with which ethyl chloride and nitrous oxide are administered, local anaesthetics are not generally used, but short operations are sometimes done under ether or ethyl chloride spray or cocaine injections. A few major operations, such as the removal of the thyroid, etc., have been done under injections of weak solutions of cocaine and morphia.

As to general anaesthetics, nitrous oxide followed by ether is made use of in most cases. except when bronchial irritation is present, when chloroform is used. Chloroform is made use of in the extremes of life, say under six and over sixty years. When the patient is doing badly under the first anaesthetic chosen, whether that is ether or chloroform, a change is made to another and generally with success.

Preparation of the Patient.—Rest in bed for some days before time of operation is advised, the last two days of which light diet is given and one meal is withheld just before operation. A laxative should be given two days before operation, but no strong purgative at any time is allowed.

The operation should be done in the morning if possible, the earlier in the day the better. The patient should be encouraged and cheered up in every way possible before commencing the administration of the anaesthetic; and no patient should be anaesthetized who greatly fears the results, rather another time should be chosen.

Water (hot or cold), as the patient wishes, should be given in large quantity before and after an operation, and in some cases washing out the stomach before hand has been of great service.

The anaesthetic should be commenced and gone on with in the place in which the operation is to be performed, and as little movement of the patient as possible should be permitted after the administration of the anaesthetic is stopped. Quick and gentle removal back to bed seems to be the best plan.

Management of the patient during time of administration.—The temperature of the surroundings should be between 65 degrees and 70 degrees. The anaesthetist should devote his whole time and energy to the administration, keeping one finger on the patient's pulse all the time and closely watching the patient's breathing, eyes, lips and general appearance. A clean and disinfected inhaler should be made use of.

Chloroform should be given drop by drop by means of a towel or piece of lint, leaving the eyes uncovered; ether by means of a cotton covered cone, the face being protected from chloroform by vaseline and from ether by a face piece of gauze. If available, Barth's instrument for nitrous oxide-ether will be found very satisfactory.

A trained nurse should remain with the patient at least two hours after the anaesthetic is stopped. Keep the patient on his side or nearly in this position when the nature of the operation will permit of it, to allow mucous to come out of his mouth easily till consciousness is complete.

When water is given in quantity beforehand, and afterwards, the patient is kept in the open air or practically so, and the patient disturbed

very little after the anaesthetic is stopped, nausea and vomiting are almost unknown and the usual remedies to stop sickness are not required.

Fees.—Considering the risks of administration, the time and energy required, the anaesthetist should receive at least an amount equal to one-third of the sum charged by the operator.

Use of Drugs.—Morphia given beforehand is seldom or never necessary, and strychnine should only be given when called for by the weak condition of the patient, and not as a routine practice.

ERYSIPELAS COMPLICATING LABOR TREATED BY ANTI-STREPTOCOCCIC SERUM WITH RECOVERY.

By A. R. HANKS, M.D., Blenheim, Ontario.

THE case I herewith report has been of such intense interest to me that I publish it with the hope that my experience in this case will encourage some brother practitioner in the hour of dire necessity when he feels the battle is against him.

Mrs. W. H. E., aged 28 years, multipara, eight months pregnant, on the evening of December 24th, presented a well marked erysipelas of nose and left side of the face, the left eye being swollen nearly shut, the rash extending from ala of nose on left side over the left face and cheek nearly to the ear, across the root of nose beneath the right eye, blebs on the left side of the nose and eye-lid. She gave a history of not having felt well for some months, complained of aphthous sore mouth, had chilly sensations for the past three days alternating with fever, a feeling of fulness and burning in the face at the seat of the fiery rash which was very tender to touch. She had headache, pain in the back and limbs, coated tongue, temperature 102 1-2 degrees, pulse 120.

Next day the eyes were both swollen completely shut, Could not see at all. Disease extending up the forehead, its margin being marked by a distinct ridge which advanced as the disease spread. It also extended over the right side of face and possessed a brawny feel, tongue dry and brown in middle, very delirious, urine frequent and scanty, no albumen, pulse 120, temperature 104 degrees.

December 26. The disease extended up the forehead and to the right ear, but not involving the ear. Symptoms in no way ameliorated, temperature 105 degrees, when during the night she was taken in labor, the baby being born about 7 a.m. on the 27th. At this time her temperature was 103 1-2 degrees, pulse 110.

December 27. The erysipelas extended to and beyond the roots of hair on the forehead, and the whole face from ear to ear and above the lips was extensively involved, the swelling of the parts first involved showing signs of subsiding though extending at the margins. The tongue

was very dry and brown, the bowels loose and the patient very delirious.

December 29. Can open left eye a little. Erysipelas had extended to left of mouth and the lower lip involved. Right ear and right side of head were involved and much swollen. The tongue still dry and brown, delirium less.

December 30. The right ear enormously swollen, no fresh involvement, tongue cleaning and becoming moist, delirium gone, appetite returning.

December 31. Restlessness gone, urine abundant, disease not spreading.

January 1, 1905. Left ear involved and left side of head, which assumed normal three days later, urine scant.

January 2. Retention of urine, which was abundant when drawn off by catheter, a process we were compelled to continue for three days. Tongue clean and moist, appetite good, face, lips and ears much swollen.

January 5. The right ear somewhat swollen still, and eye lids show ulceration from superficial abscesses. Patient feels well, except for sore mouth, and urinates voluntarily again.

We have been taught that the streptococcus which produces erysipelas is the same germ that commonly causes septicæmia after labor; and that the germs cling to your clothing and hands with such tenacity that, as Osler puts it, you should never attend a case of confinement while treating a case of erysipelas.

Here our patient, already three or four days ill with a severe facial erysipelas, dry, brown tongue, active delirium and enormous swelling of face, with a temperature of 105 degrees, pulse 120, is taken in labor and must be protected from streptococcic infection.

How to accomplish the task in a house, already germ laden, and from which the patient's mother, her servant and her nurse had, during her illness, to be sent to their respective homes, each suffering from a follicular tonsillitis due to unsanitary surroundings, was a question the favorable solution of which was of vital importance to the patient.

Aseptic mid-wifery is an ideal we all worship, but, under circumstances such as these, to rest content with the strictest asepticism would probably have been followed by the death of the patient a few days later from septicæmia.

When the labor was well advanced, but previous to delivery, the thighs, buttocks and vulva were given a good anti-septic scrubbing, and a large sterilized pad placed over the vulva, no vaginal examination having been made at any time. The patient was completely disrobed and carried to a bed farthest removed from the room in which she lay, while fresh clothing and bedding were used, and a large wad of sterilized cotton was kept constantly applied over the vulva, the nurse using sterilized rubber

gloves to change the dressings and sponge the vulva with anti-septic washes.

Then anti-streptococcic serum was used liberally for the double purpose of protecting the patient against infection, and arresting the progress of the erysipelas, both of which it accomplished admirably.

The temperature chart showed that within twenty-four hours of beginning the administration, there was a decided effect upon the pulse first, then on the temperature, tongue and delirium. The baby was born on the 27th, and three doses of serum were given on the 28th, when the pulse and temperature both went down; at this time, the serum was being given every six hours on the 29th, three more doses were given every six hours, and, as the delirium and temperature were declining, the interval was lengthened to eight and then twelve hours, so that in four days after twelve doses of serum the temperature was subnormal never to rise above normal.

The only unpleasant symptom attributable to the serum was retention of urine, which lasted three days, and the sub-normal temperature for a few days.

The erysipelas continued to spread for four days after the first administration of the serum, even though the constitutional symptoms showed an improvement, and I am not prepared to say the erysipelas would not have pursued as favorable a course if serum had not been used; but I think from previous experience it would not, and I certainly will use it in my next severe case of erysipelas. But it is of its protective influence I wish especially to speak.

This patient was debilitated to such an extent that she was suffering from aphthous sore mouth. She was surrounded by such unhygienic influences as to develop a severe erysipelas *de novo*. Three inmates of the house contracted follicular tonsillitis—a streptococcic affection—though there were no other cases in the section; so that one would expect little resisting power in the patient at the time of labor, even without the proximity of so contagious a disease as erysipelas. While due precaution was adopted to prevent germs finding entrance to the vagina, I can not think the parts escaped contamination under all the circumstances.

There was no pelvic involvement, thanks to the serum, and the patient made an excellent recovery.

This is an example of serum conferring immunity against infection, and of its value in this field I cannot speak too highly.

As a curative agent in infection following labor, the results have been variable in different experimenter's hands, which may be because of delay in administration, or it may be due to insufficient persistency in its use; but, as a prophylactic, there can be no doubt of its efficacy. Vaccination

furnishes immunity, but is not curative; anti-toxine furnishes immunity and is also curative, but it must be administered early in the disease and in sufficiently large doses. No fact is better established than that the efficiency of anti-toxine is in direct proportion to the earliness of its administration; and, if anti-streptococcic serum is a certain prophylactic, as this case seems to prove, it appears reasonable to assume that it is equally as curative as anti-toxine, if it is prescribed sufficiently early and in sufficient doses.

GOVERNORS' FELLOWSHIP IN PATHOLOGY. MCGILL UNIVERSITY.

By the resignation of Dr. Oskar Klotz this fellowship, instituted in 1899, has now become vacant. Dr. Klotz is a graduate of Toronto University, and has during the tenure of his fellowship done much valuable research work including studies upon bacillus isolated from water agglutinating with high dilutions of typhoid serum, and on the isolation of a motile micrococcus causing an epizootic among rabbits, (both published in the Journal of Medical Research), together with several studies in morbid anatomy. His most important work, shortly to be published, is on the part played by soaps in the process of pathological calcification.

The Fellowship is open to graduates in medicine who have done some previous medical research work, is tenable for two years with a salary of \$500 per annum.

HYSTERICAL AMBLYOPIA.

Fish, *Ophthalmology*, October 1904, gives the histories of a number of cases which would evidently be classed as hysteria. However, upon closer examination, it was found, in each case, that the cause of the trouble was located in one of the frontal sinuses. After appropriate treatment the symptoms disappeared.

Fish regards frontal sinusitis, subacute or latent, as a much more prevalent affection than is usually supposed.

"These patients suffer from asthenopia, owing to a reduced range of accommodation or a diminished power to maintain prolonged accommodation, and, furthermore, they are subject to frequent attacks or aggravations of these distressing symptoms when the sluggish pupil and ciliary muscle cause them great discomfort."

CURRENT MEDICAL LITERATURE

MEDICINE.

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

THE THERAPEUTIC VALUE OF YEAST.

Yeast has long been used as a therapeutic agent and recently the more intelligent study of its powers has led to a definition of the qualities which it possesses, and glycolytic, phagocytic, antitoxic and bactericidal powers are ascribed to it. A carefully dried fresh yeast is the most suitable and doses of 25 centimetres three times a day may be given.

The chief therapeutic indications for yeast follow :

1. In glycosuria, 50 grams or less are employed daily, diluted with water, and given in divided doses at meal times. If diarrhea follow, the dose is reduced. The glycolytic power of the yeast is exerted throughout the alimentary canal, and the treatment is allowed by diminution or disappearance of the sugar from the urine. Often there is a decided, but temporary, increase in the body weight under the use of the yeast.

2. In albuminuria not due to renal change, the same treatment is followed in many cases by diminution in the amount of albumin. The treatment is of no value where renal degeneration is under way.

3. In pyogenic infections like furunculosis and carbuncle. In furunculosis, three to six teaspoonfuls per day are employed, according to the tolerance shown by the patient, and some clinicians have reached the dose of four tablespoonfuls a day. The boils in process of formation dry up and fail to suppurate, and fresh crops are speedily aborted. Lassar has had good success with yeast in the ordinarily inveterate crops of boils common in diabetic patients, the good results being probably due to the combined glycolytic and antipyogenic powers of the agent. In carbuncle, even if fully developed, prompt improvement occurs. "The pain is relieved or entirely ceases after the second day, the edema and lymphadenitis on the third or fourth, then suppuration becomes less and finally ceases, and on the seventh or eighth day the carbuncle cicatrises, leaving merely an induration which does not disappear till some weeks have passed. If at this period the administration of yeast is abruptly suspended, the carbuncle tends to relapse; hence it is advisable to continue the treatment till the induration has disappeared." (Laumonier).

4. In recurrent styce of the eye, Terson has observed constant improvement under the yeast treatment.

5. It has been used in the treatment of vaginal leucorrhœa, both simple and gonorrhœal, by injections diluted with water, and by application

to the membrane followed by tamponade. The reports on this treatment are conflicting; some observers reporting prompt and continued improvement, and others temporary improvement followed by an intractable pruritus. It is possible that the pruritus may have been due to using decomposed yeast.

6. In obstinate constipation, yeast has been successfully employed in doses of 25 centigrams of the dried form two or three times a day. The beneficial effects are noted by the second day.

7. In gastro-enteritis in adults and children, many observers have had excellent results. Three teaspoonfuls of dried yeast, diluted with water, given in divided doses through the twenty-four hours, are directed for an adult, and correspondingly smaller doses for children. Other observers think a better action is secured by using the yeast by enema, after flushing the bowel out and instituting a fluid diet.

8. Various observers have noted beneficial results in cholera, scarlet fever, measles, purpura, cancer, and tuberculosis, but the reports are not yet sufficiently positive to warrant one abandoning older remedies in such diseases.—The Medical World.

STANDARD RECORDS OF THE LEUCOCYTES IN NORMAL BLOOD.

In the *Boston and Medical Surgical Journal*, December 29th, Hewes, of Boston, describes a series of experiments undertaken for the estimation of the normal number of leucocytes in human blood. The subjects, thirty young men, students at the Harvard Medical School, and the counts were made forenoon and afternoon; the method used was that of stained smears checked by the Thoma-Zeiss apparatus.

The results show that the number of leucocytes is almost invariably higher in the mid-afternoon than in the mid-forenoon in the same individual, the amount of increase being from 3,000 to 4,000 per c.m.m., the range in all the experiments being from 6,200 to 18,100 forenoon and from 12,000 to 15,600 afternoon—the high limit in the forenoon cases occurred in the only case, in no other did it exceed 12,000. The study of the different varieties of cells showed the following proportions:

Lymphocytes,	}	Basophiles 21 to 49 per cent.
Large mononuclear cells,		
Transitional cells,		
Neutrophiles		52 78 per cent.
Oxyphiles (eosinophiles)...		0.5 to 6 per cent.
Mast cells		— to 1 per cent.

SURGERY.

Under the charge of H. A. BEATTY, M.D., M.R.C.S., Eng.

Chief Surgeon Canadian Pacific Railway, Ontario Division; Surgeon Toronto Western Hospital.

EXTERNAL URETHROTOMY.

In a recent article, Reginald Harrison, of London, states that external urethrotomy seems specially applicable to the following classes of cases:

1. To resilient and rapidly contractile strictures in the deep urethra which, like burn-scars, are unamenable to stretching or dilatation, and where a splice or an interval of new tissue is required within the circumference of the contraction.

2. In cases where the wound made by an internal urethrotome is out of proportion to the natural drainage possibilities of the urethra, such a wound may be so made within this canal as to never drain completely either in regard to urine or its own discharges, the result being much the same as in accidental lacerations of the urethra.

3. In cases of stricture complicated with urinary fistula and sinuses. The division of the stricture from without and the formation of a single opening for urine drainage communicating directly with the bladder often leads to a speedy recovery in these cases.

4. In cases of stricture with extravasation of urine, the division of the stricture with direct drainage of the urine from the bladder as well as from the surrounding tissues is a matter of immediate importance.

5. In some rare cases where internal urethrotomy performed for stricture is rapidly followed by acute symptoms of impending death from septic absorption through the urethral wound. Here if an external urethrotomy be done and a large drainage tube inserted into the bladder the patient may promptly improve.

In the operation of external urethrotomy, Harrison attaches importance to the careful observance of the following three things:

1. The use of a guide in all cases of external urethrotomy for stricture.

2. The utility of internal urethrotomy as an immediate preliminary to the external operation. This is shown by the ease and completeness with which the latter operation can be carried out on a larger staff than could otherwise be used.

3. The necessity for providing the most efficient and cleanly kind of urine and wound drainage.

ASEPTIC CATHETERIZATION OF THE URINARY PASSAGES.

In the *Journal of the American Medical Association*, September, 1904, M. Krotoszyner and W. P. Willard summarize the methods of catheter sterilization which prove to be safe and simple as follows:

1. Soft rubber catheters are rendered sterile by being boiled five min-

utes, preferably in sodium chlorid solution, care being taken that the solution, fills the lumen of the catheter. As a matter of precaution the catheter should be washed with soap spirits and running water after use.

2. Hard rubber and silk and cotton woven catheters should be boiled five minutes in a saturated solution of sulphate of ammonia. Each instrument should be wrapped separately in gauze or a towel, or, if several catheters are to be sterilized, in such a manner that their surfaces shall not come in contact with the sides of the vessel or other catheters.

3. Ureter catheters can be folded and wrapped in a towel so that their surfaces are kept apart and boiled for five minutes in a saturated solution of ammonium sulphate.

4. Cystoscopes should be sterilized by first washing them in soap spirits and water, then vigorously rubbing them for two minutes with two different pieces of gauze or cotton wet with soap spirits, and then with alcohol, for one minute. The channel of the catheter can be cleansed by means of a brush, first brushing with soap spirits and then with alcohol. Instruments can be kept aseptic if they are snugly wrapped in a piece of gauze or towel wet with soap spirits.

TREATMENT OF THE STUMP IN APPENDECTOMY.

In a letter of December 17th last, to the editor of the *St. Louis Medical Review*, Ochsner says:

"It is my opinion that any one of the dozen different ways of treating the stump is perfectly satisfactory and that it does not make a particle of difference which one of these methods may be chosen. The objections to each one of the various methods which have proven to be eminently satisfactory in practice are simply theoretical and do not count upon the fact that the stump of the appendix is in a location in which nature is accustomed to do a great deal towards repair of pathological conditions. I have at various times tried all the different methods that have been described and have found the results equally good, if carried out accurately, in nearly three thousand appendectomies."

GYNAECOLOGY.

Under the charge of S. M. HAY, M.D., C.M., Gynaecologist, Toronto Western Hospital; Consulting Surgeon Toronto Orthopedic Hospital.

A FURTHER CONTRIBUTION TOWARDS THE STUDY OF THE NATURAL HISTORY OF TUBAL GESTATION.

In the *British Medical Journal* of October 29th, Dr. Augustus W. Addinsll, of London, has an article on this subject. He says the objective and subjective phenomena, associated with the recognition of extrauterine pregnancy, are so classic that they need not be referred to, but a lively

controversy still rages round the question of treatment. Practically, it amounts to this, ought we to operate at once or wait? During the last four years the doctor has been associated with 15 cases. Four of these were operated on. Eleven were treated by the expectant method of absolute rest in bed. All 15 cases have recovered.

The writer states that of the four cases operated on, three were by abdominal section, and the sac was removed. In the fourth case, as supuration had taken place, a free incision was made into the vaginal roof and the abscess cavity drained. In one of the three abdominal cases, symptoms of appendicitis came on, and the operation was undertaken for that complaint, otherwise the patient was doing well under treatment by rest alone.

Dr. Addinsell believes the majority of cases that come to hospital are sent in as cases of miscarriage by the doctor attending, and this is the usual diagnosis of the patient herself, who, having missed one or more periods and experiencing the subjective symptoms of pregnancy, naturally regards the onset of a colored discharge, accompanied by pain, as a miscarriage. Herein lies the danger. The woman has recovered from her first internal hemorrhage. He also believes it to be quite exceptional for the primary internal hemorrhage to be fatal; he has never known it to be so in a single case.

The doctor sums up his paper as follows:

1. If the patient has rallied from the first shock of bleeding and there is no evidence of it still going on, wait.
2. If the bleeding returns, operate at once by the abdomen.
3. If the diagnosis is made of tubal pregnancy, before rupture or abortion, operate at once; but this is very difficult to diagnose and is very rarely done.
4. If tubal abortion or rupture is recognized and the foetus is still living in the early weeks, operate.
5. If an haematocele has formed in the pelvis, it is probably shut off by adhesions from the general peritoneal cavity, wait for absorption.
6. If the haematocele becomes infected, open freely through the vaginal roof. The bacillus coli communis will usually be found to have been at work with its characteristic odour; so let your drainage be very thorough.

TECHNIC OF FIXATION OF PROLAPSED KIDNEY.

Dr. Augustin H. Goelet, Professor of Gynecology in the New York School of Clinical Medicine, writes on the above subject in the November number of the *American Journal of Surgery and Gynecology*. He says experience proves the necessity of the operation, especially in the face of the inadequacy of all mechanical appliances, such

as belts and corsets, except in cases where the kidney has not descended below the border of the last rib in front to prevent further descent. After this operation, which is intended to support the abdominal organs, there is general improvement of the health as well as a feeling of greater security to the patient.

The indications for the operation, he says, are prolapse of the kidney to the third degree, when the kidney has descended below the border of the lower rib in front, and the upper pole can be palpated when the patient is in the erect position, because this is an anomalous condition that should not exist, and is not conducive to either health or comfort. The position of the organ interferes with its circulation and function and with the flow of urine from the kidney, and by compression of the ovarian vein, which it overlaps, gives rise to pelvic discomfort.

Continuing, the doctor says, one cannot too strongly emphasize the importance of careful preparation of the patient for the operation to obviate post-operative vomiting, which strains the freshly attached kidney and loosens it from its new anchorage. Thorough purgation is imperative; and gastric lavage excellent, if the patient be particularly nervous and the stomach dilated.

In operating, he thinks the chief objects to be accomplished are:

1. Permanent fixation of the kidney in its normal position.
2. Complete detachment of the colon from the organ to obviate subsequent dragging upon it by the distended bowel.
3. The avoidance of mutilation of the kidney and of the patient.
4. Cure of the symptoms and conditions produced by the prolapse.

The author's technic is as follows: The kidney is reached by a vertical incision along the outer border of the erector spinae muscle, the muscles being separated in the direction of their fibres. Next, the fatty investment of the kidney is opened by a vertical incision near the spinal side of the wound, and the kidney is delivered through the incision upon the surface of the back. The fatty capsule is then completely detached upon both the anterior and posterior surfaces, care being taken to detach the colon completely. The redundant fatty capsule is trimmed off on both sides. The fibrous capsule of the kidney is not detached or otherwise disturbed. The sustaining sutures, two in number, are inserted only under the fibrous capsule, each having three insertions through and under this fibrous capsule, and the ends are brought out through all the structures of the back at the upper angle of the incision in the skin and are tied over a fold of gauze to avoid cutting by the suture and loosening of the loop.

The suture material used is silkworm gut and the sutures are removed after three weeks.

The wound is closed by two layers of cat gut suture, one uniting the superficial fascia, and the other the skin margins.

A gauze drain is inserted about the lower pole of the kidney and brought out at the lower angle of the wound. This aids in supporting the organ, taking the strain off the surrounding sutures during the first forty-eight hours, after which time it is removed.

Dr. Goelet says among the many reasons why nephropexy may prove a failure, the chief ones are as follows :

1. Postponement of the operation until the kidney is seriously disabled or an incurable pyelo-nephritis has developed, or until the health of the patient is permanently shattered.

2. Failure to completely detach the colon from the kidney, which may drag the kidney away from its anchorage or give rise to annoying pain.

3. Failure to immobilize the kidney until it can become permanently adherent by employing absorbable sutures or by attaching them insecurely to structures that yield to the constriction when it is tied.

4. Fixing the kidney too low down, where it will be irritated by pressure of the corsets or clothing constricting the waist.

In the report made to the American Medical Association, there was a record of 159 nephropexies by the method here described (on 126 patients); in 33 of these both kidneys were fixed at the same time, without a death and without a single failure to secure permanent fixation. The ultimate results were cure of the symptoms and conditions depending upon the prolapse in all of the cases in which it has been possible to trace the patient, from two to twelve months after operation.

ENDOMETRITIS: ITS PATHOLOGY AND TREATMENT.

Charles A. Robertson, M.D., Professor of Gynaecology and Abdominal Surgery, Nashville, Tenn., has an article on this subject in the January number of the *American Journal of Surgery and Gynaecology*. Dr. Robertson, after treating somewhat fully the anatomy, and histology of the subject, takes the position that the disease is one of infection, whose pathology, symptomatology and treatment depend upon the character and virulence of the poison. He maintains a germ-free condition of the uterus exists in health and thus excludes the possibility of auto-infection. Therefore, infectious material, of whatever character, is introduced from without.

Etiology.—Under this heading the following points are mentioned :

1. Instrumentation of the uterine cavity with criminal intent, or for diagnostic purposes.

2. Filthy hands of the physician or mid-wife in obstetric practice.

3. The use of the daily vaginal douche, with unclean nozzle, the resort to tamponade and rubber devices for the prevention of conception; unclean coitus.

4. Laceration of the cervix, chronic dilatation of the cervix, and downward displacement of the uterus favor infection of the endometrium, from the vagina, which abounds in pathogenic bacteria.

5. Contributory causes, as acute specific diseases, exanthematous fevers, uterine neoplasms, displacements, vulvo-vaginal disease, impaired general health., etc.

Regarding the bacteriology of endometritis, the writer says we may have a gonococcal, streptococcal, diphtheritic, tubercular, and occasionally a bacillus coli communis endometritis.

Symptoms of Acute Endometritis. —The symptoms depend upon the severity and, to some extent, upon the character of the infection.

The onset is usually marked by a chill, followed by rise in temperature and increase in pulse rate. Pain in suprapubic or sacral regions is usually complained of, also frequent and painful micturition with rectal tenesmus.

The uterine secretion is increased, is puriform in character, and may be streaked with blood. In mild cases the discharge may be clear and viscid, or even milky in appearance, and is designated as a leucorrhœa.

In acute puerperal infection the lochia is either much lessened or ceases altogether for a time.

If due to gonorrhœal infection the discharge becomes purulent very soon.

Upon digital examination we usually find the os uteri quite patulous, the cervix soft and enlarged, the body of the uterus somewhat enlarged and tender to pressure.

Symptoms of the Chronic Form. —The symptoms of the acute form, modified, may continue in the chronic form, especially the pain, tenderness, muco-purulent discharge and vesical disturbance.

The menstrual function is disturbed. The patient may suffer with menorrhagia, metrorrhagia, and, in the fungoid variety, hemorrhage is quite a constant symptom.

Lencorrhœa, the discharge being copious, thin, purulent, often offensive in odor and streaked with blood, is a prominent symptom in this form.

Pain is usually referred to the lower abdomen and back, and is associated with a "bearing down" sensation.

The writer says the "uterine headache" he has observed, but is convinced that it is not of any constancy or value.

The general health becomes impaired, the patient being prone to neurasthenia, hysteria and periods of mental depression.

Sterility is common, and if conception should occur, abortion is quite the rule.

In case of doubtful diagnosis, a microscopical examination of the uterine scrapings will clear matters up.

Treatment of Acute Form.—Acute cases, if mild and of non-puerperal origin, need nothing more than rest in bed, saline purgation and vaginal douching of water at a temperature of 105 degrees to 120 degrees twice daily.

If the case is one of puerperal infection, or occurring after abortion, with perhaps retained products of conception, undergoing decomposition, it becomes necessary to remove the offending material under strict aseptic precautions.

The curette, which, in the hands of the inexperienced or careless surgeon, is capable of doing irreparable injury, is, in proper hands, an instrument of great value, and capable of saving many lives. After curetting the uterine cavity it is important to irrigate with an antiseptic, for example a 2 per cent, solution of creolin.

Where the pelvic peritoneum is rapidly involved, the serous secretion which is copiously thrown out becomes a suitable culture medium for the growth and reproduction of streptococci, which are rapidly absorbed, hence vaginal section and drainage is often of great value.

In very extreme infections, hysterectomy may be the only hope and should be performed.

Treatment of the Chronic Form.—Dr. Robertson says in the simple, uncomplicated forms where leucorrhoea is the most persistent and annoying symptom, the local application of mildly escharotic and antiseptic remedies may bring about a cure.

In cases of marked hypertrophy and hyperplasia, with involvement of the myometrium, this local treatment may in time bring benefit, but at best it is slow, uncertain and promises but little. When the patient prefers this local treatment to anything of a surgical nature the general health must be at the same time well looked after by giving tonics, etc.

In the fungous variety, with irregular and oftentimes copious hemorrhage, there is no way but the radical operation of curettage. Temporary relief may be obtained by giving cotarine hydrochlorate in doses of 2 1-2 to 4 grains four times daily.

In all forms of chronic indometritis the operation of curettage should be performed; however, curettage alone does not suffice to bring about a cure, for the utricular glands penetrate the entire thickness of the membrane and their distal extremities are imbedded in the muscularis.

Curettage does not remove all the mucous membrane, and even if it did, there still remains the cup-shaped distal extremities of the utricular glands in which the pathogenic micro-organisms are entrenched in sufficient numbers to perpetuate the diseased process. Therefore, after curettage we should apply antiseptic remedies, such as iodine, carbolic acid, chloride of zinc, and, in gonorrhoeal cases, nitrate of silver, and this should be repeated twice a week for a month or six weeks.

Complicating conditions, such as uterine neoplasms, cervical and perineal lacerations, displacements, and adnexal disease must be relieved by appropriate surgical treatment.

Failure to recognize and properly deal with complicatory conditions, either general or local, presage failure in any and all forms of treatment of uterine infections.

OBSTETRICS AND DISEASES OF CHILDREN.

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

CHRONIC INTESTINAL DYSPEPSIA OF CHILDREN.

J. Bunton Blaikie, in the *Edinburgh Medical Journal*, September 1904, deals with the above topic.

In his paper, the author has embodied a study of fifty cases of what he terms chronic intestinal dyspepsia, the "mucous disease" of Eustace Smith; or, as it is termed more frequently in America, chronic intestinal indigestion.

The children, between the ages of three and twelve years, were attendants at the outdoor clinic of the Great Ormond St. Hospital, London.

Recognition of this condition as a distinct clinical entity is important for three reasons: First, it is an exceedingly common condition; second, correct diagnosis results in a reassuring prognosis, as the condition is usually diagnosed as tuberculosis or tabes mesenterica; third, correct diagnosis means correct treatment, which is directly contrary to that of tuberculosis, as forced feeding, cod liver oil and hypophosphites tend to aggravate the condition.

The condition is common in the children of the poor, but is frequently met in the children of the wealthier classes. There is a certain amount of hereditary predisposition to this condition and it is common to both sexes. It is most commonly met with between the ages of three and five years.

The duration of the disease he was unable to ascertain, but in many of the cases it had lasted for years. Few of the children showed obvious signs of former rickets and, in these cases, pre-existing disease seemed to play but a small role in the etiology.

The author agrees with Smith and others that the nervous element is an important factor in the causation of the condition. A careful study of the symptoms reveals that languor combined with excessive excitability or nervousness, are constant.

All suffered from nocturnal restlessness while "night terrors" and enuresis were common. Forty-seven of the cases complained of headache and forty-eight of cough. The cough is usually of a "hacking" character, though the "bark" of the common "stomach cough" is frequent. Pain

in the epigastrium was present in forty-seven of the cases. This pain had no relation to the indigestion of food.

In every case more or less wasting was noted. The appetite was de-ranked in all. In the females the appetite was poor, while in the case of males it was frequently ravenous.

Irregularity of the bowels was frequent, constipation marking some of the cases, diarrhoea others; while in many, the condition alternated irregularly. Contrary to description given by Holt and Rotch the motions generally appeared normal.

Occasionally, attacks of fever, associated with symptoms of acute gastric disturbance, occur in the course of this disease. In these cases the symptoms often suggested appendicitis and may lead to a mistaken diagnosis. Jaundice occurred in six of the cases. Flatulence was very rare. With regard to mucous in the evacuations the author states that in thirty of these cases it was never observed, in five it was rare, while in thirteen it was frequently present. Intestinal parasites were frequently found. Three cases had tape worm, two ascaris lumbricoides, and six thread worms. Attacks of palor were common in all cases, and in most complaints were made of cold extremities.

Physical examination of the cases showed that pale, sallow faces were common. The skin was usually harsh but not so marked as seen in advanced tuberculosis. The condition of the tongue varied, but two common types were met with. In the first, the tongue at the back is coated with a whitish yellow fur, whilst the rest of the organ is fairly clean, but covered with a layer of shiny saliva. In the second type, the dorsum of the tongue has a whitish, sodden appearance, as if steeped in an alkali, the fungiform papillae stand prominently out of this white background as raised, bright pink prominences.

Examination of the urine showed nothing typical, though albumen was found present in six of the cases. The prognosis is generally good, though in the author's cases the results of treatment were difficult to record as many of the cases could not be followed up.

The author dwells on the value of change of air and of surroundings in the treatment of these cases. He considers this the most powerful remedy. Associated with this, to be curative, there must be a careful regulation of the diet which should be maintained for years. The diet should consist of milk, rusk, thin toast, stale brown bread, eggs, lightly cooked fish, and meat and green vegetables may be allowed in small quantities.

No sugar, sweets, jam, potatoes, new bread, sago, tapioca, arrow-root, Indian corn, flour, turnips or carrots should be given.

Cold baths, warm clothing, open air life and freedom from excitement must obtain.

The drugs most useful are alkalies, oleoresins and bitter tonics. He recommends the following as a useful mixture: R. Potas. bicarb; Potas. Citrat. aa gr. X; Tr. nuc. vom. m. iv ; Tr. Myrrhae, m. XXX; Infus. Gent. Co. ad, ʒii t.d., a.c. Pulv. rhei in small doses at night is valuable especially when constipation is marked.

THE VALUE OF THE ADDITION OF CITRATE OF SODA TO COWS MILK IN INFANT FEEDING.

F. J. Poynton, *London Lancet*, August 13th, 1904, remarks that the use of citrate of soda was first suggested by Wright in the *Lancet*, July 22nd, 1903. He pointed out that there are two forms of milk curdling. Rennet curdling in which the resulting clot is firm. This takes place when the stomach is empty. Acid curdling, in which the resulting clot is loose. If the lime salts of the cows milk are precipitated, the clotting by rennet will be delayed in time and will be less firm in its consistence and thus become more digestible. As lime salts are in excess in cows milk, as compared with human milk, this precipitation can be brought about without impairing its food value. Citrate of soda when added to cow's milk results in precipitation of the lime salts, and, being harmless, Wright recommended its addition with this purpose in view.

Poynton has successfully carried out these suggestions in his clinic in Great Ormond St. Hospital; and finds that, as a rule, the proportion of one grain of citrate of soda to the ounce of milk brings about the desired result.

A prescription is ordered of a solution of citrate of soda in water to which is added a small quantity of spts. chloroform to prevent fungus growth. The dose of the mixture is so arranged that one teaspoonful, added to the child's food mixture, gives the desired amount of citrate of soda for the milk contained in it.

He has never met any ill effect from its use. He has treated fifty cases of severe indigestion in artificially fed infants in this manner. He usually uses cow's milk diluted with one or two parts of water, according to the infant's digestive capacity.

When the infant's indigestion is due to the proteids in its food, this method of treatment succeeds. If the indigestion is due to fat, then the method fails and other treatment is indicated.

THE CAUSES OF INFANTILE MORTALITY.

In the *Glasgow Medical Journal*, October, 1904, there is a report of the discussion of the causes of infantile mortality which took place at the Glasgow Med. Chir. Soc., important papers on the subject being read by

Dr. A. K. Chalmers, Professor Glaister, and Dr. Ness. These papers present an interesting mass of statistics difficult to abstract, but well worthy study by those interested in this important subject.

Dr. Chalmers' paper deals with the infantile mortality of Glasgow. He states that the decrease in the birth rate of that city during the last thirty years has been about 20 per cent., while the infantile mortality has declined only about 12 to 14 per cent.

Professor Glaister points out that those causes which have operated toward the amelioration of this condition of the lives of average citizens, of those conditions in which progress has been made in general sanitation, have failed to reach the infants under one year of age. In these countries a progressive diminution of general death rate has obtained, but no such diminution is discernible in the death roll of children.

High death rates in children under one year prevail in all parts of the civilized world. Figures prove that the rate of infantile mortality is not diminishing.

In large urban centres the mortality rate is higher than in rural. About one-half of all children who die before the completion of their first year, do not survive the first three months of their existence.

He divides the cause of infantile mortality into two classes—the unavoidable and preventable.

Under the heading unavoidable may be included such as premature birth, injury at birth, congenital defects and deformities, and congenital diseases.

Much waste of infant life results from marriage between parents of unhealthy stock.

Preventable causes of infantile mortality are insanitary domestic surroundings, vicious and objectionable modes of life of parents, effects of parental poverty, occupation of mothers during the early months of child-nursing, wilful or compulsory abstinence of mothers from nursing their off-spring, and physical unfitness of mothers for that duty owing to different prime causes.

With regard to preventive measures these must depend upon the joint efforts of the state, municipalities and the medical profession.

Demonstration of approved methods of rearing children, and especially of the artificial methods of feeding children in cases where lack of maternal milk supply, or necessity to work, prevents natural feeding, must in great measure be depended upon. Such experiments have been attended with beneficial results in many parts of the world. The result of such an experiment made by the council of Salford reduced the infantile mortality rate in one year from 246 per 1000 to 178 per 1000.

He advocates the control of milk supply and the establishment of milk depots in congested districts.

Public creches, where the infants of poor mothers compelled to work during the day may be cared for and fed have proved of great value. There become centres for the dissemination of knowledge of infant hygiene and feeding and have a high educational value.

X-RAY THERAPY AND SKIAGRAPHY.

Under the charge of JOHN McMASTER, B.A., M.D., C.M., Toronto.

THE INHIBITORY ACTION OF X-RAYS UPON MALIGNANT GROWTHS.

In the December issue of the *St. Louis Medical Review*, Dr. Geo. C. Johnston of Pittsburg, Pa., an X-Ray operator of wide experience, possessed of a broad knowledge of electrical appliances and a keen discerning judgement in the best methods for their application as therapeutic agents, recounts his experience and draws conclusions from it regarding the effects of X-Rays upon malignant growths. His paper is in support of the following proposition, that the radiations from an excited Crook tube is capable (if applied in accordance with well defined technique) of inhibiting the rapidity of the growth in malignant tissue, and in a certain proportion of cases. This inhibition becomes permanent, and is followed by the disappearance of the growth, which may be replaced by a normal scar tissue constituting a more or less permanent clinical cure. In some cases this inhibitory action is absent. Indeed if the proper technique is not employed, which implies the use of a tube with the vacuum properly adjusted to suit the case, the time of treatment and the distance of the tube from the diseased tissue, as well as the quantity of radiance produced. This inhibition may not be produced, but in its place a seeming increase in the activity of the pathologic process. The methods to be employed in this work are of far more importance than were at first thought to be the case. To acquire this judgement necessitates careful and prolonged study of the apparatus used and its powers of producing X-radiance. The dissensions that have raged over the modus operandi of radiotherapy are useless, and we are not so much concerned with how this agent accomplishes its work as we are with what it accomplishes. Quinine cured malaria as quickly and positively before man first saw the plasmodium as it does now. The fact that two grains of quinine will not cure a case of tertian and that sixty grains may produce permanent deafness, do not prove quinine is useless or that it is dangerous. Many of the failures reported during the past year, have been based upon an experience of such under or over dosage. The judgment of the value of radiotherapy, must be based upon the results achieved, by men of the highest skill possible and of the largest experience in dealing with these classes of

cases, and not upon the scattered success or frequent failures which bespeak inexperience and want of judgment in technique.

This inhibition while not constant, yet occurs in direct proportion to the skill and experience of the operator, and the results, on the whole, are more favorable each year, as time adds to the operator that judgment which contact with large numbers of cases alone can bring. Its value to the surgeon in operable cases is evident. In many personal experiences, a patient physically unfit for operation, has been built up by tonic treatment, while the disease was held in check by radiation till such time as a successful operation could be performed; then radiation was employed to promote granulation and prevent recurrence. The final results have been pleasing to both operator and patient. In frankly inoperable cases, the method of treatment has been used many times, with the happiest results, to prolong life and relieve pain. In some of these supposed hopeless cases a clinical cure has followed and persisted over periods of years.

This inhibitory action is to a degree in direct proportion to the dosage administered, which degree consists in the following factors, length of exposure, frequency of exposure, distance from the tube, penetration of the ray (vacuum in the tube) strength of excitement and quality of current.

A general characteristic of malignant tissue is in its enormous rapidity of cell proliferation. This is checked and in some instances stopped by radiation. The newly formed tissue low in vitality and physiological resistance to injury and endowed with poor reparative power, may, even and often does undergo tissue death, and is absorbed or thrown off *en masse*, and is replaced by connective tissue. If this process be complete throughout, a clinical cure results; if not, the growth is but temporarily inhibited and will, later, take on renewed activity. This effect is local. There is no antitoxin generated which circulates through the body to have effects at distant points upon foci, which have not been exposed to the radiation. No matter how thoroughly the original growth may have been destroyed, metastatic deposits will go on as usual, unless found and destroyed. The difficulty of an early recognition of metastatic foci is responsible for a very large part of the failures in other than primary cases.

The radiation from an excited Crook's tube is capable, when properly applied, of inhibiting malignant growth.

This inhibition is in direct proportion to the skill and experience of the operator and is not a constant result.

In certain cases this inhibition is so complete and permanent as to constitute a clinical cure.

In inoperable and apparently hopeless cases, the radiation may be employed with gratifying results to prolong life and relieve pain.

It is of great value following operation to prevent recurrence. Its employment for therapeutic use must be confined to specially skilled physicians and surgeons, and its prostitution at the hands of nurses, orderlies, engineers, etc., should be opposed by all ethical men.

X-RAYS IN SKIN AND GLAND AFFECTIONS.

Dr. Russel H. Boggs, Secretary of the American Roentgen Ray Society, whose experience in the use of X-rays has been extensive, states in a paper in the treatment of skin and glandular disease that X-rays has a stimulating effect when applied in small doses and a destructive action in large doses. The dosage of no other therapeutic agent, therefore, is more important. The rays should be used as carefully as strychnine or any other poisonous drug. In small doses the rays accelerate the processes of nutrition and in this way, aid in the healing of unhealthy ulcers. In many cases time is saved by using high frequency currents or Finsen light in connection with the X-rays. The irritation and trophic changes produced by the X-ray, are deeper than those produced by stimulating drugs. He has treated twenty-seven cases of lupus vulgaris and two of lupus erythematosus. Twenty of the cases of lupus were cured, four improved and one of the lupus erythematosus cured and the other improved. Four of the cases of lupus vulgaris had a relapse or a recurrence in which the X-rays were again effective. Each of the cases in which a relapse occurred, stopped treatment as soon as the visible signs of the disease disappeared. Most of his cases were extensive and of long duration and could not be treated with Finsen light. He has been able to so improve his technique that one half of the treatments now are effective.

Of primary epithelioma he has treated thirteen cases, that had no operative interference. Nine of these are cured, two improved and two still under treatment. A permanent cure cannot be expected in the latter, as the disease is very extensive.

Nine cases of carcinoma of the neck involving the glands, which started as epithelioma of the lower lip, were treated. In each of these the epithelioma had been removed by the knife and there was a recurrence and the case referred for X-ray treatment. All these were hopeless from a surgical standpoint. At present, one case is apparently cured. Not one of these case would probably have recurred if X-ray had been employed after the removal of the epithelioma by the knife and a sufficient amount of radiation been given to destroy the remaining foci.

Excellent results have been obtained in tubercular glands by the X-rays. The same is true in tubercular sinuses. Seven cases of the former were treated with five cures, one is still under treatment and almost well, and one discontinued after a short time with but little improvement.

Obstinate cases of acne and chronic eczema respond to this treatment when all other forms of treatment have proved ineffective.

Out of twenty-four cases of carcinoma of the breast, all were favorably influenced by the rays, excepting one, sixteen of these have been operated upon and a recurrence taken place when they came under X-ray treatment. Six cases were considered hopeless and only inhibitory action expected by the physicians referring them. Two of the other cases which had never been operated upon were in such a condition that the surgeon had refused to operate. Out of the twenty-four cases treated therefore, there were only six in which much could be expected. Up to the present time, eight have died, of two trace has been lost, and the other fourteen are living. Seven are symptomatically cured, three are under treatment and are rapidly improving, and the other four are gradually becoming weaker. Several of these have been well for over three years, but this is too short a time to say that there will be no recurrence.

His conclusions are, 1. Technique and judgment are largely accountable for both successful and unsuccessful results. 2. In the treatment of lupus, epithelioma, carcinoma, acne, eczema and tuberculous glands, X-ray ranks an excellent remedy. 3. In most cases of carcinoma, the combination of X-ray and surgery offers the best chance of recovery.

OPHTHALMOLOGY AND OTOLOGY.

Under the charge of G. STERLING RYERSON, M.D., C.M., Professor of Ophthalmology and Otolaryngology, Medical Faculty, University of Toronto.

THE TREATMENT OF EARACHE.

In the *Brooklyn Medical Journal*, December, 1904, Dr. Lafferts A. McClelland discusses this old and ever important subject as follows:

The objects of this paper have been to call attention to the importance of symptoms referable to diseases of the ear in childhood and especially that most common affection, earache, for it is a notorious fact that this very troublesome affection receives scant attention even from men in our profession who honor themselves with the opinion of duty well done. Under aetiology, it may be stated as a general principle that any disparity from the equal aerial pressure within and without the tympanum tends towards this affection. Therefore, what can be more noteworthy than that the common coryza, so difficult of treatment in children is a contributory cause. Frequently the nose and post nasal space is filled with a yeast-like supply of gurgling mucous, which is being churned backward and forward during respiration. This is often aspirated into the Eustachian tube and tympanum. Then, again, we must not forget the impinging of adenoid tissue and other enlargements about Rosenmüller's fossa which gradually choke off the sufficiency of air entrance into the tube of the ear. The

pump-like action of an enlarged faucial tonsil will suck out, or aspirate, air at each piston-like motion during deglutition. Consequently the muscular structures concerned in the usual control of the air supply of the tympanum will lose tonicity. Again, at times the pharyngeal vault is filled with cobweb-like adhesions which often involve the openings of the Eustachian tubes. These hinder the action of the salpingopharyngeus muscle when, as they often are, found binding down the lips of the tube in all directions like little strands of dried catgut. Between the meshes made by such is ever present a catarrhal exudate viscid and persistent. Inspiration of water into the tubes during bathing is another cause common in the summer time. Nasal douches and the forcible sniffing of water into the nose are likewise fraught with similar danger. A violent blowing of the nose may be a factor. I believe that the inspiration of noxious stomachic and intestinal gases may also tend to produce this trouble.

Under pathology, let me be cursory, for here we have just that which would occur to an inflamed mucous membrane anywhere plus the results of emptying an aerated cavity of its air which occurs by deflation and absorption. We have a retraction of the membrane, due to its lack of aerial support. Soon it becomes congested. The mucous membrane swells and becomes oedematous and flabby, so that the walls of the affected area may become agglutinated. Then the transudation of serum follows. In acute catarrh of the middle ear the mucous membrane is alone involved, so that the fluid which accumulates is usually in the form of sero-mucus. I have not limited my observations too exclusively to the tympanum, for while the analogous, though not identical, affection which is known as catarrhal aural salpingitis might be considered distinctly, we will consider the combined affections which for our practical purposes are so closely correlated that their origin and tendencies are similar; for it is too common a fact that we may have an involvement from the orifice of the Eustachian tube all through the tube to its terminus and involving the tympanum too. The accumulation of fluid within the tympanum may be such as to distend the membrane so that its removal is urgently called for, if indeed the overdistention has not already been sufficient to produce a rupture of the drumhead.

In children the temperature usually is 102 degrees or 103 degrees and may run much higher. It may be ushered in by chills, vomiting or convulsions. Pain is excruciating and apt to be constant until the pressure is relieved. The piercing cries of the child with earache are to me peculiarly trying. Usually the infant places his hand to the affected ear. The membrane is diffusely hyperaemic and later may be seen to bulge so that the drumhead is forced low in the external auditory canal. After discharge takes place the canal is rapidly filled with a sero-mucus discharge

which can be seen to pulsate in rhythm with the arteries of the tympanum. The flow is often so great that the canal refills rapidly after cleansing. In adults, the pain is severe, but apparently less than in childhood. Prior to the exaggerated symptoms there is a feeling of stuffiness in the ears, muffled voice sounds, snapping and bubbling sounds due to air entering the fluid, pain, deafness, sometimes giddiness from labyrinthine pressure, mental hebetude is often marked prior to the distention.

Physical examination further shows besides the congestion, at the early stage, retraction of the membrana tympani, absence or displacement of the pearl or light spot, undue prominence of the hammer while later may be seen the fluid line and bulging of the tympanum.

Prognosis is usually good under appropriate treatment. This depends, however, largely on the character of the invasion, whether streptococcic, staphylococcic or pneumococcic.

Under treatment in the early stage there are two immediate considerations, viz., relieve the pain and abort further involvement. This may frequently be accomplished by thorough cleansing of the nose and post nasal space, preferably with cotton on probe, then the application of 1-10000 adrenal chloride solution on cotton when the cleanness and patency of the nasopharyngeal entrance will enhance the chance of re-establishing the intra-tubal and tympanic pressure by nature, or by the aid of Politzer bag. At times, when the membrane is retracted greatly, the Siegle's otoscope will withdraw the membrane's excessive impingement upon the ossicles and thus tend to replace the normal position. Liberal flushings of the canal with water of 110 degrees to 120 degrees delivered in a constant stream from the ordinary fountain syringe, using the smallest tip, which should be placed on the floor of the canal, but not pushed into it, will prove of much service in relieving the prevailing condition in mild cases. I believe that this simple procedure is not practiced at sufficiently regular and short intervals by many, who fail of the object in consequence. Half hourly intervals between the two quart irrigations is often indicated. Leeches to the tragus will often dissipate the agony of a suffering child so promptly that sleep will follow forthwith. A dressing to the ear may be found most comfortable and my preference is a large wad of warmed absorbent cotton packed loosely about it. A hot foot bath and a cathartic are often beneficial. Occasionally a hypodermic of morphia may be necessary.

Failing to abort the affection, sterilize the canal and incise the membrana tympani while the patient is under the influence of either nitrous oxide gas, ether, chloroform or a local anaesthetic, e.g. R. Alcohol, carbolic acid and cocaine (saturated solution), equal parts.

After operating, irrigate the canal with sterile warm saline solution or Thiersch's solution.

The common practice of insufflating boric acid into the canal may be fraught with danger owing to its tendency to cake and occlude the canal, thus interfering with drainage. Protect the tympanum from further infection by carefully dressing the canal with sterile gauze or cotton, being diligent in its frequent removal. Cleanse and redress very often, always remembering to dry the canal after irrigation. Follow up with inflation if this is indicated.

THE TREATMENT OF DULLNESS OF HEARING AND SUBJECTIVE NOISES IN THE EARS BY HIGH FREQUENCY CURRENTS

In the *Glasgow Medical Journal* of December 1904, this interesting subject was discussed by Drs. Galbraith, Connal and James R. Riddell. The case as selected for electrification were ones in which other methods of treatment had been used but found ineffectual. For instance, in chronic catarrh of the middle ear, catheterisation of the Eustachian tube or inflation of the middle ear had been tried. In nearly all, complaining of tinnitus aurium, drugs, such as bromides, hydrobromic acid or strychnine had been used ineffectually. In addition, any nasal defect which might have an influence on the aural condition was rectified. If recognized methods of treatment failed to effect any improvement in hearing or lessen the tinnitus, these patients were sent to Dr. Riddell for electricity. In all, forty patients were treated, but, final results could not be obtained in eight of these, leaving thirty-two cases to report. Notes were taken of the hearing distance with the watch and the tuning fork reactions. These were carefully checked after the treatment had been discontinued.

1. Chronic dry catarrh of the middle ear with labyrinthine involvement (6 patients). No improvement in any of them, but two patients thought that the noise had decreased.

2. Chronic dry catarrh of the middle ear without marked labyrinthine involvement (14 cases). Ten of these had tinnitus, eight reported improvement. In one case the noise disappeared altogether. In two cases there was some improvement of hearing.

3. Post suppurative conditions (5 cases). Five had tinnitus and four reported improvement.

4. Sclerosis of middle ear (5 cases). All showed improvement markedly so in three and slight in two. In one of these, who had persistent and loud tinnitus for four years, there has been no noise for the last four months.

One case of primary disease of internal ear and one of tinnitus, without deafness, derived no benefit from treatment.

The treatment of diseases of the ear by high frequency currents may be carried out in various ways. The patient may be treated by general

electrification or local application of the currents, but it must be remembered that local applications have a general effect.

Local applications may be applied as follows :

1. By means of the effluve taken from the resonator applied to the side of the head. The multiple electrode is held as near the patient as possible without producing sparking.

2. By means of condenser electrodes, which are attached to each end of the solenoid, and introduced into the external auditory canal.

3. By metal electrodes, placing one against another, that is applying the currents "by derivation." This method is apt to be painful unless carefully done.

It has been shown by D'Arsonval and others that high frequency currents have a profound effect on nutrition generally. Under their influence there is a great increase of the secretions, and in the output of heat. If the benefits derived depend on these properties, then the proper way of applying treatment would be by general methods. There may, however, be other explanations. There is a great alteration in the circulation produced by the currents, not only in the general arterial tension, which is first lowered, then raised, and remains above the normal for a considerable time, but there is a marked local effect, the capillaries being greatly dilated.

There is another possible explanation, namely, there may be a fine mechanical vibration set up by the passage of the current.

In connection with the supposed germicidal effect of this form of electricity, it has been suggested that the cultures are rendered sterile by the mechanical vibration set up in the media. On account of these properties—alteration of local blood supply and mechanical vibration—local treatment may be expected to be more useful than general.

LARYNGOLOGY AND RHINOLOGY.

Under the charge of PERRY G. GOLDSMITH, M.D., Belleville. Fellow of the British Laryngological, Rhinological and Otological Society.

THE ETIOLOGY, TREATMENT AND PROGNOSIS OF INNOCENT LARYNGEAL GROWTHS.

Dundas Grant, *Journal Laryngology*, in introducing this subject, at the recent annual meeting of the British Medical Association, confined his remarks to the non-malignant growths found in the interior of the larynx. The etiology of these growths is very often veiled in obscurity and, in many cases, are so closely related to inflammatory products that

they cannot be distinguished from them. Grant prefers to describe most of the small polypoid growths on the vocal cords as vocal cord hypertrophies and not fibromata. He says in general the causes of new growths in the larynx are those of irritation. Among those are wrong use of voice and irritating vapours, a dusty atmosphere (blackboard chalk in case of teachers), excess of tobacco smoke (especially by inhalation), nasal obstruction leading to mouth breathing, or purulent nasal discharges inhaled into the larynx. Syphilis may produce chronic inflammatory changes, predisposing to new growth development; and tubercle bacilli, as well as accompanying micrococci, are also capable of exciting the growth of papillomata.

Treatment is not necessarily always operative. The avoidance of exciting and predisposing causes, complete silence or limitation of voice to a whisper for several months, is sometimes sufficient in cases of very small nodules due to over-use or misuse of the voice. Laughing must be absolutely prohibited or prevented. Avoidance of smoking and smoky or dusty atmosphere, moderation or abstinence in regard to alcohol, and other causes of gastro-hepatic disturbance, are also valuable prophylactic and therapeutic factors. The correction of errors of voice production is of vital importance. Vocal exercises, after Holbrook Curtis' method, are very valuable in suitable cases. Various astringent applications may also be of value. Grant has had some excellent results in cases of small growths by using the galvano-cantery point, and also finds it of value to cause the disappearance of any small pieces remaining after the use of forceps.

THE TREATMENT OF DIPHTHERIA WITH SPECIAL REFERENCE TO THE DOSAGE OF ANTITOXINE.

While there is practical unanimity among medical men as to the value of antitoxine, there seems to be a hesitancy among some to use large doses, thinking probably the small doses are sufficient. Voelker, *Clinical Journal*, October 12, 1904, summarises his conclusions as to the use of antitoxine as follows: (1) It should be used in every case of diphtheria, whether mild or severe; (2) in cases of faucial diphtheria, use 3,000 units; (3) in nasal diphtheria use 6,000 to 9,000 units at once; in laryngeal diphtheria use 6,000 units, and repeat the dose within twenty-four hours if the symptoms of obstruction are not diminishing; (4) when symptoms call for intubation or tracheotomy, use 6,000 units at once, and repeat the

dose within twenty-four hours if there is not a distinct improvement; (5) in cases of faucial diphtheria, if the membrane does not show signs of separating after twenty-four hours, repeat the injection; (6) the injection should be made with antiseptic precautions into the subcutaneous tissue of the abdominal wall.

DISEASES OF THE MAXILLARY ANTRUM, THEIR DIAGNOSIS AND TREATMENT.

Emil Mayer, *Laryngoscope*, December 1904, in a very practical paper on this subject, in which he introduces a special form of wash bottle and curved canulæ for irrigating the antrum through the natural opening, arrives at the following conclusions:—

1. The diagnosis is readily made when all classical symptoms are present.
2. The absence of pus in the nose does not exclude antral disease.
3. Pain; long lasting, directly over the antrum, should be an added factor in the diagnosis.
4. Transillumination test is corroborative.
5. The washing out by means of the natural opening is difficult of accomplishment, because of the lack of proper drainage, and is applicable to the acute conditions only.
6. Irrigation by means of a properly made wash-bottle, whose force can be readily controlled, is of very great help in the treatment.

ACUTE SINUSITIS IN CHILDREN.

Massei, *Archivii Italiani di Laringologia*, October, 1904. The author points out that contrary to the general opinion, acute maxillary sinusitis is not so rare in children of five years. The article is limited to the discussion of sinusitis of the antrum and of the frontal sinus. The most common cause is coryza. The easy communication between the antrum and the nose permits of the extension of inflammation and the entrance of organisms as the pneumococcus, streptococcus, staphylococcus, colon bacillus, influenza bacillus, etc. The disease may follow diphtheria, scarlet fever, measles, etc. Exceptionally a bad tooth acts as an exciting cause. The pathological anatomy consists of a serous infiltration or of round cells without notable destruction of the epithelial layer. The purely serous exudate is an exception and when it does occur may form a cyst. Resolution is the rule. If in the course of an acute coryza, an infectious disease or influenza, a child complains of pain at some point in the face, an acute sinusitis must be thought of. Examination of the nose shows pus in variable quantity and foetid. The third symptom is fever. Relapses are common.

PROVINCE OF QUEBEC NEWS

Conducted by MALCOLM MacKAY, B.A., M.D., Windsor Mills.

At the Montreal Medico-Chirurgical Society a very interesting evening was devoted to the discussion of actinomycosis. Dr. Bell began by giving a very complete paper upon nine cases which had been under his charge, in which the diagnosis had been confirmed by bacteriological methods, mentioning three other cases in which he was satisfied that the condition was present, but which were not confirmed. Dr. Quam followed with a report chiefly upon the pathological conditions, and Dr. Keenan spoke of the surgical pathology and methods adopted in confirming the diagnosis. Dr. W. F. Hamilton and Dr. Chipman took up the medical and gynaecological aspect of the cases. Drs. Nichols and Archibald added much to the success of the evening by their able remarks during the discussion which followed.

Drs. England and Richardson showed a living case of fracture of the skull and a pathological specimen of sarcoma of the omentum. Dr. W. F. Hamilton read a paper on lead-poisoning with a summary of thirty cases. Dr. Hamilton, who has devoted some time to this subject during the past year, pointed out among other things the peculiar blood changes found in the condition.

The regular meeting of the district of St. Francis Medical Association was held on January 11th in Sherbrooke with Dr. Austin in the chair.

The first business taken up was in reference to a letter from the President of the Medical Protective Association, which stated that local provincial executives were being appointed throughout Canada, in order to facilitate the work, and that Drs. Buller, Thomas and Park had been appointed for the Province of Quebec. It was thought that this measure was necessary in order to conduct the movement in a business-like manner. The fact that the St. Francis Medical Association originated the scheme was mentioned, and it was requested that all new members should follow the example of the older men and join the association. The secretary then read a communication from the secretary of the Canadian Medical Association regarding the proposed change in the British Medical Act of 1858, which prevents colonial graduates from holding positions in the British Army, Navy and Civil Service. Lieut.-General Laurie is about to bring the question before the Imperial Parliament for the second time, and propose the acceptance of colonial degrees. The society passed a resolution hoping that the proposed amendment might be carried and thanking Lieut.-General Laurie for his interest in the matter.

Dr. Farwell read a very practical paper on mastoid disease. He took up the question from the standpoint of the general practitioner and spoke of the methods of dealing with the condition from the simple application of ice in early mild cases, to the complete removal of the bone in severe infections.

Dr. Camirand reported a case of a boy, aged seven, with a testicle situated in the inguinal canal. At operation the testicle was found to be normal with its tunica and membrane and cord intact.

Dr. Blackford reported a case of pneumonia with pyæmia of the elbow and shoulder joints as well as pus in the bursal sack of the hip joint. The patient was but a year old and recovered, after incision of the foci, with good use of the joints.

Dr. Mackay reported a case of Little's disease in a child at six years. It had been a seven months pregnancy and the child weighed less than three pounds at birth. Development was slow but the mental functions were fairly good. A very marked spastic paraplegia was present, the arms not being involved. After three months of massage and graduated exercises some definite improvement was noticed.

Dr. Brown related a remarkable case in which within six hours of beginning treatment for what appeared to be a simple catarrhal jaundice the patient became maniacal. The jaundice increased to such an extent that bile pigment could be rubbed off any part of the body, and the patient died within 48 hours without any return of consciousness. No post-mortem could be obtained.

Dr. Bachand reported a case of albuminuric retinitis where the patient was blind of one eye without knowing it, and where the kidney lesion was first diagnosed by the retinal condition, improvement had followed treatment for Bright's disease.

The election of officers for the Montreal League for the Prevention of Tuberculosis resulted as follows: President, Sir George Drummond; vice-presidents, Sir William Hingston, Mr. G. B. Burland, Mr. J. Reid Wilson, Hon. Senator Beique, Mr. E. S. Clouston; chairman executive committee, Dr. Lachapelle; chairman publication committee, Dr. Adami; chairman finance committee, Mr. G. C. Holden; chairman investigation committee, Mr. W. I. Stethem; convenor ladies' committee, Lady Hingston.

Dr. J. A. Riches, who has been for two years secretary of the league, presented his resignation, which the members very reluctantly received. As they still hope to retain Dr. Riches' supervision of the work, no successor was appointed, and it is likely that one or more assistants will be appointed for Dr. Riches if he retains office.

Dr. Roddick requested that he be relieved of duty as chairman of the Board of Management as all his spare time will be taken up now in the interests of the Alexandra Hospital, of which he is president. He suggested that the committee consider the appointment of a business man rather than a physician to this chairmanship.

The publication committee was authorized to print an annual report of the league's work.

The league is making good progress and much is being done to curtail the ravages of consumption in the city.

The president of the Montreal General Hospital has announced the receipt of a cheque for \$10,000 from Mr. Robert Reford for the purpose of increasing the endowment fund, the addition of a new ward, or towards the erection of a new out-door department. The governors have full authority to dispose of the gift as they see fit.

A circular has been issued by the Board of Management of the Western General Hospital, Montreal, with a view to raising sufficient funds to clear the institution of a debt of \$10,000. During the past five years the work of the hospital has greatly increased, and while in 1898 the admissions were 294, in 1903 they reached 600. In the out-door department the consultations rose from 2,169 to 7,560. This expansion of the medical work, together with the rise in wages and the higher cost of supplies generally, has called for an increased annual expenditure, which with careful management has been covered. The institution, however, burdened with an old debt of \$10,000 nearly half of which is made up of outstanding accounts. This debt is not only a continual source of annoyance and discouragement to the treasurer, but greatly embarrasses and hampers the work of the executive. It has been decided to make an earnest effort to wipe off this indebtedness. The response by the public to this appeal has been very encouraging and the subscriptions are being reported in the daily press.

The annual banquet of the students of Bishop's Medical College was a very successful function.

The new maternity hospital in Montreal is nearing completion. It will cost \$100,000 and furnish accommodation for sixty beds. It is built of pressed brick. There will be a training school for nurses in connection with this hospital.

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EDITORIAL

PROFESSOR OSLER'S VISIT TO TORONTO.

Professor Osler is always a welcome guest among medical men wherever the English language is spoken. Indeed, his reputation has spread far beyond the medical profession and is widely and favorably known to the general public. All this is as it ought to be and is the result of merit built upon the foundation stones of honesty of purpose and hard work. Professor Osler is a fine fulfilment of Ruskin's definition of genius as consisting in a capacity for work.

Dean and Mrs. Reeve gave an At Home, Wednesday evening, ^{Jan. 1904} 27th, in the medical buildings, in honor of Professor Osler. The function was very largely attended by the medical profession.

On the afternoon of 28th, Professor Osler opened the building in Queen's Park to be devoted to uses of the Ontario ^{Medical} Association. On that occasion he gave some excellent advice. He urged that professional jealousies should cease and that all should unite in raising the standard of the medical profession socially and educationally. He strongly discountenanced listening to the gossip of patients which often created much ill-feeling. He said that "Never believe what you hear against your brother practitioner, not even if you know it to be true." He referred to the ill will that was formerly too common among teachers of medicine. "In heaven's name what can we expect from young men taught under such conditions?" With regard to the value of study, the observation of cases and the association with each other he said, "Years do not necessarily bring experience. They may bring sterility, for there are many who do not gain in intelligence or ability with the passing years, and all of us know of men who, the older they get, the worse doctors they become." He urged that an effort be made to secure the manuscripts and records of the older physicians, as they contained much of value regarding the early history of the profession in this province. He spoke of the nobility of the medical profession and the high ideals of the ancient Greek physicians. As Professor Goldwin Smith once remarked, "The angel of mercy has accompanied the medical profession throughout the ages, and there were no persecutions to mar its history."

In the evening, Dr. A. McPhedran gave an At Home to the medical profession of Toronto in honor of Professor Osler.

Professor Osler was the guest of the Canadian Club at its one o'clock luncheon. The attendance of club members and guests was very large. He delivered a very eloquent and able address, referring to our relationships with the States, Great Britain and our duties to ourselves. Throughout his address there was the clear note of Imperialism. With regard to ourselves it was the duty of all to aim for a strong physical people, an intellectual people—remarking that “brains come hard and they come high,” and a moral, virtuous people. He made an eloquent appeal for that same spirit of tolerance in public life that he has so frequently urged among medical men.

“The way is long and tedious by precept, but brief and effectual by example,” said Seneca. Professor Osler has been a teacher by example. His work has been an embodiment of industry and honesty; and, as the reward of these he has been called to fill the highest medical position in the British Empire. We feel sure he will never forget his own Canada, and will ever say, in the words of Horace, “For me no portion of the earth smiles so sweetly.”

THE TENDENCIES IN THE PRACTICE OF MEDICINE.

There are not a few who claim that the medical profession is the noblest of all. It would also be easy to show that it is the most ancient. The profession of medicine is always reaching forward after something new and useful, something that will prove useful to man, something that will lessen pain and lengthen life, something that will add to the sum total of human happiness. “Man in nothing comes nearer to the gods than in giving health to his fellow mortals.”

One of the most manifest features of medical education at the present day, is the enormous attention that is being paid to the scientific side of the doctor's training. His work in the laboratory claims a large share of his time. The chemistry of man is now a most important study. Bacteriology and all that goes with it has become a major feature of the college curriculum. Twenty years ago but little was said about contagium vivum. It is quite different now, and some of our most potent remedies come through the agency of disease producing germs. All this has made preventive medicine a true science. Yellow fever, the plague, consumption, cholera, etc., can no longer hide their footsteps; for small as are their causative organisms, nevertheless they leave their marks on the pathway they have trod.

But the very knowledge that laid the foundation for the true science of preventive medicine, also laid the foundation for prevention of disease

in surgery. Keep the staphylococci and the streptococci out of your wounds and they will heal rapidly and painlessly, thereby averting suffering and saving life. But this, again, opens up a new field. Disease is attacked by the surgeon in every portion of the body. In doing so he not only cures, but prevents. Sepsis has now lost its terrors. The maternity hospital is no longer closed because of puerperal septicæmia, nor is the surgical ward cursed by hospital gangrene.

But all this effort after the scientific side of our profession has too often overshadowed the æsthetic side. There is an art in medicine as well as a science. The doctor should be a gentleman in word and act, and many an able physician has been handicapped by a faulty manner. The late Milner Fothergill once said that, "when visiting even the most humble cottage never to forget the old lady sitting in the corner."

There is another feature in the practice of medicine that must not be forgotten. There are at the present moment too many practising physicians, and the proportion to the population is steadily increasing. In the United States there are about 100,000 regular doctors. To this number about 5,000 are added each year. This far exceeds the reduction due to deaths in the profession. It requires about 1,000 people to yield a fair practice to each physician. This ratio is steadily decreasing, and with this decrease in the number of persons to each doctor the average income must fall.

But in all the cities, large hospitals are being erected. There is a marked tendency in many of these to give advice and medicine free. This, of course, pauperizes the people in this respect. In the large cities there are usually one or more medical colleges. To make these efficient there must be found clinical material. To get this clinical material is often a serious problem and, consequently, the hospitals in connection with these colleges offer free or very cheap beds to patients, and free or nominally free treatment. This induces patients to come from a distance and therefore deprives the local practitioners of their fees. While it is not our desire to say one word against these colleges nor the hospitals in connection with them, it is only reasonable to expect that they will be so managed as not to rob the very men they are graduating from year to year.

The medical profession has paid too little attention to mental influences, and more must be given to this side of the physician's work in future. A man is not all mind, neither is he all body. Fright has been known to produce exophthalmic goitre and joy to cause sudden death. Fear will cause diaphoresis and anxiety diuresis. The secretions and excretions may be lessened, increased or very markedly modified by the emotions. "A physician's exclusive duty should be to study men as men, to master the marvelous intricacies and dependencies of spirit, soul and

body, and to be sufficiently skilled to know when and how to call on the one to help the other, and with such men the profession would be complete." To these words of Sir James Paget let us add those of Sir Benjamin Brodie: "It is the business of every practitioner of medicine to study not only the influence of the mind upon the body, but also that of the body upon the mind." The neglect of these things have been largely responsible for the growth of Christian science and other fads.

One more thought. Every advance in medical science tends to do away with the doctor's occupation. Preventive medicine is reducing the death rate, lengthening life, and lessening the total amount of sickness. Mr. Wade once said in his presidential address before the British Medical Association that "The time might come when the principal duties of the profession would be to attend to accidents and injuries, to wait upon the aged, and to look after the conditions incidental to parturition."

TOXAEMIA AND INFECTIONS AS CAUSES OF INSANITY.

The blood is the source of nutrition to the brain and the channel of exit for its waste material. The bearings of poisons in the blood, as causes of insanity, is of comparatively recent date. These toxins may be developed in the gastrointestinal tract, or by bacteria in the system, or result from the retention of waste products because of faulty elimination.

In not a few cases of brain disorders, careful enquiry will reveal the fact that there has existed considerable disturbance in the digestive organs, accompanied by fermentation and putrefactive processes. As a result of this there may be considerable change in the urine, indicated by the presence of urates, phosphates, oxalates, xanthin, indican, and abnormal specific gravity.

Each neurone is an entity and intimately related to the vascular and lymph channels which surround it. These neurones are very sensitive to their surroundings. The quality of the blood and lymph acts upon the nerve elements, and their health or disease determined thereby. In this way the nutrition of the neurones is affected, and, when perverted functional nervous disorders follow, or worse, some organic change in the nerve elements sets in. If there be any hereditary tendency the danger is increased. Toxines may be introduced from without, exogenous, or developed within the body, endogenous. The nerve elements affected and the nature of the poison account for the phenomena, as to their clinical features of excitability or depression.

It is well known that many neuroses arise from enteroptosis, hepatic derangements, chronic constipation, etc. In all these cases the utmost care should be devoted to the digestive organs. In these cases lavage, laxatives, intestinal antiseptics, and the regulation of diet must receive

due attention. Nearly all cases of acute insanity should be treated on the eliminative plan. Just here comes in the great value of the open air treatment. In no other way can so much be done for an acute maniac or one suffering with delirium tremens, as by keeping them in the open air.

It has been observed that alcohol tends to produce insanity with criminal tendencies, lead causes mental derangement of the parietic type, and the toxins of febrile diseases some form of acute mania. It must also be borne in mind that a person who easily becomes delirious from toxins in the blood, has usually some inherent instability of the nervous system, and is liable to break down again on slight provocation.

The lesson from all this is that the insane should be subjected to careful study as to the condition of all their organs and functions. For the treatment of the early period of insanity, as urged by many competent authorities, there should be special hospital pavilions with abundance of ground and facilities for the open air treatment. A hammock swung between two trees will cure more cases of insomnia than our best narcotics. While purgatives, suitable nourishment, and exercise in the open air will bring back reason to more maniacs than the most elaborate system of asylum rooms.

It is our departure from our walk with nature that breeds mental derangement and a return to nature's methods is the best way to recover the lost balance of thought.

BLOOD PRESSURE.

There are few subjects that should interest the physician and surgeon more than that of the blood pressure, and the causes for its variation. The most important function of the vascular system is the maintenance of that degree of blood pressure required in the several parts of the body. Alteration in the proper blood pressure gives rise to some of the most marked disorders to which the body is heir. In speaking of blood pressure the arteries are usually in mind, as it is not often that there is much change in the degree of pressure or tension in the veins. The maintenance of circulation is largely one of the adjustment of tension so as to distribute the blood from the vessels where it is stored to the parts where it is required.

As an example of this adjustment of the amount of blood in different portions of the body take the effects of ordinary exercise. The first effect of both muscular and mental effort is to raise arterial pressure; but after a time the pressure falls again to normal. While this state of increased pressure continues, there is a larger amount of blood in the arteries than usual. This extra amount of blood is obtained from the blood stored in

the abdominal veins. There is here a well marked reciprocation between the systemic arterial and the abdominal venous blood supply. Exercise removes the blood from the digestive organs, while the taking of food and the active performance of digestion withdraws blood from the general arterial circulation. This accounts for the depressed feelings which active exercise causes after eating, and the coldness that follows the taking of food after exercise. Over-eaters are usually lethargic, while the mental workers are frequently dyspeptic. The arterial system is a blood-reservoir, the area of which is constantly increasing with distance from the heart. This reservoir must be kept full, and as exercise dilates the peripheral vessels the heart must work with more energy to fill these vessels. It must also be borne in mind that the blood is contained with a system of tubes a considerable portion of whose walls are composed of muscular tissue.

There is a group of low pressure cases, such as are met with in valvular diseases, and in diseases of the muscular substance of the heart. High tension cases are caused by some agent acting upon the arterioles, giving rise to a constricted condition of them, and forcing the heart to do extra work to supply blood to the tissues. This agency is usually a toxæmia. There is still a third group of cases, the terminal low-tension cases; or the final low-tension stage, of those cases that present, in their early history, a condition of high-blood pressure.

Turning to the low-pressure cases, it should be noted that whatever weakens the pumping power of the heart may cause them. Disease in the muscular walls of the heart, such as myocarditis, or degeneration in the muscle tissue, any form of valvular disorder, when compensation fails, and dilatation from cardiac strain, are competent causes for primary low-tension conditions. This low-tension state must be regarded as pathologic as soon as the blood pressure is low enough to deprive the tissues of their proper blood supply.

The treatment of these cases is of much importance. When the low-tension is due to a weakness in the heart, without any discoverable arterial or valvular disease, the indications are to strengthen the heart by tonics, exercise and proper food.

In cases of low-tension, due to valvular disease, much care is required and the management of these cases naturally falls into three periods—the early period, the period of compensation, and the period of failing compensation. In the first period of valvular disease, the main features in the treatment are prolonged rest and the gradual return to an active life. By these means the valves are enabled to make the nearest approach to recovery and the heart to acquire the requisite hypertrophy to maintain compensation. The restrictions on the patient's movements must be kept in force until objective signs and subjective symptoms have disappeared.

When the restoration is slow, digitalis and other cardiac tonics may be employed.

When compensation has been established, the patient must live in a very guarded manner. Every form of excess must be scrupulously avoided, and physical and mental exertion regulated with great care. This quiet life is required for two reasons, the avoidance of annoying symptoms and the production of undue hypertrophy. The occasional administration of the iodides have been recommended as a means of restraining the tendency to over hypertrophy.

In the later period of these low-pressure cases, when compensation has broken down and there may be more or less oedema, the main features of the treatment are rest, care of the digestive functions, cardiac tonics and eliminatives. These patients are also benefitted by being kept in the fresh air as much as possible. Late low-tension cases, caused by degeneration in the hypertrophied heart, or from an overly fat-laden heart, are treated on the general principles arising out of the causative conditions.

THE PUBLIC AND THE DOCTOR.

In the first place the family doctor has often a good deal to contend with in the case of the "irregular practitioners." Some of these are quite harmless, while others are very dangerous—not to the doctor, but to the patient. Christian Science and Osteopathy rank among those most frequently met with. To these fads the doctor must yield no countenance. The fundamental fact in Christian Science is that many diseases get well if left alone, while in Osteopathy there is nothing other than the application of massage to cases suitable and unsuitable alike. It behooves the doctor, however, to make himself familiar with these fads in order that he may intelligently deal with them when they are brought under his notice.

The doctor should disavow any special designation. He should neither be a "homoeopath," nor an "electro-path," nor an "allopath." He should stand up firmly for the idea that the whole practice of medicine, surgery and obstetrics is scientific, and that it is founded upon investigation, study, reasoning, and experiment. He should disclaim any such tenets as that "like cures like," that "infinitesimal doses are sufficient," or that there are "schools" in medicine. All regular physicians should discard the name "allopath," except as having a historical meaning. When homoeopathy came into existence, its founders called those who rejected their wild claims, "allopaths," or those of the "other" pathology. The word "allopathy" has as little place or meaning in scientific medicine as would the word "thaumaturgy."

The public have a rough-and-ready way of sizing up the doctor; and public judgment is often correct. The public respects a gentleman, even the very poorest of its members; but, while this is true, they quickly point out, for a due share of asperse criticism, the doctor who is made-up or over does a good thing and appears unnatural. The public, as a rule, regard unfavorably the doctor who goes to extremes on religion, temperance, politics, new methods of treatment etc. But the sentiment of the day is very strongly set against the doctor who drinks too much, and very few families would now call in any doctor of whom it could be said "he gets drunk." To gain the greatest amount of confidence in any community, the doctor should be a man of sound common sense, should avoid extremes, and should be of unswerving integrity. These are qualities that the fool, the faddist and the dishonest are compelled to respect, while the other elements of the community expect them in the doctor. People generally do not take to a boisterous, loud-mouthed physician, and one who blows his own horn, or does not keep the secrets of his patients, or is always running down other doctors and adversely criticizing people.

The doctor's fate depends very much upon the same conditions as that of other business men. He should embrace all proper means of making himself known and appreciated. He should place a proper value upon his services and give his patients to understand that he expects these to be paid for. The doctor should be a clean, tidy man in a neat business dress. He should avoid, on the one hand foolish, and, on the other, all careless habits.

The doctor should be a studious man. He should avail himself of every means at his disposal of acquiring fresh knowledge and keeping himself up to date on all the subjects coming within the range of his practice. Recent editions of good books and some of the best medical journals should be carefully read, always bearing in his mind the words of an eminent professor that the next best thing to coming in contact with great men, is to read what they say. One of the most important means of gaining information is through the channel of the medical society. Professor Osler once aptly said that it enables us to take stock of our knowledge, and get rid of old and out-of-date ideas, acquiring in their stead new and bright ones.

The late Dr. W. T. Aikens once said that the only really brilliant thing after all was thoroughness. Sir William Gull said to his students often that more mistakes were made from not observing than from not knowing. This is very true. A short time ago, Professor Osler said to a number of Toronto's doctors that unless we observe the phenomena of disease our experience will do us no good; and, indeed, the longer we are

in practice the worse doctors we become without this habit of observation.

One last but all important point is this. The doctor should not engage in lodge practice. He should keep his services up in the estimation of the public, and this he cannot do through the lodge.

EYE-STRAIN IN MODERN LIFE.

Dr. George M. Gould, of Philadelphia, has written a good deal upon the effects of the errors of refraction on some noted persons. These articles have constituted his well-known "Biographic Clinics."

It may be that many are not able to follow Dr. Gould as far as he would wish to lead them, but this does not prove that he is not leading them in the right direction. His studies on the sufferings of Browning, Spencer, Carlyle, Darwin, Huxley, Parkman, Taine, Nietzsche, Beethoven, Wagner, De Quincey, Symonds, etc., are well calculated to make the medical profession think. And we suppose this is all Dr. Gould is concerned about; for he believes if the profession will only think about the matter, much of what he is contending for will be accepted.

We have seen some very adverse criticisms of Dr. Gould's views, and in journals of high standing. But books and articles are no wiser than the men who write them, and it is just possible that some of these unfavorable opinions came from the pens of those who had not given this subject much personal study. If so, then their opinions are of but little weight. But we have all known of opinions that were given in the most positive manner and backed up by many arguments, and that after all turned out to be quite erroneous.

Taking the cases of those studied by Dr. Gould, no other solution has yet been offered for their ill health than that suggested by him. It does seem strange that, with so many learned men in the medical profession, no theories have been brought to light to explain the case of Darwin, or Parkman, or any of the others. These persons were attended by eminent physicians who failed to discover any organic disease; and, in most cases, they lived to an advanced age, recovering from their distress, in many cases, as they advanced beyond mid-life, when the condition of eye-strain might pass off.

But most medical men are familiar with cases closely resembling the history of those studied by Dr. Gould, and whose symptoms were entirely, or very much, relieved by glasses. Here, then, we have concrete proof; and it does not seem very difficult to reason back from such instances to a case like that of Carlyle or Browning. We certainly think that Dr. Gould is making headway, the adverse critics notwithstanding to the contrary.

But all this does not worry Dr. Gould. He is fully aware of the fact that many of the great discoveries in science have been at first rejected, as witness Galvani, Galileo, Lebon, Jouffroy, Franklin, Ohm, DaGuerre, Newton, Young, Lamarck, McDowell, Pasteur, Lister and many others. But the truth must come.

The new ophthalmology is the application of the science of optics to the correction of errors of refraction, and the study of the varieties of refractive errors, as compared with the older ophthalmology of a study of the diseases of the eye. Dr. Gould holds that many boys become truants and criminals, and many a sewing girl betakes herself to vice because of eye-strain; and that many find their way into the asylums, the prisons, and Elmira through the gateway of astigmatism.

POISONING BY WOOD ALCOHOL.

Drs. Frank Buller, Professor of Ophthalmology, McGill, Montreal, and Casey A. Wood, Professor of Ophthalmology, University of Illinois, Chicago, have published jointly their cases of poisoning by wood alcohol. The authors are to be congratulated upon the results of their studies of this important question. Their report appears in a 32-page pamphlet, reprinted from the *Journal of the American Medical Association*.

They show that wood alcohol is dangerous when drunk, that its fumes may cause alcoholic poisoning, and that when rubbed into the skin serious results may follow. It is deadly poison, and the authors report 122 cases of death and 153 of blindness. They suggest that ethyl or grain alcohol should be employed in the arts and industries where wood alcohol is now employed. The ethyl alcohol could be rendered unfit for drinking by the addition of a little naphthalin. This is used in Britain as "methylated spirit," and, as a consequence, there are no cases of death or blindness there from methyl or wood alcohol.

The authors remark that wood alcohol is employed in the manufacture of many proprietary medicines, in such perfumes as Cologne and Florida waters, and liniments, witch hazel and bay rum. It is also used in the make-up of cheap whiskey, and many essences. It is thus a real source of danger to the public. The government should take steps to control the employment of methyl alcohol in all these articles or to prescribe their sale when it is used. It should be made a criminal offence to employ wood spirit in the manufacture of any extract, beverage, perfume, essence or liniment, since it is beyond doubt that its internal or external use may be followed by death or blindness.

It is a most heinous offence against the health of the people that anyone should be allowed to make and sell a proprietary medicine, a con-

siderable portion of which consists of this deadly spirit, wood alcohol. We have said before, and wish to emphasize it again, that there should be a public officer whose duty it would be to analyze such mixtures and report their composition and warn the people regarding the dangers of their use. The question of vested rights or personal liberty must not stand in the way for a single moment when the people's health and lives are at stake. Justitia must be blind to all else but the welfare of the public.

THE GIVING DAYS.

We hope these blessed days of giving have come to stay; not only in Toronto, but throughout the entire province. Mr. Cawthra Mulock gave \$100,000 to aid the clinical work of the medical faculty of the University of Toronto. We learn that Mr. George Gooderham is going to give a handsome donation to the Toronto General Hospital for the same purpose. We hope there are others to follow.

But we hope that this sort of thing may become general. Why should some wealthy persons, living in Kingston, not give a few hundred thousand dollars to the Kingston Hospital and medical college? Then, again, there is money going to waste in London; and some people have so much of it that they do not know how to use it. Let them turn in and take an interest in the medical college and hospital in London. Get proud of, and keep proud of, their own city. Why should the wealthy people, in and around Kingston and London, allow the wealthy people of Toronto and Montreal to out-step them? There is only one reason—they have not yet got the right sort of pride in their own cities.

It has often been said that the wealthy people of Toronto do not immortalize themselves by their donations. Well, we hope that this statement may prove less true in the future than in the past. The signs of the times are that a more liberal spirit is abroad, and that the long lost magic words, "Open sesame," have been found at last.

DECLINE IN THE DEATH RATE FROM CONSUMPTION.

In a recent issue of the *Boston Medical and Surgical Journal*, Dr. Miller discusses the above subject. His observations are very encouraging and hopeful. In the United States the death rate was, in 1890, 245 per 100,000, while in 1900 it was only 187. In England in the same period, it fell from 238 to 190; and in Prussia from 280 to 210 to the same unit of population.

The causes for this decrease in the death rate from consumption are to be found in the knowledge of the germ, the better sanitary conditions of

the people, and the establishment of sanitoria. This means to the United States an annual saving in life of over 40,000, to Britain of over 20,000, and to Germany of about 35,000.

The writer concludes his article with the following observations :

(1). Statistics of tuberculosis show conclusively a marked decrease in the death rate during the last twenty years. For the countries whose statistics were available, it is not too much to expect that tuberculosis will die out in this century.

(2). The most careful investigators are agreed that tuberculosis is directly communicable from one person to another. They consider the dried sputum a source of danger, but the spray from a coughing, sneezing patient in the last stages of consumption they consider a much greater source of danger. They consider a hospital for the consumptive poor when in the last stage to be a necessity if we are to prevent the spread of the disease most effectively.

(3). With proper precautions the danger of infection from a consumptive may be reduced to almost nothing.

BRITISH MEDICAL ACT (1858) AMENDMENT BILL.

Since the passing of the British Medical Act, 1858, very great advance has been made in medical education throughout the Empire, and especially in the self-governing colonies. This Bill provides that where the examinations and course of education at the principal colonial schools of medicine are in all respects the same as those practised in the United Kingdom and subject to the supervision of the General Medical Council, medical men from Greater Britain should, when proved to be properly qualified, be admissible to serve the Empire in the Naval and Military and Civil Services of the Crown.

Surgeons of the highest standing in Canada, and holding commissions from His Majesty in the militia, volunteered for service in South Africa, and a complete field hospital was offered by Canada, and in both cases the War Office refused to accept such service on the ground that it was contrary to the Medical Act of 1858 to permit a surgeon on the Colonial Register and colonially trained to attend professionally to British troops. The object of the amending Bill is to remove this disqualification.

We would commend to our readers the careful study of the Amendment of General Laurie. The amendment was introduced last session and will again be reintroduced this coming session of the Imperial Parliament, provided the medical men of the colonies think favorably of the amendment. We give the proposed amendment our hearty endorsement. It would have the effect of placing Canadian graduates on practically the

same footing as British graduates. This would be a genuine step towards true "Imperialism."

The following is the text of the proposed bill of General Laurie as introduced last session :

Be it enacted by the King's most Excellent Majesty, by and with the consent and advice of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows :

1. From and after the commencement of this Act the provisions of the Medical Act, 1858, shall be extended by adding to Schedule A of said Act the under-mentioned paragraph to be known as paragraph twelve.

"12. Doctor, or Bachelor, or Licentiate of Medicine, or Master in Surgery of any University or Medical School in the Empire at which the curriculum of studies and the examinations required to be passed by the undergraduates shall be accepted and recognized by the General Medical Council as equal in all respects to the requirements from students and candidates for degrees in the Institutions shown in paragraphs one to eleven of Schedule A."

2. This Act may be cited as the Medical Act, 1903.

THE THIRTY-EIGHTH ANNUAL MEETING OF THE CANADIAN MEDICAL ASSOCIATION.

The thirty-eighth annual meeting of the Canadian Medical Association will be held in Halifax, N. S., from the 22nd to the 25th of August, both days inclusive, 1905, under the presidency of Dr. John Stewart of that city. Recently there was held in Halifax a special meeting of the Medical Society of Nova Scotia, when there were present several members from the surrounding country near Halifax. It was decided that the Medical Society of Nova Scotia should act as hosts and entertainers of the Canadian Medical Association. Dr. G. Carleton Jones has resigned from the position of local secretary and the president, on the advice of his executive, has appointed Dr. J. R. Corston as local secretary, Dr. Jones having been appointed chairman of the General Committee of Arrangements. The address in surgery will be delivered by Mr. Francis Caird, of the Royal Infirmary, Edinburgh, and the address in Gynecology will be delivered by Dr. Howard A. Kelly, of Johns Hopkins, Baltimore. The title of his address will be "Cystitis in Women." Dr. J. W. Stirling, of Montreal, will deliver an address in Ophthalmology. In addition to this there will be addresses in Medicine and Pathology and Dr. A. J. McCosh, of New York, will also be asked to present a paper.

The general secretary is now in communication with the transportation companies as regards rates and an effort will be made to have transportation extended to Sydney, the Canadian Pittsburg, with return via Portland, Boston or New York. From the manner in which the Maritime medical men have taken hold of matters it is expected that the meeting in Halifax will be fully up to the best meeting yet held.

Any one desiring to present papers, present specimens, or make demonstrations should enter at an early date into communication with the general secretary, Dr. George Elliott, 203 Beverley St., Toronto.

TWENTY-FIFTH ANNUAL MEETING OF THE ONTARIO MEDICAL ASSOCIATION.

The annual meeting of the Ontario Medical Association will be held in Toronto, June 6th, 7th and 8th next, under the presidency of Dr. Wm. Burt, of Paris. Strong committees on papers and on arrangements have been appointed under the chairmanship respectively of Dr. A. Primrose and Mr. I. H. Cameron.

A considerable number of papers are already promised and in addition the committee is pleased to announce that they have received word from Dr. Albert Ochsner, of Chicago, accepting the invitation of the Association to present a paper in surgery.

The personnel of the two local committees is as follows:

Committee on Papers and Business—Drs. A. Primrose, chairman; N. A. Powell, J. F. W. Ross, A. A. Macdonald, Allan Baines, R. D. Rudolf, W. B. Thistle, R. A. Pyne, Clarence Starr, J. M. McCallum, W. H. Ellis, N. H. Beemer, and Price Brown.

Committee on Arrangements—Mr. I. H. Cameron, chairman; Drs. R. A. Reeve, A. H. Wright, G. A. Peters, J. A. Temple, W. J. Wagner, H. C. Scadding, H. T. Machell, Chas. Sheard, W. P. Caven, A. McPhedran, H. C. Parsons, B. L. Riordan, P. L. Scott, W. Goldie, G. B. Smith, and Hamilton.

PERSONAL AND NEWS ITEMS

Drs. A. R. Winram and R. B. Anderson have entered into practice in Winnipeg.

Dr. Campbell Meyers, of Toronto, has returned from a visit of some months to Europe.

Dr. H. C. Jamieson has taken over the medical practice of Dr. A. D. MacIntyre, of Glencoe.

Dr. T. H. Orton has returned to Guelph after four months' absence, and resumed his duties.

Dr. Dougald McBane has entered into partnership with Dr. W. F. VanBuskirk, of St. Thomas.

Drs. A. N. Worthington, M.P., and W. W. Lynch, Sherbrooke, have entered into a partnership.

Dr. John N. Johnston, of Lakefield, was married recently in Peterborough to Miss Mae McPherson.

Dr. Klotz, who some years ago practiced in Middleville, has now established himself there permanently.

Drs. R. M. Simpson and Halpenny have formed a partnership and have commenced practice in Winnipeg.

The marriage of Dr. S. C. Farrel, of Rat Portage, and Miss Naomi Borden, took place at Port Williams, N. S.

Dr. and Mrs. Edwin Seaborn, after their wedding trip to the Southern States, have located on Dundas Street, London.

Dr. Brefney O'Reilly was home from a trip to Hong Kong and spent the holiday season in Toronto with his parents.

Dr. Bertha Dymond, after spending two months in Britain, has resumed her practice at 66 Brunswick Avenue, Toronto.

Dr. D. G. Cameron, of Wallacetown, has been appointed house surgeon at the Hospital for Sick Children, College Street.

Dr. and Mrs. Bruce Smith, formerly of Brockville, have taken up residence for the winter at 412 Markham Street, Toronto.

Dr. Leslie R. N. Hess (Tor. '03), of Hamilton, has begun practice in the office recently occupied by Dr. Thomas Douglas in that city.

Dr. Frizzell, who practiced his profession in Kemble for a period of between three and four years, has opened an office in Owen Sound.

The marriage of Dr. R. N. Walsh, M.P. for Huntingdon, Que., to Miss A. W. Cunningham, took place Monday evening, January 9th.

Dr. A. P. Douglas, medical health officer of Winnipeg, attended the American Public Health Convention, held in Havana, Cuba, a short time ago.

Dr. John W. Cook, late of St. Michael's Hospital, Toronto, has located in Fort William, and has gone into partnership with Dr. A. D. Stewart.

Dr. Edward Richardson, of Sturgeon Falls, and Miss Mamie Behan, of Pembroke, were married two weeks ago in the Bishop's Palace, Pembroke.

The 50th anniversary of the marriage of Dr. Anson Buck and Keturah Adelaide Howell was celebrated on Tuesday, December 27th, at their home in Palermo.

The marriage took place in Tillsonburg on Monday, January 23rd, of Miss Florence Livingstone, of that town, to Dr. W. T. Williams, of St. Thomas.

Dr. O. S. Niemeier, of Annette Street, E., Toronto Junction, who is the latest arrival in the medical profession, lived formerly in Tavistock for eighteen years.

Dr. Fred S. Eaton, a recent graduate of Toronto University, has received an appointment as house surgeon for a term of a year and a half in a New York hospital.

Reference to the statistics of the Secretary of the Provincial Board of Health, show a decrease of 40 per cent. in the deaths from consumption in the last three years in Ontario.

The many friends of Dr. W. H. Johnston, of Fergus, will learn with regret that he has been very ill for some time. He was taken ill when making a visit to a patient. It is feared he may have to go to a warmer climate.

Dr. Edward Fahey, a graduate of Queen's, and a former resident of Kingston, was married quietly, January 5th, in Rochester, N.Y., to Miss Kathleen G. Joyce. Dr. and Mrs. Fahey left immediately afterwards for Duluth.

An interesting ceremony was performed at the residence of Mrs. Elizabeth Shore, 102 Charlotte Street, Winnipeg, January 11th, when her only daughter, E. Grace, was united in marriage to Dr. I. Herbert Davidson, of Manitou.

Eight members of the house staff of 1892-3, at Toronto General Hospital, had a pleasant reunion three weeks ago at the hospital and a dinner at the Toronto Club in the evening, at which Dr. Charles O'Reilly was the guest of honor. Among those present were: Drs. H. B. Anderson, A. A. Bruce, Fred Fenton, and H. C. Parsons, of Toronto; Dr. J. N. E. Brown, Dawson City; Dr. Middleboro, Owen Sound; Dr. A. S. Tilley, Bowmanville; Dr. H. J. Way, Chicago.

Dr. O'Reilly congratulated his hosts one and all on their great success during the past twelve years, and on their devotion to the honorable profession, four having taken English degrees and two the F.R.C.S. by examination after having spent a year in the Toronto General Hospital.

Since 1876 some 220 house surgeons have been on duty in the Toronto General Hospital for one year, and longer, and it is intended to inaugurate at once an "association of ex-house surgeons." The mortality has indeed been remarkably small, only eight of the 220 having died in 28 years.

The new pavilion for the Toronto Western Hospital, which furnishes accommodation for forty patients, is making rapid progress towards completion. It is intended in the spring to erect another building with accommodation for fifteen or twenty patients to be devoted to contagious cases, or such as require isolation.

Dr. Alfred Thompson, the new member for the Yukon, is a Nova Scotian by birth. He was born at Nine Mile River, Hants, in 1869. He was graduated an M.D., C.M., from Dalhousie in 1898, and joined the rush to the Yukon in April of the following year. He immediately began the practice of his profession in Dawson.

Dr. George A. Charlton, of McGill University, who has lately returned from Vienna, where he has been doing research work for the past year, has been appointed by the Northwest Government as pathologist and bacteriologist for the Northwest Territories. Dr. Charlton is at present visiting his aunt, Mrs. B. E. Charlton, 280 Bay Street south, Hamilton.

In the Muskoka Cottage Sanitarium, it was reported, the number of patients under treatment during the year was 218, rather more than for the previous year and much greater than any other year. The training school for nurses that had been established during the year had proven a success, and helped materially to strengthen the institution.

The annual banquet of the medical students of London, Ont., was a very successful affair. There were over two hundred persons present. In reply to the toast of the Medical Faculty, Dr. Moorehouse gave an excellent review of the progress of medical education in the province during the past 35 years, or since the establishment of the Medical Council.

Two Montreal boys, medical graduates of McGill University, have just been given important appointments by the Liverpool School of Tropical Medicine. They are Dr. McConnell, son of Dr. J. B. McConnell, Bishop Street, and Dr. Wolferstan Thomas. The two young doctors will go on expeditions to study tropical diseases. Dr. McConnell going to the West Coast of Africa and Dr. Thomas to the Amazon, in South Africa.

The most successful year in seven is the story revealed in the reports presented at the seventh annual meeting of the trustees of the National Sanitarium Association, which was held at the National Club on Saturday afternoon last. Sir William R. Meredith, the vice-president, was in the chair, and others present were Hon. George A. Cox, Mr. W. J. Gage, Mr. J. J. Crabbe, Mr. Hugh Blain, Mr Edward Gurney, Dr. N. A. Powell.

Dr. W. T. Williams, who has been practicing medicine in St. Thomas for some time past, sailed about the end of January for Nassau, Bahama, having received the appointment of government physician for the island of Inagua, Bahamas, with headquarters at Mathewtown. Dr. Williams' friends will be pleased to hear of his appointment and will wish him success in his new home.

OBITUARY.**REGINALD PERCY VIVIAN, M. D.**

Dr. Vivian died at his home in Barrie, December 8th, in his 30th year of age, from an attack of diphtheria. He was a graduate of the University of Toronto of the class of 1889.

DAVIDSON MACDONALD, M. D.

Dr. Macdonald died in Toronto, January 3rd, from an attack of acute dilatation of the heart following la grippe. He graduated in 1873 and went to Japan, as a medical missionary, where he was well known both as physician and missionary.

A. S. KIRKLAND, M. D.

The late Dr. Kirkland, of Collingwood, was born in Argyleshire, Scotland, in 1844. He was educated at the Toronto School of Medicine, and graduated in 1867. He practised in Nottawa, Mount Forest, Duntroon, and Collingwood. He was a man of much force of character.

CHARLTON SHAW, M. D.

Dr. Shaw, of Tupperville, died at his home on December 10th, last. He had returned the day before his death from St. Louis. Though not feeling well on his return, he made no special complaint, but the day following was seized with a severe attack of heart trouble and died suddenly.

ROBERT SOMERS, M. D.

Dr. Robert Somers died of pneumonia at Le Mars, Ia., where he had been practising medicine for several years. He had been ill only a few days. Dr. Somers was a graduate of the University of Toronto, and of Toronto Medical School, and was about 32 years of age. Deceased was well-known in Toronto as a bright energetic young fellow, for whom a brilliant future was anticipated, and the most sincere sympathy and heartfelt regret is being tendered to the family.

N. F. SNIDER, M. D.

Dr. N. F. Snider and wife, Odessa, were driving to a dinner party on January 5th, when the horse ran away and disaster ensued. Dr. Snider was thrown against the ridge pole of a bridge, striking his abdomen with terrific force. He was carried home and died 30 hours later. He was aged 63.

PETER REID McMONAGLE, M. D.

Peter Reid McMonagle, M.D., died at Prescott on Tuesday, 20th December. The deceased was the second child and eldest son of Henry and Isabel McMonagle, of Hampton, Kings County, New Brunswick, and was born June 3, 1833. Commencing life as a school teacher, after receiving a classical education in what in his day was known as an academy, he subsequently entered the Burlington, Vt., medical college, from which he received his medical diploma. Subsequently he also received a diploma from a medical college in Philadelphia and one from a New Brunswick college of medicine in New Brunswick in 1854. In 1863, during the Civil War, he located at Rossie, St. Lawrence County, where he practised his profession until 1865, when he located at Ogdensburg, N.Y., where he practised until 1872, since which time he has resided at Prescott, Ont. In 1852 he married at Maugerville, New Brunswick, Canada, Sarah S. Miles, by whom he left five children.

GEORGE A. CAMPBELL, M. D.

The death is announced of Dr. George Andrew Campbell, late of the British navy, which took place on January 16th at the age of 68. He was born in Kingston, Ont., and was a son of the late Dr. Duncan Campbell, who at one time practised in this city. He was a brother of Dr. F. A. Campbell, Bay Street, Toronto. Deceased leaves a widow and five children. Deputy Inspector-General of Hospitals and Fleets, George Andrew Campbell, M.D., R.N. (retired), of 2 St. Leonad's Road, Ealing, was educated at Upper Canada College, Toronto, and at Harvard, and at Kingston, Ont., where he took his M.D. degree in 1859. Entering the navy in 1860, he became a staff-surgeon in 1872, and in that rank served in the Heccla, at the bombardment of Alexandria, on July 11th, 1882, during the Egyptian campaign, which followed, and throughout the naval and military operations near Suakim, in the Eastern Soudan, in 1884. For his war services he received the Egyptian medal, with the Alexandria and Suakim clasps, and the Khedive's bronze star. He was promoted to the rank of fleet-surgeon in 1883, and retired in 1891 as a deputy inspector-general.

BOOK REVIEWS.

CARINOMA AND SARCOMA OF THE LARYNX.

Malignant Disease of the Larynx (Carcinoma and Sarcoma) by Philip R. W. Dr Santi, F.R.C.S., Lecturer on Disease of the Throat, Nose and Ear, Westminster Hospital Medical School, etc. Bailliere, Tindall & Cox, 8 Henrietta Street, Covent Garden, London.

De Santi is particularly qualified to write on this topic, and acknowledges the help he has received from Mr. Bullin and Sir Felix Semon in the preparation of it. His object is to place before the profession the correct English views on the operative treatment of laryngeal cancer. In a book of one hundred pages he has written all that is of value in the diagnosis and treatment of this distressing malady.

EXAMINATION OF THROAT, NOSE AND EAR.

A Guide to the Examination of the Throat, Nose and Ear for Senior Students and Junior Practitioners, by William Lamb, M.D., C.M., Edin., M.R.C.P., Lond., Honorary Surgeon, Birmingham Ear and Throat Hospital. Bailliere, Tindall & Cox, 8 Henrietta Street, Covent Garden, London.

This small book of 150 pages contains an amazing amount of valuable information for students and general practitioners. The author has succeeded in making the most elementary part of the book pleasant reading. The difficulties frequently met with by beginners are anticipated and simple methods of avoiding and correcting them are given. The pages devoted to the examination of the nasal sinuses are particularly good. The chapter on "Hints on Local Treatment" is full of very useful tips. We can recommend this book as quite the best guide we know.

TREATMENT OF INOPERABLE CANCER.

Some Methods of Hypodermic Medication in the Treatment of Inoperable Cancer. By John A. Shaw Mackenzie, M.D., Lond., Bailliere, Tindall & Cox, 8, Henrietta Street, Covent Garden, London. Price, paper, 1s.

This is a brochure giving the experience of the author in the treatment of inoperable cases of cancer with the hypodermic administration of chian turpentine and soap solution. A 20 per cent. solution of chian turpentine in olive oil is employed, of which the initial dose is 5 minims, increasing by 5 minims on alternate days, up to 60 minims. The injections are into any muscular part of the body. Some very interesting cases are reported. The second method of treatment is by the hypodermic injection of soap solution, made after the manner of Dr. J. H. Webb, of Melbourne. Common yellow bar soap will do, of which a one per

cent. solution is made. One drachm is injected every four days into sound tissue as near the cancer as possible. It is painful and half a drachm of a 3 per cent. solution of eucaïne should be first inserted. Along with this treatment, he advises the use internally of inspissated fresh ox gall. The little booklet is worthy of very careful study, as it gives the record of several encouraging cases.

DR. NORMAN WALKER'S DERMATOLOGY.

An Introduction to Dermatology, by Norman Walker, M.D., F.R.C.P. Edin., Assistant Physician for Diseases of the Skin to the Royal Infirmary, Edinburgh, Editor of the Scottish Medical and Surgical Journal, with 49 full-page plates and 59 illustrations in the text. Third Edition, revised and enlarged. Bristol: John Wright & Co. London: Simpkin, Marshall, & Co., 1901. Price, 9s. 6d.

To state that this book is got up in a handsome style is to give it less praise than it merits. Everything about it from the book makers point of view, is ideal. With regard to the contents, Dr. Norman Walker needs no introduction to the medical profession. The first edition appeared in 1899, and now the third is issued in 1904. The arrangement of the subjects is simple, but scientific. The pathology is tersely given, yet clear and satisfactory. For a medium sized book of 280 pages, there is a very full statement of treatment. There are many excellent prescriptions scattered throughout the book. We can recommend this work on dermatology with the utmost confidence.

EDGAR'S OBSTETRICS.

The Practice of Obstetrics. By J. Clifton Edgar, M.D., Professor of Obstetrics and Clinical Midwifery, Medical Department of Cornell University, New York City; Attending Obstetrician to the New York Maternity Hospital, etc. Second Edition, Revised, Enlarged and Improved, with 1264 Illustrations, including 5 colored plates and 38 figures in colors. Philadelphia: P. Blakiston's Son and Co.; Toronto: Messrs. Chandler & Massey. Price, cloth, \$6.00; sheep, \$7.00.

Some time ago we reviewed the first edition of this important work and spoke in very high terms of its merits. The second edition is now before us with some additions. This is a standard work and reflects the highest praise upon author and publishers. The work is throughout very original in every way. The author is independent in his method of teaching, though fully acquainted with the best views and conservative to all that is good. The illustrations are largely original and prepared for this work. We recommend this book very highly as a truly great and erudite work, worthy of a place in any library along with the best in medical literature.

DISEASES OF THE EYE.

A compend of the Diseases of the Eye and Refraction, including Treatment and Surgery. By George M. Gould, A.M., M.D., and Walter L. Pyle, A.M., M.D. Third edition, revised and corrected. One hundred and nine illustrations, several of which are in colors. Philadelphia: P. Blakiston's, Son & Co. 1904, Price \$1.00.

Drs. Gould and Pyle are well known writers on diseases of the eye. The present little book contains a great deal of very useful information on the diseases of the eye. Indeed, it contains everything that the general practitioner requires. The information is given in a neat and practical form. It is a very useful book.

 HAND-BOOK OF THE ANATOMY AND DISEASES OF THE EYE AND EAR.

For Students and Practitioners, By D. B. St. John Roosa, M.D., LL.D Professor of Diseases of the Eye and Ear in the New York Post-graduate Medical School; formerly President of the New York Academy of Medicine, Etc., and A. Edward Davis, A.M., M.D., Professor of Diseases of the Eye in the New York Post-graduate Medical School; Fellow of the New York Academy of Medicine. 300 pages, square, 12 mo. Price, extra cloth, \$1.00 net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia, Pa.

This is a useful little hand book which describes the anatomy, physiology and diseases of the eye and ear in a clear and comprehensive manner and is suitable for use by general practitioners and students. The section on therapeutics of the eye is up to date and contains a brief description of the newest drugs and their mode of employment. A second edition of this book would be improved by the insertion of a few cuts and illustrations of which the present edition is entirely devoid.

 ESSENTIALS OF ANATOMY.

Including the Anatomy of the Viscera. By Charles B. Nancrede, M. D., Professor of Surgery and Clinical Surgery in the University of Michigan, Ann Arbor. Seventh edition, thoroughly revised. 12mo volume of 419 pages, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Co, 1904. Cloth, \$1.00 net. J. A. Carveth & Co., Limited, 434 Yonge St., Toronto.

This work, now in its seventh edition, has met with a most cordial reception. In this revision the entire book has been carefully gone over and the section on the Nervous System completely rewritten. The illustrations throughout the text are excellent, showing the anatomy of various parts with unusual clearness. Students, and indeed young practitioners, will find the work of great service.

A TEXT-BOOK OF CLINICAL DIAGNOSIS.

By **Laboratory Methods**. For the use of Students, Practitioners and Laboratory Workers. By L. Napoleon Boston, A.M., M.D., Associate in Medicine and Director of the Clinical Laboratories of the Medico-Chirurgical College, Philadelphia; formerly Bacteriologist of the Philadelphia Hospital, and at the Ayer Clinical Laboratory of the Pennsylvania Hospital. Octavo volume of 547 pages, with 320 illustrations, many of them in colors. Philadelphia, New York, London: W. B. Saunders & Co., 1904. Cloth \$4.00 net; sheep or half morocco, \$5.00 net; J. A. Carveth & Co., Limited, 434 Yonge St., Toronto.

Dr. Boston here presents a practical manual of those clinical laboratory methods which furnish a guide to correct diagnosis, giving only such methods, however, that can be carried out by the busy practitioner in his office as well as by the student in the laboratory. He has given special attention to outlining in progressive steps the various procedures in clinical technic, such steps being illustrated whenever possible. All the more recent methods for the examination and staining of blood are described and illustrated by original drawings, and the subject of Serum-Diagnosis is very carefully considered. The newer methods for the estimation of Sugar, Bence-Jones' Albumin, Uric Acid, and Purin have received thoughtful consideration. The subjects of Animal Parasites, Diseases of the Skin, Transudates and Exudates, and Secretions of the Eye and Ear have received an unusual amount of space. Attention has also been paid to Inoscopy and Cyto-diagnosis. Indeed the book contains much useful material throughout, and being the latest work on Clinical Diagnosis, includes the most recent advances along that line.

NEW JERSEY BOARD OF HEALTH.

The Twenty-Seventh Annual Report of the Board of Health of the State of New Jersey, and Report of the Bureau of Vital Statistics, 1903. Somerville, N. J.: The Unionist Gazette Association, State Printers.

This report, like all those from the New Jersey State Board of Health contains much useful information for persons having to do with matters of Public Health. Some of the articles are specially valuable, such as those on Smallpox, on State Hygiene, on Streams Pollution, etc.

EXAMINATION OF THE URINE.

By G. A. de Santos Saxe, M.D., Pathologist to the Columbus Hospital, New York City. 12mo volume of 391 pages, fully illustrated, including 8 colored plates. Philadelphia, New York, London: W. B. Saunders & Co., 1904. Flexible leather, \$1.50 net. J. A. Carveth & Co., Limited, 434 Yonge St., Toronto.

Dr. Saxe has presented a work on examination of the urine unusually complete, absolutely up to date, concise, yet explicit in all its parts; and it will be found to meet fully the requirements of the student and practi-

tioner without burdening him with unnecessary analytic procedures. Special attention has been paid to the interpretation of findings as applied to clinical diagnosis, and the student is told what each chemical element and each microscopic structure means when found in the urine. The character of the urine in various diseases is also described in detail. Descriptions of technic have been made very explicit, and the author has inserted some new methods of working developed in his own experience. Cryoscopy and other means of functional diagnosis have been given their proper places. The text is fully illustrated, including eight colored plates of the various urinary crystals. The work will be useful because it is practical.

HAIG'S DIET AND FOOD.

Diet and Food Considered in Relation to Strength and Power of Endurance, Training and Athletics. By Alexander Haig, M.A., M.D., Oxon., F.R.C.P., Physician to the Metropolitan Hospital, and the Royal Hospital for Children and Women. Fifth Edition, with seven illustrations. Philadelphia: P. Blackiston's Son & Co.; Toronto, Messrs. Chandler & Massey. Price, \$1.00, net.

Some time ago we reviewed the previous edition. On that occasion we mentioned some of the leading features of this little book. It is full of very valuable information, and will well repay a careful perusal of its pages. The information it contains is important and well stated. The book is written in Dr. Haig's well known forceful style. We think that most who read this book will be somewhat surprised at the manner in which the author demolishes many of the old theories about food and their nourishing qualities.

NAGEL'S EPITOME OF NERVOUS AND MENTAL DISEASES.

A Manual for Students and Physicians. By Joseph Darwin Nagel, M.D., Consulting Physician to the French Hospital, New York. In one 12mo volume of 276 pages, with 46 illustrations. Cloth, \$1.00, net. Lea Brothers and Co., Publishers, Philadelphia and New York, 1904.

In this age of rapid progress and evolution of new theories and sciences the student of medicine, who in four years is supposed to master the intricate and varied details of his chosen profession, and the busy practitioner, who must still spend a good part of his time in research and study to keep abreast with the rapid strides of advance, both feel the daily need of a text-book which will give them the essence of the subject which they are pursuing. It is with this idea that the author has undertaken to gather the various facts and data contained in the numerous text-books and pamphlets on the diseases of the mind and nervous system,

and to weave them into a compact fabric, easily studied by those who are in search of precise information.

There is not a single author or lecturer of high standing, whose teachings have not been incorporated in a condensed form into the pages of this volume.

Illustrations are used throughout the volume wherever the understanding can be better helped by the combination of text and pictures, and the price of the volume (\$1.00), based upon the certainty of a very wide usage, is low enough for every student's purse.

MAGEE & JOHNSON'S EPITOME OF SURGERY.

A Manual for Students and Practitioners. By M.D'Arcy Magee, A.M., M.D., Demonstrator of Surgery and Lecturer on Minor Surgery; and Wallace Johnson, Ph. D., M.D., Demonstrator of Pathology and Bacteriology in Georgetown University Medical School, Washington, D.C. In one 12mo volume of 295 pages, with 129 engravings. Cloth, \$1.00, net. Lea Brothers & Co., Publishers, Philadelphia and New York, 1904.

The authors and editor have made an earnest endeavor to furnish an authoritative, clear, compact presentation of the essentials of modern Surgery. While this little volume is by no means intended to take the place of a text-book, it will be found convenient for study many times when a large book is inaccessible, while for students' use in quizzing themselves or each other, in preparation for college or state board examinations, it will be of the utmost service. As with the other volumes of this excellent and very popular series, the questions are not interspersed with the text, but follow each chapter, thus permitting consecutive reading without interruption.

HYDE AND MONTGOMERY ON THE SKIN.

A Practical Treatise on Diseases of the Skin, for the use of Students and Practitioners. By James Nevins Hyde, M.D., Professor of Dermatology and Venereal Diseases, and Frank H. Montgomery, Associate Professor of Dermatology and Venereal Diseases in Rush Medical College, Chicago. Seventh and revised edition. In one octavo volume of 929 pages, with 107 engravings and 35 plates in colors and monochrome. Cloth, \$4.50, net; leather, \$5.50, net. Lea Brothers & Co., Philadelphia and New York, 1904.

The volume is no doubt already familiar to you, since it has long enjoyed the greatest popularity among the profession, but we invite your special attention to this, the seventh edition, because it represents such marked improvements as to render it practically a new work.

A glance at the preface will indicate to some extent how thoroughgoing has been the revision to which the volume has been subjected and what soundness of judgment has been displayed in selecting the new topics admitted to its pages. Due prominence is given to every fact of

importance that the fruitful fields of recent investigation have yielded while mere theorizations receive critical discussions, the authoritative-ness of which is attested by the prominence of the writers.

The sections devoted to radio-therapy and to photo-therapy are unusually full and contain all needful details for the successful application of these forms of treatment, the indications for their employment being elaborated under the various diseases for which their use is to be recommended.

The most advanced discoveries in the etiology of such diseases as scarlatina, variola, pyroplasmosis, blastomycosis, etc., are mentioned and subjected to critical scrutiny, and a new chapter on the general pathology of the skin has been added to keep pace with the progress that has lately been made in this direction.

The importance of adequate illustrations together with clear, comprehensive descriptions cannot be overestimated in a work on this subject, where it is often necessary to produce in the reader's mind a definite and accurate mental picture of a lesion that he has never seen, and the happy facility of the authors in word-painting is most adequately supplemented by a series of engravings and of plates in color that represent the acme of graphic depiction.

The difficulties of dermatological classification are proverbially great, but the authors have perfected an arrangement which is at the same time logical and yet convenient for rapid reference and for the purposes of differential diagnosis. The practical value of the work is still further enhanced by the enormous number of prescriptions and plans of treatment suggested for the different diseases.

SIMON'S PHYSIOLOGICAL CHEMISTRY.

A Text-Book of Physiological Chemistry. For Students and Practitioners of Medicine. By Charles E. Simon, M.D., late Resident Physician, Johns Hopkins Hospital; author of *Simon's Clinical Diagnosis*, etc. New (2d) Edition. Revised and enlarged. Octavo, 500 pages: Cloth, \$3.25, net. Lea Brothers & Co., Publishers, Philadelphia and New York.

Dr. Simon has here treated Physiological Chemistry in a manner adapting his work to the wants of the medical student, and of the physician who has previously been unable to devote to the subject the attention which it merits. It deals with foods, their origin, classes and decomposition products, their digestion, resorption and excretion, the chemistry of the tissues and organs of the body, the substances resulting from their activity and their relation to physiological function. The early call for a new edition has enabled the author to include the results of the very active research in this field to date. The chapters on the Albumins, Nitrogenous

Katabolism and Gastric and Tryptic Digestion have been rewritten. To render the work still more useful both to students and teachers, laboratory exercises have been added. The methods have been described in such detail that the student should find no difficulty in performing the experiments.

ARTERIA UTERINA OVARICA.

The Utero-ovarian Artery or The Genital Vascular Circle. Anatomy and Physiology with their Application in Diagnosis and Surgical Intervention. By Byron Robinson, B. S., M.D., Chicago, Ill., author of Practical Intestinal Surgery, Landmarks of Gynecology, Life-sized Chart of the Sympathetic, Abdominal Brain, Colpoperineorrhaphy and the Structures Involved, The Meter, Gynecologic Charts of the Genital Circulation. E. H. Col'egrovo, 65 Randolph St., Chicago, Ill. 1903. Price, \$1.00.

This is a truly excellent work and reflects great credit on the care and skill of its author. The figures, several of which are colored, are works of art. In this the marvelous circulation of the utero-ovarian artery is amply displayed. The relations of the ureters to the artery and to the uterus are very clearly shown. The circle of Byron Robinson, made up of the aorta, illiacs, ovarian and uterine arteries and their branches, is of great importance as showing the wonderful anastomosis and blood supply of the uterus and its appendages. To the surgeon, the zones on the uterine surface, of limited vascularity as well as the position of arterial trunks, are of great importance. This is a work we can heartily recommend for careful study by every gynaecologist.

IN THE YEAR 1800.

Being the relation of sundry events occurring in the life of Dr. Jonathan Brush during that year, by Samuel Walter Kelly, M.D. The Saalfield Publishing Company, Chicago, Akron, O., New York, 1904. Price, \$2.50.

This is volume three of "The Doctor's Recreation Series," edited by Charles Wells Moulton. This volume purports to give the events occurring in the experience of Dr. Jonathan Brush during the year 1800. Dr. Brush lived in Farmerstown, in the Province of Maine. The book is said to be founded upon manuscripts left by Dr. Brush, rearranged. The book is certainly a clever one and will afford much genuine entertainment to its readers, and a good deal of insight into the state of medical knowledge one hundred years ago. Many of the incidents are told with much spirit, and in places, the author exhibits a very fine vein of pathos. The troubles of the doctor one hundred years ago were much the same as they are to-day—the jealousy of rivals and the gossip of the public

The style is thrown back into that of the period, and has the real smack of the old New England days. The book will afford much amusement and no small amount of information about an interesting time in the history of this continent. The observations of the main character in the book, Dr. Brush, are very shrewd and will often cause the reader to pause and think. If the science of medicine was not the same, the humanity of it was the same one century ago as it is to-day. In this respect the history of medicine has known no break since the days of Hippocrates.

WHO'S WHO, 1905.

This is one of A. and C. Black's publications, of Soho Square, London. The book is brought up to August 30th, 1904. The book contains a vast amount of reliable information regarding persons of note throughout the British Empire, home and colonial. It is biographical in character, and is of much value to everyone who may have occasion to look up the standing, age, titles, address, etc., of well known persons. The price, 7s 6d, brings the work within the reach of all.

THE ENGLISH WOMAN'S YEAR BOOK.

Messrs. Adam and Charles Black, of London, have performed to women a genuine service by the issuing of this book. The matter in the book is well arranged, and contains a great deal of useful information education, employment, industries, medicine, science, art, literature, music, temperance philanthropy, charities, sports, etc., as concerning women. The price is 2s 6d.

ANAESTHETICS.

A Guide to Anaesthetics for the Student and General Practitioner. By Thomas D. Luke, M.B., F.R.C.S., Ed., Instructor in Anaesthetics, University Surgical Classes, Royal Infirmary, Anaesthetist to the Deaconess' Hospital, and the Dental Hospital, Edinburgh. With 45 Illustrations. Second edition. Edinburgh and London: William Green & Son. 1905. Price, 5s. net.

When we reviewed the first edition of Dr. Luke's book on Anaesthetics, we took occasion to speak well of it, and to recommend it to our readers. The second edition is now before us. It affords us much pleasure to again endorse this excellent manual on a very important subject. There is no physician or surgeon who may not be called upon at any moment to administer an anaesthetic, and there is always some danger in doing so. It is well, therefore, to know the views of so competent an authority as Dr. Luke. The author discusses the choice of anaesthetic nitrous oxide, ethylchloride, ether, chloroform, anaesthetic sequences,

anaesthetic mixtures, apparatus, difficulties and their treatment, the preparation of the patient and after treatment, local anaesthesia, and anaesthetic commissions and investigations. This is a pretty full bill of fare, and it is well handled. The book is got up in a most attractive form. We have again much pleasure in recommending this carefully prepared book.

LAKE ON DISEASES OF THE EAR.

Handbook for Diseases of the Ear for the use of Students and Practitioners by Richard Lake, F.R.C.S. (Eng.) Second Edition London: 1904, Bailliere, Tindall and Cox. 6s.

This is an excellent modern little manual, adapted for the use of students and general practitioners. The anatomy and diseases of the ear are set forth in a clear and comprehensive manner. It is well illustrated and got up and should be found useful for those for whom it is intended.

WHO'S WHO YEAR-BOOK, 1905.

This book is published by A. and C. Black, of London. It contains much tabular matter about societies, judges, courts, journals, governments, banks, etc. The matter is arranged alphabetically and is furnished with a complete index. The book is published at the small price of 1s. and forms an excellent companion to Who's Who.

DISEASES OF WOMEN.

Practical Manual of Diseases of Women and Uterine Therapeutics, for students and practitioners. By H. Macnaughton-Jones, M.D., M.Ch., Master of Obstetrics, Royal University of Ireland; Fellow of the Royal Colleges of Surgeons of Ireland and Edinburgh; formerly University Professor Midwifery and Diseases of Women and Children in Queens University, and Examiner in Midwifery and Diseases of Women and Children in the Royal University of Ireland; Ex-President of the British Gynaecological Society; Corresponding Member of the Gynaecological Society of Munich. Ninth edition. London: Baillière, Tindall & Cox; Toronto: J. & A. Carveth, and Chandler and Massey. 1904. Price, 21s.

Dr. MacNaughton-Jones' book on the Diseases of Women has long been before the medical profession. It is just twenty years since the first edition appeared. The book was then a rather unassuming little manual; but with each edition it has grown in size, and now contains over 1,000 pages and belongs to the publishers' well-known "University Series." The work contains 637 figures and 125 plates, some in colors. It is well bound and made up. The paper and press work are excellent. As one examines the contents of the work, the impression constantly grows that it would be difficult indeed to conceive of a more complete or perfect work

on the diseases of women. Every topic is covered and yet with that conciseness which is the best evidence of a thorough grasp of the subject. The descriptions of disease, pathological changes, and operations are very clear and direct. Both author and publishers deserve the highest praise for their efforts in placing in the hands of the medical profession such a classic on the diseases of women at the moderate price charged. It should be in the hands of every doctor who has anything to do with the subjects discussed by the author.

THE APPENDIX VERMIFORMIS.

The Surgery of the Diseases of the Vermiform Appendix and their Complications. By William Henry Battle, F.R.C.S., Surgeon to St. Thomas, Hospital, formerly Surgeon to the Royal Free Hospital; Hunterian Professor of Surgery at the Royal College of Surgeons of England, etc.; and Edred M. Corner, M.B., B.C., F.R.C.S., Surgeon in Charge of out Patients to St. Thomas' Hospital, and Assistant Surgeon to the great Ormond Street Hospital for Sick Children; Erasmus Wilson, Lecturer at the Royal College of Surgeons, etc. Chicago: W. P. Keener & Co., 1905. Price, \$2.50.

The appendix, like the poor, we have ever with us. Wherever two or three doctors are gathered together, there it is in the midst of them, an ever-present topic for discussion. Though the book contains a careful review of the literature upon the subject, it is mainly an original study of the cases which came under the authors' own observation. In seven years there were in St. Thomas Hospital 525 cases of non-suppurative appendicitis, 150 cases of localized suppuration, and 108 cases of general peritonitis. About 70 per cent. were in their first attack, 20 per cent. in their second, and 10 per cent. in their third. In appendicitis with localized peritonitis or localized abscess, the death rate was nil; whereas, in cases of diffuse peritonitis, the death rate was 84 per cent. The authors urge early operation in all cases of acute onset. The section of the book dealing with the "Acute Abdomen" is one of much merit. The work, as a whole, is an important contribution to the subject of appendicitis and should have a wide circulation. It is got up in the best possible style.

MEDICAL ELECTRICITY.

A Practical Handbook for Students and Practitioners. By H. Lewis Jones, M.A., M.D., Fellow of the Royal College of Physicians; Medical Officer in Charge of the Electrical Department in St. Bartholomew's Hospital, London; President of the British Electrotherapeutic Society; Honorary Fellow of the American Electrotherapeutic Association; Member of the Société Française d'Electrothérapie et de Radiologie. Fourth edition, with illustrations. Toronto: Chandler & Massey; London: H. K. Lewis, 136 Gower Street, W. C. 1904. Price, 12s. 6d.

This book is one of the well-known, indeed famous, "Practical Series" of Lewis. This book deals with electricity in its scientific aspect, as a therapeutic agent in medicine and surgery, with electric light, the electric

bath, X-rays, etc. The book is well illustrated and handsomely got up. In this work of nearly 550 pages, a great variety of subjects are discussed, and the use of electricity, in its different forms in the treatment of diseases, clearly indicated. To those who desire to become acquainted with the therapeutic applications of electricity, we can most cordially recommend this book of Dr. Jones. For many years, electricity was left too much in the non-professional hands, but conditions are changing, and it is becoming more and more apparent that like suggestion and massage, it has a place. Whether he cares to make personal use of it or not, every physician should be familiar with the best views upon the subject, in order that he may properly advise his patients.

THE ANATOMY OF THE BRAIN.

A Study of the Human Brain from the Brain of the Sheep. A Manual for Students in Medicine, Biology and Psychology. By J. F. Burkholder, M.D., Professor of Anatomy in the Illinois Medical College and the Illinois Eye, Ear, Nose and Throat College; Professor of Physiology in the Dental Department of the University of Illinois and the Dearborn Medical College. With an introduction by Prof. Henry H. Donaldson, of the Neurological Laboratory of the University of Chicago. 175 pages, Octavo, 32 full page Plates (5 colored). Cloth. Price \$2.00 postpaid. Chicago: G. P. Engelhard & Co., 358-362 Dearborn Street.

The joint authors of this book, Dr. Burkholder and Professor Donaldson, have long been known as close students of neurology, especially from the standpoint of anatomy and physiology. The work before us is an excellent exposition of our knowledge of the anatomy of the brain at the present moment. The work is not too large and makes a good manual for those who wish to gain a knowledge of this important subject.

A MANUAL OF PERSONAL HYGIENE.

Proper Living upon a Physiologic Basis. By American Authors. Editors by Walter L. Pyle, A.M., M.D., Assistant Surgeon to the Wills Eye Hospital, Philadelphia. Second Edition. Revised and Enlarged. 12mo volume of 441 pages, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Company, 1904. Bound in Silk. \$1.50 net. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto.

A short time ago, when Dr. Pyle's work first appeared, we gave it our unqualified recommendation. The new second edition, just issued, is evidence that his work has filled the need. Personal hygiene is applied physiology, and a proper understanding of certain elemental truths

on practical human physiology must first be acquired before it can be applied. Knowledge of the normal functions of the body and simple methods of keeping them in healthy action is the one thing that no educated person should be excused from possessing. The ordinary instructions in physical education, physiology, dietetics, and exercise is not sufficient, and often faulty. Dr. Pyle has selected eight prominent American physicians, each writing upon his chosen specialty, and setting forth the means of health in this "Manual of Personal Hygiene" with a simplicity, conciseness, and authority that has never been approached in any similar work.

, In this new second edition there have been added, and fully illustrated, chapters on Domestic Hygiene and on Home Gymnastics, besides an Appendix containing methods of Hydrotherapy, Thermotherapy, Mechano-therapy, and First Aid measures in medical and surgical accidents and emergencies. Physicians could render no better service to their patients than the recommendation of this book.

MISCELLANEOUS.

A FEW PRACTICAL POINTS IN INFANTILE ANAEMIA.

Infantile anaemia always manifests distinctive, objective and subjective symptoms of mal-nutrition, of which the most prominent is a lowered blood standard. Disease of childhood shows more pronounced changes in blood than does disease of the same class in the adult; therefore a careful study of the blood is invariably necessary and yields points of greatest importance in deciding the best method of treatment.

There is still a great deal to be determined about the marks of distinction between the normal and abnormal conditions of the blood in children, much has been developed but there is still much to be learned. In the transition from infancy to childhood, the process of the development of the blood is going on, and it is often hard to determine whether a certain case is normal or abnormal in the condition of the blood. For instance, the percentage of haemoglobin which is, in proportion, higher at birth than in adult life, may fall within the first few weeks of life to fifty per cent., and still not be abnormal. It is, therefore, for the busy practitioner, no less than for the one not so proficient in haematology to have some simple, reliable and easily practical methods of ascertaining the exact blood condition. When this knowledge is obtained a diagnosis can be made. To obtain this practical knowledge, no special skill is required; the ordinary use of the microscope, haemoglobinometer, and harmocytometer, can with a little practice, obtain the necessary data. It is now conceded that aside from chlorosis nearly all cases of anaemia in

children are of secondary origin, consequently it is not difficult to ascertain the causes. The tendency may be transmitted from the anaemic, poorly nourished patient; in sufficient quantity an improper kind of food is usually the chief cause. The infectious or constitutional conditions such as rickets, syphilis, tuberculosis, malaria, rheumatism, etc., are responsible for the great majority of cases of secondary anaemia, and usually present one or more distinctive symptoms indicating their origin. The thing most desired in the treatment of these conditions is naturally to remove the cause, which is sometimes possible but not always; a careful study of the blood should be the first step after which its proper treatment, for by this means one can often remove the subjective symptoms of the anaemia, thereby making the patient more comfortable as well as reinforcing the treatment of the cause.

In the endeavors to restore the normal standard of the blood in cases of secondary anaemia, dietetic and hygienic measures are of greatest importance. A careful study of many cases shows conclusively that a large proportion of the cases which owe their origin to conditions prevalent among the poorer classes—improper food, poor air, lack of exercise—are the prime causes. A correction of these defects with proper feeding, fresh air and tonic, will bring about the desired results without the necessity of much drug medication. But in those cases in which the anaemia is secondary to the infections, the diathetic or hygienic measures can be supplemented by the application of proper medication; the treatment then becomes one of removing the cause of the anaemia, at the same time reinforcing the system by proper nutrition. The most frequently employed drugs as blood reconstructors, are iron and arsenic, but their field of usefulness is limited. They undoubtedly produce a tonic effect by stimulation, but lack the proper elements to build up the newly born cells as the result of this stimulation, consequently their therapeutic value is limited and something more complex is required. Too short a space is allowed to enumerate the many cures laid down by various clinicians in the treatment of anaemia. All have virtue more or less, none are complete. Most of the tonics of iron will increase the blood cells without a corresponding increase in the haemoglobin, consequently, many of the new born cells never reach maturity but become shrivelled, disintegrated or paralyzed as a result of the mal-nutrition. With this clinical picture before me I naturally sought for something that fully covered the field, in other words a tonic, stimulant and complete food. The combination of the three making the essential whole I found in Bovinine, and its employment in many cases has proved it to be a most valuable diathetic and therapeutic agent.

T. J. BIGGS, M. D.

COMPLICATIONS OF MEASLES.

Among the complications which contribute to the severity of measles, bronchitis and pneumonia are the most prominent, the latter not infrequently terminating in phthisis. Hence a prominent part in the management of the disease consists in the prevention and treatment of these complications. In Vapo-Cresolene the practitioner will find a safe and efficient means for that purpose, which successfully passed the experimental stage many years ago. When diffused in the air of the sick-room it is readily inhaled by the child even during sleep, and exerts a constant antiseptic and soothing effect upon the inflamed mucous membrane of the air passages, relieving cough and dyspnea. If used early in a case of measles it will often prevent the downward extension of the bronchitis into the lungs, and thus protect the little patient against the dangers of pneumonia.

WHAT GLOBULIN IS.—THE DIGESTION OF THE CASEIN OF MILK ACCORDING TO KUEHNE AND CHITTENDEN.

All proteid matter taken into the stomach is separated into two distinct groups or radicals at the initial stage of digestion. These two groups by successive hydrations, form two clearly defined and entirely different products. Kuehne and Chittenden have designated these as the Hemi-Group and Anti-Group.

The presence of these two groups of radicals in the molecule of albumin is well demonstrated by the following experiment :

If we boil a given weight of white of egg coagulated in a 3 per cent. solution of sulphuric acid it will be seen after an hour or two that half the mass has been dissolved and the remainder appears as a homogeneous mass very firm and totally insoluble in the sulphuric acid solution, but readily soluble in a dilute solution of Sodium Carbonate.

The insoluble portion is the Anti-Group, which Schutzenberger called the hemiproteine and which is now called anti-albumin. That which is dissolved in the 3 per cent. Sulphuric Acid Solution is the Hemi-Group which was formerly known as Hemi-Albumose.

All the derivatives of the Hemi-Group, by a series of changes and distinct steps are formed into leucin, tyrosin and aspartic acid. These are not tissue builders. The derivatives of the Anti-Group on the other hand are not transformed into leucin, tyrosin and aspartic acid; but, on reaching the peptone stage are then transformed into globulin. It is therefore, the derivatives of the Anti-Group which really form the tissue builders.

In it we see that the Protocaseose comes chiefly from the Hemi-Group, but that there is also a small contribution from the Anti-Group.

On the other hand the Heterocaseose comes chiefly from the Anti-Group, but the Hemi-Group also contributes a part. Both the Protocaseose and the Heterocaseose by the prolonged action of the Gastric juice are transformed into Deuterocaseose, but the Deuterocaseoses will in each case be more or less different in their intimate structure. The difference between them is the difference in the proportions contributed to each by the Anti-Group and the Hemi-Group.

The Deuterocaseose by the further action of the pepsin in an acid medium is converted into amphopeptone. The Hemi-Group predominates in the Amphopeptone formed from the Protocaseose, whereas the Anti-Group predominates in the Amphopeptone formed from the Heterocaseose. A further step in the gastric digestion of casein is the separation from the Anti-Group of a small part which forms Anti-Albumin. This Anti-Albumin is but very slightly acted on by the pepsin, but on reaching the intestines the action of the trypsin converts it into Deuterocaseose and later into peptone.

The peptones derived from the Anti-Group, during their passage through the intestines are acted on by a special ferment and changed to serum albumin or Globulin.

It is as Globulin that all the products of digestion reach the blood to supply the loss by metabolism and to create new protoplasm.

This theory of digestion which was originally propounded by Kuehne and Chittenden is at present accepted by A. Gautier and most physiologists. It is now supported by the results of numerous very exacting experiments.

The reign of obscurity has now passed and we are able to give an exact account of the work performed in the gastro-intestinal tract. Globulin is the last step in the process of digestion of albuminoid matter. This albumin forms the human albumin and replaces the broken down products of metabolism and thus acts as a nutrient and a tissue builder. It is then ready to be used as required by the individual cells. It differs from peptones in that in a given weight of peptones there is always a large amount which is reduced to crystallizable substances (Leucine, Tyrosin and Aspartic Acid) and which serve no useful part in the nutrition of the body. There are none of these in Globulin and consequently all of it is assimilated. All the substances derived from the Anti-Group give rise to these same crystallizable products.

Lactoglobulin is an exceptionally fine form of Globulin. It is very carefully prepared by the Lactoglobulin Company, of Montreal. It has proven itself to be an excellent nutrient.

TWO FINE PICTURES.

We have recently received an enlarged copy of the above picture, "The Doctor" by Luke Fildes, together with one of "The Anatomy Lesson," by Rembrandt, size 13 by 17 inches, from the Angier Chemical Company, Allston District, Boston, Mass. This firm is sending them to physicians only, on receipt of ten cents to cover cost of mailing. Both of these pictures are worthy of a prominent place in any physician's office.

THE POINT OF VIEW.

"A cigarette, a glass of water and the kiss of a pretty girl will sustain a man a full day," according to a Spanish proverb. Sentiment apart, there must be reasons for the popularity, now almost universal, which the cigarette has attained.

Taking the "Sweet Caporal" cigarette—which is deservedly the most popular of all—as an example, we find that competent chemists have analysed and tested it, and, in the words of one of them, it is "made from well selected, clean tobacco leaf and a purified article of harmless paper." Giving a much lighter smoke than the pipe, the cigarette has the additional advantage of being in direct contact with the air, so that its smoking causes none of the bad effects of incomplete combustion.

To sum up the whole subject, whether we take the standpoint of the medical or scientific man, or the point of view of pure enjoyment, we arrive at the same conclusion—that the Sweet Caporal cigarette is the purest form in which tobacco can be smoked.

SANMETTO IN NOCTURNAL EMISSIONS AND PROSTATIC AND URETHRAL TROUBLES.

I have been using Sanmetto ever since it has been before the medical profession. Sanmetto, as prepared only by Od. Chem. Co., New York, has never disappointed me, but substitutes have. The scope of usefulness of Sanmetto is much more, in my humble opinion, than has ever been claimed for it. In nocturnal emissions, resulting from self-abuse, I have found Sanmetto very nearly a specific, as well as in all prostatic affections. For a number of years Sanmetto has been my sheet anchor in gonorrhoeal troubles.

L. L. JANEWAY, M. D.

Whitewell, Tenn.

DURING LA GRIPPE AND AFTERWARDS

the experience of thousands of physicians proves the value of Angier's Petroleum Emulsion. It braces the patient, enables him to withstand the ravages of the disease and guarantees him freedom from the subsequent exhaustion and sequelae. Angier's Petroleum Emulsion promptly relieves the cough and symptoms of respiratory irritation, palliates the nervous symptoms and hastens convalescence.

KRESS AND OWEN V. CRUTTENDEN.

A short time ago, Mr. Thomas Cruttenden was convicted by Magistrate Denison for infringing on the trade mark of Glyco-Thymoline, owned and registered in Canada by Messrs. Kress and Owen

LA GRIPPE AND ITS SEQUELAE AGAIN PREVALENT.

The following suggestions for the treatment of la grippe will not be amiss at this time when there seems to be a prevalence of it and its allied complaints. The patient is usually seen when the fever is present, as the chill, which occasionally ushers in the disease, has generally passed away. First of all, the bowels should be opened freely by some saline draught. For the severe headache, pain and general soreness give an antikamnia tablet, with a little whiskey or wine, or if the pain is very severe, two tablets should be given. Repeat every two or three hours as required. Often a single dose is followed with almost complete relief. If, after the fever has subsided, the pain, muscular soreness and nervousness continue, the most desirable medicine to relieve these and to meet the indication for a tonic, are antikamnia and quinine tablets. One tablet three or four times a day, will usually answer every purpose until health is restored. Dr. C. A. Bryce, editor of "The Southern Clinic," has found much benefit to result from antikamnia and salol tablets in the stages of pyrexia and muscular painfulness, and antikamnia and codeine tablets are suggested for the relief of all neuroses of the larynx, bronchial as well as the deep seated coughs, which are so often among the most prominent symptoms. In fact, for the troublesome coughs which so frequently follow or hang on after an attack of influenza, and as a winter remedy in the troublesome conditions of the respiratory tract, there is no better relief than one or two antikamnia and codeine tablets slowly dissolved upon the tongue, swallowing the saliva.