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Original Articles.

GRANULAR KIDNEY.*

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For my apologies in appearing before you this evening to read a paper I will have to refer you to the President. He asked me to present some subject to the Association, and bearing in mind the difficulty I had experienced in procuring papers from others, my well-known good nature caused me to consent. Then, indeed, my troubles began! All subjects seemed to be so well known that I was in a quandary as to the selection of something interesting. The older members have always assured me that the writing of a paper was most profitable to the one who prepared it. I therefore have written this paper to get the subject-matter more clearly fixed in my mind, and will depend upon the other members to supply the interest and profit generally when the discussion is opened.

In granular kidney almost invariably both organs are involved. Generally they are reduced in size, though occasionally they are the equal or even the superior of normal kidneys. You notice the capsule is thickened, and you find there is an increase in connective tissue throughout the kidney and an atrophy and degeneration of the active renal cells. The effect of this is seen most noticeably in the cortex, where the glomeruli are destroyed and the cortex as a result is reduced in thickness. An endarteritis involves the smaller arteries and capillaries.

The urinary secretion as described shows increased quantity

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with specific gravity of 1005 to 1012. Albumin may not be found, and frequently when discovered its presence is only demonstrated by the more delicate tests. Casts are always found at some stage, and will be seen frequently if careful search be made. Phosphates are markedly decreased.

Beginning in the left ventricle, and eventually extending to the whole organ, the heart becomes hypertrophied. This is known by the apex beat being displaced downwards and outwards. However, where there is emphysema of the lung this is often hard to demonstrate. This is the more to be regretted because not only is hypertrophy of the heart an important link in the diagnosis of granular kidney, but emphysema is most liable to occur at a time of life when the renal trouble is most prone to develop.

The renal failure eventually draws on increased cardiac action to aid in the work of elimination, and frequently death is precipitated by the inability of the heart to longer carry the load demanded.

Hyaline degeneration and arterio-capillary fibrosis attack the vessels generally. The evidence of this condition is seen in the radial artery, for instance. By obliterating the radial pulse the vessel can be felt as a distinct rounded structure, while in health it cannot be recognized from the surrounding tissue.

Persistent high arterial tension is an early and important sign of the possibility, nay, I might say probability, of renal difficulty, particularly if no other cause is obvious.

With persistent high arterial tension there naturally follows an hypertrophy of the arterial coats, either due to the severe strain which has to be met by the vessels or in part to the various poisons floating in the blood—such as lead, mercury, or the virus of syphilis.

I once saw a very ingenious explanation of high tension in this condition. It was a mechanical one, and as few mechanical theories will long explain any of the functions of the body, it will hardly suit in this case. However, it may be one factor in the determination of the degree of abnormal high tension which may occur, and I will give it to you for what it is worth.

The writer* maintained that granular kidney was provocative of anemia, and as a result there is an unusual and marked difference between the specific gravity of the blood plasma and that of the corpuscles. Therefore the corpuscles are not carried along with their usual celerity, but have a tendency to fall and

*Renal and urinary diseases, Saundby.

rub along the capillary walls. When this increased friction, slight though it may be, is considered in the light of the enormous areas covered by the myriads of capillaries throughout the body, a very good case is made out in favor of this physical condition being at least one factor in the determination of the degree to which the abnormal high tension may be raised.

The points of clinical interest we have so far noted are namely: Persistent high tension, arterio-capillary fibrosis, cardiac hypertrophy, an increased quantity of urine with specific gravity 1005 to 1012, albuminuria slight and evanescent and the presence of casts.

These are the comparatively constant conditions which accompany granular kidney. To fill out the history of any great number of cases many other phenomena will have to be noticed.

The eye changes most commonly observed consist of what is known as albuminuric retinitis. Two varieties are noticed, of different pathological explanation and of equally different clinical significance.

The first is inflammatory and exudative, showing patches on the retina described as woolly with indistinct borders. These are most commonly associated with parenchymatous nephritis, but do occur in granular kidney. They may be extensive and seriously interfere with sight, yet if the kidney mischief be checked there is a good chance these patches will disappear and the sight be restored remarkably well.

The second variety is not an edema, but a degeneration. The patches are white and glistening in appearance, with more sharply defined outlines. They are the result of fatty degeneration of the retina and the very finely divided fat granules, or it may be even minute cholesterine crystals replacing the once active retinal cells produce the characteristic bright fish scale appearance of these patches. These changes are degenerations due to the arterio-capillary endarteritis, and they never repair.

Retinal hemorrhages occur, but have no special appearances to distinguish them from hemorrhages due to other causes.

Blindness may be due to uremia or to cerebral hemorrhage. Intra-ocular bleeding or detached retina will produce the same result.

The skin at all times performs important functions, but during this trouble we often depend for help on the hyperactivity of the skin, so to speak. Therefore any change in the skin is always watched with anxiety. Edema may occur, and the vitality of the various layers of the epidermis be lessened there-

by. Local erythema or eczema may arise and be a source of considerable annoyance to both the physician and the patient. However, as long as they remain local they may have little bearing on the ultimate outcome of the case.

Blebs, however, are to be looked after very carefully owing to their liability to infection; as a result an inflammatory process closely resembling erysipelas may supervene, the desirability of avoiding which I am sure none need have urged upon them.

Even with edema, erythema, dermatitis, exfoliation or eczema may arise and become general. Such a complication is always of grave moment, as it betokens a very serious renal derangement.

Owing to the arterial degeneration we are not surprised to find aneurism of the aorta, and in the cervical or cerebral vessels it is rather a frequent occurrence.

Epistaxis, sometimes of alarming or even fatal severity, may occur. I am sure, however, all of us look upon the nose-bleed as a sort of safety-valve action, and we are very glad that the hemorrhage is not taking place in the brain, as we know cerebral hemorrhage is often a fatal and sudden termination of the disease.

Hematuria is an occasional occurrence, and in cases presenting small repeated hemorrhages we ought to be on our guard always lest it denote granular kidney.

On the heart itself we have seen that much depends, yet with the coronary arteries affected we can see what a terrible handicap a person is under in endeavoring to fight off a fatal termination.

Valvular insufficiency, dilatation of the heart and myocardial changes we see can readily occur, therefore we are not surprised if a serious or fatal breakdown of the circulatory system terminates the progress of the kidney mischief.

With cardiac failure and cerebral hemorrhage we have to class uremia in importance. Death frequently results from an uremic attack, and may be the first known warning that granular kidney is present.

An uremic attack often presents diagnostic difficulty, as it may simulate epilepsy, cerebral hemorrhage, narcotic poisoning or delirium tremens. The patient's condition may range from noisy delirium down through all the intervening conditions to dulness or profound coma.

The nervous system may also cause headache, dizziness, vomiting, peripheral neuritis, dyspnea and melancholia to be thrown out as an indication of the renal breakdown.

Now we have seen the essentials and the common accompaniments of granular kidney, but before going into the diagnosis and treatment I would like to present one or two more points which, so far as I know, have not been made clear in print.

As described in the books the whole situation reminds me of a predicament I was in one day three years ago last summer. I was off on one of my fishing trips, and fishing down the Beaver River, searching every eddy, every shadow and cover with the flies, when suddenly I became aware of the fact that there quite close to me was an enormous trout with his head poked under a ridiculously small log. I could have cast five times the distance to offer him the line. It was no use, however, as I could not present the cast in such a way that he would take the slightest notice of it. A worm was out of the question owing to a barb-wire entanglement of submerged cedar twigs in front, and the approach from the rear was guarded safely by the swift rush of the waters.

Now you know I could see the latter half of that trout very clearly, in fact I can see it yet, and I am convinced to this day that my difficulty lay not in seeing and seeing clearly the last half of the trout, but I could not get at the first part or business end of the fish.

Now we all see granular kidney—see, that is, the last half of it and see it clearly—and are as helpless in regard to it as I was while I contemplated the magnificent sweep of that big trout's tail as he kept his place under the log.

But there must be a beginning to granular kidney. For instance, there must have been a time in a typical case when the urinary specific gravity was 1014, 1016, 1018, or normal, and I might add there always is a time when it is habitually above normal. In short, there must have been a period when renal difficulty preceded renal inadequacy. The first stages are as deliberate and as hesitating in their advance as are the manifestations of the later stages. It is altogether beyond my comprehension that a typical case of granular kidney, full grown and menacing, ordinarily can be produced practically all at once and then run a chronic course of years.

Let us consider the cause and recognition of renal embarrassment before permanent damage is done!

To anyone who habitually uses his microscope on the urine of the most of his private patients I have no doubt it is often a matter of surprise that granular kidney is not more common

than it seems to be. How often you have seen the needle-pointed uric acid crystals and the milky way of myriads of oxalate of calcium crystals; and how long will these hard foreign bodies, with their infinite needle points and their keen knife edges, be poured down the urinary tubules before some real mischief is set up. We feel it surely cannot go on indefinitely; nay, we see spurious cylinders in numbers in these conditions, and no one will deny that they are evidence of renal unrest. You say to me that I cannot prove these crystals are in the urinary tubules during life? Well we *do* find them in the kidney in the form of calculi, and when the crystals are present in the urine for any prolonged period you will always find truly formed hyaline casts, and that without much difficulty.

The causes of such a urinary exhibition are generally a condition of habitual meat eating three times a day, indefinite indigestion and constipation. In addition to this history the patient will often complain of general depression and often of precordial distress and shortness of breath on exertion. On examination you will find high tension and a noticeable amount of edema.

I believe this is often the early stage or business end, so to speak, of granular kidney. Perhaps I should say the prophecy of granular kidney. We should all heed the warning and apply proper prophylaxis before irreparable damage is done.

If you follow your cases through a few years you will find that there is a first stage when as yet there is no albumin, no rising at night, no lowered specific gravity, but you will find frequently edema and casts.

The destruction to be meted out to the renal system is a question of degree, and may be overshadowed by cardiac distress, misinterpreted as a rapid oncoming old age or cut short by death through some other disease more apparent in its symptoms.

With the causes mentioned above of course go habitual drinking of malt liquors; chronic poisoning, such as lead or mercury; chronic infection, such as syphilis or tuberculosis, or, in short, any other habitual cause of kidney or arterial overstrain. Any condition or combination of conditions producing and maintaining an excessive high arterial tension will produce pathological results, and it is a matter of individual peculiarity whether the clinical manifestation shall be most apparent in the failure of the circulatory or the renal systems.

In regard to the diagnosis you will note that it will depend largely on the initiative and clinical skill of the physician. To review in detail is unnecessary.

Treatment.—The best treatment I know of is to make an early diagnosis, to give the patient a clear idea of the best habits of eating, drinking and working which will save the kidney and the body generally—and then see that your advice is followed. A man presenting a marked case of granular kidney depends for his continued existence upon high arterial tension and good cardiac action, yet I will venture to express the opinion that such a patient presenting himself for the first time will always have tension in excess of the renal requirements, and you will seldom make a mistake in attempting to reduce this unnecessarily harmful cardiac burden.

To begin with, you would do well to advise complete abstinence from meat or eggs for a week.

One good daily action of the bowels should be secured, assisted by salts if needed.

There should be a daily warm sponge, followed by a brisk rub.

Once or twice a week a mild sweat by warm bath, pack, or vapor bath immediately before retiring will be beneficial.

If there is edema I would advise the use of a diuretic. The best of them all is cream of tartar in one-half to one drachm doses three or four times a day.

Diuretin acts well in a few cases, but will not give satisfactory results after a week or ten days.

For bowel action pulv. jolapæ co. will act well, and may be used successfully if salts are not well borne.

Withal the patient should be warmly clad and protected from exposure or sudden morbid drops in temperature.

Great business strain should be avoided where possible, and the winter would be well spent in the South. In this connection I would suggest patients go prepared for cool evenings and warm days. No rooms should be secured that do not provide arrangements for a fire when needed; otherwise patients will often suffer more from cold in the South than they would have done at home.

The diet should contain a small piece of meat once a day, and of other kinds of food than the meats there should be a variety. Well chewed food will show a surprising economy over that carelessly eaten. Exclusive milk diet is harmful as well as depressing.

Malt liquors should never be used, but in the case of a drinker it is doubtful if a small daily portion of whiskey is very harmful.

Acute attacks occurring in the course of granular kidney do not differ from other cases in their treatment, but do not keep up too vigorous treatment too long.

In the very late stages it is a merciful and justifiable thing to allow a liberality in diet, and all irksome instructions should be withdrawn.

Some say the kidney has an internal secretion and that splendid results are obtained from feeding the cortical extract of pigs' kidneys. Some reliable writers have reported favorable results in a few cases. I have been giving Reed and Carnrick's tablets to a case of granular kidney with edema for a week past, and as yet there is no result at all.

A cheerful prognosis ought to be given all these cases. The specific gravity taken together with the quantity is a good indication of the renal condition and would only lead you astray in case there was a large quantity of albumin suddenly excreted.

Uremia, retinal changes, general skin lesions, all indicate a dissolution within a year as a rule. Cardiac failure is not so easy to forecast. Your prognosis will be best and easiest if you diagnose granular kidney before it is granular.

THEORY OF HEADACHE.*

BY E. L. WILLIAMS, M.D.

Mr. President and Gentlemen,—Headache, taken broadly as meaning pain in the head, is one of our most common symptoms. Indeed, we meet it so often that we rarely place much value upon its presence or absence in making a diagnosis. It is only in those cases where a definite head lesion is present that it becomes important. The reason for this is that we are yet ignorant of its nature, that it appears and disappears we know not how. But we believe that it is not an accident, but the natural result of certain causes, and that its significance will some day be ascertained.

The value of pain in diagnosis is often a difficult question. Individuals differ to a remarkable degree; what may be insignificant to one may be agony to another. Again, in any condition of lowered vitality the experience of pain is usually accen-

*Read before London Medical Society, January 14th, 1907.

tuated. Therefore in an enquiry into a subject like that of this paper this fact must be kept in mind.

Various attempts have been made to classify headache. Thus it has been divided into organic and functional, or structural, congestive, toxic and nervous, or, based upon its anatomical seat, into external and internal. However, none of these classifications can be satisfactory until we have a more intimate knowledge of the subject. In this short paper I purpose to deal with but three forms: Headache due to referred pain, that due to increased pressure within the cranium, and toxic headache.

Referred Pain Headache.—By this I understand pain experienced in the sensory nerves supplying the outside of the cranium and the dura mater within the skull, but which is not due to a pathological condition locally situated. In other words, there is an irritative lesion at some point in the body which is interpreted in consciousness as a pain in the head.

The question of referred pain has been pretty fully investigated by physiologists, and although they differ as to the theory of its production there is little question as to the fact. Head says that "Any organ in the chest or abdomen may, under favorable conditions, cause referred pain in the head, accompanied by painful areas in the scalp. An area in the scalp does not stand in direct primary relation with any organ in the chest or abdomen, but is associated with the segmental areas of the trunk as low as the tenth dorsal. The lower the segment on the trunk that is affected the more posterior will be the tender area on the scalp; the higher on the trunk the more certainly will the pain and tenderness be found over the forehead."

When impulses pass up sensory, sympathetic fibres from an organ which is diseased they set up a disturbance in the segment to which they are conducted. Now, any second sensory impulse from another part which passes into this segment will be profoundly altered. The resulting stimulus conducted upwards towards the brain will appear exaggerated or may, perhaps, undergo some actual increase in its passage through the excited segment. Thus any otherwise painless stimulation may appear painful. It is probable that impulses passing from an affected internal organ up the white ramus of the sympathetic system produce an alteration in some of the cells of the posterior root ganglion. In these ganglia are the cells which are the trophic centres for the sensory fibres of the skin. Thus stimuli from an internal organ may produce such a disturbance in the ganglion that every stimulus from the peripheral distribution of the fibres

entering the ganglion appears as painful. This explanation of Head's seems to explain the fact of pain and tenderness occurring in the skin over an affected organ, but the reason why pain should occur in such a distant organ as the head seems at best vague.

Outside the occipital region the sensory fibres which supply the outside of the cranium pass by way of the fifth pair of cranial nerves. This nerve also sends branches to the dura mater within the skull. The deep origin of the fifth nerve is from a nucleus on the floor of the fourth ventricle. As this nucleus is situated not far from the nucleus of the tenth nerve it is believed by some that stimuli from the various viscera pass up the vagus and spread from its nucleus to that of the fifth nerve, and from there to the sensorium. But it is not necessary to believe that the afferent impulses pass by way of the vagus; it is quite possible that they are carried by the afferent fibres of the sympathetic to the cord and ascend through some of the afferent tracts.

Clinically this form of headache cannot always be distinguished. The pain is usually of a shooting, burning, neuralgia character, which is relieved by pressure, and is benefited by those drugs which lessen the activity of the spinal ganglia; thus besides the coal tar products, quinine and arsenic are of value.

Among headaches of this class that associated with eye strain is the most important. Any error of refraction or anything that tends to produce a permanent abnormal tone of the ciliary muscle will produce headache. The pain may be referred to any branch of the fifth nerve, but the most usual seats are just above the eyebrows and in the occipital region, the former being supplied by the supra-orbital branch of the ophthalmic division, while the pain in the occipital region can probably be explained by the branches of the fifth to the tentorium cerebelli and the dura mater in this region.

From the thorax we may have a referred pain due to chronic lung or cardiac disease; thus in phthisis it is often a symptom. That due to cardiac disease may be of this nature, but offers another explanation.

One of the most common forms is that due to irritation of the sensory nerves in the walls of the stomach. This is often well seen after an indigestible meal has been eaten. The pain comes on almost immediately, and is only relieved on evacuation of the irritating material. This is one form of true bilious headache, but there is another more common form that receives this name. We often hear patients say that they can eat pork

one day with safety, but that if they eat it the next or the third day they will be sure to be "bilious." The cause of this I believe to be the accumulation of faulty digested products in the bowel. These are absorbed by the liver, thrown out in the bile, re-absorbed and again appear in the bile, and thus make the circuit I know not how many times. After a time they become so toxic that they irritate the walls of the bowel, and a referred headache is the result.

Another common form is that due to affections of the genital organs. These are richly supplied with sympathetic fibres, and headache is a symptom much complained of. It more often accompanies minor functional disorders than gross pathological changes, and is often associated with a neurotic general condition. It is in this class that I also would place migraine. In it, I believe, we have a marked picture of referred pain, but unlike the others that have been mentioned it is not associated with any definite viscera. It may be that it will be discovered to be associated with some particular organ or that it is the sum of stimuli from several viscera.

Before leaving this form of headache there is a correlative symptom worthy of notice, that is, vomiting. This not only accompanies irritation from the digestive organs, but is present in the other forms. It is not an uncommon thing to meet patients who have been dieting themselves like martyrs for years finally to have their whole trouble disappear when properly fitted with glasses. Almost with, or it may be before, the onset of the pain there occurs a cessation of the motor activity of the stomach and bowel. This is probably due to an inhibition of the vagus. It is this fact which leads so many of our patients to believe that their headaches are due to errors in diet.

Again, the pallor or flushing of the face seen in this form of headache is due to vasomotor influence, and in no way indicates anemia or congestion of the brain, which is to be treated by stimulants or depressants.

Headache Due to Increased Intracranial Pressure.—We have abundant evidence that increased intracranial pressure is a cause of headache. In such conditions as rapidly growing brain tumors and in some forms of hydrocephalus it is the principal symptom. That the pain is due to the pressure is shown by the fact that it immediately disappears after trephining. Just where the pain is located has been a subject of doubt. We know that although the brain itself is insensitive, that the men-

inges are richly supplied with sensory fibres. Also that the sub-arachnoid space which contains the cerebro-spinal fluid differs from other serous spaces in that its walls are in places separated by a varying interval and are joined by a more or less well-developed reticulum. In any increase in pressure in this space the sensory nerves in this reticulum would be put upon the stretch.

But outside of gross lesions, such as has been mentioned above, are there any minor temporary causes which may produce an increased pressure within the skull?

The brain lies suspended in a fluid which not only separates it from its bony cell, but fills the cavities in its interior. This fluid normally is in a state of equilibrium, that is, it is absorbed or secreted, accommodating itself to a varying quantity of blood within the cranium. But is it always so; may not this physiological function sometimes become disturbed and symptoms result? The cerebro-spinal fluid cannot be classed as ordinary lymph; more properly it may be called an internal secretion. It is secreted by the choroid plexuses found in the ventricles of the brain, and an investigation of these would lead us to suppose that they had a much greater function than is usually attributed to them. In structure they resemble somewhat a malpighian corpuscle of the kidney, which fact was noted by Hilton Fagge many years ago. This structure consists of a highly convoluted bundle of blood-vessels inclosed in a thin infolding of the pia mater. The afferent vessels come from the circle of Willis, while the veins of Galen form the efferent vessels. Is it reasonable to suppose that an increased pressure in the choroid plexus will produce an increased secretion of cerebro-spinal fluid? One fact might lead us to believe so, *i.e.*, tumors situated in the regions of the *venæ gallenæ* give rise to a progressive hydrocephalus. The increased flow of fluid would be analagous to the increased amount of urine secreted from partial pressure on the renal veins.

Again, the cerebro-spinal fluid is absorbed, at least in part, by the Pacchionian bodies. These have been called arachnoid villi. They are protrusions of the arachnoid membrane into the blood sinuses of the brain, and, according to Cunningham, they have a special function to perform. He says: "Through them fluid can pass from the subarachnoid space into the venous sinuses with which they stand in connection. Whenever the pressure of blood in the sinuses is lower than that of the fluid in the subarachnoid space and the ventricles of the brain, the

cerebro-spinal fluid filtrates through the Pacchionian bodies into the blood sinuses."

Can the occurrence of a dull headache in many temporary states of high venous pressure be accounted for by a disturbance of this function. As low arterial pressure means high venous pressure we might expect headache to occur in those conditions in which there was a fall in arterial pressure.

We are all familiar with the headache of exhaustion, which is benefited by a mild stimulant, such as a cup of tea. Again, in aortic disease headache is a usual symptom. In anemic chlorosis and all marantic states we have usually a lowered arterial pressure, and headache is a common symptom. Again, such drugs as lower arterial pressure are apt to cause headache, such as the nitrites, aconite, caffeine and tobacco.

Clinically this form of headache differs from that due to referred pain. Instead of pain of a neuralgic character we have a dull ache or simply a full feeling in the head. If we enquire of the patient about tender spots on the scalp they are apt to tell us that the ache is inside the head. It is this form that is often best treated by a good meal.

Toxic Headache.—The third class of headache to which I wish to call your attention is that found in conditions in which other factors lead us to believe that some abnormal chemical agent is present in the blood. Thus, in diabetes, Bright's disease, lithemia, auto-intoxication, and a variety of other diseases that will readily come to your mind, headache is a usual symptom. The greatest difficulty in investigating the cause of the headache in these states lies in our ignorance of the exact nature of the toxin or ptomain present. For instance, in auto-intoxication we may have a variety of products depending upon the food taken, the bacteria present in the bowel, and the activity of the secretions. At one time we may get a product which acts like aconite and at another one with an action like belladonna or digitalis. Again, in Bright's disease we can hardly expect that the effete materials left in the blood are always the same.

If we take it for granted that these various toxins are the cause of the headache, we have yet to explain the pain. Alchin says: "It is permissible to believe that this symptom is due (a) to intrinsic nutritional disturbances in the cortical cells over a wide area; (b) to mechanical irritation of the cortical cells by the pressure of overful blood vessels, or (c) peripheral irritation of various afferent nerves of common sensation so stimulating the cortex cells as to produce headache." To these three

I might add a fourth. If the choroid plexus is a secreting structure and acts like the other glandular organs it may be supposed that its secretion may be influenced like they are. Thus certain drugs might cause an increased secretion and certain others the reverse. Likewise, toxins in the blood might act on the gland as upon the kidney. We know that the function of secretion is a powerful one, and if the absorption of the fluid was less rapid than its secretion increased intracranial pressure would result.

Information regarding the quantity and quality of the cerebro-spinal fluid in disease is yet but meagre, but it has been ascertained that the pressure is greatly raised in some conditions, and in chlorosis the severe headache has been relieved by withdrawal of the fluid by lumbar puncture.

In concluding, I may say that I have made no attempt to diagnose and treat the many different kinds of headache that are usually spoken of, but have rather endeavored to find some underlying basis of relation, believing that if we could understand the cause, our course of treatment would readily follow. But glancing over the field it is apparent that the large majority of headaches must be classified in the referred pain group, while an ever-decreasing number will be considered as toxic.

Of pain in such inflammatory conditions as neuritis, rheumatism of the scalp, irritative meningitis, and disease of the bones of the skull, only mention need be made, as in these we believe that the cause of the pain is apparent.

DISCUSSION.

DR. J. McARTHUR.—In order to elicit some preventive or curative treatment, during this discussion, I will dwell only in a practical way on the old-fashioned bilious or sick headache, sometimes called migraine, possibly all misnomers so far as we yet know. Perhaps less than 50 per cent. (and thus dealing very liberally with the specialists) can be alleviated by removing, as some think, the more frequent causes, visual disturbances and abnormal conditions of the pelvic organs, and still we have the sick headache, for which as yet no method of treatment has been discovered, either prophylactic or curative, and unless some suggestions from Dr. Williams' classification of headache, although mostly theoretical, will render us some assistance, we are still at sea regarding the causation. There is, no doubt, a close connection between stomach, the evacuation of which often comes to the rescue, and outward or functional headache; and while specialists often attribute the cause to the line or channel along

which they operate, notwithstanding, as they suppose, the carelessness of the general practitioner in faulty diagnosis, we still have to cope with a large percentage of these unrelieved headaches. Not the laboring man, but persons under a high nervous tension, associated with an active, busy life, are usually the victims, very common among our own profession. Few of us who have not been prostrated time after time with a bilious, nervous headache, as I cannot disassociate the terms, and from my own experience, and that of a great many others, there is a cycle or period in a man's life when he will be a victim to this trouble, and in the interval will enjoy entire and complete immunity for a certain length of time, which to my mind excludes errors in digestion as even a cause. Nor yet does the accumulation of so-called toxins explain this immunity to my satisfaction.

DR. R. OVENS.—I congratulate the reader of the paper on the able and concise manner he presented this troublesome subject of headache to us. I consider your classification good, for it covers the whole subject. You showed wisdom and judgment in dealing with the cause and origin and diagnosis of headache, instead of spending time on the treatment of these already overdosed sufferers. My experience in the past has been that this class of cases has never lacked for treatment, and received the treatment, too, before any diagnosis. Treating any case before it is correctly diagnosed is poor practice, but throwing treatment into or at those unfortunate sufferers without a searching diagnosis for the origin of the trouble, was neither scientific, rational nor honest, and often resulted in injury to the profession. By using our modern means of diagnosis all, or nearly all, sufferers of headache due to referred pain can be relieved, and I feel safe in saying all cases of eye-strain class cured. There is a class of cases in the diagnosis of which I have had much trouble, in fact, they are the most persistent and rebellious to treat. In symptoms they belong to the migraine class. Headache at longer or shorter intervals follows an effort at reading, or after a drive or on returning from church or the opera; it generally commences while in the building, if well lighted. These sufferers look worried, and their friends often ask why they are looking cross. Any effort or strain on their attention soon becomes too overpowering, as the retina is over-sensitive and easily tired. In many and, indeed, most of these cases, there is absolutely nothing to be found wrong with the refraction or muscular efficiency of the eyes. At any rate, to account for the persistence and severity of the symptoms, the tone and capabilities of the ner-

vous mechanism of vision seems to be at fault. Such a condition is probably frequently of reflex origin, though the region from which the afferent stimulus proceeds is not often apparent. These are a class of cases, when you are sure of your diagnosis, you can cure by moral effect. Get them out of and away from themselves, as it were. The headache, when starting, instead of yielding to it, do not, but go on with the work, or drive, and patient suddenly becomes aware of the fact that employment and work improves their condition. At any rate, let them thoroughly understand that the proper use of their will power and work is curative. The gynecologist effects some brilliant cures with these sufferers, not from his doses to, appliances on, or operations with and in the uterus and appendages, but rather the moral effect he has created. She now believes the weakness is taken away; no longer yields to every little symptom; applies herself and becomes interested in work, and the headaches are gone. Unfortunately, not so in all his cases. If you keep track for a sufficient length of time you will be surprised at the small percentage that are even relieved by gynecological procedure, to say nothing about being cured. After her uterine treatments or operations the sufferer often returns to or writes the doctor, stating that her head still aches and cannot follow her usual occupation with any comfort. You prescribe a tonic, etc., rest, and with patience she will grow out of it. Does she? Unfortunately she grows into it, but her confidence in his professional ability grows out, and he sees no more of the patient. Other cases are referred to the oculist, after your store of operations and appliances have become exhausted, and the favorite prescription to cure "toxic conditions" failed. The oculist, after an examination of the eyes, finds nothing in their condition, at any rate, to account for these rebellious headaches, and sends the sufferer back to the gynecologist. After this she is in good shape to fall into the hands of the quack optician or Christian Science healer, becomes suddenly cured, and one of their strongest votaries. I would strongly urge on every medical man: Study up this subject; fit his office out with the necessary lenses and appliances, so that he can make a diagnosis of headache due to referred pain. In this way, and this way only, can he hope to retain in his clientele that numerous class of patients who suffer from headache. I feel safe in saying at the present time, not more than 25 per cent. of sufferers from headache ever go near or consult the family physician; the other 75 per cent. you will find in the parlors of the quack optician or at the counters of the drug stores, buying headache powders or other nostrums.

DR. SEABORN.—I take the liberty of criticising Dr. Williams for not having attempted a classification of the causes of headache, as I am never satisfied unless I can really understand enough of a disease to put it in a class. We can classify only when we understand every attribute of every member to be dealt with. The classification usually given is: (1) Reflex or referred, as in eye-strain; (2) inflammatory, as in neuritis, meningitis, etc.; (3) neurotic, as in hysteria and exophthalmic goitre; (4) toxic. As the members of the toxic class are always increasing at the expense of the other classes, allow me to enumerate some of them: Anemia, nephritis, lithemia, gout, rheumatism, disorders of stomach and intestines, diabetes, fevers, intoxications by alcohol, lead, mercury, tobacco, etc., enlarged tonsils, absorption from any septic focus, as from decayed teeth, etc., fatigue, impure air. Pain is purely a subjective symptom, and as there are more varieties of people than of headache, it is often unwise to ask many questions about the quality and intensity of the pain. It is generally sufficient to know that we have pain and where it is. After that we must search for a cause in other organs. A specialist in mental diseases on one occasion showed me that insanity in a parent may be transmitted as epilepsy in the son, as rheumatism in the second generation, and as migraine in the third, or the descent may vary in many ways from this. Headache is only one of the symptoms of migraine, and in some attacks these other symptoms may occur without the headache. Thus we may have anesthetic areas or vertigo or vomiting. On one or two occasions when women have complained of letting things fall on account of numbness of the hands, I have been able to trace the connection of these symptoms with migraine.

It is a peculiar fact that many of the cases of tumor of the bladder occur among workers in aniline dyes.

In the aged pain and disability in the arm after traumatism demand especial care in examination of the shoulder. Fracture of the head of the humerus is often overlooked.

FRACTURES of the head of the radius are probably more common than generally supposed, being overlooked frequently because of the absence of the ordinary signs of fracture.

IN the performance of the radical operation for breast carcinoma it is important to avoid injury to the periosteum of the ribs.—*American Journal of Surgery.*

CARE OF THE PERINEUM IN CONNECTION WITH LABOR.*

BY J. MCARTHUR, M.D., LONDON, ONT.

Mr. President and Gentlemen,—In directing your attention this evening to the "Care of the Perineum in connection with Labor," one might feel that an apology for presenting the subject is necessary; but not so, when we realize that injury to the perineum is perhaps the most common accident occurring in normal, natural labor, that is, even in vertex presentations. I might also defend the object of the paper when we consider that labor in woman was foreordained as a curse, even in the most natural way, with suffering and difficulty, and still made more difficult by the intellectual evolution of the human race, which has increased the brain, and consequently its coverings, membranes and skull, without a corresponding increase in the pelvis. Thus labor in all its bearings becomes more than a physiological process, and as a consequence art must keep in the race, and come to the rescue to help nature in preserving the perineum during its most severe test.

The higher the social circle, or, as is claimed for it, the greater the culture and refinement, the more it is opposed to nature's remedy for safe delivery, and perhaps we all notice along this line a corresponding difference between labors in the working classes and women who have not to earn or help to make their living, more especially in reference to the perineum.

Accidents to the perineum occurring in 30 to 35 per cent. primiparæ, and perhaps 10 per cent. in multiparæ, although in the latter less formidable and more easily avoided than in primiparæ, and more likely to occur in a perineum that has been restored than one in which there has been no breach of continuity. I feel this percentage is not too high, and will occur in the hands of most skilled attendants. At any rate, the injury is so common that we no longer hesitate to examine the pelvic floor after labor, and make no bones of allowing the patient to know whether or not there has been a tear by our attention being directed to its examination and restoration when required.

While we will not dwell on the anatomical structure of the parturient canal, still we must keep in mind that part of it in

*Read before the London Medical Society, January 14th, 1907.

connection with the pelvic floor, muscles, bones, fascia, vessels and nerves.

Measures and methods without number have been thrust upon us by obstetricians for preventing lacerations and preserving the continuity of the perineum, and notwithstanding all these the means at our disposal of any practical value are very limited indeed, but a few observations under the following heads may be beneficial to our mutual helpfulness:

1. *Control or modification of the expellant forces, not forgetting that resistance is offered by the parturient canal (fascia, bones and nervous supplied muscles).*—(a) Ask our patient to check or increase the voluntary expulsive efforts, which can sometimes be done, as both the central and sympathetic nervous systems are involved in labor; (b) encourage her to cry out as the head rolls out, perhaps more applicable to multiparæ, and is often accomplished between the pains; (c) place her on left side, thus modifying force of gravity; the weight of uterus and fetus work in opposition to the ordinary expellant forces; (d) administration of chloroform, which abolishes the pain and paralyzes the abdominal muscles; labor simply continued by uterus modified by the anesthetic; beginning its administration when the vertex touches the pelvic floor or bulges the perineum with every pain; I say chloroform in preference to ether, as it can be more rapidly given and not so complicated to administer, and can be given more easily by a nurse if we require to resort to her assistance in that way, but not advisable; perhaps it is not too extreme when I recommend in every case requiring the giving of chloroform that a qualified anesthetist should have full charge of that end of the patient, under your direction. Whether or not surgical anesthesia is required, the importance of this is apparent when we know that often justice cannot be done our patient if only single-handed; (e) to mark time, which is a great factor, can be helped by opium or morphia; from beginning of labor which has a tendency to work both ways, delay and dilate.

2. *Procedure.*—Manipulation (not a good word, as it savors of meddlesome midwifery) before the test to render the vulvar ring more elastic, and during expulsion to equalize the tension. Under the first may be mentioned the following, although the utility of them may be questioned. Massage with some unguent before labor begins at all; pouring in Lysol solution if parts become dry and hot; placing two fingers in the vagina and, as it were, drawing outwards of the perineum during a pain, a

manoeuvre which, when it is necessary, stimulates the perineum from above, as well as stretching of the endangered area; applications of warm or hot pads to the parts, which at least is most comforting to the patient. Possibly all these methods have a place.

3. *Efforts at our disposal during the expulsion of the head (or, in other words, the real test).*—Under this head my remarks are more applicable to primiparæ. Patient on left side, near edge of bed, legs drawn up (thus relaxing the psoas muscles and giving more room at brim), and we thus remove the force of gravity, gives us more control of the presenting part, and makes ocular inspection of the endangered area more convenient. Bowels empty, bladder of course, same, and if we have been able to delay head on perineum for at least half an hour, and with all the means mentioned above, or some of them, having been taken advantage of, we now allow the expulsion of the head to take place, as of course there is objection to the presenting part remaining too long on the perineum, and only experience helps us to judge when to let the head pass.

And just here the question arises, what to do if pains too weak and getting more so. Whether to give an opiate and allow woman to rest for hours, or profound anesthesia, and take lots of time with forceps to deliver, usually latter resorted to, but when the saving of perineum the object, would advise the former method and perhaps avoid use of forceps altogether. It just strikes me here there is not much danger to the parts if the perineum remains thick and soft, but so soon as it becomes elongated and thin, then look out.

Most procedures to prevent injury to this part are not only useless but possibly mischievous, but will mention a few, which have proved the most satisfactory to me:

To assist the occiput to come further forward and escape under the pubic arch, *e.g.*, forcing or continuing flexion longer, I place my right hand protected by a pad, especially covering the arms, with points of fingers on after part of left labia and thumb on right opposing part, with the head covered by perineum in the hollow of my hand, as it were, squeezing the two labia together to relax the central tension; in other words, moderate counter pressure on head with the hand.

Object of the hand not support the perineum, but steady and regulate the expulsion of the head, the moulding of which should not be interfered with. I'll admit the objectionable feature of the hard hand.

I do not use left hand at all, as so often recommended by obstetricians, to keep up the flexion; object in view in this plan, as you will understand, is to keep the sides of perineum together, thus pressing forward the head and retarding somewhat expulsion. Any other manoeuvres, finger in the rectum, etc., trying to direct the head through the vulvar opening, have not been of much avail to me. Episiotomy out of question, as an almost inevitable or impending rupture may be avoided.

Placing sutures in the perineum before the tear does not appeal to me, and now as the head emerges, perhaps without any visible tear, still our vigilance must not be relaxed until the whole body is born, still watching the force from above (*vis a tergo*) and relieving whichever arm comes easier, better the anterior one, not forgetting that the hips may enlarge any rupture already started, as I feel the order in which the giving way takes place is fascia, muscle, mucous membrane, and last the skin, especially in the deeper wounds.

Another circumstance that might avert or limit a laceration and prevent undue strain on the resisting girdle, and which has proved itself satisfactory to me, especially when applying forceps, viz., to stretch out or down legs of patient just at the test, and sometimes acted on voluntarily by patient. More especially applicable to forceps cases in lithotomy position.

It might be well to mention here some of the circumstances which jeopardize the integrity of perineum:

All deformities of pelvis and malpositions of child; tough, non-elastic or resisting ring of tissue, found in both very young and old primiparæ; over 35 the elasticity is very limited, while in delicate, thin, anemic women perineum often very yielding; large fetus; small vagina; perineum too long and body too thin; precipitate labor; unskilled use of forceps; protracted labor; powerful contractions; delay of head on perineum will also make the parts dry and unyielding; strong, healthy, muscular women require extra watching.

Now, regarding treatment of wound when it does occur, a few observations will not be out of place and perhaps give more scope to the discussion. We must bear in mind at the outset, first, that every case of labor should be treated surgically; second, that a restored perineum is never the equal of one not requiring restoration.

So that the most delicate task that confronts us during the second stage of labor is if possible to preserve the perineum.

In primipara, if any marked degree of rupture occurs and

a proper anesthetist is not at hand, better to allow woman to rest a few hours, the necessity for which is apparent, and return, and with patient properly anesthetized (ether perhaps more indicated at this stage) and the lithotomy position assumed and sutures introduced in the regular way.

First suture one-half inch in front of posterior part of tear and one-half inch apart to and including edge of fourchette, being careful to avoid pockets in sulci; silk-worm gut, of course, remaining in four or five days, treated surgically. And right here I deprecate the use of irrigation for cleansing for at least the first five or six days. Allow inside to take care of itself and wash outside; no solutions, except soap and water, from beginning of labor to the termination of the puerperium; Lysol simply as lubricant.

Primary perineorrhaphy invariably heals by first intention, and my reason for recommending delayed suturing is that the more favorable circumstances give us the best results; and am not certain but that even no matter how accurate the coaptation of the divided parts with favorable union is effected, time reveals the fact often that the body of the perineum is gone and we have simply mucous membrane and skin perfectly united, even if not in apposition as formerly, and perhaps even this result may be attributed to the secondary operation. If, however, for reasons of our own we decide to repair at once, it can be accomplished without chloroform, as the sensibility of the perineum is often numbed, and by placing patient on left side and near edge of bed, and parts exposed to a good light, we can sometimes do our patients justice, and secure a fair perineum. The same directions and precautions applicable to immediate repair as to delayed suturing.

Even if only fourchette is torn it should be repaired, and it occurs in about 65 per cent.

Complete rupture of the perineum, *i.e.*, through the sphincter ani and into the rectum, which seldom occurs unless unusual force is practiced, we will not consider, as the operation for its repair is more radical and requires the services of a specialist.

Perhaps laceration of one of the lateral sulci of the vagina is more common than we imagine, which so injures by overstretching of the levator ani muscles and accounts for the subsequent relaxation and pelvic organ displacement. Nature often comes to the rescue and, without repairing, unites by first intention a torn perineum, or by granulation and cicatrization, when we will have an unyielding pelvic floor.

I will not refer to the consequences of an ununited perineum, nor yet to the extra danger at the time.

Now, in conclusion, Mr. President and gentlemen, for these rather thrown together observations I claim very little originality, as we are all so apt to imitate rather than emulate, but have given what experience and reading have helped me to imbibe.

And while I might have said a good deal more, still the object of my opening the discussion on this subject to-night will be achieved provided some of the chief factors and extreme ideas have so enlisted your interests as to provoke a good free discussion.

DISCUSSION.

DR. SEABORN.—No one could find fault with Dr. McArthur's paper. All his statements are orthodox. Still, I would like to show the reverse of some things: First, There is an element of danger in giving hypnotics and waiting when the pains are not strong enough, and that is, that the pains may come on before you have returned, and the perineum be ruptured. Of course, we have no fear when we have a capable nurse and when our patient is in an hospital, but that is not always. Second, That primary repair is always successful. That appears to be so, but often we have union of only the skin and mucous membrane, or at least the body of the perineum is only thin and may easily give way under any strain and so produce prolapse, etc. I believe that no perineum is ever as strong after rupture, no matter how skilfully repaired. Third, That too rapid expulsion may be the cause of rupture. Very true, but the converse is also true. When expulsion is too slow after the head has reached the perineum, the floor becomes swollen and edematous and very liable to rupture. Many women expect chloroform to partial narcosis from the very first, and I believe that chloroform may be the cause of rupture when it delays delivery too long. Dr. McWilliams speaks of kneading the perineum with the thumb inside the fourchette. This is excellent. Pains are not necessary to relax the perineum if only the head be pressed down and retracted in succession, and the place of the head may easily be taken by the accoucheur's hand. I have often adopted this method, but have used the first two fingers instead of the thumb in an attempt to massage more of the levator ani muscle than can be reached with the thumb. Dr. Meek speaks of preventing rupture by keeping the head flexed until the occiput passes under the pubes. Very good, but when the nape of the neck is against

the pubes firmly the rupture has probably begun. I believe in unavoidable ruptures. The rupture has taken place before the nape of the neck is firmly against the pubes. I should be pleased to have some others' opinion on this point.

DR. FERGUSON.—For the protection of the perineum two points in the mechanism of labor should be kept in view in vertex presentations, viz., the promotion of flexion of the head until the occipital protuberance passes the sub-pubic ligament, and thereafter the favoring of extension of the head, so that the smallest or suboccipito-bregmatic diameter, instead of the occipito-frontal, may be the one to pass through the vaginal outlet. Too rapid expulsion of the head was doubtless the most frequent cause of perineal tears, insufficient time being given the muscles in which to stretch instead of tear. On this account he thought that time and chloroform were important safeguards. To delay the too rapid extrusion of the head, the proper manipulation was to exert pressure on the presenting part of the head, and not on the perineum. He did not experience any danger to the perineum in stripping it back over the presenting part, if expression were attempted in the interval between pains, nor did he find any ground for objection to the repair of tears between the birth of the child and the expulsion of the placenta.

A Mercier catheter is the first kind that ought to be employed in attempting to overcome retention caused by an enlarged prostate. Often it will have to be resorted to in the end; and, therefore, it will save much unsuccessful manipulation to use it at once. Occasionally a metal catheter will pass when even a Mercier fails.

Occasionally, contractures of the fingers following the treatment of a cellulitis of the hand and forearm may be due, not to the cellulitis itself, nor to the incisions made to relieve it, but to fibrosis and shortening of the flexors in the forearm, the result of too tight bandaging or strapping. Such a condition—Volkmann's ischemic muscle contracture—must, therefore, be distinguished from the stiff, flexed fingers produced by the cellulitis. Passive motions and massage are helpful in both conditions, but in the former, bone shortening (radius and ulna) is necessary to accommodate the contracted muscles.—*American Journal of Surgery.*

Clinical Department.

Note on a Case of Infection during the Puerperium Simulating Psoas Abscess. WILLIAM AYRES, B.A., M.D. (DUB.) in *The Lancet*.

On April 25th, 1903, I attended a patient in her fifteenth confinement. I had attended three previous confinements. The labor was most uneventful. I arrived just in time to be present at the birth of the child. On the fifth day of the puerperium the patient had a rigor. The temperature was 99 deg. F., and the pulse-rate was 100 per minute. I douched out the uterus and put the patient on a quinine mixture. I examined the uterus and adnexa most carefully but could find no reason for this rigor, and as the temperature remained normal, thought I was free from all trace of puerperal infection. On the twelfth day of the puerperium the patient began to complain of pain in her left leg, which gradually got worse and the leg began to contract until the knee was at right angles to the body. The pain was relieved by suppositories of morphine. On the fifteenth day of the puerperium a small hard lump of the size of a Tangerine orange began to appear to the left of, and below, the umbilicus. This lump was very hard and immovable and was thought to be an inflammatory swelling in connection with the broad ligament pressing on the lumbo sacral plexus; it grew very slowly. The temperature never went beyond 99 deg., and that was reached only once or twice; the pulse-rate was never beyond 100 per minute. On May 18th I had for private reasons to leave my practice and I gave instructions that a colleague should see the case in my absence if the pain became unbearable. My colleague came to the conclusion that the lump was of a cancerous nature owing to its hardness and immovability and also the absence of any very definite temperature and pulse-rate. It was decided, therefore, as there was some doubt as to the exact nature of this lump to give the patient the benefit of an operation. After consultation Dr. F. Edge, of Wolverhampton, kindly undertook the operation, which was performed at the Nursing Institution, Wolverhampton, on June 9th.

After the preliminary laparotomy a hard lump was discovered behind the sigmoid flexure, which was fixed but not involved anteriorly or laterally. As owing to its position removal of the mass if malignant was impossible, and incision into it pregnant with danger should pus have been struck, as

it would have had to drain through the peritoneal cavity, it was decided to await events, and the abdominal wound was accordingly stitched up again. The uterus and adnexa were found to be in a perfectly healthy and normal condition. The patient stood the operation well and made a good recovery. The temperature several times reached 101 deg. F., and the pulse-rate varied from 90 to 110. She seemed to be in rather a typhoid condition, but at the end of three weeks she improved and went home.

There was no doubt as to sepsis of some kind, but it was held to be due to mischief in the sigmoid flexure or infection of the mass from the intestinal canal, but the mass was so hard and firm that the possibility of sarcoma was not excluded, and the question was raised as to whether an artificial anus might not be required later.

Ten days after the patient's return home the lump suddenly disappeared from above the brim of the true pelvis and presented itself in Scarpa's triangle, where it was seen to be inflammatory, and was accordingly opened. The patient was up and about again in another two months.

The lymphatic glands involved were the left common iliac and lower lumbar glands, and it is possible that the lesion in such cases is due to injury to the rectal tissues during labor.

A most interesting case of a similar nature has recently been reported by Dr. T. J. Watkins, Professor of Gynecology at the North-Western University, Chicago, but there are so many points of difference in the two cases that perhaps a report of my case may be of interest to the profession.

I am indebted to Dr. Edge for the kind use of notes during the time that the patient was under his care.

Lithopedion Carried Twenty-Six Years or More. H. W. MORE,
HOUSE, M.D., Danville, Ill., AND E. H. GRISWOLD, M.D., Peru, Ind.
in *J.A.M.A.*

History.—Mrs. B., aged 62 years, commenced to menstruate at the age of fourteen years. Menstruation was always regular and painless. The patient was married at the age of twenty. Her first child was born March 13th, 1866; the second was born Sept. 16th, 1867; the third, Oct. 9th, 1869; the fourth, Aug. 16th, 1871. She missed a menstrual period in July, 1880. In August she had a sharp attack of abdominal pain requiring rest in bed and morphine; three days later she had another attack

still more severe, necessitating confinement to bed for almost a month. In September there occurred a very severe attack of pain accompanied by symptoms of collapse. She was confined to her bed for three or four weeks thereafter, and was not well enough to return to her home, a short distance in the country, until November. In December a colored uterine discharge appeared, the first since the preceding June. At this time there was a discharge of a fleshy membrane. From this time menstruation was regular and painless until 1886, when she had a severe attack of peritonitis confining her to bed for about three months, after which menstruation was again established and remained normal until 1894, when it ceased permanently. During all this time there was abdominal soreness and distress occurring at irregular intervals. It was finally discovered during one of these attacks in the early part of 1906 that there was a movable abdominal tumor to the right of the median line low down in the pelvis.

Operation.—Abdominal section, made June 5th, 1906, disclosed the abdominal tumor to be a lithopedion surrounded by and attached to omentum and intestine. There were no attachments to uterus, ovaries or tubes. Recovery was uneventful.

The specimen is complete in every respect, even to the preservation of the bones of the hands. It is a perfect skeleton of a fetus of five or six months, flexed on itself as *in utero*, as is shown in the accompanying illustration. This is a perfect picture of the specimen, as it was lifted from the abdominal cavity without any covering or vestment whatever except occasional small bodies of adipose tissue.

The omentum and the ileum were adherent to lithopedion by a very small band just beneath its submaxillary. The calvarium, which is somewhat collapsed, is filled with a caseous mass. The whole is covered by a closely adherent thin fibrous tissue. The specimen is now in the museum of Rush Medical College.

Ventral Hernia During Pregnancy. ERNEST F. ROBINSON, M.D.,
Kansas City, Mo., in *J.A.M.A.*

The following case is reported as a demonstration of the efficiency of "vertical overlapping" operation for ventral hernia. No severer test could be demanded than the experience of this case.

Patient and History.—Mrs. H., aged 23, was seen in consultation with her attending physician, Dr. Trexler, June, 1905.

She was a little over three months pregnant, and was suffering from a hernia. About one year before, she had given birth to a still-born child. This labor, her physician told me, was very severe and prolonged, and he feared the result should she undergo a similar experience with the hernia that existed.

Examination.—A rupture at the umbilicus about the size of an orange was found, the hernial ring admitting the tips of two fingers. The hernia apparently contained omentum and at times, on straining, a knuckle of gut could apparently be felt. The contents of the hernial sac could be only partially reduced.

Operation.—Under ether anesthesia a transverse elliptical incision was made around the hernial sac, down to the deep fascia. The sac was freed from its attachments at the ring. It was opened, and the contained omentum, which was greatly thickened and adherent, was dissected free, tied off with catgut, and dropped back into the abdominal cavity. All about the ring, the fat was dissected free and a small incision, one-half inch deep, was made on either side of the ring. Then from above downward, the tissues were brought together as flaps, making the upper slip over the lower, as advised by the older Mayo. This was accomplished by inserting two mattress sutures of hemp into the edge of the lower border of the ring and passing the thread underneath the upper border and bringing it out two inches above. These sutures held the flaps in position, but they were, in addition, united by several buried catgut sutures. Thus, in place of the hernia, there existed a double layer of abdominal wall. The skin wound was closed without drainage.

Post-operative History.—Immediately following the operation rather severe vomiting occurred, but the line of sutures held well and primary union resulted. A little less than five and one-half months later the patient gave birth to a large, healthy child. It was a face presentation and labor was much protracted, but the line of union held firmly.

The only complaint the patient had to make was that she no longer had a navel, but was like her great ancestor, the original Adam.

In acute (septic) osteomyelitis immediate operation is not too radical; in chronic osteomyelitis patient waiting is often not too conservative—the final expulsion of a sequestrum may be all that is necessary to effect spontaneous cure.—*American Journal of Surgery.*

Rupture of the Inferior Vena Cava.

WM. ST. CLAIR SYMMERS,

M.B., C.M. (Aberd.), in the *Lancet*.

I recently performed a post-mortem examination on a boy in whose thorax the following unique condition was found. A lad aged 16 years was brought to the Royal Victoria Hospital, Belfast, with the history of having been kicked in the chest by a horse. The patient survived for several hours, dying about four hours after the infliction of the injury. At the necropsy the skin over the chest was found to be normal in every respect; there was slight hemorrhage in the right pectoralis major near its sternal attachment; the sternum was snapped through transversely just below the attachments of the third costal cartilages, the underlying mediastinal tissues being slightly ecchymotic. The pericardial sac was distended with dark blood containing a single large dark-red clot. The anterior surface of the heart was uninjured. The inferior vena cava was ruptured to the extent of exactly one inch on its anterior aspect, the rupture beginning at the auricle and running straight down the wall of the vessel. This rupture was gaping so that the orifice was oval in shape and nearly a quarter of an inch wide. Apart from some very slight hemorrhage near the head of the pancreas the other organs were normal.

A Case of Surgical Emphysema (?) of Unusual Origin. HENRY POWER, M.D., Spokane, Wash., in *J.A.M.A.*

While acting as surgeon to the Spokane division of the Great Northern Railway I was, on July 24th, in charge of a case giving the following history, part of which was furnished by officers of the wrecked train:

History.—The victim of the accident, a healthy man of about 30 years of age, was seated in the forward part of the smoking car when the engine, mail car and baggage car left the track and ran down an embankment into a deep lake. The car in which the patient sat was also about half submerged. He, though shaken up, retained control of himself and made his way through the window and remembers swimming in the lake. An employee who stood on the bank states that he offered the swimmer the end of a stick in order to draw him to the shore; before this could be done, however, one of the tanks of acetylene gas, which had broken from its fastenings, was seen to have taken fire, and, floating on the surface of the water, was dis-

charging a large jet of flame from an orifice with great force. The tank, floating past, threw the flame full in the face of the swimmer, rendering him unconscious for one or two hours. On examination severe burns were noted on the hands and face, and in the cavity of the mouth and pharynx, and on stripping the patient marked emphysema was seen extending on both sides from the lower jaw to the lower end of the sternum, being most marked about the neck and upper chest. There was marked dyspnea and some pain was complained of about the neck and pharynx and to some extent about the right clavicle.

For some days the patient seemed in serious condition, but there was little if any rise of temperature. Some expectoration of a bloody nature was noted and at times small black masses were mixed with the blood. The emphysema had extended slightly over the abdomen, but was not so marked above, leading to the inference that the pressure was only in process of equalizing and that the total quantity of air had not increased since the accident.

During the subsequent stay of the patient in the hospital careful examination failed to show any fracture of ribs or clavicle, and the case made a slow recovery without new symptoms of importance. Up to the middle of October there persisted a slight amount of gas in the upper abdominal wall.

None of the commonly accepted theories of the etiology of emphysema explains this case. Possibly the sudden pressure in the mouth and pharynx caused a rupture into the subcutaneous tissues, allowing gas to escape into them.

A Case of Graves's Disease Treated by Rodagen. J. RONALDSON
RUSSELL, M.R.C.S. (Eng), L.R.C.P. (Lond.), in the *Lancet*.

Rodagen is described as a mixture of milk-sugar and the dessicated milk of a goat from which the thyroid gland has been removed. It has been used with apparent success in cases of Graves's disease, and the following is an account of a case in which I was able to try the effect of the drug. Messrs. R. W. Greeff, Eastcheap, London, kindly provided me with a supply of rodagen sufficient for a six weeks' trial. The previous history of the case before commencing rodagen was as follows: The patient was an unmarried woman, aged 29 years. She first consulted me in May, 1905, on account of loss of weight amounting to 14 pounds in three months. She suffered from profuse

perspirations; exophthalmos was marked, and neither Stellwag's nor von Graefe's signs were present. There was uniform slight enlargement of the thyroid. Tachycardia was present, the pulse varying from 120 to 160 per minute. No cardiac murmur could be detected, but the pulsations of the thyroid and of the large vessels of the neck were noticeable to the patient herself. Tremor of the hands was present and a feeling of weakness in the knees. She was sent to a farm-house, where she had four pints of milk per diem in addition to ordinary diet, and was kept at rest in the recumbent position out of doors for one month. She was also given bromide and tincture of digitalis but without apparent benefit from these. On the other hand, the dieting and the rest apparently were of large benefit to her, and all the symptoms became less severe and she increased in weight 7 pounds. Treatment by rodagen was commenced on June 17th, 1906, her weight being then 9 stones 4 pounds. She was first given 5 grammes per diem and afterwards 10 grammes. On July 16th her weight had increased to 9 stones 7 pounds, and on August 7th she weighed 9 stones 12 pounds. At this date the treatment was discontinued. The weather during the whole of the time she was taking rodagen was very hot, and the patient said that she was never so well in hot weather. Since taking the rodagen she states that the diarrhea has certainly been less frequent. She has slept better and the weakness of the knees has not troubled her so much nor has the tremor. The headache, palpitation, and throbbing of the neck have, however, been much the same as before. I should certainly try the treatment again in any case where the expense was not prohibitive. I am quite aware that no definite arguments can be drawn from one trial of the drug in one case, but from other cases which have been reported I think that the drug deserves a further trial.

A bright and altogether satisfactory light for throat examinations can be had cheaply by covering a 16-candle-power Edison electric bulb with a smooth layer of plaster of Paris, about three-eighths of an inch thick, leaving on one side an aperture the size of a silver half-dollar, or larger. The white inner surface of the plaster brilliantly reflects the light. The outer surface may be painted black for appearance's sake.—*American Journal of Surgery*.

Society Reports.

THE ONTARIO MEDICAL ASSOCIATION.

The Committee on Papers announces that the series of papers to be read at the next meeting, dealing with the relation of the profession and the public will be read under the following titles:

1. "The Medico-Legal Aspects," by Dr. G. Silverthorn. This paper will take up the question of the appointment and remuneration of coroners; the selection of expert pathologists for autopsy work and proper remuneration; the present undesirable method of retaining experts in legal cases; a discussion of the present irresponsibility for the payment of fees in legal cases, and a comparison of all fees with those of other countries.

2. "The Public Health Aspects," By Dr. J. W. S. McCullough. The need of the appointment of county health officers; compulsory vaccination; remuneration for the registration of births, deaths and infectious diseases, and that attendance upon the poor should be remunerated by the municipality; the organization of the profession, and how to deal with the dead-beat.

3. "The Ideals of Asylum Work for Ontario," by Dr. C. K. Clarke.

4. "The Infection of Drinking Water," by Dr. J. A. Amyot.

The following have promised with some reservations at this early date to discuss these papers: Drs. C. A. Hodgetts, R. Haikes, W. R. Hall, will take up certain portions of Dr. McCullough's paper; Drs. Beemer, Burgess, of Montreal, J. Russell and W. N. Barnhart, Dr. C. K. Clarke's, and Drs. Starkey, of Montreal, and W. T. Connell, Dr. Amyot's paper.

The Committee on Arrangements wishes to announce that there will be a smoking concert on the first evening and on the second a dinner at one of the large hotels, at which a distinguished guest will speak, whose name will be announced later.

When removing a lipoma or other growth from the inner surface of the thigh, a little care should be exercised in order to avoid cutting the long saphenous vein. Ligature of that vessel (especially in ambulant and in non-aseptic cases) may be followed by a distressing phlebitis.—*American Journal of Surgery.*

Physician's Library.

The Journal of Inebriety after thirty years of continuous studies of the disease of inebriety and drug taking begins its new decade by entering upon comparatively new field of physiological and psychological therapeutics, for the treatment of these neuroses. Arrangements have been completed by which *The Archives of Physiological Therapy* has been consolidated and will hereafter be published as a part of *The Journal of Inebriety*. This very able monthly has been developing parallel lines of study with *The Journal of Inebriety*. In the opinion of its managers its scientific value would be greatly enlarged by concentrating its work along some special lines. The disease of inebriety and its allied neuroses is a field of most practical interest, hence *The Journal of Inebriety* is selected as a medium for continuing the work of *The Archives of Physiological Therapy*, henceforth. Arrangements have been completed by which *The Journal* has presented, the therapeutic effects of hot air, radiant light baths, electricity, massage, psycho-therapeutic measures, and other physiological means will occupy a prominent space. This effort to clear away the confusion and broaden the studies of therapeutic means for cure will make *The Journal of Inebriety* one of the most practical and valuable visitors to every hospital and institution, as well as to all specialists who treat brain and nerve neurotics. We shall aim to present and formulate the latest studies and facts along these frontier lines, and in this way lift the whole field of therapeutics out of its present empiric stage into one of rational therapeutics.

Anatomical Nomenclature. With Special Reference to the Basle Anatomical Nomenclature (BNA). By LEWELLYS F. BARKER, M.D., Professor of Medicine, Johns Hopkins University; formerly Professor of Anatomy in Rush Medical College, Chicago. With vocabularies in Latin and English. Two colored and several other illustrations. Octavo. Cloth, \$1.00 net.

The Basle Anatomical Nomenclature—popularly referred to as the (BNA)—is the result of an earnest, concerted effort to

systematize and simplify a nomenclature which has grown in haphazard manner, become burdened frequently with multiple designations for one structure, and in general has deteriorated in scientific accuracy and value.

The expression (BNA) is a shorthand title for a list of some 4,500 anatomical names (*nomina anatomica*) accepted at Basle in 1895 by the Anatomical Society as the most suitable designations for the various parts of the human anatomy which are visible to the naked eye. The names are all in correct Latin and have been selected by a group of the most distinguished anatomists in the world, working six years at their task, as the shortest and simplest available terms for the different structures; the majority of the names were already in use in the various standard text-books, but some of them were selected from anatomical monographs not considered in the text-books, and a few of them are brand-new terms, introduced into the list, where an examination of the literature and of anatomical preparations showed that none of the names hitherto coined was satisfactory.

One name only is given to each structure, and the mass of synonyms which encumbered the text-books can thus be swept away. If one of the larger text-books of gross anatomy be examined, as many as 10,000 names will be found employed, the half of which are synonyms; and if the anatomical terms used in the various standard text-books be collected into one list, the total number amounts to more than 30,000. It is no small achievement to have reduced the necessary number of names in gross anatomy, as it is known to-day, to less than 5,000—an achievement for which both students and teachers of the subject must be thankful.

Even more important is the exclusion from the list of all obscure or ambiguous terms, each name employed having a definite and easily ascertainable meaning. The construction of the list has led, too, to the establishment of certain general principles regarding the formation and use of anatomical names, and these principles promise to be of great service in simplifying nomenclature and keeping it uniform as anatomical science continues to develop.

The (BNA) makes no attempt to limit the language of research, but only to supply a list of simple terms, free from ambiguity, for common use. Simplicity, accuracy, and serial connection will be favored by the uniform and consistent use of the (BNA) for the structures studied in the schools. The teacher's work will be simplified and the pupil's task will be

lightened; instruction will be unhampered, research will flourish, and anatomical science will gain in dignity and in precision.

The (BNA) is already so widely used in English and foreign tongues by teachers of and writers on anatomy, physiology, histology, pathology, embryology, zoology, etc., that Dr. Barker's book is most timely in its publication.

In no other work in English are the purposes of the (BNA) described, its scheme explained, and its vocabulary given.

The Doctor's Recreation Series. Vol. V.—The Doctor's Window. Poems by the Doctor, for the Doctor, and about the Doctor. Edited by INA RUSSELLE WARREN, with an introduction by WILLIAM PEPPER, M.D., LL.D. General Editor of the Series—CHARLES WELLS MOULTON.

To those who love poetry and have the poetic heart this volume will strongly and readily appeal. Its value is enhanced by embracing gems from distinguished pens: O. W. Holmes, Eugene Field, James W. Riley, S. Weir Mitchell, S. Baring-Gould, J. G. Saxe, W. H. Drummond. There are some also from pens of men distinguished in the ranks of medicine: John Cheyne, Frederick Peterson, Edward Jenner and John C. Hemmeter. The illustrations are: "A Cure for the Gout" (Dendy Sadler), "The Anxious Moment" (B. Vantier), "The Doctor" (Luke Fildes), "The Post-Mortem." The book well keeps up the excellence of the preceding volumes.

The employment of adrenalin as an application with cocain to the mucous membrane of the cheek, *e.g.*, for the excision of a leucoplakic ulcer, is not to be advised. There may be severe secondary hemorrhage.

Everything is to be gained and nothing to be lost by having patients remove enough of their clothing to allow of a completely satisfactory examination in all cases. Instances can be called to mind by any physician of erroneous judgments arrived at before exposure of other parts of the body showed conditions altering one's opinion. Especially is it important to compare the corresponding members of the body on the sound and the affected side in all doubtful cases.—*American Journal of Surgery.*

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

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Experience has abundantly shown how useful the Association has been since its organization.

The Association has not lost a single case that it has agreed to defend.

The annual fee is only \$2.50 at present, payable in January of each year.

The Association expects and hopes for the united support of the profession.

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And Ontario Medical Journal

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No. 3.

COMMENT FROM MONTH TO MONTH.

The sudden death of Sir William Hingston calls away a distinguished member of our Canadian profession. A fine type of man, he possessed all the qualities which go to make a gentleman. Indeed, if we were to accord any special characteristic to Sir William it would be Chesterfieldian. One would expect to find in the distinguished manner of the departed doctor, senator and knight, who was at the same time a philanthropic and estimable citizen, those qualities of mind and heart which make the true man and the courteous, affable, cultured gentleman. He was all these, and no man could be better. Full of years and honor he has gone, but has left behind him an example and a name which will long live green in the annals of Canadian life, and particularly in Canadian medicine.

An Academy of Medicine may be an accomplished fact ere the close of the academic year. Special committees have been carefully and earnestly working the past two or three months, representing the Ontario Medical Library, the Toronto Clinical Society, the Toronto Medical Society, and the Toronto Pathological Society. Each of these is to constitute a unit of the Academy of Medicine, Toronto. Membership will be primarily in the Academy and secondarily in a section, medicine, surgery, etc. As there appears to be little if any opposition to the scheme, and as all the societies are working for its early consummation, no doubt satisfactory arrangements will soon be announced.

The Toronto General Hospital has issued its annual report for the year ending the 30th of September, 1906. On the 1st of October, 1905, there were in residence 175 males, 122 females, and 8 children. During the year 2,121 men, 1,462 women were admitted to the wards, and there were born in the Burnside Lying-in Department 107 males and 90 females. On the 30th of September, 1906, there remained in the institution 163 males, 101 females and 15 children. The deaths were: 184 males, 84 females and 26 children.

The subject of house disinfection and reinfection, particularly in diphtheria, is a very important one, and is now exciting interest among sanitarians. Disinfection with formaldehyde gas accomplishes so far the best results, but it does not do all. In some parts of the United States a far better system prevails in addition to the formaldehyde gas, namely, the routine examination of swabs from all inmates of the house where there is a case, as well as from the nurse. This seems to be far better and more systematic. The drawbacks against such a system can readily be answered. Especially should such routine examination be made of the throats of all children and nurses in the house. It is only after all cultures are pronounced negative that the formaldehyde gas disinfection can be employed effectively. Some statistics may

here be given: In a series of 2,807 cases of diphtheria in Baltimore there occurred *during the same year* 65 reinfections, or 2.35 per cent., and this after the throats of all the household were declared free, and subsequent formaldehyde gas disinfection. Compare with this from another city where just the formaldehyde gas disinfection is practiced: In a series of 258 cases of diphtheria there was 1.55 per cent. reinfection in *two months*. For the year and for this number of cases the percentage would be 930. Baltimore has practiced this far better system since 1898. Look at the decrease in diphtheria in that city year by year: In 1898, 2,019 cases; 1899, 1,783; 1900, 1,858; 1901, 1,149; 1902, 941; 1903, 1,436; 1904, 1,241; 1905, 941. The effect is striking when it is known the population of that city increased from 541,000 in 1898 to over 600,000 in 1906. So far as it is known, no city in Canada carries out such a rigid system for combating diphtheria. Health officers should at least call for a swab of all nurses on leaving a case of diphtheria, and they should not be allowed to engage on another case until their throats were authoritatively stated clear.

In Ontario there are 61 hospitals, 37 refuges, 30 orphanages, 3 homes for incurables, 2 convalescent homes, 2 Magdalen asylums, and 25 county houses of refuge. The number of patients in the hospitals on Oct. 1st, 1905, were 2,549; the number admitted during the year 37,537; the number of births during the year, 1,764; the number of deaths, 2,429. The cost to run these hospitals was \$1,228,289.00, towards which the Ontario Government gave \$110,000. The average cost of each patient per day was \$1.08. The movement for an additional amount from the Government it is to be hoped will be successful, as with its present income and the wealth of New Ontario largely under its control, there should be ample for the needs of all the hospitals in the province. In fact, it would be a good thing and a very beneficent piece of legislation if some portion of New Ontario were set apart specially for the hospital needs of the province.

Ontario is going to grapple with the tuberculosis problem with renewed vigor. Mr. Downey is promoting legislation looking towards the formation of county or district associations to help on the crusade. A deputation recently waited on the Government asking that consumption be made a notifiable disease. This should have been done long since, and pneumonia likewise, as it is now established beyond doubt that the disease in some cases is conveyable from person to person. La grippe is accountable for a great and widespread destruction of human life. Why not add it to the list as well? The field of the sanitary scientist is ever broadening. In a few years state medicine will have become the most important branch of the practice of medicine. Long ago Lauder Brunton predicted that the time would come when physicians would be more engaged in preventing disease than in treating people sick. That time is hastening on apace. In some respects health officers are lax in carrying out the laws of the land. Measles, whooping-cough, chicken-pox and mumps are equally classified with diphtheria, scarlet fever and smallpox, but scores and hundreds of these cases occur every year that are never reported. What the law requires in regard to all should not be applied to the most dangerous to life, whilst the others are allowed to go by the board.

The Federal Proprietary and Patent Medicine Act has been distributed to members of Parliament. This is decidedly important legislation, demanded in the best interests of the people. In plain words, it simply seeks to regulate the trade and commerce of these commodities. Sometimes they may be useful, sometimes dangerous and often times absolutely of no good whatever. Indeed, under a large section of the trade in these so-called remedies comes the latter class. It would be nothing more than foolish and nonsensical to say that all patent medicines and proprietary preparations in drugs were no good. Some of them are no doubt good prescriptions, accurately compounded. But we are thoroughly of the belief—every man to his calling in life—consequently, like all physicians, we consider we are the

best qualified and fitted to diagnose disease in all its forms and to prescribe best for its treatment. Therefore, always have doctors opposed the indiscriminate use of drugs by people who with swell-headed wiseness diagnose their own ailments and so prescribe for the symptoms thereof. For this reason, also, the good druggist is he who follows out faithfully the doctor's prescription, as she also is the good nurse who conscientiously and unassumedly carries out the doctor's orders. This says nothing about the harmful drugs incorporated in patents, for there can be no defence of such immoral pharmacy. This Act will properly regulate that.

In the domain of therapeutics there has been as good advances made during the past year as has been done in any other department of medicine. An immense amount of investigation has been done looking towards the production of immunity and the specific treatment of disease. Much progress was made in applying this new therapy, so much, indeed, that we may look forward with confidence to a more rational therapy in medicine than has ever prevailed in the past. In the expected developments of the near future we may expect that typhoid, dysentery, cholera and plague will be successfully treated by the means of vaccination. The opsonic index seems to stand out as the predominant advance in therapeutics in the past year. The method, whilst specially applicable to those diseases caused by bacteria, has been applied and the treatment accepted in some such as smallpox and hyrophobia, where the virus is still unknown.

News Items.

A NURSES' home has been opened in connection with the Winnipeg General Hospital.

DR. JAMES H. MUNRO, of Greenfield, has been appointed associate coroner of Stormont, Dundas and Glengarry.

DR. C. N. ANDERSON, of Leamington, has been nominated for the Legislature by the Conservatives of South Essex.

THE mortality figures for Winnipeg in 1906 show 16,138 deaths, or 16.138 deaths for every 1,000 of that city's population.

DR. HOWARD D. BARNES, Associate Professor of Physics at McGill, succeeds Prof. Rutherford in the chair of Applied Science.

DOCTORS who require nice sets of standard authors at close prices and easy terms of payment should consult advertising page xii.

DR. B. J. McCONNELL, of Morden, Man., is a candidate for legislative honors in the interests of the Liberal Party of Manitoba.

DR. A. B. McLEAN, who formerly taught school at Dunedin, has commenced the practice of medicine at Pe Ell, in the State of Washington.

DR. J. R. WOODGATES, a former resident of Granton and St. Marys, died on January 20th, at his late residence in Axminster, Devon, England.

A BILL to regulate the manufacture of patent and proprietary medicines has been presented in the name of the Hon. Mr. Templeman in the Dominion House of Commons.

MR. SMITH HENDERSON, a final year medical student at McGill University, and a son of Dr. Henderson, of Ottawa, recently died in Montreal of appendicitis, 22 years of age.

A NURSE in the Winnipeg General Hospital was recently seriously jammed in the elevator in heroically attempting to save a child from a similar fate, if not immediate death.

DR. J. A. AMYOT, Ontario Bacteriologist, delivered a lecture recently before the Toronto Young Men's Municipal Club on Toronto's water supply, advocating a filtering basin on Scarborough Heights, six miles east of the city.

DURING the nine months that the Winnipeg Laboratory was open in 1905, 3,396 tests were made. During the same months in 1906 the tests numbered 5,057. Dr. J. H. Leeming is bacteriologist to the city of Winnipeg.

DR. D. J. MURRAY, of New York, son of Mr. R. Murray, Stratford, has gone on a pleasure trip to the East, where he intends visiting Naples, Genoa, Rome, Palestine and the Holy Land, returning to England by way of Paris, France.

PRESIDENT CHARLES ELLIOT, of Harvard University, delivered an address at the annual dinner of the American University Association of Montreal on the evening of the 22nd of February, the subject being: "The University, Its Aims, Aspirations and Work."

IN the case of *Lafferty vs. Lincoln*, in the Supreme Court, Mr. Crysler, K.C., made application to the full court for special leave to appeal from the Supreme Court of the North-West Territories in the matter of the conviction of a physician and surgeon for having practiced his profession within the Province of Alberta without having registered under a recent statute passed by the Legislature of that Province. In addition to questions raised upon the merits, the constitutionality of the statute is challenged. Mr. Haydon, for the opposite party, did not oppose the motion. In view of the importance of the ques-

tions at issue, the court exercised its discretion by granting the special leave to appeal applied for.

DR. R. W. BRUCE SMITH, Inspector of Prisons and Public Charities, advocates the establishment of a home for weak-minded women in this Province. He says that imbecility and heredity are the most prolific causes for pauperism and crime, and that it would be good economy to provide a place of protection for such persons away from the paths of sin.

LAST year 50,441 patients were treated at the Montreal General Hospital. Of these 3,459 were admitted to the wards, and 46,982 were treated in the outdoor department, an increase of 222 in the indoor, and 2,466 in the outdoor department. During the month of December, 279 patients were admitted to the wards of the hospital, and 253 were discharged. There were 27 deaths, 16 of which occurred within three days of admission. The average daily sick in the hospital was 202, and the highest number on any one day, 215. Outdoor consultations numbered 3,577. The ambulance made 171 runs in response to calls. The average number of visitors at the hospital on visiting days was 324.

Publishers' Department

I HAVE used Resinol Ointment as a dressing for slight wounds, minor surgical purposes and for piles. In every case I have found your Ointment to be all it is represented to be—a great curative. I have known instant relief result from its application for piles. I heartily recommend it to my associates as a useful article, and one that is handy to have in many emergencies.—E. STREET, Nurse, "The Sanatorium, Matlands, Australia.

SOME USEFUL SUGGESTIONS.—In urinary incontinence, especially in children, give atropine, gr. 1-500 t. i. d. and an extra granule at bed time. In urinary incontinence due to general weakness, especially of the sphincters, add strychnine nitrate, gr. 1-134 to each dose. In urinary incontinence due to irritation of bladder from foul urine add lithium benzoate, gr. 1 to each dose. In urinary incontinence from cystitis, add a granule each of aconitine (gr. 1-134) and cannabin to each dose. Atropine, gr. 1-500 to 1-250 every fifteen minutes is useful in hemorrhage from any part of body. Hydrastinine, gr. 1-12, should be added to atropine if the bleeding is from uterine membranes. This combination effective. Atropine, gr. 1-250, till dryness of mouth is noticed, is efficacious in ovarian neuralgia, dysmenorrhea, etc. Dioscorein, gr. 1-6, should be added to relieve the severer pains. In excessive sweating, especially at night, pulse slow and soft, skin cold and clammy, atropine, gr. 1-250, every half hour will soon change conditions. In acute coryza, beginning of congestion, give atropine, gr. 1-500 every half hour until dryness of the throat is noticed, then less often. Hamamelin, gr. 1-6, should be added to atropine if bleeding from veins is due to a general relaxation of their walls. I gave dioscorein, gr. 1-6, in hot water every ten minutes, in severe gall-stone colic, and sodium succinate ever since for last six

months, with but one slight return of pain. Podophyllin and saline to keep bowels in normal condition completed the treatment.—M. B. STINE, Crooks, S.D., in *The American Journal of Clinical Medicine*, Feb., 1907.

THINGS GOOD AND BAD.—Dr. Uriel S. Boone, formerly Professor of Pharmacology and Surgery, College of Physicians and Surgeons, St. Louis, says: "There is one thing bad about the grippe. Its victims instead of being rendered immune by the first attack, seem to become more liable to its recurrence. There is one disconcerting feature about it. Its symptoms resemble those of so many far more serious maladies. This country is full of people who are going about darkly ruminating, because of evidences of heart trouble, nervous prostration, dyspepsia, liver complaint and old age, 'together with a plentiful lack of wit and weak hams.' There is one thing good about the grippe. It yields rather readily to the 'antikamnia and quinine tablet' treatment. This remedy given in one or two tablet doses, every three hours, with plenty of rest in bed, and among pleasant and quiet surroundings, will work wonders. If suffering from nervous headache, nervous exhaustion, general nervousness, muscular aches, irritability or insomnia, administer one 'antikamnia and codeine tablet' three or four times a day at regular intervals. Nothing equals this remedy in relieving the organic pains of women, and this without unpleasant after-effect. In these particular cases, prescribe one tablet every hour until three are taken."

I HAVE been testing Resinol Ointment and Soap in connection with X-Ray treatment of extremely severe cases of skin diseases, and had wonderful results. I strongly recommend the use of these preparations during the interval between exposures to the X-Ray treatment.—WALTER A. RULON, G.M., Philadelphia, Pa.