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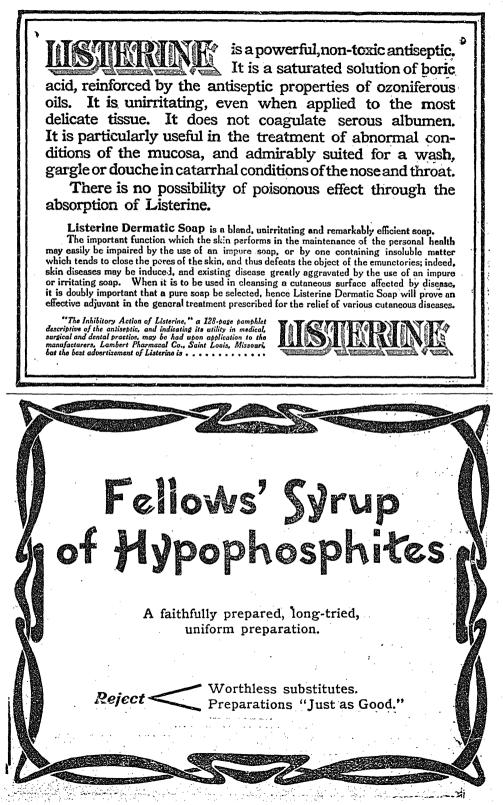
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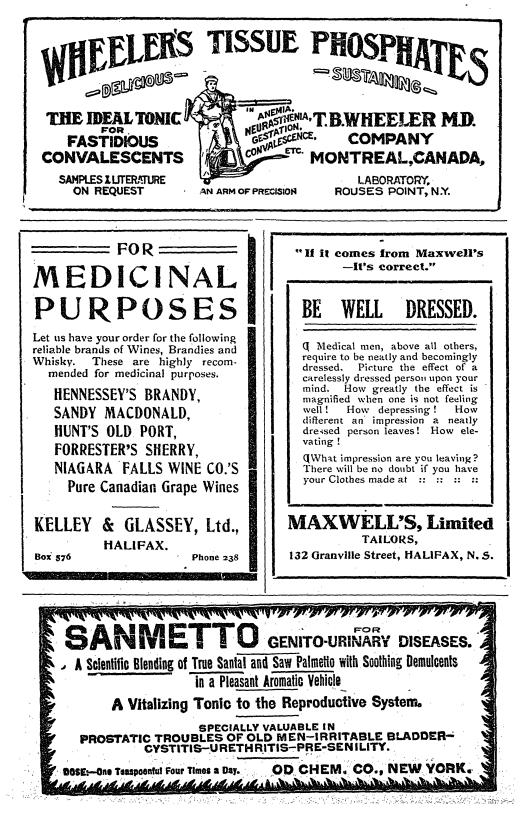
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September

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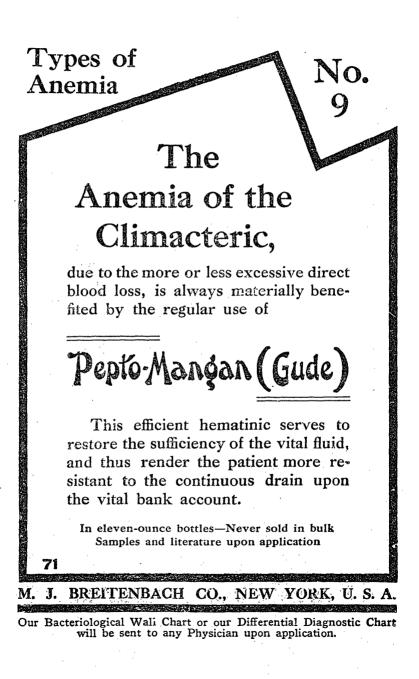
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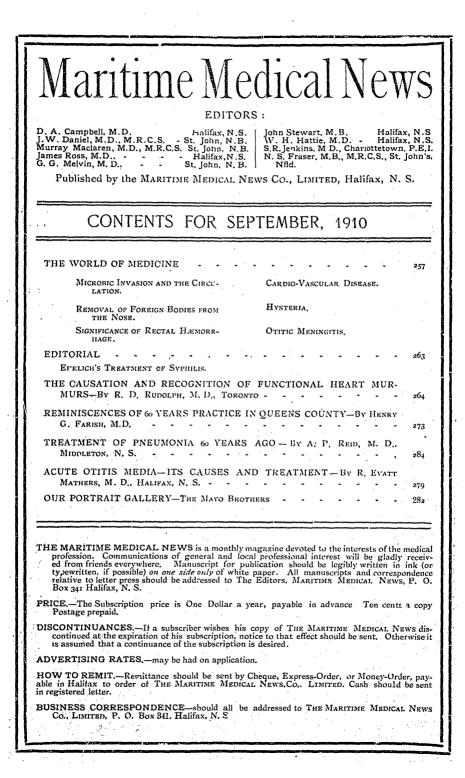
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Vol. XXII, SEPTEMBER 1910, No. 9.

WORLD OF MEDICINE.

Microbic An interesting article Invasion from the pen of Alexanand the Circulation. der Haig, entitled "The Circulation as a Factor which Determines the Effects of Microbic Invasion," appears in the Medical Record for September 3. Haig finds that bacteria attack the weak, among both old and young, and that these are the persons who have a poor capillary circulation. This circulation controls all the functions, nutrition, metabolism, digestion, and the structure of every one of the body cells. It controls combustion in general and the action of the food intake. Underlying this is obstruction of the capillaries, and deficient vis a tergo, that is weak heart. The great cause of obstruction is excess of uric acid in the blood This is illustrated by what stream. happens in a common cold, in typhoid, in the liability to ordinary in-The author explains all of fections. these by the weakness of circulation due to excessive uric acid, caused by eating non-uric acid free foods. The use of the uric acid free diet would prevent all these evils. Life is divided by the author into four stages, two of uric acid retention and two of collæmia, the stages of retention being from birth to fourteen years, and from twenty-five to fifty-five; the collæmic from fourteen to twenty-five and after fifty-five years of age. Any available uric acid is in solution in the blood of the weak and feeble;

their muscles are weak, hearts are weak, and circulation is slow; they fall an easy prey to microorganisms. Chronic underfeeding is a frequent cause of this weakness.

A simple method for re-Removal of Foreign moving foreign bodies Bodies from from the nasal cavities the Nose. of children, is described by G. Bieser in Pediatrics for July 15. According to Bieser the employment of the usual methods of removing foreign bodies from the nasal cavities in struggling children and without anæsthesia is attended not only with dangers from traumatism, but also with difficulty and occasional failure. The employment of arodynamics may overcome these objections. The method advised by the author is as follows: The child is placed in the ordinary position for intubation, the assistant holding his hand snugly over the child's mouth; one end of a piece of rubber tubing is snugly inserted in the nostril opposite the one holding the foreign body, the other end is inserted into the operator's mouth; the operator then blows suddenly and vigorously into the nostril and dislodges the offending body. The simplicity, cleanliness and efficiency of this method are apparent, the child's struggles causing no traumatism.

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Significance At the recent meeting of of the American Procto-Rectal Hæmorrhage logic Society, Louis J. Krouse read a paper on The Significance of Rectal Hæmorrhage, and called the attention of the profession to the importance of making a more careful examination of every case where there is bleeding from the rectum. He stated that rectal hæmorrhage must not be considered conclusive of the existence of piles. Many other diseases besides piles are accompanied with bleeding. He laid great stress on the importance of diagnosing malignancy in its early stage, as to give the patient a better so chance of recovery. Many cases of malignant disease of the rectum. whose only symptom is hæmorrhage, have been overlooked and the patient sacrificed, which would not have occurred had the family physician insisted upon a local examination, thereby diagnosing the disease in its incipiency, before it had gone beyond the operable stage. He further stated that every patient is entitled to a thorough examination, and physicians are in duty bound to use all the means at their command to accomplish it. As Murray very aptly expressed himself, "Thus a case that to-day would be operable and a cure result, if diagnosed, would be inoperable in six months or a year, and death result." The author reported numerous cases where a correct diagnosis had not been made on account of the negligence of the family physician. Some had been operated upon for bleeding piles, which subsequently turned out to be cancer. He concluded his article with the statement that "earlier recognition of malignancy would add materially to the future welfare af the patient which can be obtained by surgical measures, and it therefore

behooves the general practitioner to be on his guard and examine carefully every case of bleeding, so as to detect malignancy in its incipient stage."

Cardiovascular Disease, James Tyson in the International Clinics (Vol. II, Series XX) considers

the treatment of cardiovascular disease, the non-medicinal treatment at the present day being at least as important as the medicinal. He outlines the medicinal treatment in those cases in which compensation is lost, whether due to obstructive valvular disease or myocarditis. In those cases with ordema the first indication is for a purgative, either a saline or elaterium, the former preferably at first because simple and less apt to derange the stomach. Free purgation is an essential condition for success after the latter measures. After purgation digitalis is still the most reliable remedy and the infusion, if properly made, the best preparation. As a diurctic he thinks highly of theocin, a derivative of theobromin, of which the soluble form known as acet-theocin-sodium or soluble theorin is most suit able, being less disposed to derange the stomach. Although not always to be relied upon, he has found it one of the most powerful of diuretics; it is best given in 3 grain doses in water, at first twice a day increased to four times a day if necessary. It is said not to affect the heart but to regulate the renal circulation. It is chiefly in cardiac dropsy, therefore, that it is beneficial, requiring for this purpose a kidney tolerably intact. Theobromin itself is in these cases a good diuretic in 71/2 grain doses to the amount of 30 grains in 24 hours. Less satisfactory, but sometimes also an active diuretic, is the soluble combina-

tion of theobromin with salicylate of sodium, known as diuretin. It is much more uncertain and nauseous: it may be given in 10 grain doses every four hours, and should also be freshly dissolved. Turbidity of the solution indicates that the drug has spoiled. Agurin is another double salt of acetate of sodium and theobromin, with a larger proportion (60%) of the latter, and should be a better drug, but his experience with it is limited. The dose is 8 to 15 grains three times daily for adults. All drugs of the theobromin class are usually effective in 48 to 72 hours; if not we should pass on to something else. He has lately noted two new remedies, nucleinate of sodium and pitnitrin or extract of pitnitary body; the first given hypodermically in doses of 1/4 to 1/2 grain dissolved in 15 minims of normal salt solution twice a day. Pituitrin is given in 10 minim doses by the mouth every four hours increasing to 15 minims. Under its use the urine in one case increased in three days from four ounces in 24 hours to 50 ounces.

* * *

Two interesting articles, treating of hysteria ac-Hysteria. cording to modern conceptions, appear in the Medical Record for August 6. In the first, entitled, "Hysteria under Psychoanalysis." George M. Parker gives a resume of the interpretation of hysteria by the psychology of Janet, the pioneer psychologist at the Salpetrière. According to him the essential constituents in hysteria are the psychogenic cause, the dissociating mechanism, and the organization of the dissociated content with its operation on the stream of consciousness. Janet took no account of gradation in this process, either in intensity or in time sense. Therapeusis consists in a recovery and resynthesis of the dissociated content. Hypnosis is used to find out the lost material. There are gaps in this work, but nevertheless it has furnished the material for later investigators. Freud asserted the psychogenic factor; with an insufficient reaction emotionally and in-Exclusion means the tellectually. voluntary putting away of the memory of a factor; there is always an unfulfilled desire. The content of the initial impression is made sexual. He insisted on the massiveness of the shock. Freud's therapeusis consists in mental catharsis; the excluded reaction is made complete by retracing the idea through all its varied manifestations before the patient. It is reduced to its proper proportion, assigned to its proper place by a reinforced reaction. Histories of four cases seen at Roosevelt Hospital are given as examples of both methods. They stood for four groups in hysteria; the first class is a limited division distinguished by massive, psychic shock, dissociation, and the effect upon consciousness by absorption and intrusion. Hypnosis is here appliable in light degree. The second class has a wider territory. There is a sexual basis for its psychogenic factors, a volitional exclusion process, a deterministic direction given these associ-Hypnosis is not used in the ations. therapeusis; an amplification of the history is obtained by other means. The third group is the largest. It is characterized by the pressure of both mechanisms in an incomplete form. A general direction toward more healthy ideas. may be all that is needed.

The second paper, by Tom. A. Williams, deals with the "Genesis of Hysterical States in Childhood, and

Their Relation to Obsessions and Fears." Williams endeavors to make clear one of the aspects of hysteria, and the rôle played by suggested ideas as producers of obsessions and phobias. By hysteria he means symptoms susceptible of production by suggestion and removable by suggestion-persuasion. He does not in. clude psychasthenia, a state with feeling of inadequacy ฉ and tendency to unreasoning fear, or a sentiment of strangeness or unreality of self or surroundings. Such a state is not produced by suggestion, but by physiologi al error in the mechanism that produces the emotions. In true hysteria it is a suggested idea that determines an emotion too powerful to permit of rational conduct. These emotions should be mitigated until the causal idea is removed. Solicitude and sympathy reinforce the false belief of the patient. Direct medical treatment is still more injurious since it confirms the belief that the disorder is real. By ascertaining and removing the root of the trouble a permanent cure may be obtained. Induced morbid fears in children are very common as a result of attempts to punish by threats, or stories of well-meaning nurses and parents. An illustrative case is given in which the parent removed the fear by showing that the idea has no basis in fact. An infant receives such impressions from the varying tone of the voice, gestures, and expressions of the face, and ideas of fears begin very early. In the daytime the child gets on well by the support of his elders, but at night he is alone without any support from others.

Otilic Meningitis. 'American Two papers dealing with this subject are found in the Journal of the Association for

August 27. E. B. Dench, writing under the caption "Meningitis of Otitic Origin," classifies this type of meningitis as (1) circumscribed meningitis or epidural abscess; (2) serous meningitis; and (3) purulent meningitis. He says that little is to be said in regard to the symptomatology of circumscribed meningitis; its diagnosis is made in most cases on the operating table. The only symptoms which the patients present are localized headache and slight rise of temperature, which, occurring in the course of acute otitis, warrant the surgeon in suspecting incipient meningeal trouble. The second and third forms are of more interest. Whether the inflammation is serous or purulent seems to depend largely on the virulence of the infecting organism. It is probable that a purulent meningitis is always preceded by a serous cne. In suspected meningitis in ear disease the labyrinthine involvement should be looked for, as shown by disorders of equilibrum, vertigo, nystagmus, etc. In the early stages the nystagmus may occur toward either side, but, as the disease progresses and the labyrinth becomes paralyzed, it is usually more marked toward the healthy side. Both the turning and caloric tests should be used. Later the nystagmus toward the sound side may disappear or give place to one toward the diseased side, positive evidence of a retrolabyrinthine lesion, in the cerebellar substance or in the meninges close to the vestibular nerve. In adults an examination of the hearing is important and the appearance of a sudden and profound deafness, especially if accompanied with vestibular symptoms, should suggest beginning meningitis. Cochlear involvement ordinarily shows itself by deafness, loss of bone conduction and failure of perception

of the higher musical tones. Many authors speak of facial paralysis as a symptom of meningitis but Dench thinks that this is not necessarily so in ear disease. It is probable that a serous meningitis is never fatal of itself, but if it presses on to the purulent stage it is more serious. A purulent meningitis may run a rapid or fulminating course with very few symptoms, causing death even within a few hours. In slower progressive suppurative types symptoms can aid the diagnosis. In adults in severe cases headache is prominent, usually general and severe. Vomiting often occurs, ordinarily being preceded by constipation. High temperatures is the rule, more especially in adults, and symptoms on the part of the ocular muscles and neck rigidity is an early symptom. The patellar reflexes are generally increased. The Kernig sign is usually present and Dench, in a number of cases, has seen the Babinski symptom. The mental symptoms are of some significance. At first there is often a light delirium passing later into coma and in children we may have convulsions, though they are rare. Usually he has found a high leucocytosis and a decided increase of polymorphoneuclears, which falls in case of an improvement under treatment. The blood count is therefore important. The most certain and convincing symptoms are the increase of submeningeal pressure as shown by lumbar puncture and the character of the liquid obtained. If this is turbid and shows pus cells we have to do with a purulent meningitis. If clear and germ free, an intracranial neoplasm may be thought of. There are also, of course, the fundal changes of intracranial pressure to be considered, frequently observed on both sides, but most frequently on the

side of the involved ear. An early diagnosis is important and lumbar puncture should be made early in doubtful cases as the longer the disease goes on the graver the prognosis.

In the second article, the "Operative Treatment of Otitic Meningitis" is discussed by Holger Mygind, of Copenhagen. Mygind states that operation for otitic meningitis ought to be performed without loss of time. Each hour that passes before operation may be fatal. The elimination of the primary focus in the ear is the salient point in the surgical treatment of otitic meningitis, and should be done as thoroughly as possible. This involves the opening of the labyrinth in all cases in which either the functional examination before the operation shows that it is destroyed or the examination during the operation shows that it is diseased, the most frequent sign being the existence of a labyrinth fistula. In order to get the external wall of the labyrinth well exposed for inspection it is necessary to perform a radical operation also in cases of acute osteitis of the mastoid process. It is, besides, easier to perform craniotomy over the tympanic cavity after radical operation. То guard against the possibility of thrombosis of the sigmoid sinus, he exposes the whole perpendicular part of the sigmoid sinus and examines it. He generally makes a puncture with a Pravaz syringe. If this reveals fluid blood in two different places a little apart from each other it is probable that there is no thrombus. If the syringe remains empty or if pus is extracted he does not open the sinus and expose the lateral wall during this stage of the operation, but waits to do it at the end of the operation, when craniotomy is performed,

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in order to avoid infection of the soft membranes of the brain from the diseased sinus, in case it should be found necessary to open the subdural In these cases, as a rule, he space. does not ligate the jugular vein, partly because he has not faith enough in the beneficial effect of this operation in the majority of cases of thrombophlebitis and partly because he fears that ligation of these veins produces an unfavorable circulation in the diseased brains. Furthermore, the ligature prolongs the narcosis, which is often very long, especially if the labyrinth is opened.

He performs craniotomy by enlarging upward the bony cavity produced by the radical operation, using as much as possible a strong cutting forceps and making an opening extending 21/2 inches horizontally and abovt 11/2 inches vertically. The opening should be so situated as to expose freely for examination first, that part of the dura corresponding to the mastoid antrum, second that part corresponding to the attic. for the inflammation of the soft membrane of the brain occasionstarts here as a local ally pachymeningitis; and, third, the part of the dura which covers the posterior surface of the petrous bone, for there are found now and then small, deepseated epidural abscesses which otherwise are easily overlooked. When looking for this form of abscess the

free exposure of the sigmoid sinus, performed in the first stage of the operation, is of great assistance, as the inner edge of the perpendicular section of the sinus represents a line beyond which one must not go. Regarding the routine opening of the subdural cavity in these cases, he says the question is still subjudice, but states that it should undoubtedly be done in the following class of cases: (1) When a fistula is found in the dura, for then there is sure to be either a pure subdural abscess or a subdural abscess complicated with a superficial abscess of the brain (what Macewen calls an ulceration of the brain); (2) when there are signs of gangrene of the dura, which shows itself by a part of the cranial surface of the dura being discolored, soft and uneven on the surface, and in which case it is highly probable that there is a suppurative pachymeningitis interna with or without superficial abscess of the brain; (3) when the subjective or objective symptoms point toward the existence of a brain abscess; this must be suspected especially when brain symptoms have existed previously to the development of meningitis, when there is slow cerebration and when there are local symptoms. It is, however, an established fact that meningitis may be accompanied by local symptoms without an abscess of the brain being present.



EHRLICH'S TREATMENT FOR SYPHILIS.

UR medical exchanges have, for the past few weeks, given prominence to articles on a newly discovered remedy for syphilis, which are to say the least startling in their assertions, and, if true, are of extraordinary importance to the medical world and humanity at large. (of "Side - Chain" fame) Ehrlich stands sponsor for this remedy. Dioxdiamidoarsenobenzoldihydro - chloride. or "No. 606" as he himself calls it. He has spent years of study upon the subject, and his "No. 606" is the result of carefully formed theories. the different steps of which have been proven by experiments on animals.

Treatment so far has been principally confined to syphilitic conditions. The exact formula of the remedy is for the present being kept secret, but it has been put to a severe test by Ehrlich and his immediate friends who will continue to follow their cases and note accurately the effect of the remedy upon them Quite recently the preparation has been put upon the market, and when the results justify it. Ehrlich promises to make public his formula.

The results have been most gratifying. Over 2,500 cases of all varieties of syphilitic lesions have been treated vith uniform success. Amongst those who have been testing it is Dr. Wechselmann, of Wilhelm Berlin. who has treated some 600 cases of syphilis with 'No. 606," one injection of which has caused erosive chancres. the roseola, mucous patches, rupia, gummata and other lesions to become healthy and altogether heal within periods varying in length from twenty-four hours to a few Other observers, including days.

Neisser, have used the remedy, and express amazement at its officacy. Parasyphilitic conditions, as might be expected, have not been so happily affected, but their symptoms have in many instances been greatly alleviated. Generalized recurrences have not been noted, but single localized areas of recurrences have been seen, due, so Wechselmann thinks, to a localized endarteritis which prevented the remedy from reaching the diseased area.

Slight untoward effects have appeared. Of these optic neuritis seems most to be feared, although Ehrlich himself thinks that even this is of extreme rarity, and clinical results so far have sustained him in his opinion. Patients with heart disease should be watched during and after administration for it seems to be a cardiac depressant.

Two methods of employing the remedy have been tried—the subcutaneous and intravenous injections. The dose in either case is 0.3 grams about 5 grains. In the subcutaneous method the scapular region is chosen. Severe pain often results, and may persist for some days. Wechselmann thinks that this is due to faulty technique and he does not meet with it in his cases. The intravenous method is painless but is followed by chills, vomiting and fever.

Further developments will be awaited with much interest. Meanwhile we have reason to believe that an extraordinary advance has been achieved, and that we may be encouraged to anticipate an enormous forward stride in every department of medicine as a consequence of the impetus given to investigators by this latest announcement of Ehrlich's.

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THE CAUSATION AND RECOGNITION OF FUNCTIONAL HEART MURMURS.

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C OME years ago, when as a medical student and young graduate in Edinburgh, I was a member of the oldest medical society in the British Isles-the Royal Medical Society-it came to my turn, as it does to every member in turn, to read a paper before the Society. The subject that I had selected was Functional Heart Murmurs, and it has happened to me as it has often happened to other members of that society, that the subject of my thesis has always interested me since. So when your President did me the great honour of asking me to deliver this address, and further hinted that some circulatory subject might be desirable, what more natural than that I should turn to my first love.

By functional heart murmurs is over meant those murmurs heard the precordium, which for various reasons we do not consider as due to any permanent physical lesion of the heart structure. That they are due to some temporary change in the physical condition of the heart or adjacent vessels is, to my mind at least, certain. alteration in form of But this the tissues is temporary and quite capable of completely disappearing.

Laennec, the father of auscultation, fully recognized these murmurs and wrote as follows: "I have known a considerable number of persons to die of different diseases, acute and chronic, who have presented a 'bellows murmur' during life, sometimes during several months, as well in the heart as in the different arteries, and

upon examination of their bodies I could discover no lesion coinciding constantly with the phenomena, which are not constantly met with in subjects who had never exhibited anything of the kind during life." And since that time, much has been written about them.

These murmurs are often spoken of as of trifling import and of not mattering much, but nevertheless the subject is one of the greatest importance as upon their correct recognition often rests the patient's whole future life.

We have all seen such cases, where perhaps some young fellow has been condemned to the life of a semi-invalid, possibly knowing too much about digitalis and the like, when it has been our great pleasure to assure him that he is all right and that the sooner he gets out into the cricket field or on to the golf links the better.

In insurance work again who has not seen people sailing under the false colours of "bad risk," who are well practically, but happen to have a systolic murmur about the base of the heart.

A case such as the following illustrates the importance of such a diagnosis:--

A. B., a medical student, aged 22 years, complains of palpitation of some weeks' duration. He has been working hard at his books and is feeling run down and is losing weight. Two weeks ago he felt faint, and consulted a medical man, who told him he had heart disease with enlargement of that organ, and gave him tablets of digitalis and nitroglycerin to take frequently. He has been distinctly worse since then, and the palpitation has been considerably more troublesome. He has no special shortness of breath, nor swelling of the feet. He does not use alcohol or tobacco.

He is a pale, anxious youth with cold extremities; has lost 12 pounds in the last year. The pulse is rapid and slightly irregular. The -cardiac impulse is marked all over the precordium, and a good deal of pulsation is visible in the epigastrium and this troubles him much. The cardiac apex is one inch below the normal and $\frac{1}{2}$ inch outside of the nipple line. There is a loud oruit de diable in the neck. At the apex the first sound is impure, but there is no conduction of this impurity into the axilla. At the base there is a loud systolic murmur, accentuation of the second with sound. The blood is normal; and the tongue foul.

A diagnosis of functional heart trouble was made and he was put on a strychnine mixture, and later on cod liver oil and malt. He steadily improved and in six months had gained eleven pounds in weight and a'l the murmurs had disappeared. I have seen him often since this note, of eight years ago, and he has remained well in spite of hard work as a general practitioner.

The occurence of murmurs about the heart, systolic in time, is so common, that it is probable that the physician gets into the way of sub-consciously ignoring them in most cases. For example, in acute fevers it is almost rare for the first sound of the heart to remain quite pure throughout the illness, la Salle found them in 66 per cent. of cases of scarlet fever, and yet in such cases we do not at once diagnose endocarditis, unless indeed there happen to be other signs or spmptoms present to suggest such a thing

But when a young patient is in the clutches of acute rheumatism, and murmurs develop, as often as not such a diagnosis is come to, when there may be nothing organically wrong with the heart.

Let us first look for a moment, at the various murmurs that come under our title, and then go on to consider shortly their causation.

As regards the appearance of functional murmurs it may be laid down as a rule that they are all systolic in time, is—they lie in that part of the cardiac cycle devoted to the ventricular systole.

Murmurs have been described as functional which occur in the diastolic part of the cycle, but one should always look on such with the gravest suspicion. Some of them may be explained by a venous hum occurring about the base of the heart. One has seen aortic diastolic and pulmonary diastolic murmurs come and go, but it suggests that there is something organically wrong here.

These bruits are nearly always rather soft and blowing in character, and accompany rather than displace the first sound, and are often distinctpostsystolic. Distinctly musical ly sounds are probably always organic, and although one accasionally hears such a one clear away it does not therefore follow that it was purely functional. One can easily imagine the cusps of say the mitral valve so thickened and stiffened by inflammatory infiltration as to be for a time unable to properly close the orifice, and yet, as the inflammation clears up they become more limber and able

to do their passive work properly, although if carefully examined they might show signs of organic disease.

The most common site of maximum intensity of a murmur is the pulmonary area, or rather the third left intercostal space, close to the sternum. and this bruit is usually accompanied by an accentuated pulmonary second sound. The next most common one is the mitral and after that come the aortic and tricuspid. The pulmonary murmur often occurs alone, but it is very rare to find any of the others without the pulmonary one as well.

These murmurs are not well transmitted. They are markedly affected by posture, being all louder, or indeed only present when the patient 's recumbent. So much is this the case that some years ago Dr. James F. Goodhart wrote to the Luncet suggesting that they should be called postural ones. There is no doubt but that they are more affected by posture than are organic ones, and the reason for this has been much discussed. The late Dr. A. Foxwell³ argued, and with much reason, that a recumbent posture increased a pulmonary murmur because(a) it caused an alteration between the angle of the convs arteriosus and the pulmonary. (b) it increased the blood pressure in the pulmonary antery, and (c) in the recumbent posture the heart no longer pulled by its weight upon the pulmonary artery, and thus this vessel could more easily dilate.

A second theory of why the recumbent posture brings out the pulmonary murmur is that of Dr. William Gordon.⁴ He found that in this posture the antero-postericr diameter of the chest is less than in the vertical one, and he assumes that therefore the anterior chest wall is nearer to the heart in the recumbent posture

in the vertical. That the than chest does measure less anterioposteriorly in the recumbent than .n the vertical I can fully confirm. as some years ago working with special calipers, we found that there is often a difference of from 1/2 to 3/4 inch but because the chest then measures less in that diameter it does not at all follow that the heart is then nearer the sternum than when the individual is vertical. Dr. Cummings and I showed at the time of the British Medical Association meeting four years ago' that in the vertical position the heart is distinctly nearer to the anterior chest wall than it is when the individual is horizontal. In the latter position the organ tends to fall away from the front. Hence it is not because the heart is nearer to the front in the horizontal position that the murmur is better heard. Probably Dr. Gordon is right when he says that the chief reason for the fact that all systolic murmurs are louder when the individual is horizontal is that then the blood in producing them, is not working against gravity as it is when the patient is vestical.

Functional murmurs are much affected by respiration, being as a rule better heard towards the end of expiration, but this is not always the case.

They are usually associated with a *bruit de diable* in the neck, and very likely also with an arterial murmur.

There may be no symptoms associated with such murmurs, but frequently one finds shortness of breath, dizziness and even faintness, and there is often in fact usually a slight dilatation of the heart. Any signs of real breaking down in compensation, such as enlargement of the liver, cedema (beyond a slight puffiness on long standing) and scanty urine should make one reconsider the diagposis.

As a rule the general vaso-motor tone is low, and there is a tendency to cold extremities. There may be seen a slight venous pulse in the neck, which is usually auricular in time. Out may be ventricular which means tricuspid leakage.

Causation.—One would naturally say that there must be something wrong with people in whom functional murmurs occur. for if not then why are they not present in everyone. But there is no doubt but that they may occur in individuals who seem to he quite well, and Dr. Thayer, of Baltimore, recently read a paper before the Academy of Medicine in Toronto, on the presence of such murmurs in the apparently healthy. and he then argued that they had no significance. To my mind, however, they suggest that the individual is not quite well, just as much as the common finding of a hæmoglobin per centage of say 85 per cent. shows that the patient is not quite himself, and probably requires iron. These murnurs are extremely common in the ordinary run of hospital cases, and recently we found them present in 60 per cent. of the surgical cases at the Victoria Hospital for Children, and in 50 per cent. of adult patients taken at random in the Toronto General Hospital. Also the other day I noted them in 8 out of 20 Barnardo boys just arrived from England.

Functional murmurs have often been termed "hæmic murmurs," and it used to be believed that they were due to a blood condition, but it is so common to find them present where the blood count is normal and on the other hand to find them absent when there is even extreme anæmia that the term "hæmic" must be abandoned. During the past winter I watched two cases of severe pernicious anæmia, in one of whom murmurs were well marked and in the other were absent. Skoda in 1839 put the matter bluntly but well when he wrote that "it is not true that a watery state of the blood is a cause of murmurs, because in many cases one does not find it."

All the same it would be safe to say that we are more apt to find these bruits in anamic people than in those not so afflicted. Anamia undoubtedly predisposes to their production, probably as we will see by producing a relaxed condition of the circulatory tissues. Thayer and MacCailum⁵ found in experiments upon dogs that when these were bled freely and then infused with saline solution pulmonary and aortic murmurs developed. Here an artificial anamia was induced.

Besides anæmia, hard work, ill health of all kinds, acute and chronic, due to disease or toxæmia, such as ricotine and alcohol, all predispose to these murmurs.

The physical causes of pulmonary and aortic murmurs will be much the same, so may be considered together, and likewise mitral and tricuspid ones may be grouped and discussed as one. PULMONARY AND AORTIC MURMURS.

A number of explanations have been put forward to account for the common murmur which is best heard about the pulmonary area and a little lower down

Balfour and Naunyn believed it to be really produced at the mitral orifice and to be conducted to the surface by a distended left auricular appendix. But the facts that in many cases no murmur is heard at the mitral area while it is plainly audible nearer to the base, and also that the murmur occurs best nearer in and lower down, than is the position of the auricular appendix would seem to negative this theory.

William Russell held that the murmur was due to the dilated left auricle forming a fulcrum about which the pulmonary artery was bent so that obstruction was produced with a consequent murmur. This he says is furthered by the dilating and lengthening of the pulmonary artery which undoubtedly does exist and has again and again been shown post mortem. But the theory has not found general acceptance and seems to assume too much. Why should the left auricle be distended before the mitral valve leaks?

Foxwell⁶ and others believed that that this murmur was due to a dilated conus arteriosus plus a dilated pulmonary artery beyond and has advanced much evidence to show that such a dilated conus and pulmonary artery actually exist in these cases.

Physicists tell us that, 1st, a fluid passing from a cavity into a cylindrical tube is not likely to produce a sound; that 2nd, fluid passing from a cylinder into a cavity may, but not easily, do so; but that, 3rd, the figure par excellence which will most easily give rise to a murmur is one in which the fluid passes through a constriction. Now in the normal heart, either at the aortic or at the pulmonary orifice, fluid-the blood-is flowing from a cavity-the ventricle-into a cylinder-the artery with its orifice-and hence no murmur occurs. And however much the ventricle be dilated, as long as the orifice and vessel beyond remain of the same diameter it is little likely that a sound wil be produced. If, however, the orifice be stenosed, as occurs in organic disease we have the physical conditions necessary for the

production of vibrations and a murmur is the result

But in functional disease of course no such constriction occurs and yet murmurs are heard. What must have happened is that the artery beyond must have dilated and as a result we have the blod flowing from a cavity the ventricle—through a normal orifice—into a cavity beyond—the dilated artery, and hence the physical conditions necessary for the production of a sound are met. We have in other words a relative constriction at the orifice.

That such a dilated condition of the pulmonary artery does occur in functional disease is often easily demonstrated clinically by pulsation in the second left intercostal space. A dilated condition of the ventricle, especially the conus arteriosus has often equally been proved and such would undoubtedly increase the tendency to the murmur, but to my mind the essential condition that must be present is that the artery immediately beyond the orifice must be enlarged.

The reason why the orifice itself does not dilate along with the artery is easily seen in its firm fibrous ring. which usually successfully resists any such tendency. On the other hand. Foxwell showed that the pulmonary artery was six times as easily dilated as the artery after making all allowance for the different strains at which they work, and Stacey Wilson demonstrated the ease with which it is disease with which a dilated pulmonary tended.7 A demonstration of the artery will produce a murmur may be easily done as follows:-If a hose pipe be introduced and tied into the tricuspid orifice of a bullock's heart and another be continued from the cut end of the pulmonary artery and a stream of water be allowed to flow

through the apparatus (while we auscultate over the pulmonary orifice) no sound is at first heard. This demonstrates by the way that a watery fluid and therefore watery blood will not produce a sound in going through a normally shaped heart. If now the pressure be raised in the pulmonary artery by slowly obstructing the outflow of the water from the distal tube, the pulmonary artery will be seen to easily dilate at its root and soon a loud murmur will appear here.

It appears likely then that the common pulmonary systolic murmur is due to a dilated artery just beyond the orifice, and anything that will induce such a dilatation will tend to produce the murmur. There is no reason to think that the blood pressure rises in the artery in anæmic and run down conditions, and hence the probable cause of the dilatation is a relaxed state of the vessel wall.

This relaxed state may occur in the apparently normal, but any condition tending to lower the general health will predispose to its occurrence.

MITRAL AND TRICUSPID MURMURS.

When a systolic murmur occurs at either of these orifices it is due to leakage here. In the normal heart the valve is kept competent by three factors: (a), the cusps which are swept into position by the blood; (b). the papillary muscles which, through the chordæ tendinæ pull the cusps towards the ventricle and thus prevent these thin membranes from being swept through into the auricle: (c), the muscular sphincter around orifice. which by contracting the synchronously with the rest of the ventricular wall, makes the orifice much smaller and hence more easily closable by the cusps.

Now in functional bruits, the cusps are by the definition normal, and the cause must lie in one of the other two factors or in both. The papillary muscles grow from the inner aspect of the ventricle and if this cavity be dilated as is often the case in these conditions, the chordæ might so pull on the cusps as to prevent their proper apposition. Such may partially account for the murmurs under consideration, and my colleague, Professor Brodie, would lay more stress on it than on the next factor.

The auriculo-ventricular orifices are surrounded by rings of muscular tissue, which by their tone and contraction make the openings smaller than would otherwise be the case. John Hunter pointed out the importance of these sphincters and showed that the cusps of the tricuspid valve are barely big enough to close the orifice if it were not for the contraction of the sphincter. In the heart of the bird the tricuspid valve is not provided with cusps at all, and its closure is effected wholly by the sphincter, whilst in diving animals, according to Wilkinson King, quoted by Sherrington,⁸ the incompetent tricuspid valve seems specially provided to permit of regurgitation when the animals are under water. Now even in healthy athletes any great strain produces such a temporary leakage at the tricuspid valve, this, the so-called safety-valve action of the valve, being believed to be due to the temporary dilatation of the sphincter of muscle. So probably in people who are run down or in any way relaxed as regards the muscular wall of the heart, the sphincter tends to dilate under the normal intracardiac pressure and does not contract as strongly as it should do, and as a result the orifice is too large at the moment when \mathbf{it} most needs to be small, and thus the normal cusps are not able to close it, especially if they also are pulled upon by the chordæ tendinæ to an unusual extent. This want of contraction of the sphincter may occur alone, or be part of a general want of action of the whole ventricle. This, to my mind, is the cause of the frequent mitral and less common tricuspid systolic murmurs of functional origin. When a systolic murmur occurs in later life. due to insufficient action of the muscular ring of the mitral orifice, it is a more serious thing than in younger people, as probably by this time the muscle is not healthy organically, and hence has not the reparative power of one that is so. And when a mitral murmur occurs for the first time after forty it does not make difference in the prognosis much whether it be due to chronic valvulitis or to relative insufficiency of normal cusps.. It will probably be permanent in either case, unless, indeed, the giving away of the sphincter be due to some definite and extra cause such as a sudden strain or acute illness.

RECOGNITION.

As already said, the important thing about functional cardiac murmurs is to be able to recognise that they are of this nature, as upon such a conclusion rests all our prognosis and treatment.

In the great majority of instances no difficulty exists, as for example where we find a systolic murmur in the third left space, accompanied perhaps by a well marked bruit, *de diable* in the neck and largely disappearing upon the individual assuming the erect posture; and all this occurring in a youth who has been working too hard and perhaps smoking to excess. But in some cases, as where a murmur appears in the course of acute rheumatism the diagnosis is not so easy and a doubt may last for years.

In a paper published several years ago,⁹ l tried to formulate certain rules which might help one in doubtful cases and these were somewhat as follows:--

I. Functional murmurs most commonly occur during adolescence and early adult life.

II. They are more common in males than in females, although there are many exceptions to this especially in anæmic girls.

III. They all occur during the ventricular systole, and thus accompany or immediately follow the first sound of the heart. Certain diastolic murmurs have been described by Cabot and others as functional, but such must be so rare as to be of no practical interest. It should take a great deal to make us diagnose a diastolic murmur as functional.

IV. While functional murmurs may occur over any of the cardiac areas, by far the most common site is the pulmonary one and the chest immediately below this.

V. The pulmonary murmur is of so constant occurrence in relaxed states of the body that one should look with suspicion upon any murmur occuring at any of the other orifices, if the pulmonary first sound is clear. (i. e., the sounds as heard in the pulmonary area.)

VI. A puimonary systolic murmur due to organic disease is very rare, except when of congenital origin. When, however, of organic origin, from this or other causes, other signs —such as cyanosis, stunted growth. clubbed fingers, etc., will be present. and the pulmonary second sound will not be accentuated, but rather the reverse. VII. The pulmonary second sound is early accentuated in functional cases, and indeed may be present before any murmur appears.

VIII. The bruit. de diable and other vascular murmurs heard in the neck are always functional, except indeed the arterial one be due to an aneurism: hence when a cardiac murmur is associated with such vascular ones there is considerable reason for considering that the cardiac bruit is also of functional origin. On the other hand there is no reason at all why cases of organic heart trouble should not in addition have functional murmurs in the neck as elsewhere, and in fact one often finds this to be the case. The functional element will probably clear up in time leaving the organic lesion.

IX. Functional murmurs are as a rule soft and blowing in character and accompany rather than replace the first sound. They may, however, be loud and rasping, and the pulmonary one is specially apt to vary in this way.

X. Functional murmurs are not so widely conducted as are organic ones and hence are seldom audible in the axilla.

XI. Functional murmurs vary more under different conditions than do others; exertion, respiration, posture, all affecting them more than they do organic ones.

XII. In functional murmurs there is usually little sign of hypertrophy or dilatation of the heart, and the apex is not much displaced. A slight amount of dilatation is, however, usually present, and often more pulsation is visible over the precordium and in the second left intercostal space and in the epigastrium than should be there.

XIII. Signs of breaking down in compensation are rare in functional cases and should always suggest something more serious.

XIV. Functioal murmurs tend to disappear as the patient's general health improves. This is not the case with organic ones, which are apt to become louder as the heart's action strengthens.

XV. No mention has so far been made of the effect of the pressure of the stethoscope upon functional murmurs. Some writers state that these murmurs are greatly influenced by such pressure and Dr. Henry Sewall, of Denver,¹⁴ goes so far as to say that all non-organic murmurs at the base of the heart can be stopped by pressure with the stethoscope. I am not convinced that this is the case nor indeed that pressure has any marked influence upon any murmur.

XVI. No mention has been made purposey of cardio-respiratory murmurs because they scarcely come within the scope of our subject These sounds, which are produced in adjacent lung by the movements of the heart, and hence are not cardiac murmurs at all, sometimes very closely simulate them. They, however, largely disappear when the breath is held. They occur chiefly along the edge of the tongue of lung that lies just about the apex of the heart.

The object of this paper has been to emphasize the importance of recognising the frequency of non-organic cardiac murmurs and of suggesting some rough rules by which we may in doubtful cases distinguish them from those due to permanent organic changes in the endocardium.

Let me add my belief that we are all too apt to conclude that the heart is diseased because murmurs are present, and on the other hand that this organ is healthy because murmurs happen to be absent.

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REMINISCENCES OF 60 YEARS PRACTICE IN QUEENS CO.

By HENRY GREGGS FARISH. M. D. University Pennsylvania ; M. R. C. S., Eng.

T was my intention to be present at this meeting Association, but circumstances over which I have no control, prevent. I have therefore asked the President to excuse me. In a small degree, as a substitute, I have sent him my photograph to be looked at by the members present; as representing the Nestor of our profession in Nova Scotia, and I think also in New Brunswick, I being now 85 years old.

I regret the more my inability to be present, as I have most pleasing associations connected with this progressive town of Yarmouth-that in it practised my grandfather, two uncles, my father, two brothers, and now my son, who by the grace of this worthy medical society, has had the honor of presiding on this educative, social and pleasant occasion.

So the name of Farish is intimately connected with the progress of Yarmonth; and hence my interest in any meeting held here, which may tend to the advancement of the medical profession; and which may assist in the uplifting of its community, by interchange of ideas among the members of our fraternity.

I was asked, as being the oldest practitioner, and as being in continuous harness in Queens County for 60 years, whether I could not during that long period, give some striking points of contrast between the earlier and later years of my practice.

The first fact which was strongly impressed on my mind, early in my profession, was that I must rely on

myself solely. The plain and obvious reason was, that I had only one coworker, within a radius of fully 40 miles, where we called to minister to the ailments of fully \$,000 inhabitants. In nine cases out of ten, if any emergency arose, when I felt that I must have help, I looked in vain; forin that great extent of country over which we had to travel, it was more than probable that the other doctor was far away in the other direction. It was therefore useless to send a message to him. So I was thus forced to become very self-reliant. For instance, to illustrate among many such cases. In my very early practice I was called to amputate. The patient lived 35 miles from any doctor-away in the back woods. The case was rapidly progressing-a Sarcoma. She was pregnant 6 months. There was no possible chance for delay. So I called in two men, near by, and an old nurse. As the disease was in the forearm, I had to amputate below the elbow. At the first grating of the saw, the two men tumbled over in a faint. The nurse and I had to do the work between us. As I could not attend to the after dressings so far away, I had the patient removed by easy stages to Liverpool; where all went on successfully. At the full period she was confined. No mishaps. The malignant disease never returned. This experience of self-reliance gave me a never-to-be-forgotten lesson, that if successful in one case why not in a similar case.

In my very early practice ether and chloroform had only lately been discovered; and were administered in a very cautious manner, fearful of fatal results; consequently in my own cases this anæsthetic was given with fear and trembling; and in prolonged operations was tabooed. In some cases intoxication with good old Jamaica rum, was substituted and with not such imperfect results after all.

In after cases where I gave ether more freely, and became more confident, operations were mostly done with the help only of the laity: and this compelled me to give the anæsthetic till the patient became unconscious. I then assigned the office of administrator to my skilled lay assistant while I attended to the operative part of the performance. I selected good, strong-nerved men to assist, who had become reliable through experience. I was thus able to perform many delicate operations which otherwise would be impossible.

The primitive treatment in dressing wounds in the Continental hospitals was by means of "charpie" or shredded lint. In such cases as amputation, this material was stuffed between the flaps, which were then brought together. The result was pus secretion; and if the pus was of a thick, creamy consistence, not sanious. it was called "laudable pus." I witnessed this treatment in going my rounds in Hotel Dieu Hospital in Paris. A celebrated surgeon on examining one of his cases (an amputation), when he saw the pust of zing through the flaps smiled most complacently, and with lifted hands, exclaimed "Voila ! C'est pus laudable. C'est excellent. Bon, Bon !

Rapidity in operations was the point sought for in the great hospitals in London, when the celebrated surgeon Liston was in the zenith of his

professional career, he gained the esteem of his co-workers in the operative field by reason of his rapid operations. The students at that time always pulled out their watches and a hum of approval was heard when this surgeon scored above his fellow surgeons, and he got a higher notch mark thereby.

But it was in obstetrics where the contrast in directing the use of the forceps was most evident, between the For instance. past and the present. in Dr. Ramsbotham's voluminous book on Obstetrics, replete with the finest illustrations and which was considered the text book when I attendcd his lectures in London, these are his words. *literatim*, where he gives directions for the use of the forceps: "If the pains are subsiding gradually. or have entirely disappeared; if the strength is failing, the spirits sinking; the countenance become anxious. if the pulse be 120 or 130 or 140, the tongue covered with a white slime, or dry, brown or raspy; if there have been 2 or 3 rigors; if on pressing on the abdomen, there is great tenderness of the uterus; if there be green discharge; or if there be preternatural soreness of the vulva, with heat and tumefaction of the vagina; if the head has been locked for 4 hours and has made no progress for 6 hours: if the patient is vomiting a dark coffeeground-like matter; if there be hurried breathing, delirium and coldness of the extremities, we should be acting injudiciously to allow the case to proceed without relief from the use of the forceps."

He stood there in all the dignity of his venerable form, and poured out these words with sledge hammer emphasis. Is it any wonder that we students were impressed, and the thought overpowered us "who then can be saved?" In our after practice. could we do less than hesitate to use as we then considered them, such weapons of destruction? But a few cases convinced me, that in his great dread of his students using these "iron hands" too indiscriminately, he had -witched to the other extreme-and bis words of advice soon became as a dead letter. Had I followed his orders if I did not lose my patient outright, she would have been left with a vesico or recto-vaginal fistula for the balance of her life, as no operation for repair of such cases was then performed.

Again in the early days venesection was an every day occurrenceused in all inflammatory diseases, especially in pneumonia, pleuritis and cerebritis. We often skipped over the bounds of inflammatory conditions and used it as well in neuralgic ailments.

My patients were largely of the robust sort, a majority being af good old German blood. With these venesection acted admirably; particularly in pneumonia and pleuritis. The patient was propped in bed and bled till syncope showed up. The pillows were then removed, the color was soon restored, and the symptoms very much alleviated, particularly the dyspnora. If this heroic treatment did abort the the attack, a course of depressant medicines was entered upon; and it was very perceptible how soon recovery took place.

It was also customary for the older folk every spring to walk 8 or 10 miles to the doctor's office to have their annual blood letting, to "remove them spring feelins," as they called it: and they would after being depleted, walk home, much relieved by the operation.

The abdomen was then a sealed cavity.

No surgeon would be brave enough to perform laparotomy, explorative or curative. The name appendicitis was not heard in the land. Typhlitis or peri-typhlitis was the cognomen. These diseases were treated on general principles. The safe guard for any man's inquisitiveness to see the patient's "insides," except by a postmortem procedure, was the dread of an action for mal-practice, instigated by some person versed in the law.

In pleuritis serous effusion. or pus formation, which did sometimes occur. from delay in treatment in the formation of the diserse. I had no aspirator. A common trocar was used. with a rubber tube attached to the external end, to act as a syphon; or if the fluid did not flow owing to its density, and empyema was suspected. my habit was to introduce the trocar with the rubber attachment, and draw out a few drops by means of an exhaust syringe, just to be sure of my diagnosis. Then an opening was made, with perhaps a section of the rib removed: and drainage was thus effected.

In the cases where we required quick relief from pain, no hypodermic syringe existed then. We relied on morphia or budanum by the mouth; and here in our anxiety to relieve, we were often met with toxic effects from an over dose, not knowing (where vomiting was present), how much of the narcotic was retained.

No clinical thermometer was then in existence.

But under all these adverse circumstances and with restricted knowledge, the Country Doctor plodded along, hoping for better things. He depended greatly on the pulse, and upon the help from his stethoscope. With this instrument he had lung diseases more correctly diagnosed; and

September

with a discerning and sensitive sense of touch, seeing, and hearing at command, he was able to differentiate disease with considerable accuracy: but still many were the cases, especially those located in the abdomen, which had no positive name. Here we did as best we could. Gradually with the freer use of anesthetics, and with better "arms of precision" the surgical world was revolutionized. Laparotomy was conducted by the merest tyro. The appendix was a common site for operation. The removal of the kidney. the obstructions in the gall bladder. stomach and intestines by the knife. all of these and many more, under rigid aseptic technique, were considered legitimate operations.

In the special surgical department of the eye, ear. nose and throat, the eve and throat were the most successful operative regions, but the treatment of the nose and ear was most empirical. Adenoids and enlarged turbinated, curvature and obstructions are now open to operations, through the help of cocaine, adrenalin and novocaine, assisted by electric lighting. Catarrh has thus been more successfully treated by discovering the cause, while the ear, especially the middle cavity, as well as the hitherto lesser known cases of mastoid complications, are now manipulated every day with most wonderful success. These mastoid infections were left untouched. to either extend fatally to the brain. or to remain to give vent to horrible foctid discharges, making life most miserable.

In the *medical department*. What strides have ben made ! To mention only a few.—The common use now of the serums, for the arrest or immunizing of diphtheria, typhoid, tetanus, hydrophobia, carbuncles, etc., etc. Then comes before the profes-

sion. stovaine. discovered by Dr. Jonnesco, of Roumania. to be used with strychnia as a tolerant, for spinal anæsthesia. The popular belief is that this stovaine is the heaven-sent miracle of the ages, that in its spinal injections, all problems of anæsthesia have been solved; but so far as has been tried, the administration of it requires great delicacy of judgement. Any but the most extreme aseptic surgical condition would result in spinal meningitis which is fatal. Any carelessness in puncturing would lead to permanent paralysis. There is also a constant danger of blood poisoning. All of these difficulties will have to be solved by arbitration of t ime, before stovaine can be used generally.

And again may we not hope that in the varied field of bacteriology a serum may not be found for the arrest of the bacilli of tuberculosis and cancer?

As adjuncts to the more helpful means of diagnosing pathological conditions we may now claim the use of the endoscope and X rays.

And in the great domain of *nervous* ailments, which hitherto have been the bête noir of our profession, may we not look with some favor to the influence of hypnotism and suggetion ?—exemplified in the Emmanue! Movement for the cure of those susceptible and pitiably nervous creatures of whom we all have had hand in treating—but only with meagre results ?

In the *field of obstetrics*. I could call your attention to the great inprovement made by the use of chloreform. But God forbid me from dlating on this gruesome part of our businers. In the early portion of nov attendance on the 4,000 cases in an I around Liverpool, I can look upon these sights of agonizing pains and sufferings without chloroform as a veritable hell on earth, but under its calming influence in later years, J was on a bed of roses.

Before bringing these rambling remarks to a close I beg to be allowed to advance a suggestion or two. One to apply particularly to the younger members of our noble profession

It is a common experience that then the younger practitioner hangs out his shingle, he must get a preten-Lous book case, and fill it with a large number of professional books: not so much with the idea of the howledge to be obtained, as with the indirect object of impressing the public. This is all wrong, for the simple reason that in a very few years. owing to the great and rapid strides in our profession, these readings become obsolete. Far better to collect a few standard books on the different branches of our profession, and let the balance of cash he devoted to the purchase of monographs and magazines, and thus you would always be reading works which are up-to-date.

Another suggestion is that men practicing, especially in a country town, should devote a certain period for a *post-graduate course*—say every 3. 4, or 5 years. We thus need our periodic rest to enable us to do more perfect, up-to-date work, through the knowledge obtained abroad. We must rab shoulder to shoulder with the best in our profession, to keep up with the rapid progress around us: otherwise we fall into ruts with injury to ourselves, and wrong perhaps to our patients.

But you will ask when amid all these obstructive conditions, existing in a country doctor's life, when he is worn out by long fatiguing journeys, huffeting the snow drifts in winter, and the driving rains in summer, over

rough, hazardous and lonesome roads -when-I say, has such a doctor time for study ? He must keep himself abreast of the times. A man with any spark of ambition would scorn to be classed among the Old-School bygones. He must force himself to grasp every fleeting moment. It became therefore my duty and my habit, to stuff my pockets with professional literature, and while driving with pipe in mouth, and with reins over my neck, to open up these periodicals, and read with avidity. It was a happy time for me, when, perchance, I was detained at some lonely shanty, some miles from home, to be able to sit beside a smoky lamp. or a tallow candle, and pore over my book or magazine, wherein was contained so much valuable knowledge to me.

These were laborious times; but it is not work as *simple work* that hurts. We do not mind the strain, if we have good physique. We can live and thrive under it. It is the galling. grinding responsibility which bows us down, especially when we have none other to bear with us the load. But thanks to God it is then that courage comes to emancipate us: when in the hour of peril to our patient. it is then for us not to tremble-not to shrink from the responsibilitynot to hesitate- to falter-to stand despairing-but to bring our nervous system into subjection and to uct and that promptly.

And where is our reward?

To give an answer, I will quote a few lines from Ian MacLaren's inimitable book "The Doctor of the Old School."

The doctor is talking to his old mare, Jess, in these words, as he is breaking his way through the snow drifts:-- "It's a coorse nicht, Jess, and heavy traivelin'; can ye see afore ye, lass? for a'm clean confused wi' the snaw; bide a' wee till a' find the deveason o' the roads; its aboot here, back or forrit. Steady lass, steady; dinna plunge, it's a drift we're in, but ye're no sinking? Up noo-there ye are on the road again."

"Eh. it's deep the nicht and hard on us baith: but there's a puir wumman micht dee, if we didna warstle through."

"Ye're fair dune, Jess, and so a' am masel', we're baith gettin auld, and dinna tak sae weel wi' the nicht wark. It's been a stiff journey; a'm tired lass—a'm tired tae deith."

Here is *our* reward. We wrestle through snow banks, and are urged on with the impulse that if we neglected our duty a woman might die. Thus we force ourselves through life alleviating the pains, the sorrows, the troubles of others: and if not rewarded in this world, may it be our lot to hear that blessed word, "Well done good and faithful servant, enter thou into the joy of my Lord."

Thus when we get through with every trying individual case, as we meet them in our daily courses and all is over, we can then

Scatter sunshine all along our way.

Cheer, and bless and brighten every passing day.

"A little kindly word each day;

How much it helps us on our way."

* * * * * *

But the country doctor at last longs to throw off his harness, after the worries and strains of his arduous life, when he would seek to free himself from the engrossments of an active professional career, when he would desire to have a little of the primeval instincts of our nature, perhaps cultivate a garden with flowers, or engage himself in other congenial easy work, interspersed with the lovely *Dolce far niente*—the sweet do nothing, which the Italians in their sunny clime revel in. In calm enjoyments he can then recall the memories of long gone years, and in surroundings hallowed by the touch of early manhood he can live over again a busy and strenuous life, with all its achievements—its partial disappointments, and its good fellowship.

In our country there is a beautiful period called "*The Indian Summer*," days of lovely, balmy weather. May we hope that for all of us, after the busy hustle of summer, and early autumn of life, these days of Indian Summer may come into our hearts. when in calm, and peace, we can project ourselves into a period of blessing and hallowed hope.

So mote it be.

And now President and Gentlemen farewell.

* * * * *

In parting I would say:-

"Never have more than one trouble at a time."

Some people have three kinds:-

All they have had,

All they have now, and

All they expect to have.

But on this occasion throw *all* your troubles to the wind, and enjoy thirecreation right royally, remembering the adage, when you, one and *all*. return to your homes to take up your cares, that

"'Tis easy enough to be pleasant

While life flows along like a song.

But the man worth while

Is the man with a smile

When everything goes dead wrong.

(Sgd.) HENRY G. FARISH.

ACUTE OTITIS MEDIA__ITS CAUSES AND TREATMENT.

By R. EVATT MATHERS, M. D.

(Read at Annual Meeting of Annapolis-Kings Medical Society, June 22, 1910.)

MR. PRESIDENT AND GENTLEMENS-

Y subject this evening is, "Acute Otitis Media—Its Causes and treatment.

I must first thank you for the honour you have done me, in asking me to speak at your Society's annual meeting, and assure you that no one more fully appreciates my unfitness to deal with this important subject than I do myself, but with your kind consideration I will endeavor to point out and refresh your memories on some of the salient points in the cause and treatment of this painful disease.

The subject, I know, is time-worn and old, and much that I say will be uninteresting, but acute otitis media, I am sorry to say, is looked upon by the laity and sometimes, too, by the physician, as if it were nothing more than an ordinary toothache, while the results are sometimes so far-reaching that not only permanent deafness, but death results.

The predisposing causes are catarrhal conditions of the nose and pharynx, enlarged tonsils and adenoids.

The exciting causes are colds, fevers, especially the infectious ones as measles and scarlet fever, teething, grippe, wrong use of the nasal douche allowing fluid to enter the tympanic cavity, introduction of water into the middle ear while bathing, etc., etc.

The disease may be divided into two classes (1) acute catarrhal; (2) acute purulent.

The diagnosis in the adult is usually easy. In the acute catarrhal otitis the early symptoms are usually slight. The patient complains of a fulness in the

ear due to congestion of the Eustachian tube. Pain follows, and usually increases in severity, and is localized. The pain is worse when the patients lies down, due to the increased bloodpressure in the head when this position is assumed. Tinnitus and increasing deafness are complained of. Deglutition is painful due to air entering the swollen Eustachian tubes. The body temperature in this form is not much elevated. Spontaneous rupture may take place in 12 hours, or may not take place for days. Immediate relief ensues if the rupture is large enough to permit of free drainage. In some cases, when spontaneous rupture does not take place, the mastoid cells become involved. We then note an increase in the severity of the symptoms, mastoid tenderness and increase of the temperature. 1

The discharge may cease of its own accord, but this seldom occurs, as it usually becomes infected from without or within if not treated, and a chronic purulent inflammation of the middle ear ensues.

In the acute purulent otitis all the symptoms are much more severe. Pain is excruciating, temperature is elevated, constitutional depression, etc.

In children the symptoms are somewhat different and the diagnosis is not so easy, but it is wise precaution when called to the bedside of a child suffering pain, always to examine the ears, as in many cases that is where the trouble will be found.

The temperature in children suffering from acute otitis is usually elevated, 101 to 104; the child tosses about, throws its <u>arms</u> usually over its head, puts its hand up to the ear, and usually gives evidence of great suffering. The child may drop to sleep, but soon awakens, screaming with pain.

The symptoms may be very severe, and as the ear is the organ least suspected, and often with difficulty examined, if the child is restless, and we remain in ignorance of the true cause of the temperature until the drum ruptures and the discharge makes its appearance in the meatus.

One author says very truly: "Obscure illness in young children, consisting of feverishness, irritability and symptoms of cerebral disturbance, are sometimes explained by the ultimate appearance of a discharge in the car."

The diagnosis is partially indicated by the symptoms as detailed.

On examination of the drum membrane with reflected light from the head mirror, it will be found somewhat congested, especially in the region of the long process of the malleus, gradually fading off into the pearly normal colour of the drum membrane. Sharpnell's membrane is usually quite red. Later in the disease the whole membrane is inflamed, all landmarks with the exception of the short process are gone. The drum is bulging, and in marked cases hangs down like a globular swelling.

If the discharge has made its appearance before we see the case, inspection should be made of the ear and the perforation looked for to see that it is of sufficient size for free drainage. It is usually found low down in the inferior segment.

When called to see a patient suffering from an acute otitis, the first indication is the relief of pain. The patient should be put to bed, a brisk saline cathartic administered. It may be necessary to administer an opiate to

give relief for a few hours while trying to abort the disease.

I cannot condemn too strongly the use of unsterilized oils, laudanum, onion cores, etc., as they possess no therapeutic value and are favorable to bacterial growth, and in case of spontaneous rupture of the drum render the middle car much more liable to infection. We always use a solution of carbolic petrogen, 2 to 5 per cent. strength, put up by Wyeth. This warmed and dropped into the ear often gives great relief, besides making the canal antiseptic. Dry heat in the form of the hot water bag is the best. Moist heat is objectionable in that it softens the tissues and hastens local necrosis. Argyrol in strengths of 15 to 25 per cent. solutions should be dropped up the nostrils several times daily, for its germicidal and astringent properties, which is a matter of great importance. The diet should be light, and fluid or semi-fluid. Failing to abort the attack and the pain continuing for 12 hours or so, incision of the drum should not be delayed. It is much better to perform this operation early rather than have a spontaneous rupture, as healing takes place much quicker from a clean cut than from a perforation. In the latter, the edges are necrosed from pressure and it is sometimes impossible to heal the perforation in these cases.

The local depletion caused by the operation is of much value in these cases.

Before opening the drum, which is very painful and often necessitates a general anaesthetic, the canal should be rendered sterile with a 1-10.000 bichloride solution and carefully dried out. The knife and ear speculum sterilized. The knife is passed through the most bulging portion of the drum, if possible, and a free incision made. Relief almost always immediately follows this operation and the patient usually drops off to sleep, much needed and well deserved. It is a good plan after opening the drum to wait until bleeding has stopped, then dry the canal gently and insert a piece of sterile gauze like a wick and use it for drainage. The ear should be kept scrupulously clean either by frequent drying with sterile absorbent cotton or gently syringeing with a normal saline solution or boric acid solution, for a week or so. If the discharge still continues then it is necessary to either use a more astringent agent or else, after syringeing, to thoroughly dry the ear and blow in a minute quantity of boric powder.

The Eustachian tubes should be inflated either with the Politzer bag, or catheter, preferably the latter. If the bag is used, it must be with gentleness and caution.

Opening the Eustachian tubes by gentle catheterization in the early stages often affords great relief to the patient.

I would strongly advise the early removal of adenoids and tonsils in all these cases. It will often be found impossible to heal a discharging ear until the adenoids and tonsils are removed or any pathological conditions of the nose or naso-pharynx set right. It is surprising how quickly an ear will heal up after removing the hypertrophied lymphatic tissue.



OUR PORTRAIT GALLERY.

Drs. W. J. and C. H. Mayo.

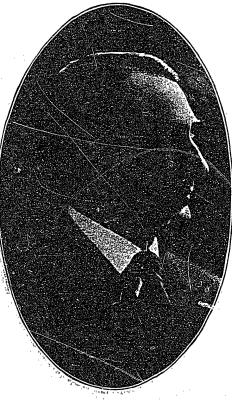
UR readers will, we have no doubt, be pleased to have portraits of the Mayo Brothers, as these two illustrious surgeons are known in every surgical clinic throughout the world.

We believe Dr. W. J. Mayo is not yet fifty years of age; he graduated from the University of Michigan in 1883. His brother Charles, is about five years his junior. They have worked together from the beginning, and while each has perhaps identified himself with some one operation, Dr. W. J. Mayo excelling in gastric and bile duct operations, and Dr. Charles H. Mayo in operations for goitre, the whole field of surgery is theirs and each is a master in all its developments.

They were born and brought up in the town which they have now made famous. This little town of Rochester, situated on the prairies of Minnesota, far from crowded industrial centres, and on a branch railway line, would never have been expected to become the centre of a great surgical clinic; and yet there are few centres of surgical teaching in the world today, to which surgeons resort with more eagerness. We may indeed speak of the Mayo School of Surgery, although there is no medical school in the ordinary sense in Rochester. The pupils are surgeons, old and young. from every state of the Union, every province of Canada, and every country of Europe. And the teachers are the two brothers who by constant assiduity, unwearying labour, most rigid scientific investigation, and, may we

not say it, the great gift of genius have won a leading place among the recognized authorities in surgery.

A marked feature in the methods of the Mayos is the careful preliminary examination of their patients. Here the principle of the division of labor is utilized and a staff of expert physicians examine into the bodily



DR. W. J. MAVO.

condition of patients, test-meals are analysed, blood counts and blood films made, the various secretions are tested, and a very complete pathological and bacteriological laboratory is hept busy.

The amount of operative work done et St. Mary's Hospital is almost incredible. In 1909, the number of abdominal operations alone was 3.746. with only 68 deaths. The total number of operations of all kinds was 7,477. They begin operating at 8 a. m. and are frequently busy until 1 p. m., and from twenty to thirty operations are frequently done in one forenoon. Each has his own operattheatre. Dr. William Mayo's ing chief assistant in his operations is one of the Sisters, who has acted in this capacity for many years. The hospital, now so famous, was at first a small one established by the order of the Sisters of St. Francis.

The Mayo brothers are public spirited men who take an active interest in the affairs of the town which they have helped so largely to create. They lately presented a fine park to the citizens, and they have also given the Y. M. C. A. building.

To visiting surgeons they are courteous and attentive to a marked degree, and few things are more notable than the "Surgeons' Club," of Rochester, where, in one of the rooms of this Y. M. C. A. building, the surgeons who may be visiting Rochester, men who represent the surgical world, from San Francisco to Stockholm, meet in the afternoons to discuss the cases and operations they have just seen.



DR. C. H MAYO.

At the Winnipeg meeting of the Canadian Medical Association last year, Dr. William J. Mayo, who read the address on Surgery, was elected an honorary member of the Association.



TREATMENT OF PNEUMONIA SIXTY YEARS AGO,

By DR. A. P. REID, Provincial Medical Officer.

Read at the Aunual Meeting of the Medical Society of Nova Scotia, Yarmouth, July 6th, 1910.)

Mr. President:-

Noting the difference between the present and the past, must be my excuse for the subject of this paper.

Pneumonia now is a very frequent and fatal malady and in the past neither condition obtained to the same extent, and it may be well to consider the subject.

The morbific cause doubtless is the same and has always been so, but of late it is either intensified. in essentia. or the vital powers are hampered in their means of defence. and I think it is generally conceded that this latter explanation is the more probably correct one: due in chief part to the change in the housing or residences. the workshops and offices and social customs of the people, and this has taken place in the country as well as the cities and towns, but here and now its discussion would lead us too far afield as its consideration would open up the question of prophylaxis.

What I propose specially to refer to is the great mortality of Inte years. Pneumonia always was an acute serious lesion, but an attack of the disease did not cause the dread fifty or sixty years ago that it does today with physician as well as patient.

I can recall many serious cases in different countries as well as Nova Scotia, but fatal terminations were not so common, due no doubt either to defective vitality on the part of the patient or to method of treatment.

The former cause is very frequently accepted as the explanation, and although in some localities or conditions it may be paramount yet to me it does not embrace the situation and hence the latter, the treatment is one of the elements in the management of a case that we may discuss.

In limine. I may lay down the principles that guided the former practice and in doing so I do not desire to broach any theoretical question, a clinical fact takes precedence of any theory.

In order that my argument may be may be more easily followed I will recall a few *physical* and *pathological* laws that dominate the situation

PHYSICAL LAWS.

1st. Diminish the area of a fluid conduit and increased force is required to so increase the velocity as to move the same amount of fluid through the restricted channels.

3rd. Doubling the speed of flow in the same period of time requires more than four times the output of energy.

PATHOLOGICAL LAWS.

1st. The consolidated portion of the lung in pneumonia is practically impervious to blood and air and the rest of the lung has more work to perform.

2nd. The pulmonary capillarics resist the passage of venous blood to the left side of the heart, under the normal or ordinary conditions of the circulation.

3rd. The heart is overstrained in trying to force the blood through restricted channels. 4th. Respiration is increased and shallow (Dyspnœa) to supply air to the diminished air cell surface.

5th. Defectively oxygenated blood passing into the circulation is an inefficient nutritive and the heart is the chief sufferer therefrom.

6th. If the heart be over-strained or over distended it is very apt to stop and not begin again.

7th. Cardiac stimulants in which we may class alcohol, strychnine, etc., are assumed to have the property of increasing the heart action.

The Physical condition in pneumonia is:--

1st. Restricted channels for the flow of blood in proportion to the consolidation or congestion.

2nd. The motor-engine—the heart is enfeebled—(being ill nourished) and yet called on for the display of more energy, due to the accumulation of blood in the veins behind and obstruction in front.

To elucidate my position:

Let us assume that an engineer has this proposition submitted:

There is an obstruction to the passage of steam through his system of pipes that demands time for its reremoval and repair. Steam is being generated normally and he cannot quench his fires soon enough, but its flow is obstructed, and immediate steps must be taken before beginning to remove the cause, and three methods of relief present themselves.

1st. To allow an increase of pressure to try to force the obstruction.

2nd. To divert the flow into another channel.

3rd. To allow the increasing pressure to flow harmlessly away through the safety valve.

The first plan would be disastrous if the obstruction were not such as could be readily removed by the vis a tergo. The second may be impracticable.

The third plan becomes then imperative and the safety valve permits the super-abundant flow to pass harmlessly away—and no engineer would for a moment consider the question of waste of energy in comparison with the destruction that would result from its retention.

In the treatment of Pneumonia we are face to face with a similar condition—which is intensified by the probable failure of the vis a tergo the heart coupled with an obstruction more likely to increase than diminish.

In serious disease it is an axiom and imperative to avoid the tendency to death and to do so, as the obstruction is not at once removable, and the heart's power and endurance limited. we must get relief by directing the flow into other channels or by allowing the super-al undant fluid to escape in sufficient quantity to the end that the pervious channels will be able to accommodate the flow and the heart having so much less fluid to handle has its labor relieved.

The first indication could be approached by the *Junot's Boot*, which would withdraw a part of the blood out of the general circulation, but as this instrument is not obtainable, we need not discuss it. Derivation to the skin by baths, sudorifies and counter irritants, or to the kidneys and prime viæ by diuretics and purgatives have been our chief dependence and are good as far as they are efficient, but often they do not suffice.

What then? Are we to allow our patient to succumb to the physical congestion of his blood vessels and over-strain of the motor—the heart? or to dally with haphażard remedies. or use therapeutic methods that are more of theoretical than proven efficiency?

In years gone by we did not dally or play with such a condition. and trust to relief from remedies that might or might not reach immediately, as we would desire. When ordinary means did not relieve, we, without hesitation, made a temporary safety valve by opening a vein which relieved the fluid accumulation and lightened the work the often debilitated heart was called on to perform. Venesection carried to such a point as lowcred arterial tension, slowed down the pulse, cut down the dyspnoea from 30 or 40, to 20 or 25 respirations a minute, or until the suffused face became paler and a feeling of comfort replaced distress. I know of no therapeutic measure that gives such an immediate and satisfactory response.

When used with judgement, I never saw occasion for its repetition in the same illness, but it must be followed up by appropriate treatment and remedies. What we must specially avoid is any procedure that will increase the heart's action, let it have all the rest possible, as it has apparently a herculean labor to perform.

My rule, and the one that generally obtained was not to be guided by the quantity of blood removed, it may be 4 or 40 onnces, but to let it run until some of the symptoms above referred to were realized. Generally all the distressing conditions began to recede and recovery was comparatively_rapid. With long distances and bad roads, few visits were made to a patient, often not more than two or three, but enough,-for a strong impression made on the disease at first, and this followed up by appropriate treatment allowed the vital powers to resume their sway.

An increased temperature not above 103° or 104° F. was looked on as a good sign that the system was reacting and was not interfered with and should not be, because in the language of to-day "the high temperature inhibits the growth of the morbific microbes."

Of late years there appears to be a needless fear of venesection. I question if you could bleed a person to death by ordinary venesection, as fainting comes on and the flow ceases. this was at one time the gauge of the amount to be removed, but I never found it necessary to proceed as far as this stage, and again, when we know the large losses of blood that may occur and be rapidly recovered from, the loss of a quart or more need give little concern even when it does not assist to elevate the energies of overloaded lungs and heart.

I found acute pneumonia and bronchitis to be maladies particularly tractable under the lancet when it was used sufficiently early, at the commencement of the congestion and consolidation.

It would be hopeless to wait until all energy was dissipated, and yet I have had surprising results even when vitality was low, for venesection often acts as a tonic because of relief to the incubus on the straining heart and lungs.

Alcohol and so-called powerful remedies I should deem very risky where such physical as well as pathological conditions prevail. Oxygen holds out hopes but the shallow respiration prevents it in any quantity reaching the places where it would do the most good.

ALCOHOL.

This a drug requiring great discrimination in its use. When in hospital practice I for years gave it in its different forms, a careful and varied test. It may serve as a placebo doing neither good nor harm, but in weak heart it is a double-edged sword and the weaker the heart's action is the more dangerous is its use.

You may put the lash on to a tired horse to reach the not distant end of the journey where there is rest and food for him to recuperate, otherwise he may travel until he drops in his tracks.

We are apt to forget the old medical aphorism "Excitement is followed by depression."

We should place a known therapeutic fact above any theory, our object is to cure, Academic discussion may follow, hence I have always had a profound faith and belief in venesection when judiciously used as I have so often seen it act like a charm when any other treatment was futile, and though we may discuss its modus operandi, in the meantime give the patient the benefit. I could detail many cases but it would take up too much time at present.

As to the properties of strychnia as a cardiac stimulant I have no reliable personal experience, but since it excites muscular contraction its use with a debilitated heart I should consider a question demanding excessive care and tentative action.

What the practice is to-day you know better than I, but this I do know that according to the statistical tables we can scarcely congratulate ourselves on it. Weak heart appears to be more common or more intensified than formerly and the question presents itself—Have we a properly systematized management and nursing of this ailing and at the same time paramount influence in our economy ?

One of the reasons for the above paper was the recent death of our honoured, beloved and revered King. I have been unable to get any details of his illness and treatment other than chronic emphysema, dyspepsia, dyspnoea, and fainting turns with bronchitis, likely followed by pulmonary congestion and consolidation to some extent, pulse 90, temp. 98° F., rapid breathing and a chronic weak heart.

The treatment as described even in medical journals was "powerful remedies," to which he did not react. Knowing so little about the condition any remark I make must be taken "cum grano salis," yet the condition is not uncommon, and it may be considered. It must be stated at the same time that the King was an intractable patient and would not follow the directions of his medical attendants.

However, we may assume, that a stout, full habited, full blooded man symptoms above detailwith the ed would indicate that the bronchitis passed into the more serious physical lesion, and extra labor was thrown on the weak heart, this would counsel first, rest, were this not attainable then get as near it as we can. As to remedies the indications would point to an engorged and enfeebled heart and lung passages, fluid as well as aerial passages blocked, and for relief we should unload the heart and lungs. Would "powerful remedies," I assume alcohol, strychnia, etc., as included, tend to carry out the indication ? Sedatives would likely increase the difficulty by, to some extent, paralyzing the functions of the economy.

What tonic for the weak heart would have been equal to removing a part of the blood that oppressed it as well as the clogged pulmonary and systemic vessels, while allowing the smaller quantity of blood passing through the lungs to be better oxygenated and hence more stimulant and nutritive and how could this be affected otherwise than by venesection. It may be said it was too late. but delay should not have taken place and in any case venesection incurred no greater risk as he was evidently in *articulo mortis*, and it alone could have stimulated the heart by the access of better oxygenated blood. Powcrful remedies look to me like using a club on the fainting marathon runner as he was approaching the goal. he may rally for a few yards to drop in his tracks.

I will not draw a moral and must ask you to overlook my pertinacity in not co-inciding in opinion with the wise heads of the profession.



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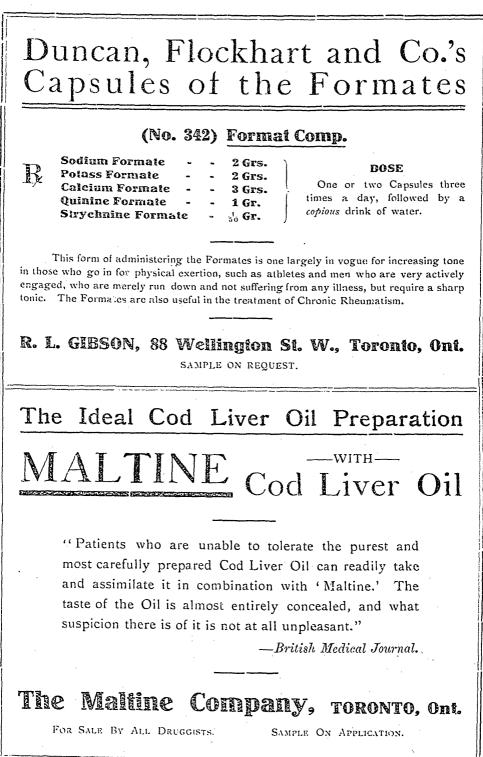
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Thermotherapy in inflammatory conditions seems to prove most effective when applied in the form of moist heat.

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The advantage of moist heat where indicated is generally acknowledged. The method of its application from professional preferment seems to be in the form of Antiphlogistine. By this method, a high temperature can Le maintained in contact with the affected part for hours without exposture of the patient for redressing.

The superior advantages of Antiphlogistine over other forms of moist dressings, such as poultices, hot packs, etc., are that it is easily applied. retains its heat for hours, is antiseptic in action, and above all produces satisfactory therapeutic results.

* * *

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The value of internal medication in certain Gynecological and Obstetri-

cal conditions is so firmly fixed that even the enthusiasm of the surgeon specialists can not set aside well tried and well proven facts.

That Hayden's Viburnum compound, after an existence of over one quarter of a century, is still growing in professional popularity, best demonstrates its usefulness in the treatment of diseases of women, such as Dysmenorrhea, Amenorrhea, Threatened Abortion, etc.

The New York Pharmaceutical Company, Bedford Springs, Bedford, Mass., have just issued a brochure. entitled, "Medical Gymecology and Therapy in Obstetrics," and upon request will send you a copy, also samples of "H. V. C." If you have never given Hayden's Viburnum Compound a trial you will never appreciate its value over the many substitutes that are trading upon its reputation.

WHEN SUSPICIOUS EXAMINE THE URINE.

Of all body excretions, the urine offers the best index of threatening



maladies and pathological changes. For this reason a little brochure just issued by the New York Pharmaceutical Company of Bedford Springs, Bedford, Mass., is not only timely but useful and from its arrangements extremely practical. Besides presenting working tests for the detection of Albumen, Sugar, Phosphates, Uric Acid, etc., their significance when found, are clearly set forth. The few moments spent in reading this booklet will be time well devoted. Send for a copy.

THE ANTI-TOXIN TREATMENT OF DIPHTHERIA.

Again are we nearing the season when the problem of diphtheria and its treatment must be met and solved. The writer of this paragraph is forcibly reminded of the fact by the receipt of a modest but important brochure of sixteen pages bearing the title: "Antidiphtheric Serum and Antidiphtheric Globulins." A second thought is that here is a little work that every general practitioner ought to send for and read. Not that the booklet is in any sense an argument for serum therapy. It is nothing of the kind. Indeed, the efficacy of the antitoxin treatment of diphtheria is no longer a debatable question, that method of procedure having long since attained the position of an established therapeutic measure. The pamphlet is noteworthy because of the timeliness of its appearance, the mass of useful information which it presents in comparatively limited compass, and the interest and freshness with which its author has been able to invest a subject that has been much written about in the past dozen or fiften years. Its tendency, one may



SOMETHING TO REMEMBER

An Unsuccessful Remedy is never substituted

Whenever a substitute is offered it goes without saying that it is not as good as the original and that the original must produce satisfactory therapeutic results and have created a demand; hence the many imitations seeking to live upon its reputation for mercenary reasons only—



For INFANTS, INVALIDS, and the AGED.

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(the original Viburn Compound) has for over twenty-five years given uniformly satisfactory therapeutic results when administered in cases of Dysmenorrhea, Threatened Abortion and other gynecological and obstetrical conditions where indicated.

To any doctor not familiar with the results following the a Iministration of the original H. V. C. samples, formula and literature will be sent upon receipt of card. *Suggestion*:—Always give Hayden's Viburnum Compound in boiling hot water.

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which can be made suitable for any degree of digestive power by the simple process of letting it stand for a longer or shorter period at one stage of its preparation.

It is used mixed with fresh new milk, and forms a delicate and nutritive cream, which is enjoyed and assimilated when other foods disagree. It is entirely free from rough and indigestible particles which produce irritation in delicate stomachs.

The Lancet describes it as "Mr. Benger's admirable preparation." Mothers and interested persons are requested to write for Booklet "Beneer's Food and How to Use it." This contains a "Concise Guide to the Rearing of Infants," and practical information on the care of Invalids, Convalescents, and the Aged. Post free on application to Benger's Food Ltd., Otter Works, Manchester, England.

Benger's Food is sold in tins by Druggists. etc., everywhere.

as well admit, is to foster a preference for a particular brand of serum, but that fact lessens not one whit its value and authoritativeness.

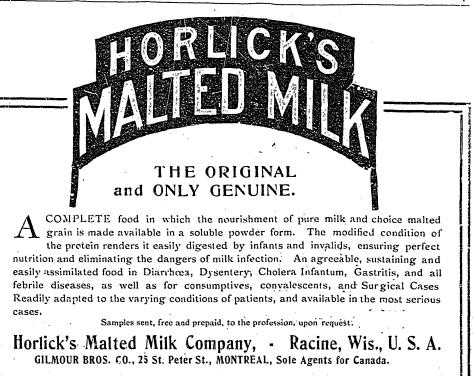
Here is a specimen paragraph, reprinted in this space not so much to show the .cope and character of the offering as to emphasize its helpful tone and to point out the fact that its author was not actuated wholly by motives of commercialism:—

"Medical practitioners have learned that, inasmuch as the main problem presented in the treatment of a case of diphtheria is the neutralization of a specific toxin, the true antitoxin cannot too soon be administered; moreover, that, antitoxin being a product of definite strength, a little too little of it may fail when a little more would have succeeded—hence larger or more frequently repeated doses are becoming more and more the rule. One more point: If the medical attendant is prompt. as he must be, and fearless, as he has a right to be, the full justification of his course will hinge upon the choice of the best and most reliable antidiphtheric serum to be had: for while there is little or no danger of harm ensuing from the use of any brand issued by a reputable house, the best results—which may mean recovery as the alternative of death—can only be hoped for from the use of the best serum."

The brochure is from the press of Parke, Davis & Co., who will doubtless be pleased to send a copy to any physician upon receipt of a request addressed to them at their main offices, Walkerville, Ontario.

THE PAINTER OBEYS ORDERS.

Sir John Batty Tuke, the eminent mental specialist, who does not intend to seek re-election for the university



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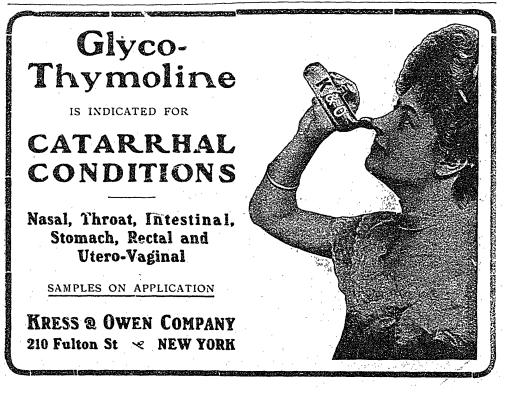
of St. Andrew's and Edinburgh, lately had a strange experience. In the course of some recent repairs at his private asylum near Edinburgh. the workmen were strictly enjoined not to converse with any of the patients. One morning Sir John appeared on the scene and addressed a casual query to a painter. This merely elicited a stony stare. When the question was repeated the workman exclaimed: 'Awa' wi ye,' deleerious deevil, I canna be bothered wi' ye.' Then, as if reflecting that this remonstrance was too crushing, he added in a gentler tone, 'But I'm soury for ye a' the same.'

POST-OPERATIVE PSYCHOSES.

A contribution to the Study of "Post-Operative Psychoses, by E. Schultze, appears in a recent issue of Zeitschrift fur Chirurgie.. The writer agrees with those who believe that the so-called post-operative psychoses in the vast majority of cases are not true pyschoses, but are forms of "post-operative delirium." True psychoses following operation are exceedingly uncommon.

The so-called post-operative psychosis may occur after any operation, but is most common in nervous patients—as in those suffering from Basedow's disease. In many cases there is an hereditary tendency to a disturbance of the mental balance.

In a large proportion of the cases such post-operative conditions as toxæmia, inanition, fever, weakness (as from carcinoma or chronic diseases), and abscess formation will be found as underlying causes of the disturbed mental state, and, when these conditions are removed (if their removal be possible) the psychosis will often disappear very rapidly. Under any circumstances, the prognosis is in gencral good, although some cases become chronic.



xvm



SESSION 1910-1911.

The Session begins on Wednesday, September 28

Into Session begins on vectorsary, contents to 1910, and continues for eight months. For the annual circular, giving requirements for matriculation, admission to advanced standing, gradu-ation and full details of the course address:

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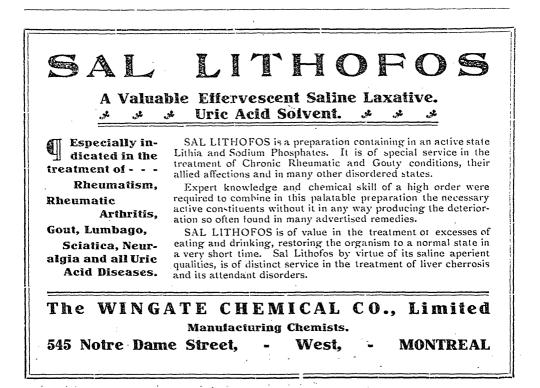
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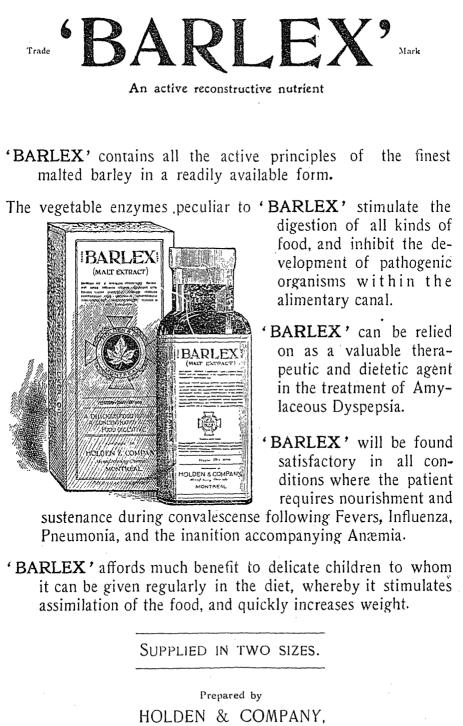
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ANÆSTHESIA.

In a paper entitled "Anæsthesia In Its Relation To The General Practitioner," appearing in the Medical Record for July 9, W. H. Kearney advocates trained anæsthetists whenever it is possible to employ them. But, in the meantime, every general practitioner should acquaint himself with the method of administration and action of one or two anæsthetics. and he prepared to give them intelligently. Every case should be a study in itself. Safety in anæsthesia cannot be obtained without knowledge and experience, and ability to detect untoward symptoms in the beginning, and remedy them before harm has come to the patient. Nitrous oxide with oxygen is safest, but impossible to the general practitioner, on account of the complicated apparatus necessary for its administration. Ether is from five to ten times safer than chloroform. Warning is given by the symptoms early in the administration when an overdose has been given. In is sudden chloroform the collapse and without warning, heart and respiration failing at once. Chloroform both produces narcosis and causes destruction of nervous and other tissues. Ether is less harmful to the cells of liver and kidneys, and does not so much interfere with elimination. Pneumonia following ether inhalation is generally due to dirty inhalers, or septic discharges from the nose, or vomited material getting into the wind-pipe. Chloroform is an excedingly dangerous drug and absolutely contraindicated in most cases. Respiration may fail from obstruction or from shock.





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