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CANADA
MEDICAL RECORD

NOVEMBER, 1897.

Original Communications.

ELEPHANTIASIS.

By J. M. ROHLER, M.D., British Guiana.

This affection is somewhat common in Eastern intertropical regions.

In South America and the West Indies I have observed a great many instances, the lymphangiomatous thickening occurring chiefly in the arms, lips, penis, scrotum, and in the labium in females.

In the present instance the patient was a man of 56 years of age, a Portuguese. He was admitted to my private hospital on the 4th day of February, 1895, with the scrotal variety of lymphangioma, commonly called elephantiasis arabum. He stated that about twelve years before he felt slight pains in the left groin, extending to the testicle, and of an intermittent character. He attributed his trouble to his occupation; he was a baker, and exposed to rapid changes of heat and cold. He consulted several physicians and surgeons, but failed to get relieved. A few months after the scrotum began to swell. It gradually increased in size, and in three years the growth had become very uncomfortable. It developed still further until the patient was unable to move about, and for six years he has been completely laid aside.

On admission to the Hospital, a saline purge was given, and the next morning a thorough examination was made. The tumour hung downwards to about ten inches below the knees.

It was shaved, washed, and sterilized with a 1 to 1000 hydrarg perchlor. solution.

The patient was placed on his back on the operating table, the tumour strapped and suspended above the body, with a cord and pulley, from the ceiling, for two hours, so as to empty the vessels as much as possible.

The A C E mixture was administered. A tourniquet was applied tightly around the neck of the tumour below the pubic arch.

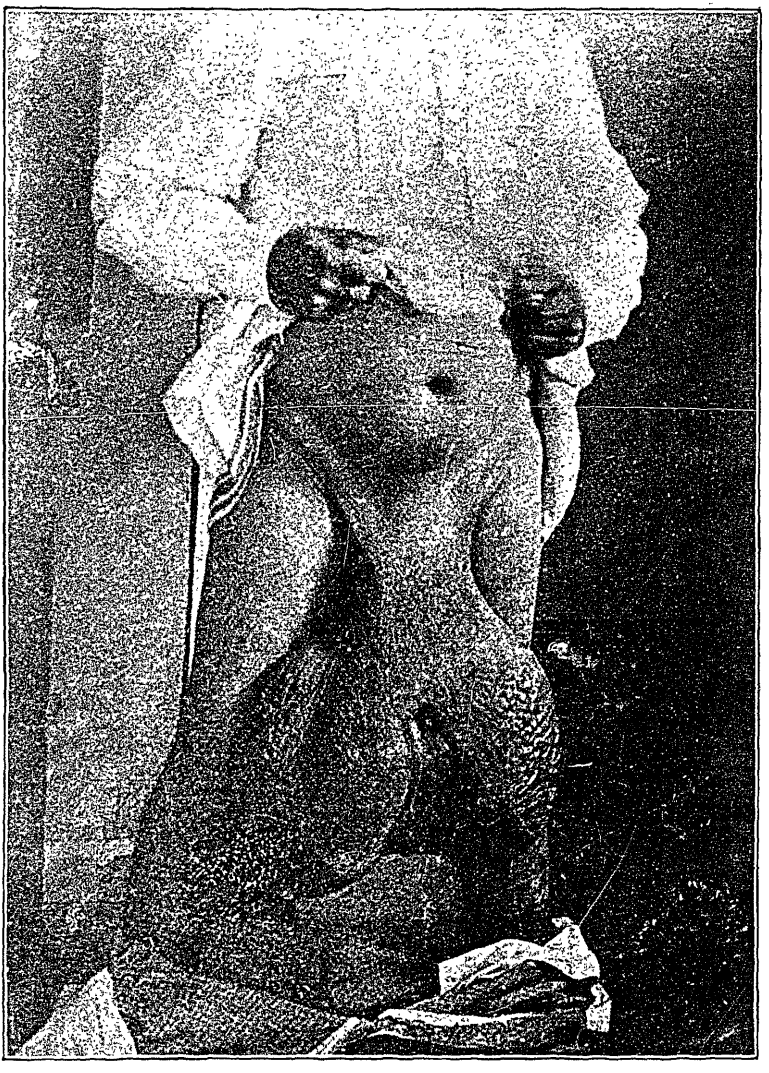
A deep incision with an amputation knife was made, beginning at the raphe ½ an inch below the meatus urinarius, drawn antero-posteriorly on both sides downward and backward, and slightly curved, about four inches from the anus to the perineal raphe, following the margin of healthy tissue, leaving sufficient to form a scrotal sac. On entering the scrotal sac a large quantity of yellowish serum came from between the tunica vaginalis and the testis. The left testicle was implicated and much enlarged, weighing nearly six pounds. It was removed. The right testicle was healthy. All vessels were ligatured, the parts thoroughly cleansed ; deep sutures and superficial silk sutures were used and a drainage tube ; dusting with iodoform, then iodoform gauze, cotton wool, and all firmly bandaged. No after hæmorrhage occurred. The tumour after removal, and including the testicles, weighed sixty pounds.

The skin varied in thickness from ⅜ of an inch to four inches at the summit.

The internal surface presented numerous tubercles of different sizes, some of them cartilaginous. The mass seemed to consist of thickened tissue, adipose tissue, irregular anastomosing cavities, the whole infiltrated with lymphatic liquid.

The parts were dressed on the second day, and everything appeared to be proceeding favorably, and union by first intention promised. On the fourth day, the deep sutures were removed, the parts cleansed and rebandaged.

On the sixth day the superficial sutures were partially removed, and, on the eighth day, the remaining stitches. On the twelfth day the drainage openings were partially closed. On the fifteenth day there was only a slight discharge and the drainage openings were nearly closed. After the parts were dressed, the patient drove to his house, returning again in the evening. The parts were examined from time to time,



A case of Elephantiasis of Scrotum successfully removed by Dr. J. M. ROHLER, in British Guiana, on the 5th February, 1895.

until the twenty-first day, when a second operation was performed to expose the penis. An angular incision was made on each side, beginning one inch from the meatus urinarius anterior to it and about four inches below the pubic arch, extending downward, backward and outward, then inward and forward to a point removing a thick portion of skin and fatty tissue. The meatus was then about five inches below the pubic arch. The incision was closed and united by first intention; the sutures were removed on the eighth day, the parts were dressed every fourth day, and on the fifteenth day the patient was discharged completely well.

I have since then operated on eight other cases with favorable results; none of them were so extreme as the one here reported, and which is shown in the accompanying illustration, copied from a photograph taken shortly before the operation.

PRESIDENTIAL ADDRESS BRITISH MEDICAL ASSOCIATION.

THE SECTION OF MEDICINE.

By STEPHEN MACKENZIE, M. D., F.R.C.P.

Senior Physican to and Lecturer on Medicine at the London Hospital.

On the Influences that have Determined the Progress of Medicine during the Preceding Two and a Half Centuries.—On this very interesting and, indeed, unique occasion, when the British Medical Association meets for the first time on Canadian soil, the mind is irresistibly led to compare the condition of medicine at the present day with that which existed when Europeans first settled in Canada, and to trace the paths by which progress has been made. When Maisonneuve and his companions landed in what is now the Custom House Square in Montreal in 1642, and when shortly after the first hospital was established by the missionary priests, medicine was in a rudimentary stage. Though anatomy had been prosecuted for some centuries, chiefly on the European continent, it formed no part of ordinary medical education; physiology in the scientific sense was unborn and organic chemistry not yet created. The medical teaching of that day consisted mainly of the ancient doctrine of the four elements and their corresponding temperaments of the separate functions of the vegetative, sentient and rational souls; of the agency of the natural vital and animal spirits, that had continued to be taught with very little variation from the time of Galen,

It was an age of Aphorisms, Definitions, Systems and Nosologies. Medical opinions were so dominated by theories and burdened by the weight of authority that the phenomena of disease for the most part passed unnoticed, and its teachings neglected. Such knowledge of medicine as the enterprising members of the medical profession who accompanied the early expedition to Canada possessed must have been of the most elementary character, gained by apprenticeship under teachers whose knowledge consisted in the doctrines of Hippocrates and Galen, and such crude experience as they themselves had obtained. Without doubt they were as zealous and earnest in their professional duties as we as a profession are to-day, and their treatment was as certainly unfettered and unrestrained by any scepticism as to the theories they had been taught or doubts as to the efficiency of their remedies for disease. But this period was the dawn of a new era in science and medicine. Harvey's great work "On the movements of the heart and blood" and Bacon's "Novum Organon" had recently been given to the world, and the seventeenth century was a time of the greatest activity and discovery in geography and in science.

What a gulf separates that medicine of 250 years ago from that of to-day! In tracing how it has been bridged, it is right that we should justly apportion the influence that various spheres of activity have exercised in reaching our present position.

The Study of Anatomy—We must in the first place ascribe the greatest importance to the study of anatomy. Vesalius and Sylvius, Fallopius and Fabricius had already advanced it to a very high point, but the study had been confined to the leisured few. Gradually our knowledge of every detail of naked-eye anatomy has been gained, and at the present time every one practising medicine must have competent knowledge on the subject gained by dissection. The same systematic study has extended to Comparative Anatomy, and great for, its time as was the knowledge of Aristotle, it has undergone an entire revolution by the application of scientific methods to increased data of information by such workers as Cuvier, Darwin and Owen. It is now taught as a branch of medical education. Physiology could have no scientific basis until anatomy was fairly advanced. The facts on which it was at first based were founded on medical observations, but in the seventeenth century direct observations and investigations were commenced by Haller, Hunter, Spallanzani and Hewson. It has since been prosecuted with the greatest energy and success, and the position of physiology at the present time is that of a science, explaining the action and interaction of the organs and tissues and the forces of the body which are the true foundation of scientific medical knowledge—the institutes

of medicine. Morbid Anatomy could not exist until normal anatomy was fairly complete, but from that time in the eighteenth century, by the laborious researches of Morgagni and numerous other workers, until now the broad facts of Morbid Anatomy have been accumulating until we have at the present day a fairly accurate knowledge of the principal pathological changes found in the body. The rise of physics and chemistry in the seventeenth and eighteenth centuries contributed greatly to the progress of medicine, by increasing our powers of "searching out the secrets of nature" by methods and instruments of precision.

The Study of Histology—Of any one influence that has helped the advance of scientific study and the progress of medicine, probably the increasing perfection of the microscope has been the greatest. With each new development of this instrument a greater range has been given to our researches, and, with the assistance of chemistry, it is continuing to reveal to us fresh facts that have created new branches of science. Starting from the observations of Bichat on the minute-anatomy of the tissues in 1801, the microscope has enabled us to understand the details of structure which were essential to complete anatomy. Until the microscope was capable of practical use the capillaries could not have been discovered by Malpighi, nor the composition of the blood understood; the mechanism of renal secretion could not be worked out until the minute structure of the kidney was known; the functions of glands, the process of digestion and secretion could not be understood until the histological details of the parts concerned were ascertained; the mechanism of light and hearing, of taste and smell, were not revealed until the ultimate details of the structures involved had been investigated; the marvellous complexity of the nervous system, whether in the delicate though comparatively coarse structure of the nerves, the higher intricacy of the spinal cord, and the marvellous details of the arrangement of ganglionic cells and communicating fibres of the cerebral tissue, which by improved methods of preparation and staining are being revealed to us at the present time, could not have been worked out without its aid. Just as anatomy had to reach a certain stage before physiology and morbid anatomy became possible, so normal histology had to advance before pathological histology could come into existence. And, as knowledge advances from the special to the general, special pathological histology had to reach to a very high point before we could reach that knowledge of general pathology on which our conceptions of the nature of disease are at present based.

What would Harvey have given to see the capillaries that completed the "circle" of the blood stream, or to have watched the

process of inflammation in the exposed mesentery of the frog by the aid of the microscope—to see the contraction followed by dilatation of the blood vessels, the escape of blood corpuscles through the walls of the vessels? What a vastly different conception has the reader of Cohnheim's Lectures on General Pathology to that of the most advanced and profound investigator and physician of two and a half centuries ago. The microscope again has introduced us to a new world, revealing minute organisms that play a great part in the plan of nature, and which are largely concerned in the production of disease. It has led to a new department of science, bacteriology, which has taught us how bacteria enter the body, how they increase and multiply therein, and of the reaction of the tissue for self protection. Chemistry has shown how the poisons formed by such organisms act in the body and supplied us with means, as yet only in their infancy, for counteracting their effects, or guarding against their entrance by their exclusion and by protective inoculation. The microscope has further furnished us with evidence of parasitism, other than bacteria, in the blood, in the muscles, in the skin and hair, and on the mucous membranes. By its aid we are able to diagnose and watch the course of several primary diseases of the blood. It has enabled us to differentiate the various new growths that develop in our bodies. So much does the microscope constitute a necessary means of research that it would be impossible to conscientiously perform our daily medical duties without its aid.

Clinical Instruments of Precision.—The thermometer again has been of invaluable aid in the study of disease, allowing of our measuring and recording the degree of fever, and of watching its progress with such a degree of accuracy as to furnish us with evidence of the greatest value in the diagnosis, prognosis and treatment of disease Electricity, by the laborious and complete investigations of Dubois-Reymond, has revealed to us the mode of action of nerve and muscle that would have been impossible to obtain in any other way. Though the hopes at first entertained of its value in the treatment of diseases have not been altogether fulfilled, it is still of much service in this respect, and perhaps still more valuable as an aid in diagnosis.

The ophthalmoscope, introduced by Helmholtz, has enabled us to understand diseases of the interior of the eye, which without its assistance was impossible. It has admitted of the exact examination of refraction, and has revealed changes in the termination of the optic nerve in the retina and choroid, not only valuable in themselves, but so important in the light they throw on pathological changes occurring in the nervous system, and in the body generally, that the use of this instrument has become a necessity of practical medicine.

The laryngoscope, perfected by Czermak, has given precision to the diagnosis and treatment of diseases of the throat not otherwise attainable, and which has important bearings on general medicine by the recognition of paralysis of the muscles that move the vocal cords in aneurism and in disease of the central nervous system.

The sphygmograph, the cardiograph, the arteriometer, and, the latest invention of this class, the sphygmometer, by enabling us to ascertain the exact condition of the circulatory system, are of the greatest service, not only in studying the problems of normal and abnormal physiology, but in the recognition of disease and its tendencies and in the influence of remedies.

Auscultation.—Nothing from the time of Harvey gave such an impetus to the study of exact medicine as the introduction or discovery of auscultation by Lænnec in 1816; and, indeed, Harvey's great discovery had little practical application in clinical medicine until its introduction. Auenbrugger had introduced percussion in 1761. Lænnec had adopted it, and his discovery of auscultation with his zeal as a morbid anatomist, enabled him to work out most of the great problems of diseases of the thorax. The knowledge thus begun has, by the labours of many workers, increased in range and accuracy down to the present time, and the diagnosis of diseases of the chest has reached a degree of precision unequalled in any other department of practical medicine. We are now able not only to recognize disease of each of the valves of the heart, but to estimate its degree, and the influence of the lesion on the greater and lesser circulations and to trace the course and effects of emboli carried along the blood stream. Our knowledge of diseases of the lungs is nearly as complete as that of the circulatory system.

Vaccination.—During the period that bridges the time from when Canada first became populated by Europeans to the present day probably no discovery has exercised a greater influence in medical science or conferred more lasting benefits on mankind than the introduction of vaccination by Jenner. It is not necessary in such a meeting to trace how Jenner was led to his discovery. Protective inoculation from smallpox by the introduction of the smallpox matter had long been known in the East, and had been introduced into England by Lady Mary Wortley Montagu, but Jenner's rare merit consisted in testing the statement made to him by Gloucestershire rustics by scientific methods and experiments; and by waiting for years until the value of the protection the "variola vaccinia," introduced by inoculation into the human subject, had been tested by exposure to contagion from smallpox, and until time had elapsed to demonstrate that this protection was no ephemeral influence but

of more or less permanent duration as much as that of an attack of smallpox itself. "I never expected it would do more, and it will not, I believe, do less," are Jenner's words. It was not until many years after he had satisfied himself as to the protective influence of vaccine virus that Jenner in 1796 published his observations. It is needless to trace the effects this discovery has had in saving human lives, and in averting the disfigurements with which those who escape death from the disease were almost invariably afflicted. It is probable that the full significance of his discovery was not revealed to Jenner himself, and on the other hand it is possible that he exercised self-restraint in not speculating as to the possible result that might accrue from his remarkable inquiries. Certain it is that the indirect results that have followed from Jenner's discovery that an attenuated virus was protective against contagion from the disease from which the virus was orginally obtained have only recently been fully utilized. Probably several causes have been concerned in the want of continuity of progress in this direction, the most important of which has been the difficulty in isolating and handling the virus in many contagious diseases. The investigations into the full extent of the value of inoculation with attenuated virus and derivatives of bacteria have only been commenced in the last few decades, since bacteriology has been cultivated by Pasteur, Lister, Koch, Klein, Gaffkey, Martin and others, and the whole subject with the aid of organic chemistry made a branch of exact science. Bacteria are now classified by their morphological qualities, by their reactions to staining reagents, by their modes of growth in various media, the temperature at which they grow and at which they are destroyed is determined, their need of oxygen ascertained, the parts of the body they make their habitat studied, the effects of their invasion in the tissues, and protective powers of the organisms observed. The chemical products to which they give rise are isolated, their nature ascertained and their effects observed on the living body independently of that of the organisms by which they are formed. Finally, the knowledge thus obtained is turned against the bacteria. The virus is attenuated by various methods, often by passing through the body of an animal immune to the disease, and its exact strength ascertained. It is then used for protective inoculations or for antidotal purposes in those already attacked by the disease from which the virus was originally obtained. Jenner's and the recent researches are equally scientific, observation, induction, experiment—but the differences in carrying out the inquiry on smallpox by Jenner and that of any specific disease due to an organized virus, at the present time, illustrate my theme of how the progress of medical science has been effected. Great as it has been, and

precise as a rule as are our methods of research, it is remarkable that up to the present time in two diseases in which protective and curative inoculations have been most conspicuously successful, namely, smallpox in which we had, thanks to Jenner, the first vaccine, and in hydrophobia in which Pasteur succeeded in attenuating the virus and using it as antidote, we have not succeeded in finding the micro-organism that is the true virus unless, indeed, Copeman Monkton has at length done so in the case of smallpox and vaccinia. As a matter of fact this organized virus has yet to be discovered in many of the most common specific communicable diseases, but the knowledge gained by the study of some members of this class in animals and of some, *e.g.*, diphtheria in the human subject has afforded a basis of knowledge applicable to the whole group.

There is one other branch of medical science which has been incidentally alluded to in the previous remarks, but which requires fuller recognition in the survey of the influences that have governed our progress. I allude to Experimental Investigations in Animals. In the Seventeenth Century, in the hands of Harvey and others, but more especially in the Eighteenth by the labours of Hunter and others, and in the Nineteenth Century, this method of observation has been the basis of normal physiology, and later of abnormal physiology or pathology and therapeutics. These investigations enabled us to reach a degree of knowledge not obtainable in other ways, not only of value to man, but also to the lower creation.

Therapeutics.—Until the exact nature of disease is fully understood, a truly scientific treatment is manifestly impossible. I need not discuss how entirely in the past, but also at the present day, our knowledge of treatment has been mainly empirical. It could not be otherwise. It is true that up to the present time scientific therapeutics only influence our treatment to a small extent. But looking back, as we have been doing, to the course of progress in medicine, we have seen that it has throughout followed the line of patient and exact research, The action of drugs is now studied with the same care and precision that have been employed in physiology and pathology, and we are yearly adding to the stock of exact knowledge of the action of remedies. The scientific application of this knowledge will come with a more complete understanding of the cause of the disease, increased knowledge of pathology, and greater precision in diagnosis. But therapeutics is not coterminous with drug treatment. It includes all the circumstances of the management of the sick, the surroundings, the feeding and general care of the patient. In all of these respects enormous strides have been made, which greatly influence the chances of recovery of the patient

of to-day. Moreover, therapeutics includes prophylaxis, the prevention of disease. It is in preventive medicine that the greatest triumphs of medicine have been and will continue to be gained. The work of Jenner, Pasteur, Lister, Koch and other pioneers of preventive medicine have saved more lives, probably, than remedial art can claim. Fresh fields of therapeutical triumphs are opening to us in the employment of antitoxin serums and extracts of animal secretions, so that if therapeutics has lagged behind other branches of medical science, it has been due to unavoidable causes, and we may look forward hopefully and confidently to its future.

The Growth of the University System.—We must not leave out of consideration in tracing the path of progress the remarkable development of the University system in all civilized countries, and the increased care and methods of medical teaching.

All the branches of scientific knowledge we have been considering, anatomy, physiology, chemistry and physics, morbid anatomy and pathology, therapeutics, and preventive medicine, have helped us to the knowledge we at present possess. But they have rendered a further aid to medicine than the mere knowledge they enabled us to acquire. Themselves scientific studies utilising methods and instruments of precision they have influenced our whole mode of thought, and made us exact and precise in our observations and investigations of disease. We may paraphrase an expression of Burdon-Sanderson's, "The history of modern medicine is largely the history of scientific method." So when we are taunted with the assertion that medicine is not a science, we can reply that medicine utilises the knowledge gained in every branch of science, and is scientific in its methods of research into the nature and reatment of disease. If its results are not so exact as in some tother branches of knowledge, it is not due to any want of scientific method and care in its investigations, but to the very complicated phenomena with which it has to deal, whilst the investigator has not the same unfettered freedom of dealing with his subject that the investigator into chemistry or physics has. By a continuance of the same methods and exact research we cannot for a moment doubt that the progress that has been so manifest in the past will be exceeded in the future.

Clinical Medicine.—If we turn now to Clinical Medicine we shall see what great strides in progress have been made. It is only possible to give a few illustrations in the time at my disposal.

Fevers.—One of the most important advances in clinical medicine has been the separation of enteric from typhus fever by the labours of Jenner, A. P. Stewart, Murchison, Liebermeister and in America by Stuart. Relapsing fever has in like manner been

separated from the other fevers by Barker and Cheyne, by Graves and Stokes, whilst in 1873, Obermeier described the spirillum in the blood of this disease, at that time the only instance in which a specific organism in the blood was proved to be always present in fevers. Quite recently by the labours of Laveran and Marchiafava, Celli and Golgi, Councilman and Osler, after previous attempts by Salisbury and Balustra, Klebs and Tommasi-Crudeli, it has been conclusively proved that a microscopic parasite, the plasmodium malariæ, is the actual cause of malarial diseases that are so common and destructive in some parts of this continent and in other parts of the world. All these gains to clinical medicine, so important in the recognition and treatment of disease, have been due to increased precision in clinical observation and Morbid Anatomy, aided in a high degree by the use of the microscope.

Diseases of the Kidneys.—It may be safely asserted that two and a half centuries ago nothing was known of diseases of the kidney except the facts of the very coarsest lesions, such as calculus and suppuration. Even these were very imperfectly connected with their clinical manifestations. The detection of albumin in the urine by Cotugne in 1770, followed by the observations of Wells and Blackall, but more especially the work of Richard Bright, who combined in a rare degree the powers of accurate clinical observation and diligent post mortem research, furnished a new vantage ground to the study of clinical medicine. The continued researches of many of the ablest physicians in all countries, who have availed themselves of each new discovery and perfection of instruments of exact investigation, have brought our knowledge to a very high degree of perfection on this subject. The recognition of the association of increased arterial tension with renal disease, and the far reaching effects of this in the production of cerebral hæmorrhage and other consequences, has been one of the triumphs of modern medicine.

Diseases of the Nervous System.—The gradual unfolding of the closed book of the nervous system, by the successive gains in our knowledge of its anatomy and physiology, the invaluable work of Sir Charles Bell and Marshall Hall, the histological researches of Caskell, the clinical and pathological work of Charcot and Westphal, the experimental work of Fritz and Hitzig, of Ferrier, Bevor, Victor Horsley, and others has helped us to understand in a great measure the working of the nervous system and the effects of its lesions. But Clinical Medicine may justly claim to have had a large share in aiding us to reach our present knowledge of its workings and disease. The deductions of Hughlings-Jackson and Broadbent, and the recent valuable work by Starr, Edward Head and Thurston have

greatly increased our knowledge of the physiology of the nervous system and aided us in our means of diagnosis. Improved methods of surgical technique, especially the advent of antiseptic surgery by the genius of Lister, have brought some of these into the region of curative treament.

Addison's Disease.—The discovery by Addison of the association of asthenia, gastric irritation and pigmentation of the skin with diseased changes in the suprarenal bodies will always remain a model of good scientific work, combining clinical and pathological observation. At the time when Addison recorded his observations no definite functions were ascribed to the adrenals, and he could do no more than draw attention to the association of the clinical and post-mortem conditions. The full fruition of his discovery was to come later, when it was established that the suprarenal bodies formed a secretion which supplied to the circulation, probably through the vasomotor centres, a stimulus or tonic necessary for the maintenance of health, and that the asthenia which is the cause of death in Addison's disease is due to the deprivation of this secretion by destruction of the adrenals.

Myxœdema.— In the developments of our knowledge of this condition we have one of the most completely worked out sections of medical knowledge, and the manner and modes in which our knowledge has been gained is most instructive. Starting from the recognition of endemic cretinism in regions in which goitre is prevalent, we next have the observations of sporadic cretinism in England by Curling, who noted that the thyroid gland was ill developed or absent in these cases. Then came the description by Gull of "a Cretinoid State supervening in Adult Life in Women." Later followed a communication by Ord, in which he pointed out that the changes in this disease were due to a mucin-yielding œdema, and who also noted the atrophy of the thyroid body, and discussed its relations to endemic and sporadic cretinism. He gave to the disease the name of myxœdema, which it has since been known by. Next the observations of Reverden and Kocher that a condition similar to myxœdema was apt to follow upon total extirpation of the thyroid gland for the cure of goitre. The latter called this condition "cachexia strumipriva." Semon pointed out the identity of myxœdema cachexia strumipriva and cretinism, and that each was dependent on a loss of function of the thyroid body. Paul Bruns published a case in which the extirpation of the thyroid of a boy, aged ten, had been followed by the condition hitherto described in this country as sporadic cretinism. Then Victor Horsley by experimental research on animals succeeded in demonstrating that loss of function of the thyroid gland produced all the symptoms known as myxœdema and

strumipriva, and varying the mode of experimentation obtained strong evidence that cretinism was a more chronic form of the condition. Finally came the crowning of the edifice by Horsley proving that transplantation of the thyroid gland arrested the changes, by the same results being obtained by Murray by subcutaneous injections, by Hector Mackenzie, by feeding with the glands, and lastly by other observers by the internal administration of an extract of the thyroid body. By these means we have learnt that myxœdema and sporadic cretinism can not only be kept at bay, but that in the latter class of cases a remarkable growth and development can be brought about. Thus it has been shown that the thyroid gland, and probably every other ductless gland, removes or forms certain products in the body, and that the integrity of those glands is essentiel to the wellbeing of the individual. This knowledge is being turned to account in the treatment of quite a number of conditions. It is interesting to observe how these results have been acquired by the steady progress of scientific methods of observation and research, and to my mind the Report of the Myxœdema Committee of the Clinical Society of London, which embraces most of the above facts, is one of the most instructive contributions to Medicine, by showing how each of the great branches of medical science has contributed to the result.

Conclusion.—The question may be asked, have the great and undoubted advances in Medicine been attended with any benefit to mankind. To this question no uncertain answer will be given. Human life has been prolonged, and not only is this so, but as brought out very clearly by Dr. James Pollock, from the figures of Mr. Noel Humphreys, several years have been added to the most useful and valuable period of life. There has been a manifest decrease of mortality from smallpox, scarlet fever, diarrhœa, typhus, enteric fever, phthisis, convulsions, croup, diseases of the digestive system, and puerperal diseases, etc. On the other hand there has been an increase of mortality fron cancer and some other diseases. The gains have been greater than the losses, and this is not the occasion to discuss why we have failed in this direction.

But whilst the review we have taken of the progress of the science and art of medicine is encouraging, we must remember there will always be a limit to our powers of curing disease. When any part of the higher tissues is destroyed it can never be replaced by the recuperative powers of nature or improvements in medical science. Sclerosis and destruction of the nervous elements means that they are almost irremediably lost. If the lung is destroyed by tubercle or other disease it can never be replaced. Nothing can make good disintegration of the kidney or liver. Nor shall we be ever able

to retard the effects of time. "To die is as natural as to be born" it has been truly said, and the silver cord that chains us to this world must sooner or later give way. Great as have been the improvements in the treatment of disease, our greatest triumphs in the future as in the past will continue in the prevention of disease.

One of the most important features in modern medicine has been the remarkable development of Medical Societies and Associations, and the fact that they are yearly increasing is strong evidence that the profession finds them useful in its work. They enable us to submit our observations and inquiries, our theories and our practice to the criticism of those most competent to discuss them, and thus to separate the wheat from the chaff. The meetings of the British Medical Association amongst others have been most useful in this respect. Let me conclude by expressing a hope that the work done at this Meeting at Montreal, and especially this Section of Medicine, will aid in the search after truth, will stimulate and ennoble the aims and energies of those taking part in its proceedings, for the advancement of knowledge and the good of mankind.

Progress of Medical Science.

SURGERY.

IN CHARGE OF

GEORGE FISK, M.D.,

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SURGERY OF THE URETER.

Delagénière (*Archives provincial de Chirurgie*, 1897; *University Medical Magazine*, Sept., 1897) in a review of operative procedures on the ureters, concludes that at present this branch of surgery is in its infancy, and at the present time the indications for instrumental interference are not clearly understood. The recent advance in abdominal surgery, especially the new methods of suturing the stomach, has of late encouraged surgeons to deal freely with the ureter, with diminished dread of supposed fatal results of urinary infiltration. The advance made in the study of ureteral conditions has been at the expense of renal surgery. In cases of hydronephrosis, instead of making a urinary fistula in the loin, or removing the kidney, the surgeon's attention is directed

towards the re-establishment of the lumen of the ureter. The ureter can be irrigated, and ureterotomy enables the surgeon to remove an impacted calculus and relieve a condition which has been uniformly fatal.

ARGONIN IN THE TREATMENT OF GONORRHŒA.

Zydlowicz has applied this remedy in thirty-three cases of gonorrhœa, six of which he described minutely. Of these, six were acute, twenty-six subacute, and one chronic. In the six acute cases, gonococci disappeared from the discharge after from three to thirteen days; in all other cases they disappeared after from eight to seventeen days of the treatment, they did not disappear even after three weeks of the treatment in one case only. Injections are not painful and therefore may by applied in all periods of gonorrhœa; under their influence the symptoms of inflammation diminish and the gonocccus disappears. All this enables the author to conclude that argonin is the best of all known antigonorrhœal medicines, and recommends it warmly.—*Przeglad Lekarski*, Nos. 1-3, 1897.—*Universal Medical Journal.*

EFFECT OF VENESECTION IN SKIN DISEASES.

Schubert (*Berl. klin. Woch.*) has treated thirteen chronic cases of skin affections—including eczema, psoriasis and furunculosis—by venesection. Nine of these cases were cured. The effect in furunculosis is especially marked. Dyes described the case of a lady, aged 30, who for seventeen years suffered from general moist eczema, for which every kind of treatment had been tried in vain. After the first venesection the eczema dried up, and four weeks after the third venesection the patient was cured. Schubert found in blood obtained by venesection that there was an increase in the number of white corpuscles in skin diseases, just as in other illnesses. He thinks that the white corpuscules are most numerous in the capillaries, and that, therefore, they come away first with the blood drawn. The accumulation of white corpuscles in the cutaneous capillaries offers a good nutrient material for the growth of parasitic microbes, which excite skin diseases. His explanation of the good effect of bleeding in some cases of skin disease is that with each venesection the blood becomes poorer in these white corpuscles. With repeated venesection he has observed a kind of regeneration of the skin, the latter assuming a purer aspect and improved coloring.—*British Medical Journal.*

A PRELIMINARY NOTE UPON A NEW OPERATION FOR THE RADICAL CURE OF HERNIA. INTRAPERITONEAL TRANSPLACEMENT OF THE SPERMATIC CORD AND OBLITERATION OF THE INTERNAL RING AND INGUINAL CANAL.

George Ryerson Fowler, M. D., in *The New York Polyclinic*, July 15, makes the following comments upon the operation for the radical cure of hernia:

"A recent experience in a case in which a recurrence took place following the employment of the essential feature of Bassini's operation for the radical cure of hernia, namely, anterior displacement of the cord, the sac of the newly formed hernia finding its way alongside the cord and forming a direct hernia at the site of the internal ring, impelled me to devise some method of getting rid of the latter more effectually than has been heretofore accomplished. The method herewith presented aims at the simultaneous obliteration of the internal ring and inguinal canal, in order to accomplish which the cord is transplaced into the peritoneal cavity for a distance represented by the space extending from the internal ring to the lowermost reflection of the peritoneal investment of the abdominal wall, just behind the pubic bone.

"The parts are exposed by a curved incision, commencing at the spine of the pubis. This is carried parallel with the os pubis for a short distance, this varying with the size of the individual, and thence curves to meet the groove in the skin corresponding to the general direction of Poupart's ligament. It is carried in this groove to a point corresponding to the line of the internal ring. This flap is reflected so as to expose the aponeurosis of the external oblique.

"The aponeurosis of the external oblique is now incised from the external to the internal ring. The cord and sac are first isolated together, and then separated from each other, each being cleared well up to the level of the internal ring. Following the suggestion of Halsted, any large veins present in the cord are isolated and removed.

"The hernial sac is now opened and its contents reduced. The sac is cut away to the level of the muscular layer of the abdominal wall, and its cut edges grasped by the forceps. The deep epigastric artery and veins are identified at the point where they cross upon the transversalis fascia, ligated in two places, and divided between the ligatures. The index finger is now introduced into the peritoneal cavity through the neck of the sac, its palmar surface turned upward, and with this as a guide the entire space represented by the posterior wall of the inguinal canal and Hesselbach's triangle,

incised, this section including, from without inward, the transversalis fascia, sub-peritoneal connective tissue, and peritoneum. The lower angle of this incision should be placed well below the level of the pubic bone.

"The spermatic cord is now transplaced into the peritoneal cavity through the gap made by this incision, entering opposite the internal ring and emerging at the lower angle of the incision. The edges of the incision are grasped by forceps and drawn forward in order to secure broad approximation of the peritoneal surfaces, and these sewn together by a "through and through" suture of kangaroo tendon. The first stitch is taken through a fold of the transversalis fascia above the point where the cord dips backward to enter the peritoneal cavity, and secures the internal ring. The suturing is continued downward until the lower angle is almost reached, just sufficient room being left at this point for the cord to emerge without infringing upon or constricting the latter. This, the new ring, if such it may be called, is placed sufficiently low to compel the cord to curve upward in order to cross the pubic bone, thus securing a bony buttress anteriorly, to strengthen this otherwise weak point.

"The inguinal canal is now closed by interrupted sutures of kangaroo tendon. These include the conjoined tendon and aponeurosis of the external oblique upon one side, and Poupart's ligament upon the other. The two lower sutures should include the outer edge of the pyramidalis upon the inner margin, or, if this is not present, the rectus muscle. This serves the purpose of guarding the site of Hesselbach's triangle. If the muscular structure does not readily come into place, the outer attachment of the muscle may be detached to facilitate its displacement. Accurate approximation of the edges of the aponeurosis of the external oblique may be still further secured by a continuous suture, each turn of which is passed between the interrupted sutures. The skin wound is now closed and the parts dressed.

"I have operated by this method in six cases. Two of these were cases of large hernia which were strangulated, and one was a double hernia. In all of the uncomplicated cases the patients were permitted to walk about in fourteen days. The cases are too few and recent to be of use in estimating the value of the new procedure, as far as permanency of cure is concerned. They are presented for the purpose of demonstrating that obliteration of the internal ring and inguinal canal is possible without resorting to castration, the most efficient of the formerly practiced methods of radical cure of inguinal hernia. This is accomplished by the method of intraperitoneal transplacement of the cord described."—*Medical Review of Reviews*, Sept., 1897.

WHEN TO CRUSH AND WHEN TO CUT FOR STONE IN THE BLADDER.

The Post-Graduate Journal for August, 1897, contains a valuable article on this subject, by Eugene Fuller, M.D., New York. He says:

"Litholapaxy causes no mutilation, and in the hands of a skilled operator it is attended with less danger than a cutting operation. Consequently it should be the procedure of choice over any form of cutting operation, if it is capable of accomplishing a radical cure. It is radically curative in all cases wherein it is possible to crush and evacuate all the calculus, provided certain abnormalities of the bladder itself and of the vesical function do not co-exist. If a stone lies free in the bladder—that is, if it be not encysted; if its diameter be not too great to prevent its being caught between the blades of the lithotrite, and if it be of such consistency as to allow of its being fractured, then there is nothing, as far as the stone is concerned, to stand in the way of a crushing operation. One ought to be able to evacuate all fragments of stone in every case in which normal vesical conditions exist. It may, however, be difficult, and perhaps in some instances impossible, to remove in this manner the nucleus about which some stones form, provided it be a foreign body which cannot be fractured at all, or at best only partially. Thus, India rubber, wire, gum, paraffine, straw, wood and bone, represent substances about which stone may form, and which in all probability cannot, or are not liable to be removed by litholapaxy. In attempting a crushing operation, if it is found that a nucleus such as I have described exists then it is better, as a rule, to abandon that method of procedure and to complete the extraction by making an opening into the bladder. In cases of vesical atony it may be difficult to wash out all the fragments, but, nevertheless, perfectly possible and practical if only time and patience be practiced. In some cases wherein abnormal conditions of the bladder exist, such as sacculi or pouches, generally post-prostatic ones, it may be impossible to remove every fragment secreted in such places. Very few stones, indeed, are too hard to be fractured by the lithotrite. Most of them break readily under one hundred pounds pressure.

"The abnormalities of the bladder and of the vesical function which may contraindicate litholapaxy, are the existence of structural conditions which prevent such an operation, or of pathological ones which render it of very temporary benefit. The conditions which prevent the operation are urethral obstruction, which precludes the passing of the lithotrite, and which cannot be overcome by the passage of sounds,

accompanied, if necessary, by some minor cutting operation confined to the anterior urethra. Thus, if a stricture is deep and non-dilatable, so that a perineal section would be necessary for its proper treatment, that operation would be called for, the stone being extracted through the incision. If an obstructive anterior stricture exists it can be divided by an internal urethrotomy, and then litholapaxy can be performed as in natural conditions. Prostatic senile hypertrophy, and very rarely other abnormal conditions of the prostate, may interfere with the performance of the litholapaxy by so restricting the movements of the lithotrite that it may be impossible to engage the stone or its fragments sufficiently to accomplish the necessary amount of crushing, or if it be possible to crush the fragments it may be impossible, although this is less likely, to so move the evacuating tube as to be able to aspirate all of them. Then, again, vesical sacculi may exist in which a calculus lies wholly protected from attack by the lithotrite. Sometimes a calculus may project from a sacculus, or, in other words, may be partially encysted. A case of this description cannot be radically treated by litholapaxy since the stump, as it were, of the calculus cannot be by that method removed, but remains to act as a focus about which fresh concentrations can collect. Vesical neoplasms may also so prevent the movements of the lithrotrite that a calculus cannot be sufficiently crushed. Very rarely a bladder may be so contracted about a stone that there is no space in which to work the blades of the lithotrite. Structural conditions such as I have mentioned, sufficient to prevent the successful performance of litholapaxy, are not, however, at all common in the experience of skillful operators. Of more importance than the causes which may exist to prevent the performance of litholapaxy are those which act to render it of but temporary benefit. In this class of cases the formation of stone in the bladder is really only secondary to and dependent on existing diseased conditions. Stones of this class are phosphatic and originate in the bladder, due to the prevalence of pathological conditions favoring infection. Thus, any condition which causes an habitual inability to empty the bladder either completely or partially, favors decomposition of urine and phosphatic deposit, Prostatic disease, most often of a senile nature, is the chief cause for this condition, although many other diseases, such as spinal paralysis, vesical and pelvic growths, stricture, etc., may be present. If the surgeon has a case of this description, the radical and best treatment is to do whatever cutting operation may be necessary to correct the vesical disease which causes the stone formation, and at the same time to remove the stone. If a patient of this class has, however, some

disease which it may not be possible to correct, or only possible by resorting to a risk greater than the patient or surgeon may be willing to accept, then litholapaxy should be done as a palliative operation, and as one which is attended with little risk; but before doing this operation under such circumstances the patient as well as those who stand sponsor for him should be plainly told that it is probable the operation will have to be repeated unless the patient, by artificial means, may be able to keep his bladder sweet and free from infection. If this is not done the surgeon who removes the first stone will be blamed when a second one forms, the patient supposing his relapsing symptoms to be due to an incomplete performance of the first operation.

"In the performance of litholapaxy, certain rules should be observed. In the first place, the bladder should be free from tenesmus. This can be accomplished by the administration of ether or chloroform sufficient in amount to produce general muscular relaxation. Local anæsthesia, generally by means of a weak solution (2 per cent.) of cocaine, has been occasionally employed, and is still recommended by a few operators. It is, however, a dangerous agent when used in this manner, owing to the toxic symptoms which may follow from its rapid absorption in case the vesical mucous membrane becomes abraded during the opration. Its use could, however, be justified occasionally in cases where, from certain general conditions, the administration of ether or chloroform might seem to be strongly contraindicated. When it is used the surgeon should be on his guard and ready to draw off the solution and wash out the bladder on short notice, as toxic symptoms may develop suddenly.

"In a very few instances no anæsthetic may be required. Such individuals have bladders which are thoroughly accustomed to instrumentation. One sees cases at times of this description in which calculi have at frequent intervals for a numbers of years passed from the kidney into the bladder, and so little may these patients think of the operation that I have known them to stop at the office of a morning on their way to business to have the concretion cracked and washed out.

"After administering the anæsthetic the bladder should be washed clean through a catheter, the agent employed being simply warm sterile water or a boracic acid solution. No astringent antiseptic should be used, as it interferes with the working of the blades of the lithotrite by causing a binding in the slot. From 5 to 6 ounces of fluid should be in the bladder while the stone is being crushed. The calibre of the lithotrite should be enough smaller than that of the urethra to allow the instrument to be moved about with perfect free-

dom. Most lithotrites have a calibre of from 20 to 25 French. Lithotrites as small as 9 French (4 English) are used in India for crushing stone in boys a year old, or even younger. Boys somewhat older than this will, however, usually take an instrument of 12 to 14 French. One skilled in the use of the lithotrite can generally distinguish the difference in the feel between stone and bladder wall. Stone caught between the blades and gently compressed affords no signs of elasticity. The feel, however, presented by different kinds of calculi varies, phosphatic stones being soft and sometimes even crumbly, while those composed of uric acid, and especially of calcic exalate, are hard. A most important rule to be observed in operating in order never to wound the bladder is always, after catching a concretion in the blades of the lithotrite, to rotate the handle of the instrument, thus moving the concretion away from the place in which it was picked up before the blades are locked, preparatory to screwing them together. By so doing, if perchance a fold of bladder wall is caught in the grip, either by itself or together with a fragment of stone, the movement will cause whatever is between the blades to slip out, while, on the other hand, if stone alone is in the grip, the rotation of the shaft will not dislodge it. After a stone has been so crushed that the fragments as measured by the guage on the lithotrite seem sufficiently small, then the lithotrite should be withdrawn and an aspirating tube as large as can be easily passed and attached to an evacuator inserted, through which as much of the debris should be removed as possible. The lithotrite should next be re-introduced to crush still further the pieces too large to pass through the eye of the evacuating tube. Then the evacuator should be again brought into use, and so on until all the particles have apparently been washed out. Oftentimes at the first washing all the particles can be removed, and it is rarely necessary for the evacuator to be brought into use oftener than three or four times in an operation. Some operators dispense entirely with the aspirating tube and the evacuator. These surgeons crush the stone into very fine particles, reducing it to the consistency of coarse sand. They then introduce a catheter, through which, by means of repeated vesical washings, all the particles are finally removed.

"As a last step in the operation the bladder should be washed out with a strong antiseptic solution, such as nitrate of silver, gr. ss. to gr. i. to the ounce of water. If the bladder is healthy and is emptied completely by the patient at the end of each urination, the after treatment ought to be simple, and the patient ought to wholly convalesce in a week

or thereabouts, the treatment being chiefly rest in bed and the administration of diuretics. If the bladder does not empty itself then the case is different. The catheter will have to be frequently employed, and the bladder washed by antiseptic solutions; otherwise decomposition will be invited. Within a week or so after all operations it is always well to insert a small aspirating tube, to which an evacuator is attached, in order to make a final test for stray fragments. This can usually be accomplished without the use of an anæsthetic.

"If some reason such as has been enumerated exists to contraindicate litholapaxy, then a cutting operation will be in order. There are three principal cutting operations—the median perineal, the lateral perineal and the supra-pubic. Large calculi have also been removed on two or more occasions through an incision on either side of the base of the bladder, that part having been exposed by means of a Kraske incision.

"Very large calculi require the suprapubic incision, as it affords most space. The least space is afforded by the median perineal opening, while the lateral perineal cut is best for stones too large for the median, but still not of excessive size. Many times the supra-pubic operation will be required to correct diseased conditions of the prostate which have occasioned stone. In such instances the removal of the existing stone is simply a preliminary step in the main operation, which is directed toward the prostate."

OBSTETRICS.

IN CHARGE OF

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PUERPERAL SEPTICÆMIA TREATED WITH ANTI-STREPTOCOCCIC SERUM—DEATH.

J. B. Rawlings, M.D., Lond., in *Lancet* describes a case of puerperal septicæmia treated by the serum treatment. A primipara æt. 24 at full term had been in labor 54 hours when admitted into the hospital Aug. 24th, an unsuccessful attempt at delivery with forceps having been made in her own home. On admission there were fairly strong pains every 10 minutes. The fœtal heart was 156. Pelvic measurement showed a slight degree of general contraction. A vaginal douche of the bichloride of mercury 1-2000 was given. Two hours later chloroform and an easy forceps delivery. Uteru

and vagina again douched with 1-2000 bichloride of mercury solution. A little later pulse 84, temp. 99.2°F. On the 25th, or 12 hours later, temp. 103.6°F., pulse 120, no rigor. 26th, temp. varied from 101.4°F. to 104.2°F. and the pulse 122 to to 140, resp. 28 to 36. Patient sweating freely; headache; no rigors. Lochia normal. There was found to be some superficial sloughing of the lower part of the vaginal wall. Heart and lungs normal. Uterus curetted, nothing found. After curetting temp. fell suddenly to 97.8°F., resp. infrequent and sighing, pulse 100, good volume.

On the 28th temp. rose to 103.2°F., pulse 120, douche given, and at 2 p.m. 9 c.c. of serum given; in the evening patient seemed a little better, pulse intermittent, temp. 102 8° F. A further 9 c.c. was injected.

29th, patient said she felt better, but looked worse; temp. varied from 102° at 2 a.m. to 98.6°F. at 10 a.m. Pulse 136, 20 hours after the first injection of antitoxin. Antitoxin again injected at 1 p.m. and again at 9 p.m., but no fall in temp. Digitalis, strychnine and caffeine injected. Patient complained of severe pain in back, which persisted till her death, and was unaffected by morphia. On the 30th temp. ranged from 100.4° to 101.4°, pulse 200; 31st, no change, and died Sept. 1st at midnight. Necropsy showed no general peritonitis, but the left half of the post aspect of the uterus and peritoneum was injected. Douglas' pouch contained 2 drachms of pus, otherwise there was little of note.

Remarks:—One interesting point in the case is that there were no rigors. *The case is a striking example of the extreme value of a high pulse rate in the diagnosis of puerperal fever.* There were no rigors, lochia sweet and plentiful, patient bright and cheerful, tongue moist and clean, appetite good. Although the temp. fell 20 hours after the injection of antitoxin from 103.2° to 98.6°, it was not accompanied by a fall in the pulse rate, and hence was not regarded favorably. Hence, in cases where in the first three days of the puerperium the temp. rises to 102° and is accompanied by a pulse rate of 120, the case should be regarded at least provisionally as septic. If the temp. and pulse rates continue 12 hours the uterus should be curetted and douched at once. The intensity of the pain in the back was unusual, and nothing found to account for it. There was marked tolerance of morphia, 3½ grains being injected one night. The condition of euphoria was well marked.

ETHER VERSUS CHLOROFORM IN OBSTETRICS.

In a paper on "Some Things I was not Taught in Obstetrics," E. S. Boland (*Boston Med. and Surg. Journal*) says

a few words in praise of chloroform in midwifery practice. Chloroform he uses hundreds of times to once of ether. Boston, he says, justly proud of her great discovery of that great general anæsthetic, ether, has not been fair to chloroform. He has not found that it predisposes to hæmorrhage. As a routine practice he examines the heart before giving it, and under these restrictions he regards it as an ideal anæsthetic during the latter part of the first stage and during all of the second stage of labor; it is seldom necessary during delivery of the afterbirth or for suturing a perineal tear.

NURSING SORE MOUTH.

Dr. E. Holt Bowling, Luster, N. C., says: Listerine acts like a charm in stomatitis materna. When a nursing mother comes to you complaining of diarrhœa which does not yield to ordinary remedies, and has a sore mouth, irritable gums, etc., give her:

R Listerine.....8 ounces.
Sig.: Teaspoonful after each meal.

You will find that the disorder will yield to this treatment when it will resist all others.

NON-LIGATION OF UMBILICAL CORD.

Kellar (*Pacific Med. Journ.*) advocates non-ligation of the cord; he has practised it in more than 2,000 cases, and, after careful observation of these and other cases, summarises as his views: (1) Ligation in man is unnecessary because (*a*) it is not required at birth of any other animal; (*b*) the imagined necessity to prevent hæmorrhage does not exist; (*c*) to tie for cleanliness in superfluous; (*d*) it is unreasonable to consider such an imperfection as need of ligature exists. (2) Ligation is in many cases injurious, (*a*) because it may justly be considered the cause of secondary hæmorrhage; (*b*) by interfering with desiccation, and thus preventing separation, it gives rise to ulceration, with not infrequent consequences of erysipelas, fungoid excrescence, etc.; (*c*) it causes inflammation of funicular vessels by keeping them distended with unnaturally retained blood, hindering their normal obliteration, and laying foundation for phlebitis, jaundice, pyæmia, etc.; (*d*) by preventing normal escape of blood, and thus causing hyperæmia and congestion of portal circulation, it may lay the foundation of numerous infantile affections apparently originating in congestions of these vessels. (3) Certainly in some, and probably in not a few, cases ligature has been directly fatal; (*a*) numerous fatal cases attributed to ligation have been recorded by the highest authorities; (*b*)

it can be seen in the newborn that the ligature maintains the right ventricle in a state of distension, otherwise relieved by bleeding from the hypogastric arteries, and this prevents renewal of action if the heart has stopped, or hastens its stoppage if it is failing; (*c*) in many instances removal of the ligature has saved life when other remedies have failed.

CONSTIPATION IN THE PUERPERIUM.

Hubert (*Revue Médicale* Louvain) writes on alarming symptoms in childbed, which depend entirely on constipation, and disappear when the bowels are opened. No doubt the bowels are naturally slow to act after delivery. Sometimes the retention of fæcal matter simulates metro-peritonitis. Not only is there loss of appetite with foul tongue and breath, but tympanitic distension of the abdomen sets in with rigors, and temperature occasionally as high as 104°. When a purge succeeds all these symptoms vanish. If the constipation be neglected true peritonitis may undoubtedly set in. This complication is not the peritonitis of puerperal infection due to the streptococcus, but a peritonitis of stercoral infection where the offending germ is the bacillus coli, which passing through the intestine infects the serous coat. There is also a later form of constipation in the puerperium, accompanied with hæmorrhages, hæmorrhoids and great pelvic congestion.

IPECAC NOT AN OXYTOCIC.

Dr. A Keilmann (*Petersburger Medicinische Wochenschrift*) has tried the tincture of ipecac as an oxytocic in weak uterine contractions, as recently recommended by Drapes and Utt, of St. Petersburg, and denies that it has any such powers. He would rather advise pushing the head from above down into the pelvis, but under anæsthesia.

THE NOSE AND MENSTRUATION.

The fact has been observed that the nasal mucosa undergoes certain modifications during the menstrual period, turgescence, exaggerated sensitiveness, tendency to hemorrhage and cyanotic discoloration. Fliess, of Berlin, has been studying this phenomenon, and has found that a certain form of dysmenorrhea, in which the pains continue after the commencement of the menstrual discharge, is largely dependent upon the nose. He applies the term genital to those parts of the nose where these manifestations are most intense, namely, the inferior turbinate bones and the tuberculi septi. Lesions of these points produce this form of dysmenorrhea, while their cocainization arrests the dysmenorrheic pain as

long as the effect of the cocaine lasts. Cauterizing will also arrest the dysmenorrhea permanently, or at least for a long while. These nasal congestions occur during pregnancy at the time when the menses would otherwise occur.—*Reported at the Ges. f. Geb. und Gyn.—Jour. A. M. A.*

THE TREATMENT OF PLACENTA PRÆVIA.

G. Fieux (*Annales de Gynéc.*) reports 5 cases of placenta prævia which have come under his notice. In the first two the treatment consisted in the use of the Champetier de Ribes bag and rupture of the membranes; in the next two, packing the vagina very tightly was first tried, and found ineffectual, while rupture of the membranes immediately arrested the hæmorrhage. In the fifth case hæmorrhage occurred at the six month of pregnancy, natural rupture of the membranes then occurred, and the gestation nevertheless persisted for seventy days thereafter, a viable child being ultimately born without incident. Fieux, therefore, sums up strongly in favour of rupture of the membranes as the best treatment of placenta prævia. Even when the placenta covers the os uteri, he would still rupture the amniotic sac through the placenta; in fact, this was done in the third case, although the leg of the fœtus was also drawn down into the opening. The rupture need not be immediately followed by complete emptying of the uterus, as is learnt from the fifth case.

IS THE VAGINA IN NORMAL PREGNANCY ASEPTIC?

Goenner (*Centralbl. f. Gynak.*) has carefully investigated the normal secretion of the vagina in healthy pregnant women. He finds that it contains anaërobic bacteria, not such as cause primary septic endometritis, but those which can be easily introduced from without. As in the case of streptococci which set up puerperal fever, the germs in the vagina do not represent auto-infection, but are brought there by the medical attendant, the midwife, the nurse, or the instruments. Septic endometritis, often indicated by fœtid liquor amnii, may be excited by the bacterium coli.

THE PNEUMOCOCCUS IN PREGNANCY.

Vinay (*Revue Obstet. Internationale*) observed a patient who suffered from great gastric irritability during pregnancy. Multiple abscesses appeared during the seventh month; the pneumococcus was found in the pus. The patient died nineteen days after delivery.

PREMONITORY SYMPTOMS OF PUERPERAL INFECTION.

Ferré (*L'Obstétrique*) lays stress on the success of intra-uteri treatment for puerperal fever. The success stands in direct ratio to the earliness of intervention. Hence very careful clinical researches have been made in lying-in hospitals in order to detect true prodromata. The true rigor, local pains and conspicuous pulse and temperature are known to all, and when combined indicate more or less advanced infection. Ferré denies that these symptoms ever come on suddenly, though certain milder types of infection now observed may represents epsis modified by antiseptic agents. These milder types, however, will assuredly develop into deadly septic infection if neglected. Ferré finds, after long clinical research, that even the severest form is preceded for a day or two by distinct elevation of temperature and pulse, and by insomnia. An evening temperature of about 100° in the axilla, with a fall of about a degree in the morning, without a corresponding drop in a somewhat rapid pulse, is a distinctly suspicious symptom. The rise in the pulse often precedes the rise in the temperature ; the observer must therefore make sure that acceleration of the heart's action is accounted for even in a patient who seems otherwise convalescent. Reaction after the fatigue of labour, hæmorrhage and emotions all send up the pulse. Insomnia, Ferré has noted, is often observed in the earlier stages of infection, distinct want of sleep without restlessness is usual for a day or two before bad septic symptoms. The lochia may remain free from odour in the premonitory stage of puerperal septicæmia, nor are the discharges always fœtid when the disease is established.

THE INDICATIONS AND TECHNIQUE OF LAPARO-HYSTEROTOMY.

Dr. N. Senn (*American Journal of the Medical Sciences*) says:

Laparo-hysterotomy is justifiable when delivery through the normal passage is impossible without mutilation of the living child.

It is absolutely indicated where the conjugata vera is less than two and a half inches, when obstruction is due to fixed pelvic tumors and advanced malignant disease of the cervix.

Mutilating operations on a living child for the purpose of effecting delivery are no longer legitimate obstetric procedures, as laparo-hysterotomy and symphysiotomy are life-saving operations for both mother and child.

Hysterectomy after laparo-hysterotomy is only justifiable if the uterus itself is the seat of a life-threatening removable disease.

Elastic constriction as a hemostatic measure should not be resorted to in laparo-hysterotomy before the delivery of the child.

The uterine incision should be enlarged to the requisite extent by tearing for the purpose of diminishing hemorrhage.

The visceral wound should be closed by four rows of sutures applied in such a manner as to absolutely arrest the hemorrhage and completely separate the uterine from the peritoneal cavity.

Laparo-hysterotomy is also indicated in the operative treatment of single, large myofibroma of the uterus in youug women when the tumor is located within or near the uterine cavity. In such cases the uterine incision should be closed in the same manner as in operations on the pregnant uterus, and the bed of the tumor should be packed with iodoform gauze which is brought through the cervix into the vagina, thus serving the double purpose as a hemostatic tampon and capillary drain.

ANTISTREPTOCOCCUS SERUM IN PUERPERAL FEVER.

W. Butler Walsh (*Intercolonial Medical Journal of Australasia*) records the following case :—Patient, aged 25, in third labour. All well till fourth day, when nurse (contrary to the author's usual custom) administered a vaginal injection. The same evening the patient had a severe pain in the right inguinal region. Temperature 102°. Hot fomentations were applied, and the temperature fell to 99°, but soon rose again to 103°. The uterus was washed out, and a pessary of iodoform (½ drachm) inserted into it. The temperature fell to 99.8°, but rose again the following day to 104.4°. The uterus was then curetted, and a piece of placenta and hypertrophied decidua, quite hard and adherent, removed. There was free hemorrhage and collapse. Temperature 95°. The patient was in a critical state for four or five hours, sometimes almost pulseless. Ether was injected hypodermically and coffee and brandy *per rectum*. Next day temperature in morning 99.6°, in the evening 99.8°. Three days later the temperature in the morning was 104°, running pulse, gasping respiration, face becoming sunken and yellow. The condition appeared almost hopeless. Ten c.cm. of serum injected at 1 p.m., the temperature being 102°. The temperature and pulse improved considerably for a few hours, but gradually rose again. The next day the temperature was

102.6°. Ten c.cm. of serum again injected. The temperature, pulse and general condition gradually improved, and the patient steadily recovered. Besides the serum injections, a pessary of iodoform (½ drachm) was on three occasions introduced into the uterus. Brandy and liquid nourishment were freely given, and quinine (grs. 4) every three hours. A slight cellular infiltration round the uterus was noticed about six days after the fever commenced. This was treated by hot antiseptic vaginal douches. No erythema, urticaria, arthralgia or other unpleasant symptom followed the use of the serum.

PATHOLOGY.

IN CHARGE OF

ANDREW MACPHAIL, B.A., M.D., M.R.C.S. Eng., L.R.C.P. London.

Professor of Pathology, University of Bishop's College.

In the county of London alone there are nearly twenty thousand lunatics and imbeciles, continually under observation in the asylums at Banstead, Cane Hill, Claybury, Colney Hatch, Hanwell, Bexley and Horton. In the asylums of Canada there are fourteen thousand insane, exclusive of idiots; in the province of Quebec alone the asylums contain nearly 3,000 patients. A perusal of the annual reports of all these institutions leads to the belief that an imperfect use is made of this wealth of material for clinical, but more especially, for pathologic purposes.

Everyone interested in the care and treatment of the insane is making an earnest effort to substitute for "asylum," with its old stigma, the more comfortably sounding "Hospital." And yet, for the most part, the people at large are found believing all things of Hospitals for the Insane if only they be false, and the more readily if they are malicious. Some of the more ignorant amongst the public are yet harking back to the calumnies of Charles Reade, whose facts were long ago proven to be fiction.

In the *British Medical Journal*, 22nd December, 1894, these and similar delusions are adequately dealt with.

Those who are responsible for the management of asylums would do well to insist, in their reports, more strongly upon the means taken for the care and cure of their charge rather than upon their detention. The old stigma can only be covered by the scientific mantle, which many superintendents and pathologists are weaving about the insane and their diseases.

There is evidence, however, within the last few years that this state of affairs is passing away, and many reports

contain more than a few scraps of information upon the pathologic enquiry carried on in the various institutions.

The Eighth Annual Report of the Asylums' Committee of the county of London, presented to the Council in June, 1897, yields welcome proof of this fact.

In the report above referred to, there is evidence that the large field at the command of the London authorities is begun to be worked. There is now a pathological laboratory at Claybury in full working order under the direction of Dr. F. W. Mott, F.R.S., to whom is assigned an annual salary of $3,500. Dr. Mott has two laboratory assistants, and the Technical Education Board has established there a research scholarship in neuro-pathology of the annual value of one hundred and fifty pounds.

The asylums are also recognized by the Royal Colleges of Physicians and Surgeons as institutions at which clinical instruction may be received, and the Schools of St. Bartholomew's, Westminster and St. George's so availed themselves.

The pathologist's report will be read with relief, coming though it does in the midst of an uncouth bundle of printed matter, 13 x 8½ inches and 150 pages thick. The relief is the greater if one has entered into the details of which the report is largely composed, the cost and varieties of coals used, the contract prices for provisions—like Whitely's catalogue.

Even the superintendents' reports are unnecessarily meagre. The names of Doctors Claye-Shaw, Moody, Jones, Seward, Alexander, are well known, but their reports are for the most part devoid of scientific interest.

It is quite true that these authorities do seek other channels for their scientific observations, but the committee would be well impressed if it were at least suggested that some such work is being done.

For all these reasons then the account of Dr. Mott's research is a relief. It would appear that Dr. Mott himself has had to initiate the recording of the clinical history of the new cases. Of great interest is the observation that in 70 per cent. of the cases of general paralysis, fatty degeneration of the usual muscles—heart, diaphragm and the adductors of the arm—was found. This is analogous with the condition found in diphtheritic paralysis, and leads to the interesting enquiry as to whether general paralysis is not also due to a toxæmia.

Dr. Mott was struck by the frequency with which syphilitic lesions were found. At the autopsies in the Verdun, Montreal, Asylum, last year, it was noted that in 20 per cent. of the cases venereal disease was the cause of the mental condition and death of the patient.

Dr. Mott's work has been systematic, and has dealt with

the evidence of toxic agents in the blood and cerebro-spinal fluid; the possible influence of those agents in producing death by degeneration of the heart and other muscles; the relation of syphilis to general paralysis; relation of congenital syphilis to general paralysis; relation of syphilis to disease of the cerebral vessels, membranes, and brain substance; degeneration of the neuron, owing to premature decay, influence of toxins, influence of defective nutrition by cutting off the blood supply; a number of cases, such as tumours, infective diseases, ex-ophthalmic goitre, morphœa, herpes, cerebral aneurisms.

Work was undertaken by Mr. White to show if there was any connection between the presence of micro-organisms and certain mental conditions. In this enquiry the extreme unreliability of bacteriologic conclusions was demonstrated. Micro-organisms were found in 40 per cent. of the cases, but when more careful methods were adopted the percentage was reduced to sixteen.

Dr. Mott has now under his direction an efficient corps of workers, and intends issuing regular bulletins, which promise to be of great value to persons having an interest in neuro-pathology.

Medical Society Proceedings.

MONTREAL MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, April 23rd, 1897.

GEORGE WILKINS, M. D., PRESIDENT, IN THE CHAIR.

ABSCESS OF THE PELVIS.

Dr. F. J. SHEPHERD exhibited the pelvis of a male dissecting room subject, half of which was shown as a dry and half as a moist preparation.

There were sinuses in the lumbar, sacro-iliac and gluteal regions, and in the thigh and groin of both sides. The pelvis and sacral regions were filled with pus. On examination, the specimen showed beautifully how the disease was bilateral and what a small amount of original disease there was. The original disease was altogether confined to the intra-vertebral substance between the 4th and 5th lumbar vertebræ, and an abscess cavity was found here which had spread laterally down each psoas muscle and also down the sacrum into the pelvis. There was no spinal deformity whatever. The dry specimen showed new bone throughout about the lower lumber vertebræ and the sacrum but no sacro-iliac disease. The moist preparation beautifully demonstrated psoas, pre-sacral, and lumbar abscesses, all proceeding from the original disease between the 4th and 5th lumbar vertebræ. Dr. Shepherd said this case explained one of the puzzles met with in the surgical wards,

where sacro-iliac disease was suspected and abscesses were found on both sides. In the present case the disease could only be searched or in front.

Subacute Lukæmia.

Dr. J. G. Adami showed the organs and described the post-mortem appearances in a case of this disease.

Polydactilism.

Dr. Shepherd exhibited skiagraphs of a case of supernumerary fingers and toes in a girl æt. 17. He found the skiagraphs most useful in operating, and by them he was enabled to have a much more useful hand than he otherwise could. In both hands was a prepollex and in both feet a prehallux. In the feet there was also on each foot a post-minimus, the post-minimus in the hands had been removed in infancy. There was no history of any such deformity in the family.

An Alleged Case of Uterine Air Embolism.

Dr. Wyatt Johnston related a case in which he had acted as expert for the defence in a recent murder trial, where the victim died suddenly, pregnant at the 4th month, and bore marks of attempted instrumental abortion. The cause of death alleged was as above, the air being assumed to have entered the sinus left open at a partial detachment of the placenta, but the autopsy was performed in an unskilful manner, the pelvic organs having first been removed and dissected before the chest was opened. On opening the chest the heart was ligatured, and on opening it after removal sufficient air to give a distinct puff, audible to three medical witnesses, was noticed on puncturing the left ventricle. No air was noticed in the right heart, and none was observed in the uterine pelvic veins or vena cava or the veins elsewhere in the body, though the examination in this respect was incomplete, and the whole autopsy was done in so slovenly a manner that the brain, lungs, intestines and liver were not removed, and none of the important vessels were slit open. The brain, lung and liver were described as being pale, and the heart free from blood or clot. As air embolism shows a distension of the right heart and veins with air and little or no air in the left, Dr. Johnston maintained that if only in the left heart, the air obviously must have entered the heart post-mortem. The removal of the heart before the air was looked for afforded it the necessary opportunity to enter from the outside while the vessels were being tied off, and the evidence stated that a long narrow bladed knife had been plunged vertically down in opening the thorax, possibly cutting the carotid or innominate artery. Dr. Johnston had found that the heart when empty can be made to behave like a bellows, and that air can be forced in and out at will by holding the organ in a certain manner. If the heart is compressed between the finger and thumb in the plane of the septum, the ventricles are bound to assume a spherical form, and air enters in sufficient quantity to give a distinct puff when held in the hand and punctured. When the heart is compressed perpendicularly to the plane of the septum air was always squeezed out. This depends

on the physical law that if the circumferences are equal, circles and spheres enclose more space than ovals. This fact was demonstrated to the meeting by means of a calf's heart. In the case under consideration there was no record of any defect of the septum or patency of the transverse ovals.

The jury had returned a verdict of acquittal.

Stated Meeting, May 7th, 1897.

WESLEY MILLS, M.D., IN THE CHAIR.

CEREBRO-SPINAL MENINGITIS COMPLICATING PNEUMONIA.

Dr. A. D. BLACKADER reported this case and Dr. WYATT JOHNSTON exhibited the pathological specimens.

Dr. W. F. HAMILTON asked if the enlargement of the spleen was associated with softening.

Dr. WYATT JOHNSTON, in reply, stated that the spleen was very rarely enlarged in pneumonia due to pneumococci, but when due to streptococci, enlargement was the rule.

Dr. MILLS pointed out that the failure of the respiration prior to the heart was suggestive. The relation between the cardiac, respiratory and vaso-motor centres was very close, and as the tendency in pneumonia was to watch the heart, one might take an erroneous view of the cause of death.

BRONCHIECTASIS.

Dr. F. G. FINLEY reported this case, of which Dr. WYATT JOHNSTON exhibited the pathological specimens.

THE VALUE OF MODIFIED MILK IN INFANT FEEDING.

Dr. D. J. EVANS read the paper.

Dr. A. D. BLACKADER congratulated Dr. Evans on the excellent *resumé* of the facts which he had given, but he was disappointed that in the paper Dr. Evans had presented no statistics of his own, although this modified milk had been employed in the Foundling Home for more than a year. Unquestionably this modification of cows' milk was the only scientific method for the artificial feeding of infants, and in his opinion it certainly was the duty of every physician to master the general principles on which its successful employment depended. Once acquired they were afterwards easily carried in the memory. He was glad to hear the use of only a small proportion of the proteids recommended. Unquestionably there was a very distict difference in digestibility between the proteids of cows' milk and those of human milk, the latter being much the more soluble. This was a factor that could not afford to be disregarded. In his experience, in many cases of disturbed digestion in infants the proteids were the source of trouble, and in young infants it was often necessary to reduce the percentage of them very much, even so low as 50 or 60 per cent. Even with all the advantages supplied by the modified milk, we did occasionally meet with infants in whom even this small proportion of the proteids seemed to make trouble, the infants still

passing curds, which immediately disappeared on a suitable wet nurse being supplied. The one great objection to modified milk at present was the expense. It was the food for the rich and well-to-do, not for the poor. Dr. Blackader had for some time past advocated the establishing in various parts of the city depots for the supply of proper Pasteurized milk or cream of known strength suitable for home modification. He was convinced that such could be supplied in jars at reasonable expense, and mothers be taught to do the necessary mixing themselves.

Dr. J. C. CAMERON agreed with Dr. Blackader in his remark that this milk was for the rich and not for the poor. He thought the whole profession should bring this matter before the charitably disposed public in order that the milk might be placed within reach of the poor. He was surprised to hear that there was a sort of undercurrent of suspicion against modified milk as a possible source of rickets. This was not so, and Dr. Evans' paper had certainly shown its value.

Dr. KENNETH CAMERON felt that one reason that modified milk was not more used was the difficulty in understanding how to prescribe it. He had found that it was not an easy matter to write a prescription that one could make up oneself if necessary. The statistics of the Montreal Foundling and Infant Nursery showed that this method of feeding was vastly superior to any other that that had been tried in that institution.

Dr. G. G. CAMPBELL agreed with the previous speakers as to the value of this milk. He had found its expense the great drawback, and had had considerable success in a method of home modification based upon it. He used a Florence flask fitted with a perforated rubber cork containing a chemical thermometer for Pasteurising, and obtained the necessary proportions of cream and milk by having the patients receive their supply of milk in the ordinary glass bottles and syphon off the quantity directed.

Dr. J. B. MCCONNELL considered that physicians did not thoroughly understand the method of prescribing this milk. The great majority of children were overfed, and advice and instruction to parents concerning the amount of food he felt would be of more importance than determining the minute division of the constituents.

Stated Meeting, May 21st, 1897.

F. J. SHEPHERD, M.D., IN THE CHAIR.

TWO CASES OF MYOCARDITIS.

Dr. W. F. HAMILTON reported two cases of the above disease.

Case I. H. G., male, æt. 44, was admitted to the Royal Victoria Hospital on three occasions between November 22nd, 1895, and March 13th, 1896, complaining each time of shortness of breath. The heart, though enlarged, showed no evidence of endocarditis, the limbs were œdematous, and the urine on one occasion contained a trace of albumin. Cheyne-Stokes respiration developed, but rest in bed and a vapour bath benefited him so much that he insisted on leaving hospital. Readmitted three days later with complaints as before, he showed on examination the same condition, and again

had a trace of albumin but no casts in the urine, which amounted to twenty fluid ounces *per diem*. Digitalis and rest again effected a marked improvement, and after sixteen days' residence he was discharged for the second time. Two and a half months later he was admitted for the third time with Cheyne-Stokes respiration and signs of cardiac failure of much more marked extent than before, cyanosis and pulmonary œdema having developed. The urine contained no albumin. A fatal attack of erysipelas occurred after twelve days in the hospital. Post mortem the heart was found enlarged (hypertrophy with dilatation) and free from endo- or pericarditis. Microscopically the heart muscle showed generalised interstitial myocarditis. The kidneys were passively congested.

Case II. W. S., male, æt. 46, was admitted to the Royal Victoria Hospital on March 26th, 1896, complaining of paroxysmal attacks, pain in the chest, back and right shoulder, and "turns" of dizziness and faintness. The onset of these symptoms dated three months back, and followed "overlifting." On examination little was made out beyond slight enlargement of the heart to the left and an irregular pulse. On the fifth day of his stay in hospital he experienced one of the attacks, became pale and anxious looking, vomited once or twice, and died within a few minutes. A diagnosis of probable angina pectoris from coronary artery disease was made. At the autopsy the heart was found enlarged and the orifice of the left coronary artery much narrowed, and patches of atheroma on the walls of the vessel. The area supplied by this artery contained patches of myomalacia—irregular, turbid and greyish in colour, and with several small hæmorrhages into the muscle. There was no endo- or pericarditis; general arterio sclerosis, but no changes in the kidneys. Dr. Hamilton emphasized the following points in discussing these cases:

1. The very great danger of making a wrong diagnosis in patients suffering from this disease.
2. The comparatively early age at which such marked changes may be found.
3. The freedom of endocardium and pericardium.
4. The influence of digitalis in one case of advanced fibrous myocarditis.
5. The possible common cause—alcohol.

SOME DEBATABLE POINTS IN THE TECHNIQUE OF APPENDECTOMY.

Dr. G. E. ARMSTRONG read a paper on this subject.

Dr. A. LAPTHORN SMITH agreed with Dr. Armstrong in preferring a glass tube to gauze for drainage purposes, advocated drainage through the flank in suitable cases. He thought the proper method of removing the appendix was to cut it off and invert the serous surfaces, as he could not believe that two mucous surfaces would unite. He had had two or three cases of fæcal fistula following a simple ligature. Judging from his experience in the removal of pus-tubes, one should not only remove the appendix but also the inflammatory exudate, wash out the peritoneum and leave it dry, but in order to do this a large incision would be necessary.

Dr. A. E. GARROW asked if there was any difficulty in maintaining the position of the drainage tubes. In one or two cases he

had used the method of drainage through the flank with good results.

Dr. J. ALEX. HUTCHISON emphasized one or two points made by Dr. Armstrong. The occurrence of secondary abscess in the pelvis should always be kept in mind, and the part carefully explored. He cited a case in which this was the cause of death after an apparent recovery after operation.

Dr. F. J. SHEPHERD said it had been the custom of most surgeons lately when the abscess was found behind the cæcum to drain through the flank, and also in all cases to search the pelvis. The question of drainage was a vexed one. Punjee silk was recommended by Dr. McCosh. The speaker thought the object of gauze was to alter the lymph current rather than to drain. He considered that Dr. Armstrong's record of four recoveries in general peritonitis was most remarkable, and asked whether he had washed out the peritoneum. Dr. McCosh, in a paper read recently at Washington, reported saving six out of eight cases of general peritonitis by turning out all the intestines, and while an assistant washed these, washing out the abdominal cavity and closing with the intestines floated in saline solution. He also injected directly into the ileum two ounces of saturated solution of magnesium sulphate, and closed the puncture with a Lembert's suture. Dr. Shepherd stated that he had never seen a case in which there was diarrhœa which had not recovered.

Dr. ARMSTRONG in reply said that he had practised all the devices for removing the appendix, and found that the tying it off with cat-gut was just as satisfactory as the more complicated methods. Silk was likely to become infected, keep up the discharge, and not heal until it came away.

In answer to Dr. Garrow, he said he had had no difficulty in introducing the tube, that a soft rubber tube laid in the abdomen without causing pain or interfering with the peristalsis. He preferred this plan to drainage through the flank, as it obviated the necessity of a second cut, and answered the purpose just as well.

In answer to Dr. Shepherd, he stated that with one exception he had washed out all of these cases. The washing must be done through a tube inserted into the furtherest part of the abdominal cavity, so as to secure an outward flow. The cavity could not be washed by pouring water from a pitcher.

ACUTE LEUKÆMIA.

Dr. G. D. ROBINS reported this case.

Stated Meeting, June 4th, 1897.

GEO. WILKINS, M. D., PRESIDENT, IN THE CHAIR.

THE CERTIFICATION OF INSANITY.

D. T. J. W. BURGESS, in introducing this subject, dwelt largely on the many errors made by the general practitioner in filling up the prescribed form for the commitment of patients to asylums, errors often leading to delay in the reception of patients.

One of the mistakes most commonly made was in the case of married women, whose legal names, in this Province, were not those

of their husbands, but their maiden names. In this respect, the law here, based on the Code Napoleon, differed from that in Ontario, where a woman's married name was her legal name.

Another respect in which certificates were often lacking was that the *facts* on which the diagnosis of insanity was based were not stated.

Two points were to be clear in the mind of every certifying physician: 1st, that the patient was really insane, and, 2nd, that he was a proper person to be confined in an asylum. Insanity alone did not necessarily constitute a ground for the deprivation of liberty.

The *facts* on which these opinions were based should be stated in full. Merely to say that a patient was insane, or that he had delusions or hallucinations, was not sufficient. The reasons for judging him insane and the nature of the delusions or hallucinations must be stated, as also any insane conduct on the part of the patient, and the reason for placing him in confinement, viz., that he was or might be dangerous to himself or others, or that he might be benefited by hospital treatment. As an example of a certificate sent him, and one which he had been obliged to refuse, Dr. Burgess instanced a case in which the only information was, "patient tells lies." Here the patient truly did tell lies, but they were insane lies, in other words delusions, and this fact, with the nature of the false insertions, could just as easily have been stated in the first certificate furnished, had the doctor chosen to exercise a little care, as in the second, which he was obliged to supply ere his patient could be received.

As all forms required for the admission of lunatics to asylums are statutory, any mistakes such as the foregoing, and others instanced made therein, rendered them null and void, and physicians should not feel offended if asylum officials refused to receive papers not properly filled, as by so doing they would render themselves liable to severe penalties.

Dr. VILLENEUVE continuing the subject said that the full bearing of the registration of the insane may be best understood by citing the articles of the revised statutes of the Province of Quebec pertaining thereto. The insane for the purpose of registration are divided into two classes, viz.: 1st, *Private patients;* under this heading come the insane, idiots and imbeciles, who can pay for their own maintenance, treatment, etc., either by themselves, their tutors, curators or persons bound in law to support them; 2nd, *Public patients*, those who must be supported by the public. The law places no legal restriction on the admission of private patients; article 3188 simply says that the proprietors may receive insane persons, idiots or imbeciles.

With regard to the medical certificate referred to in the case of private patients, article 3189 says: "The persons above mentioned cannot be admitted, unless the proprietors of the asylum are furnished with an application according to form A, and a medical certificate according to forms B and C, signed by two medical men, who are neither partners, nor brothers, nor in the relation of father and son to each other, to the proprietors of the asylum or to the patient, and who have each separately and personally examined the patient before the application for his entry into the asylum. The forms A, B and C must be attested under oath."

The following article, 3190, enacts that the physicians who sign the medical certificate (forms B and C) must state precisely the facts resulting from their own observations and the information received from any other persons, on which they have based their opinion that such a person is insane.

Proceedings for the admission of *public patients* are a little more complicated; article 3195 covers the case and enacts as follows: "The following persons may be admitted to lunatic asylums at the charges of the government, and of municipalities, of incorporated cities, or towns, or of counties:

1. Insane who have not themselves, or through some persons bound in law to provide and care for them, the means of paying, in whole or in part, the expense of their custody, maintenance and treatment, in one of such asylums;

2. Idiots or imbecile persons, when they are dangerous, a source of scandal, subject to epileptic fits or afflicted with any monstrous deformity, and are unable, wholly or in part, to pay their custody, board, maintenance and treatment therein. In the case of a public patient, two points must be made out: 1st. That the patient comes within the meaning of the law which unlike for private patients restricts the admission of public patients to stated cases; 2nd. That he must be supported by the public. This latter point is borne out by certificates signed, on statutory forms, by the clergyman, and the mayor and secretary-treasurer of the municipality to which the patient belongs (forms D, E and K respectively, vide article 3195a)."

According to the same article 3195a, the medical certificate is made according to forms B and C, by one physician only, testifying as to the mental condition of the patient, indicating the particulars of his disease, the necessity of his being treated in an insane asylum, and of his being there detained.

In the case of idiocy or imbecility, the physician shall further declare whether the patient comes under the category of idiots or imbecile persons, who may be admitted to or detained in an asylum, and shall specially indicate the reasons upon which he bases his opinion. Such certificate cannot be received, if the physician who signs the same is related or allied to the third degree inclusively, to the proprietors of the asylum, or to the person applying for the admission, or to the insane person. The physician must be one who habitually practices his profession.

If the applicant is unable to write, form A must be sworn to before the mayor or a justice of the peace of the domicile of the patient. The medical certificate (forms B and C), clergyman's (form D) and secretary-treasurer's (form K), must be sworn to before a justice of the peace, a commissioner of the superior court, who may act as such for all the certificates in the same brief, but who must not have signed any of the certificates either as physician, mayor, secretary-treasurer, or as applicant, as these persons are debarred by the law from acting as justice of the peace or commissioner of the superior court.

Also the same person must not sign two of the forms herein above mentioned, forms B and C, which constitute the medical, excepted.

All the certificates are null if they have been prepared more than twenty days before being sent to the medical superintendent.

All the certificates must be filled up on statutory forms which are supplied by the medical superintendents on demand. After they have been all prepared they must be returned to the medical superintendent for approval and permit to transfer the patient to the asylum.

Dr. J. B. McConnell felt that the diagnosis of insanity was of greater importance than the subject under discussion. He felt that in all cases one should have the advice of an expert. People who were only feeble and weak were often declared insane on the evidence of a friend.

Dr. T. Glover Lyon, of London, England, could not understand the difficulties in filling out the certificates complained of by the first speaker. He agreed with Dr. McConnell that the real difficulty lay in the diagnosis.

Dr. H. A. Lafleur drew attention to the fact that in this province imbeciles could not be admitted to an asylum unless they showed dangerous symptoms.

Dr. F. Buller thought the information received was exceedingly practical and valuable, and pointed out several difficulties he had met with in complying with the legal forms.

Dr. Wesley Mills hoped that before long sufficient would be known of the nature and cause of insanity to render the diagnosis more easy.

Drs. D. J. Evans, A. L. Smith, W. F. Hamilton and C. F. Martin asked some questions regarding specific cases, which were replied to by Dr. Burgess.

Dr. J. C. Cameron could not see why the physician should be required to give a definite opinion in doubtful cases, and by so doing expose himself to an action for damages. He advocated having a place of detention, where, before being committed to the asylum, patients could be observed, and the question of their sanity or insanity settled.

Stated Meeting, June 18th, 1897.

Geo. Wilkins, M.D., President, in the Chair.

Sporadic Cretinism.

Dr. E. J. Semple showed a case of this disease.

Aneurysm of the Subclavian Artery.

Dr. C. F. Martin exhibited an enormous aneurysm of the left subclavian artery, and gave some notes of the history and autopsy, which were briefly as follows:

The patient, who had entered Dr. James Stewart's ward in the Royal Victoria Hospital, June, 1896, was a man of 54 years, a laborer by occupation, and born in England. He had always been accustomed to heavy manual labor, was fairly moderate in the use of alcohol, and had never acquired any venereal disease. His health had been good up to two years before death, when for the first time there appeared some pain in the left shoulder, running occasionally down the arm and up to the back of the neck. It was

at first regarded as rheumatism, but soon the pain became more severe, the lower part of the neck became swollen, and so also the left arm, which grew distinctly weaker and colder than the right. These symptoms all gradually increased, and the pain was so severe and persistent as to cause insomnia.

Physical examination on admission showed a rounded prominence in region of clavicle, from the insertion of sterno-mastoid to the junction of the middle and the outer third of clavicle, pulsating and giving a systolic bruit on auscultation. Dulness on percussion was manifest over the tumour, and naturally over the apex of the left lung to the first interspace. P. 72. The right pulse was full, regular and collapsing in character, with capillary pulsation visible in the finger nails. The left radial pulse could just be felt indistinctly. No pulse could be obtained in the left temporal or facial arteries. There was marked general arterio-sclerosis. The heart was enlarged to the left and right, and the sounds were best heard in the fifth interspace within the nipple line. There was a faint, soft systolic murmur at the apex, and a soft, short, diastolic murmur. At the base, double murmurs were detected at both orifices and traced down the right border of the sternum. The left pupil was smaller and less sensitive to light than the right, while the left vocal cord was paralysed. During the patient's prolonged sojourn in the hospital the condition progressively increased, except during a few weeks when it was thought the administration of potassium iodide in doses of 15 grains three times daily was having a beneficial effect. Soon, however, the pulsative tumour grew larger, the clavicle became distinctly eroded, and the swelling of the arm very much more marked. The skin latterly became discoloured, and the extension of the aneurysm seemed to threaten external rupture, so thin was its outer and upper covering. On August 24th the swelling measured 9½ x 9 ins. Dyspnœa, pain, swelling and weakness rapidly increased during the last month, and the patient died on December 12th suddenly, the aneurysm not having yet ruptured.

The autopsy showed that there was much emaciation. The pupils were equally contracted. The left shoulder measured in girth 53 c.m. as opposed to 41 c.m. on the right side. The skin over it was bluish-red and parchmented. On examination the swelling was seen to be due to a large aneurysm commencing from the left subclavian artery, which showed already a dilatation at its origin 4 c.m. in diameter. Immediately after, the aneurysm spread out abruptly into a large sac, in which could be felt the eroded first rib, still attached to the sternum, but with its vertebral end splintered. The clavicle was bared of periosteum for two-thirds its length, and the articulation eroded and ragged, while the acromial end was splintered and fragmented. The acromion process itself was likewise bared of periosteum. The glenoid cavity was normal, as also the head of the humerus. In addition to these bony changes there was erosion of the second rib and the bodies of the first and second dorsal vertebræ. These contained, besides loose pieces of bone, some firm and loose clots. The wall was of varying thickness, the thinnest immediately over the shoulder. The aneurysm had markedly atheromatous walls in front, but behind it seemed to have dissected into the surrounding prevertebral tissues

for some distance, as no definite wall could be detected. The aorta itself was dilated in the ascending portion, though not so much as the descending thoracic division, which measured 12 c.m. in circumference, though by the time the cœliac axis was reached its calibre was of normal proportions. Calcified plates existed throughout its whole length. The branches had features of some interest. The opening of the innominate artery was distinctly dilated, that of the left common carotid quite obliterated. On tracing up the brachial artery to the subclavian, it was possible to meet near their junction a dissection of the inner and median walls, where a commencing progression of the aneurysm was evident in this way. The brachial artery itself was small and thin, the radial still smaller and thinner, indeed more like a vein. In their corresponding veins there were numerous varices and thromboses, some as large as cherries. The heart was dilated and hypertrophied, and showed chronic aortic and mitral endocarditis. There were elsewhere no features of the autopsy of special interest in connection with the aneurysm.

THE
CANADA MEDICAL RECORD

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Editorial.

IMPROVEMENT OF BRAIN FUNCTION BY SURGICAL INTERFERENCE.

Surgical aid is sought for now in many instances in which heretofore only the ordinary medicinal means and other non-surgical methods of treatment were available. The various internal organs of the body which were considered the almost exclusive field of the physician have been invaded by the ever widening reach of surgery, and many conditions which were considered hopeless from a therapeutic point of view have been placed under control, and untold numbers of lives rescued from impending dissolution. A less conspicuous, but probably a wider department of surgical work is that, the object of which is to relieve distressing conditions and conserve or improve the functions of various organs or portions of the body.

An article on these lines by Ernest Laplace, M. D., LL.D., Professor of Surgery and Clinical Surgery in the Medico Chirurgical College, Philadelphia, appears in the *Medical Bulletin* for October, 1897, in which his experience in improvement of brain function by surgical interference is given. As in all other regions of the body, aseptic methods have permitted of accurate results in the surgery of the brain and meninges. The title of his paper was chosen on account of the fact, "that in the vast majority of instances pres-

sure is the cause of the interference, and the relief or restoration of function will depend upon our ability to diminish or entirely remove the permanent or transitory compressing cause." He limits himself in this paper to general pathological conditions as diagnosed, and the application to the brain of the same principles of surgical therapeutics as would have been resorted to to fulfil similar indications in other portions of the body. The leading symptoms of brain trouble are pain and interference with function, and are caused chiefly by chemical, physical, biological, and mechanical irritation. Loss of function is usually associated with some alteration of structure, or in the relation of one part to another, which may only be the abnormal crossing or touching of two fibres, just as derangement would follow the crossing of two telephone wires. To get good surgical results, the technique must be free from fault, so that no portion of failure may result from this cause. No death must ensue from shock, hæmorrhage or sepsis. In regard to shock, so liable to occur in operations on the brain, a skilled assistant should relieve the operator from the necessity of watching the pulse, for reasons of asepsis. And if the pulse becomes wavering and rapid, then hypodermic injections of strychnine, hot-water bottles, the head placed in a dependent position, and high enemata of warm water are indicated. The most frequent indications for surgical interference are in cases of concussion or contusion, which result in shock and congestion and unconsciousness, which in case of recovery may result in epilepsy or insanity. The indications are in unconsciousness which lasts more than a few hours to relieve the congestion by draining the cranial cavity.

Dr. Laplace in these cases makes a transverse craniectomy, removing a strip of skull one-fourth of an inch wide. The dura mater is then incised the full length of the wound, except over the superior longitudinal sinus. The groove is then packed with two narrow strips of sterilized gauze, each one extending from the temporal region to the vertex; the scalp is sutured, leaving the ends of the strips of gauze protruding on each side. This insures perfect drainage, without risk of hæmorrhage or sepsis. The gauze drain is left eight days *in situ*, during which time the symptoms gradually dis-

appear. At the end of this period the stitches are removed and the gauze withdrawn. This he believes to be the safest and surest way of restoring brain function with the least risk of after-effects, when contusion of the brain, resulting in indefinite compression, has been diagnosed. Of course, the same procedure, modified to suit the case, is to be resorted to, when extra- or intra dural hæmorrhage exists, and the clot being removed and the hæmorrhage stopped, the case is then transformed into one similar to the above. During the last four years he has treated twenty-two cases after this manner with a uniformly good result.

He recommends the local brain drainage in all cases where the brain congestion cannot be speedily relieved by purgatives, blood-letting or other derivative measures.

In cases of syphilitic gummata he has found that craniectomy with separation of the adhesions between the dura and skull, and incision of dura, has in cases where the specific treatment has not availed been followed by immediate benefit when the treatment was again subsequently begun.

The counter-irritant effects of operation are beneficial in the so-called idiopathic affections, as epilepsy and insanity. In fifteen cases of epilepsy treated in this way six only were benefited, but in all, the mental condition was improved. In four cases of insanity following injury to the anterior portion of the head, craniectomy with separation of adhesions was followed by recovery. In microcephalus and idiocy there was improvement in some cases, not in others. In tardy or arrested development, marked improvement in intellect has followed this operation. "If, therefore," he states, "we have not had as flattering results as we anticipated, it may be from the fact that the operations performed were not sufficiently extensive, or else were not performed upon the intellectual area. Our operation consists in trephining over the temporal fossa and removing a strip of skull over the coronal fissure, about one-fourth of an inch wide, directly across the vault to the opposite temporal fossa; then opening the dura throughout except over the longitudinal sinus. This certainly creates an impression on the brain, during which it is nourished into better function. Whatever may be the criticism to the mode of procedure, the results speak for themselves. We

do not claim anything but so altering the nourishment of the brain in these patients and rendering them able to appreciate and retain impressions more easily than without the operation. In other words, this procedure is in no way opposed to or intended to do away with the training which these children get in schools for the feeble-minded. On the contrary, the purpose is to put to the greatest usefulness such brain-capacity as is there, so that the children might improve and benefit by the training at school to a greater extent than if no surgical interference had awakened their limited intelligence to its fullest capacity."

It is reasonable to suppose that if the brain is in any way interfered with by pressure, or if undue resistance is offered to the expansion connected with its ordinary development, that any operation which relieves this condition must, other conditions being normal, be followed by improvement. This rational surgical attack on the last medical citadel gives promise of marking another advance for scientific medicine.

A NEW DISPENSARY ABUSE.

Langsdale's Lancet, Oct., 1896, contains the following from the *Medical Record*: "A report comes to us as we are about to go to press (as the *County Weekly* puts it) to the effect that a physician has been dismissed from one of the most fashionable dispensaries in a neighboring city (of course it could not occur in New York) for abstracting a fifty-dollar banknote from the purse of a patient.

"The pocketbook was left upon the dispensary desk, it is said, while the lady entered an adjoining room to prepare for examination. The plea made to the governing board by the physician was that he had been overworked, having treated over four hundred patients at the dispensary during the three days preceding the temptation which caused his fall, and that during this time he had been unable to procure but one full meal. Hunger and the means at hand to appease it may have proven too strong a combination for his overwrought nerves, but this naturally did not weigh with the board. The *clientele* of the institution must be made to feel that while a patient is undergoing treatment his valuables are safe. The argument was used by one of the governors that if the patients'

money is to be taken from them, they might as well go to a physician's office and be done with it.

"The crime of robbing a dispensary patient cannot be too severely punished, since such acts would soon deter many persons of wealth from patronising these institutions. It is therefore most fitting that the culprit in the present instance will be forced to take his chances for the future in private practice.

"There is something to be said on the other side. It seems unwise for applicants to carry with them and display at the dispensary large sums of money, diamonds, and the like. It would surely seem to be in the nature of contributory negligence if in the future applicants for free treatment put temptation in the way of doctors, who after all are only human and often hungry."

Circular No. 4.

LABORATORY OF THE BOARD OF HEALTH,
OF THE PROVINCE OF QUEBEC,
MONTREAL, October 1st, 1897.

To the President of the Board of Health of the Province of Quebec:

Sir,

The simple technique recommended by this Laboratory for the serum diagnosis of Typhoid, by means of dried blood, has been found, after a year's trial, quite satisfactory for the practical work of diagnosis.

At the same time (as was recently explained by a Committee of the American Medical Association, of which I was a member) although for routine diagnostic work even the very simplest methods may give good practical results, yet for recording scientific observations quantitative methods should be selected. This is especially necessary in reporting exceptional cases at variance with the general results of others, or where the observations are made the basis of generalisations.

I have found that good uniform quantitative results can be readily obtained with the dry blood method by taking in the first instance drops of uniform size, collected by means of a wire loop (I use 20 guage copper wire 2 mm. inside diame-

ter), which is returned with the outfit, and used subsequently to obtain dilutions of known strength. The method has been described more fully in a joint paper by myself and Dr. Harold Thomas before the British Medical Association at Montreal, on Sept. 2nd, 1897.

For quantitative work, the blood is dried on an ordinary glass slide, or non-absorbent paper can be used if preferred. One of the outfits will be sent, when a quantitative estimation is desired, or to any who are practically interested in the matter. As already stated, I do not find quantitative work necessary for routine diagnosis, preferring to employ cultures having a sensitiveness so low as to give no reaction at all with non-typhoid blood.

In addition to the previous observations made by myself and Dr. D. D. McTaggart as to the use of attenuated cultures, I wish further to call attention to the importance of paying special care to the reaction of the test culture media. Bouillon cultures showing after 24 hours growth of typhoid at 37° C. a slight uniform cloudiness only, and quite free from scum or sediment, offer the greatest security against pseudo-reactions. I find that such cultures can be obtained by using bouillon just on the verge of litmus acidity, giving no blue whatever to the red paper. From 3 per cent. to 4 per cent. of normal alkali are required to make this bouillon neutral to phenol phthalein.

Cultures which give a heavy bouillon growth are the ones which are most liable to give pseudo-reactions, *i.e.*, to clump in a deceptive manner spontaneously or with non-typhoid blood. If the culture is too acid the reaction may be defective. With a proper culture, I have never met with the typical reaction apart from typhoid fever. On the other hand, by employing certain incorrect methods of preparing the culture I can obtain at will very perplexing pseudo-reactions with a large proportion of non-typhoid bloods. This may be the explanation of a number of anomalous published results, though the difficulties can be also doubtless avoided by other means than those indicated here.

I have the honour to be, Sir,

Your obedient servant,

WYATT JOHNSTON,

Bacteriologist to the Board.

Book Reviews.

A Manual of Clinical Diagnosis by means of Microscopic and Chemical Methods, for Students, Hospital Physicians and Practitioners. By Charles E. Simon, M. D., late Assistant Resident Physician Johns Hopkins Hospital, Baltimore; Fellow of the American Academy of Medicine. Second edition, revised and enlarged, in one very handsome octavo volume of 530 pages, with 133 illustrations on wood and 14 colored plates; cloth, $3.50. Lea Brothers & Co., Philadelphia and New York, 1897.

Books on diagnosis are numerous, some of them massive and bulky, and calculated to appall the student with the magnitude of what has to be learnt in order to master this important department of Medicine. The number there are to choose from is an indication of the demand for works of this kind. Among those published recently, that of Dr. Simon's, which appeared last year, has received the approbation of a large number of readers and critics, and the proof of its merits is still further seen in the appearance of this second edition within a year of the first. It comes to hand in a much improved form, so much so that those who failed to get the first edition will have a considerable advantage over those who purchased the first. It is even a question if second editions should not always be waited for. In the present instance, the parasitology and bacteriology of the blood, saliva, fæces, urine and vaginal discharge have been almost entirely re-written, new methods of chemical examination have been embodied, and numerous additions made throughout the text, increasing the number of pages by about fifty. The latest work on the cerebro-spinal fluid has been added, and some illustrations replaced by more accurate ones, and new ones added, the whole making a substantial and important addition to the edition of less than a year ago. The book is printed with clear, well-leaded type, very neatly bound, profusely illustrated; not repellant, owing to being too large or in the closely packed style, but open, with the headings and sub-divisions of the subject represented in large noticeable type. It covers the ground of one of the most interesting departments of modern medicine—microscopical and chemical methods of diagnosis—and does the work admirably. Dr. Simon has elicited information for this work from many sources, including the best European laboratories and those connected with the Johns Hopkins Hospital, and is therefore eminently qualified to give the latest and best methods now available for identifying disease, by scientific, exact and practicable procedures. Every page is replete with interest and instructiveness. The subjects considered are the blood, secretion of the mouth, gastric juice and gastric contents, fæces, nasal secretion, sputum, urine, transudates and exudates, cystic contents, cerebro-spinal fluid, semen, vaginal discharge, and the secretion of the mammary glands. Minute directions are given for carrying out the

various methods. Cuts of the different kinds of apparatus required are given, and illustrations of much of what the microscope reveals are given, so that, with this book, the student can without a teacher become initiated into the secrets of this fascinating department of exact medicine. The colored plates are striking for beauty and correctness. Anyone fitted out with a good microscope and the other requisite instruments and apparatus with this volume to guide him, can soon make himself familiar with methods of diagnosis without which he can only be drifting amid uncertainties. It is an ideal book for the student, and should be at the elbow of every hospital worker.

A New Classification of the Motor Anomalies of the Eye. The prize essay of the Alumni Association of the College of Physicians and Surgeons, New York, for 1896. By Alexander Duane, M.D. New York, I. H. Vail & Co., 1897.

Dr. Duane presents in his prize essay, which constitutes the contents of this book, a very valuable addition to the literature on the motor anomalies of the eye. He starts with the statement that the present nomenclature is faulty in as far as it merely infers a symptom without any regard to its causation. For instance, the common terms trabismus means simply an ocular deviation due to defective action of a muscle or group of muscles, but from this term we cannot infer if the ocular deviation be due to an increased or diminished activity of a muscle or muscles. The same fault applies also to Stevens' terms of heterophoria, esophoria, etc,, etc. Dr. Duane proposes to substitute the terms hypokmesis, or diminished action, hyperkmesis or overaction and parakmesis or irregular action of the muscles. The book contains an elaborate dissertation on the functions of the various muscles and groups of muscles, and also their various anomalies, which is really very valuable, and indicates a vast amount of observation and study on the part of the author. It is a very useful and thorough book.

About Children. Six Lectures given to the Nurses in the Training School of the Cleveland General Hospital in February, 1896. By Samuel W. Kelly, M.D., Professor of Diseases of Children in the Cleveland College of Physicians and Surgeons (Med. Dept. Ohio Wesleyan Univ.), Pediatrist to the Cleveland General Hospital, Consulting Physician to the Cleveland City Hospital, President 1896 and 1897 Ohio State Pediatric Society, Editor Cleveland *Medical Gazette.* 180 pages. Price in buckram $1.25. The Medical Gazette Pub. Co., Cleveland, Ohio, 1897.

These lectures contain much that is of interest to the medical student and physician, although written specially for nurses, and may be read with advantage by parents and teachers. The six lectures cover most of the points peculiar to children's affections and their management: such as peculiarities of anatomy in infancy and childhood, various pathological conditions, deformities, diseases, and accidents; symptoms and their interpretation; nursing and general management of sick children, artificial feeding, etc.

The writer has had an extensive clinical experience with the

medical and surgical diseases of children, and has written numerous articles on kindred subjects, besides being an eminent and successful teacher in the department of diseases of children. The lectures abound in useful hints and numerous aphorisms, and contain a vast amount of information rendered in a pleasing style, and were all nurses made acquainted with what is here taught, much better results would follow in their management of children.

We notice an important omission in the treatment of ophthalmia neonatorum, that of not warning the nurse to avoid touching the eyelids in the frequent opening that is required, but to draw them open from the bony edges of the orbit.

Transactions of the American Pediatric Society, Eighth Session, held in Montreal, Canada, May 25th to 27th, 1896. Edited by Floyd M. Crandall, M.D. Volume VIII. Reprinted from the Archives of Pediatrics, 1896.

This volume is neatly bound in cloth, and contains 242 pages. There is a list of the presidents, present officers, and council, the various meeting places and the members. A photogravure of Joseph O'Dwyer, the late president, appears just before his annual address, the subject of which was, The Evolution of Intubation.

Following this is the report of the American Pediatric Society's collective investigations into the use of antitoxin in the treatment of diphtheria in private practice.

Other papers are: Comparative Results of the Treatment of Diphtheria with and without its Antitoxin in the District of Columbia, by Sam. S. Adams, M.D.; Nasal Feeding in Diphtheria, by Henry Jackson; Puncture of Subarachnoid Space, by A. H. Wentworth, M.D., and a number of other interesting papers which appeared throughout the year in the Archives of Pediatrics.

Hare's Practical Diagnosis. The Use of Symptoms in the Diagnosis of Disease, By Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia, Laureate of the Medical Society of London, of the Royal Academy in Belgium, etc. New (2d) and revised edition. In one octavo volume of 598 pages, with 201 engravings and 13 full page colored plates. Cloth, $4.75. Philadelphia, Lea Brothers & Co., Publishers.

This is one of the recent works which has received much favor at the hands of the profession. It is the second edition, the first having appeared in August, 1896. It adopts a novel method of presenting the salient points of diagnosis instruction, claiming for it the merit of being logical and scientific. Symptoms are first taught, those which belong to various regions of the body. A knowledge of these permits of their being applied to any case at the bedside with a greater likelihood, in a natural way, of making a diagnosis. This is claimed to be much better than learning the symptoms of various diseases as units, and applying these groups of symptoms seriatum to the case under consideration. There is an introductory chapter and two parts. In the first the manifestation of disease in organs is considered, and in the second the manifestation of disease by symptoms. In the introduction general diagnos-

tic considerations are discussed. The expertness of experience and observation which enables the physician to grasp the essential details of a case almost at the first glance is an insight gained by the gradual appropriation of the knowledge which comes from repeated noting of the value of symptoms.

It is pointed out here what can be learned from the clothing, gait, build, voice, expression, manners and position of the patient, and how to most skillfully question him; also how to gain the confidence and friendship of children, and interpret the symptoms and evidence of disease which are displayed in their cases without the help of the patient's description as in those of more advanced years. The indications of disease to be learned from the face and head are first described, such as from the expression, paralysis, spasm, movements of head and neck. Cuts are presented of a mouth breather, of general anasarca, a cretin acromegaly, myxœdema ptosis, and exophthalmic goitre. Then the hands and arms are discussed in a similar way, many of the deformities being illustrated, and several radiographs still further enhance this method of imparting facts. The appearances of the tongue in disease are fully described, and some of its appearances illustrated by four beautiful colored plates.

The many interesting points in connection with the eye are fully detailed, and the methods of utilizing its various manifestations in disease made plain and amply illustrated by cuts and colored plates.

The skin is considered in regard to eruptions, gangrene, ulcers and sloughs, scars, sweating, dryness, œdema, hardness, anæsthesia, hemianæsthesia, paræsthesia, hyperæsthesia and itching. The three colored charts showing the distribution of the spinal nerves, by Thorburn, Starr and Head, are reproduced here from the International Medical Annual, 1896.

The thorax and its viscera, and the abdomen and its viscera, are treated in the same way, and all the points usually found in works on physical diagnosis are here taken up. The chapter on the blood is quite up to date. We have the beautiful plates illustrating the malarial parasite seen now in most of the latest books of this kind, as well as the pretty and instructive plates which those showing the variations in the blood corpuscles afford.

The latest centrifuge with hæmatocrit attachment is shown, and among other recent works that of Martin and Mathewson on pseudo leukæmia, and Wyatt Johnston's modifications of Widal's test for typhoid fever is given.

The urinary bladder and the urine, bowels and fæces receive similar consideration.

In the second part the manifesation of disease by symptoms is given. Fever and subnormal temperature and their significance is taken up. The character of the various forms of fever is described and illustrated by numerous charts. Then follows descriptions of headache and its causes, vertigo, coma, convulsions, vomiting, its causes and character, and appearances of vomit; the varieties of cough and character of sputum; the kinds of pain and its significance, tendon reflexes and speech. The index of this work is also made to be studied, for under the name of any disease we find reference to most of its symptoms, and under the name of any symptom we find the names of all the diseases in which it occurs.

We consider the plan here adopted admirable for one in search of a diagnosis; finding one or more marked symptoms he can with this work readily make out their significance, and finally make a correct diagnosis; but that done we fancy the next move would be to consult a work which would have the symptoms of the disease all grouped together, rather than seeking them out in a dozen or more places throughout a whole volume. The object of this method is, however, only that of helping in a practical way to make a diagnosis, and certainly the scheme here carried out does in a facile and unerring manner fulfil the claim, and is superior to any method heretofore planned.

International Clinics. A quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynæcology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology, and Dermatology, and specially prepared articles on treatment. By Professors and Lecturers in the Leading Medical Colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M.D. (Univ. of Penna.), Philadelphia; J. Mitchell Bruce, M.D., F.R.C.P., London, England; David W. Finlay, M.D., F.R.C.P., Aberdeen, Scotland. Vol. III. Seventh series. 1897. Philadelphia: J. B. Lippincott Company, 1897. Montreal agent, Chas. Roberts, 593a Cadieux St.

The articles in this volume are quite up to the standard of those in previous volumes. There are thirty-seven papers. Among those of special interest are the following:

Opium; its Use and Abuse, by Herman D. Marcus, M.D. The Treatment of Injuries of the Eyeball, with special Reference to the Prophylaxis of Sympathetic Ophthalmia, by Freeland Fergus, M.D.; Clinical Observations upon Senile Heart, with remarks on treatment, by Henry Bates, jr., M.D.; Hæmoptysis and its Treatment, by Thos. J. Mays, A.M., M.D.; Diagnosis and Treatment of Hypertrophic Nasal Catarrh; the Climatic Treatment of Phthisis Pulmonalis, by E. L. Shurly, M.D.; Treatment of Infantile Uric Acid Infarction; Toilet of the Infantile Penis; Treatment of Enuresis, by W. C. Hollopeter, A.M., M.D.; Hæmaturia, by James Tyson, M.D.; Addison's Disease, by Edmund Neusser, M.D.; Pyothorax; Bilharzia Hæmatobia; Angina Pectoris, by Wm. H. Porter, M.D.; A Case of Localized Spasm affecting the Foot-Muscles and followed by Loss of Consciousness; the Differential Diagnosis of ordinary Epilepsy and of Jacksonian Epilepsy; the Treatment of Epilepsy, by Byrom Bramwell, M.D., F.R.C.P. (Edin.), F.R.S. (Edin.); The Therapy of Suppurative Kidney, by Thomas H. Manley, M.D.; Bleeding in Pregnancy and Labor, by A. H. Freeland Barbour, M.D., F.R.C.P. (Edin.); Displacement of the Kidney in Obstetric Practice, with Notes of a Case of Floating Kidney in a Mother and her Infant, by J. W. Ballantyne, M.D., F.R.C.P.E., F.R.S.E.; A Novel Method for the Use of Dry Heat in Middle-Ear Disease, Otalgia, etc., by E. L. Vansant, M.D.; Mycosis of the Tonsils; Nasal Mucous Polypi; Intumescent Rhinitis; Mediastinal Tumor, by E. Fletcher Ingalls, A.M., M.D.

Les Poussieres Atmospheriques. (Atmospheric Dust). By J. R. Plamondon. Price 2 fr. Société d'Editions Scientifiques, 4 rue Antoine Dubois, Paris.

This little book of 130 pages gives one a very good idea of the nature of particles floating in the atmosphere whether they be of volcanic, maxine, industrial, vegetable, animal, microbic or explosive origin.

It treats in a special way of the microbe laden atmosphere in and about cities and within hospitals or public buildings, and will be found very useful to the physician who has to deal with sanitation and allied subjects.

PUBLISHERS DEPARTMENT.

SANMETTO IN CYSTITIS, PROSTATATIS AND GONORRHEA, AND IN ALL IRRITABILITY AND INFLAMMATION OF THE GENITO-URINARY TRACT.

In my practice the administration of Sanmetto has given excellent results. I have found it unequalled in cases of cystitis and prostatitis and in all cases of irritability and inflammation of the genito-urinary tract. In many cases of gonorrhea I have used it with excellent satisfaction. I am pleased to recommend Sanmetto to the profession as a preparation which has proven invaluable to me in treating the above-named conditions.

Jackson, Mich. C. W. SHAVER, M.D.

SANMETTO IN GONORRHEA WITH EPIDIDYMITIS—ALSO IN SPECIFIC VAGINITIS WITH SALPINGITIS, ETC.

I take pleasure in testifying to the admirable therapeutic effects of Sanmetto. I used it in a case of gonorrhea with epididymitis, and the result was, if I may say, astonishing. I also used it in a case of specific vaginitis followed by the usual sequelæ, salpingitis, etc., and the symptoms were very much ameliorated by its use.

Columbia City, Ind. J. W. WORDEN, M.D.

SANMETTO IN INFLAMMATION OF BLADDER, OVARIES OR UTERUS.

Sanmetto is an excellent remedy for all bladder troubles caused by inflammation. I find it acts nicely with tinct. opii. to allay pain and inflammation, especially when the ovaries or uterus are affected. The physicians generally, about here, prescribe Sanmetto.

Bradford, Mass. LORENZO SARGENT, M.D.

"GRIP."

C. A. Bryce, A.M., M.D., Richmond, Va., editor of *The Southern Clinic*, in writing upon the above subject during an epidemic of *la grippe*, said:

"For the past four weeks or more, we have met with five times as much grip as anything else, and the number of cases in which the pulmonary and bronchial organs have been very slightly or not at all involved have been greater than we have noted in former invasions. On the contrary, grippal neuralgia, rheumatism, hepatitis and gastric congestions

have been of far greater frequency, while, in all, the nervous system has been seriously depressed.

"The fatalities from pneumonia, meningitis and other complications have been fewer, showing plainly that we are gradually gaining an immunity from this zymotic invader. With each succeeding visitation of this trouble we have found it more and more necessary to watch out for the disease in disguise, and to treat these abnormal manifestations; consequently we have relied upon mild nervous sedatives, anodynes and heart sustainers rather than upon any specific line of treatment. Most cases will improve by being made to rest in bed and encourage action of skin and kidneys, with possibly minute doses of blue pill and quinine or calomel and salol. We have found much benefit from the use of antikamnia salol in the stage of pyrexia and muscular painfulness, and later on, when there was fever and bronchial cough and expectoration, from antikamnia and codeine. Throughout the attack, and after its intensity is over, the patient will require nerve and vascular tonics and reconstructives for some time."

THE LIVING AGE FOR 1898.

In another column will be found a prospectus of this standard periodical, founded by Eliakim Littell in 1844; it has steadily maintained the reputation gained with its earliest issues of being the most complete representative of foreign thought as expressed by its greatest exponents. It is to-day a faithful reflection of almost all that is substantial and truly valuable in the passing literature of the world, embracing, as it now does in its monthly supplement, American as well as foreign literature.

While its pages show the same wise and judicious discrimination which has ever characterised its editorial management, the scope of the magazine has been widened, its size increased and its price reduced, so that increasing years seem only to add to its vigor and value.

To those whose means are limited it must meet with especial favor, for it offers them what could not otherwise be obtained except by a large outlay. Intelligent readers who want to save time and money will find it invaluable.

The Living Age is published weekly, and the price is now but $6.00 a year. To all new subcribers for 1898 are offered free the eight numbers of 1897, containing the opening chapters of the new serial, "With All Her Heart," described in the prospectus.

LITERARY NOTE.

Klemperer's Clinical Diagnosis, by Dr. G. Klemperer, Professor at the University of Berlin; first American from the seventh and last German edition; authorized translation by Nathan E. Brill, A.M., M.D., Adjunct Attending Physician, Mt. Sinai Hospital, and Samuel M. Brickner, A.M., M.D., Assistant Gynæcologist, Mt. Sinai Hospital Dispensary, is announced for early publication by The Macmillan Company.

Dr. Klemperer's work on *Clinical Diagnosis* is widely known, and all English readers will be rejoiced to find within their reach this very comprehensive but condensed manual. Its chapters deal with the inspection and examination of the patient, the diagnosis of the acute infectious diseases, diseases of the nervous system, digestive diseases, each under its special symptomatology, diseases of the respiratory apparatus, the heart and circulation. Two chapters are devoted to urine analysis and to the diseases of the kidneys. The four concluding chapters deal with the disturbances of metabolism, the diseases of the blood, the Röntgen rays as diagnostic aids, and animal and vegetable parasites including such bacteria as are of clinical importance.

No book so complete, short of a text-book of medicine, is before the American medical public. It has passed through seven editions in its original language (German) in as many years. The German school leads in clinical diagnosis, and this little work is an exquisite example of its methods.

Perhaps the most interesting, and certainly the most instructive to the Anglo-Saxon, of Prof. Ripley's papers on *Racial Geography*, in *Appletons' Popular Science Monthly*, will be that in the December number on *The British Isles*. He describes the racial history of Great Britain and Ireland, and devotes considerable space to the curious language survivals in the Gaelic, or Goidelic, which is still common in parts of Scotland and Ireland; and the Kymric, or Brythonic, still spoken in Wales.

The October (1897) number of the *Alienist and Neurologist* contains: "Neurasthenia Essentialis and Neurasthenia Symptomatica," by F. X. Dercum, M.D., Philadelphia; "President's Annual Address," by Dr. Martin W. Barr, M.D., Elwyn, Pa.; "Neurasthenia," by C. C. Hersman, M.D., Pittsburgh, Pa.; "Tremor and Tremor-like Movements in Chorea," by Dr. J. H. Wallace Rhein, Philadelphia; "Suicide," by C. H. Hughes, M.D., St. Louis, Mo.; "Syphilis of the Central Nervous System," by Sydney Kuh, M.D., Chicago; "The Action of the Nervous System over the Nutritive Processes, in Health and Disease," by Beverly O. Kinnear, M.D., New York; "The Significance of Degeneration to the General Practitioner," by Haldor Snévé, St. Paul, Minn.; "Insane Confessions, Errabund Lunatics, The Corpus Delicti and Crime," by Jas. G. Kiernan, M.D., Chicago; besides the usual Selections, Editorials, Reviews, Book Notices, etc. C. H. Hughes, M.D., Editor, 3857 Olive St., St. Louis, Mo. Subscription: $5 per annum; single copies, $1.50.

A GREAT MAGAZINE FEATURE.

The *Ladies' Home Journal* has secured what promises to be the great magazine feature of 1898. It is entitled "The Inner Experiences of a Cabinet Member's Wife." In a series of letters written by the wife of a Cabinet member to her sister at home, are detailed her actual experiences in Washington, frankly and freely given. The letters were written without any intention of publication. They give intimate peeps behind the curtain of high official and social life. They are absolutely fearless, they study Washington life under the search-light as it has never been before presented. The President and the highest officials of the land, with the most brilliant men and women of the Capital, are seen in the most familiar way. As these are all actual experiences the name of the writer is withheld. The letters will doubtless excite much shrewd guessing by readers and study of internal evidence to discover the secret. The "Experiences," which will be beautifully illustrated, begin in the December number and will continue for several months.