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EDITORIAL

ILLEGAL OPERATIONS.

On several occasions we have pointed out the grave danger that members of the profession subject themselves to when they perform illegal operations on a patient, either from sympathy or for a fee. We once heard a very experienced business man say that when you allowed your judgment to be influenced by sympathy, you might safely say you had made a mistake. In the same way it may be said that to do these operations for a fee does not pay. A lengthy observation of the conduct of these patients reveals the fact that they cannot be trusted. With tears in their eyes they will promise that they would never reveal anything; but the fact is they do print the event abroad and tell their women friends. Further, if any trouble arises they will give the operator away to save themselves.

Members of the profession will find it to their interest to exercise great vigilance in all their dealings with such women. Some of these women are in the pregnant condition illegitimately. This is a most dangerous class to have anything to do with. They have no home, as a rule, and live in rooms or in boarding-houses. If anything goes wrong they have no means of securing proper care; and things are very liable to take an adverse course.

Another class of women who seek to have abortions induced are married women who do not wish to have children. These women will make up all sorts of plausible yarns, such as that they are in poor health, or that things have gone badly with them, or that their husbands are not kind to them, and so on. Turn a deaf ear to all such appeals. They will not stand investigation. There is only one condition that can justify the arrest of pregnancy, namely, some grave condition of ill-health that threatens the life of the mother. Then interference should only be resorted to after a consultation.

But women are now becoming acquainted with many of the drugs that have a reputation for inducing a miscarriage. They will find ways and means of securing these drugs. Then many women know very well how to use instruments upon themselves. They know about taking a douche and washing their hands, and dipping the instruments in boiling water. There are very few medical men who have not met women who can tell him all about how the operation should be performed. They induce miscarriages on themselves, and then consult a doctor for the after care of the case. Here comes in a real danger—and one that every practitioner should be on his guard concerning. It is never safe to attend such cases in rooming-houses, or when the patient is boarding somewhere. They should be placed at once under conditions where they cannot implicate their medical attendants. The condition now under consideration calls and should receive proper treatment. But the point is that it should be accorded only under safe conditions.

But to some extent society is to blame for the determination on the part of a young woman to get rid of the foetus. There is nothing ahead of her but the severest censure from all parties. There should be a better system put in operation, and a more liberal spirit should be cultivated. Because a young woman makes such a mistake as to become pregnant while still unmarried, she should not be cast to the rubbish heap. There are worse sins and much less natural that regularly go unpunished. We must learn to temper judgment with mercy. In Australia the woman who gives birth to an illegitimate child receives the state aid just the same as does the married woman. We would say that the law should take up the cause of these women, and follow up the fathers, and compel them to make proper provision for the care of the mother, and maintenance of the child. When this is done, all the burden will not fall on the unfortunate woman, and the man go scott free.

THE WASSERMANN REACTION.

A good deal has been said and written upon this subject; and we have not yet had the last word. It has been contended by able observers that the reaction may remain positive for some time after the organisms have disappeared from the body. In such a case the reaction would not furnish a reliable guide to treatment. Then there are other conditions that syphilitic infection that may give a positive reaction. On this point the following quoted from the *British Medical Journal* of 19th February is to the point:

“It has long been recognized that a positive Wassermann’s reaction

may be yielded by the serum of a patient who has not had syphilis, but is suffering from such diseases as scarlet fever, leprosy, pellagra, yaws, and a few others. Drs. C. Verdozzi and L. Urbani extend this list by the inclusion of certain chronic disorders of the liver. After giving a full account of their technique, which is precisely that described by Wassermann himself, they give a tabular and also a detailed account of 26 patients with chronic hepatic affections in whom no history or signs of syphilitic infection could be obtained. An account is also given of 27 control cases, patients with either some acute disease of the liver or bile ducts, or with acute or chronic disease of some other organ, but free from any suspicion of syphilis. Not one of the 27 controls gave a positive Wassermann reaction. But a positive reaction was obtained in no fewer than 20 of the 26 patients with chronic hepatic disease. Nine of the 26 were suffering from primary or secondary new growths of the liver, and 8 of these gave a positive reaction; in 7 the reaction was complete. The remaining 17 had one or another form of cirrhosis of the liver, and Wassermann's reaction gave a positive result in 9 of these, while in 3 more there was fixation of the complement even in the absence of antigen. The authors remark that Boas failed to find a single positive reaction in 59 cachectic patients with malignant disease; possibly, they suppose, because the liver was little involved in these cases. The authors state that jaundice is not in itself a cause of a positive Wassermann reaction; jaundice was present in 13 of their 26 patients, and 6 of the 13 gave a negative reaction, as was also the case with all the 6 patients in the control series who were jaundiced. They note that the reaction was more often incomplete in hepatic cirrhosis than in the cases of hepatic neoplasm."

The foregoing is ample to make us careful not to place too much weight to the finding of a positive Wassermann. There are many things in Heaven and earth not yet dreamed of in our philosophy."

THE PRICE OF LIBERTY.

Liberty has ever come high. It is the most precious thing man knows; and it is the thing for which he has ever been ready to die. In the Balkan wars of 1912 and 1913 350,000 were killed, out of a total of 1,250,000 engaged on the side of the several countries. This is one killed in every three and one-half engaged. In the Russo-Japanese war there were 558,000 killed out of total forces of 2,500,000, or about one in every four.

From all the indications to hand the death list in the present war will run up to one in every three engaged, as the war is bound to last

for some time yet. It is stated that at least 21,000,000 are engaged in active campaigning. This means that about 7,000,000 will lose their lives directly on account of the war. At the moderate estimate of \$1,000 for each life, this would mean a loss of \$7,000,000,000, or seven billion dollars.

To this must be added the large numbers who will be greatly impaired in health, or usefulness through loss of arms, legs, sight, or hearing.

Then there is enormous expenditure of money on pay for soldiers, their clothing, their food, their tents, their guns, and the ammunition required.

To this must be added the incalculable loss caused by the destruction of property. Bridges, roads, cities, churches, ships, chattels, have gone to dust and ruin.

Then, further, there is the neglect of legitimate business. No one can guess at what this loss amounts to.

All this because Germany was ready for war and wanted war. The Allies did not wish war, and this is clear to all because they were not prepared for war. But the Allies were free nations, and the elected to remain at any cost. They are paying the price for liberty, but they are going to secure the precious article.

DOMINION HEALTH DEPARTMENT.

Dr. Michael Steele, M.P., for Perth, raised this question in the House of Commons at Ottawa quite recently. He spoke at some length in favour of the establishment of a Dominion Health Department. He pointed out the British North America Act left general health matters in the hands of the Federal Parliament; while matters, such as hospitals and charities, were placed under provincial control.

Dr. Steele pointed out that most of the countries in Europe had such a department, and that the United States had been gradually developing a national bureau of health since 1871. Canada had no such bureau. He referred to what had been done to control such diseases as typhus fever, smallpox, typhoid fever, tuberculosis, etc. This good work Canada as a nation should be aiding.

He then took up what the care of the insane cost, and mentioned that it now cost the United States \$32,000,000 a year for this purpose; and that much of the insanity existing was preventable. Then, again, infant mortality was capable of great reduction. One feeble-minded person might leave children that would cost the state very large sums of money.

Hon. J. D. Hazen said that there was no legal objection to the establishment of such a bureau; the only point being what matters should be left for it. He went on to point out what had been done by Parliament such as quarantine, and the inspection of immigrants. The growth of the work done on health matters by the provinces had relieved the Federal Government of much that it would otherwise have been forced to take up.

We adhere to the view we have frequently repeated, that the Federal Government should establish a Health Bureau, and cannot do it too soon.

THE FRENCH RED CROSS.

To give some idea of the vastness of the work that is being done by the various Red Cross societies, we may mention what is being done by the branch in France. During the seventeen months of the far it has expended \$6,400,000. It has operated 796 hospitals, with 67,081 beds, and with a total of 21,000,000 days care to the patients.

The Union des Femmes de France, the second in size, has 28,446 nurses, has equipped 355 hospitals with 29,000 beds. The Association des Dames de France has 16,000 nurses, in 350 hospitals with 22,000 beds.

The mortality among the Red Cross nurses has been remarkably heavy considering the character of their work and the immunity they are supposed to enjoy under the international regulations. Twenty-two members of the Society for Aid to the Wounded Soldiers have given their lives to the cause, some of them killed under shell fire, others carried off by contagious diseases. The nurses of this society have received sixty-three epidemic medals, sixty war crosses and one cross of the Legion of Honor.

The first Red Cross victim of the war was Mlle. Susanne Gilles, who fell at Luneville with her chest torn by the fragments of a shell that burst inside the hospital ward where she was attending wounded. The next was Mlle. Cagnard, at Cambrai, who is declared to have been shot point blank by a Prussian soldier firing into the hospital through the window. During the bombardment of Rheims seven women of the Red Cross became victims of the bombardment, including Mme. Fontaine-Faudier, Mlle. Causse and five Sisters of Charity.

Very many of these nurses are from the best families in France who never were accustomed to work. They give their time, and in many instances pay sums of money for the privilege of serving in their country's cause.

SELECTED ARTICLES

TREATMENT OF NERVOUS DISORDERS.

(Selected)*

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REGULAR attendance for some months at one of the large hospitals for nervous diseases has induced in the writer certain reflections which it is here endeavoured to put forth.

Treatment in such institutions seems to be devoted far more to diagnosis than to cure. What is meant is that the painstaking attention to the minutest detail, and the accuracy of inductive reasoning which is exhibited in the making of a diagnosis, is by no means so much in evidence when the question of treatment is under consideration. A house physician at one of these hospitals, when asked what he thought of the treatment, summed his opinion up thus: "Everything is syphilitic; and, if it is not, you cannot do anything." This was, of course, an overstatement of what obtains, but there is a modicum of truth in his dictum.

For purposes of discussion, nervous diseases may be divided into three classes, viz., those in which there is a structural change, functional cases where there is no obvious structural change, and mixed cases.

In the first class, the most interesting are those which are characterized by sclerosis. The routine treatment consists of rest in bed, massage, electricity, salvarsan and mercury, often even if the Wassermann reaction be negative, and so on.

In considering whether these usual methods, whose success is mostly temporary, constitute all that can be done, it behoves us to review similar morbid processes in other organs with the treatment in those cases adopted. Further, we have to note the results of those treatments, and to see whether, having regard to the greater vulnerability of the nervous system, the application of similar methods to it would be likely to be followed by better results than are at present obtainable.

Analogy from the causes of sclerotic changes in other organs would point to similar changes in the nervous system having also a toxæmic or micro-organismal origin. A large number of nervous disorders are already acknowledged to have such a source. To mention some—neuritis, anterior poliomyelitis, myelitis, cerebrospinal meningitis, chorea, Lan-

* Medical Press and Circular, March 1st, 1916.

dry's paralysis, subacute combined degeneration of the cord, cerebral and spinal syphilis, general paralysis, and locomotor ataxy. For convincing proof of the bacterial genesis of brain and cord affections, reference should be made to the work of Drs. Orr and Rows, published in 1914 in the "Proceedings of the Royal Society of Medicine," and also in *Brain*. In these papers the investigators not only proved the fact, but they also showed the paths of infection of the nervous system from such diverse septic foci as carcinoma of the tongue, erysipelas of the face, bed sores, psoas abscess, and cystitis. They further formulated the laws which govern such infections—as, for instance, that "the locality of the lesion in the spinal cord always corresponds with the nerve supply of the infected focus."

That very great improvement can be obtained when the cause is syphilitic by rigorous anti-syphilitic remedies suggests that anti-toxic principles applied in cases due to other causative organisms would be likely to be followed by similar good results.

We know that from the earliest moments of our existence to its termination we are continually subjected to its termination we are continually subjected to the attacks of micro-organisms, and that our health and life depend on a successful defence. As long as our defensive arrangements are effective we are free from the assaults of the enemy. But at various times, and for various reasons, our defence breaks down, and one or more of the allied forces obtain a local foothold, or a general occupation. Those who study the diseases treated at baths and spas know how common it is to find there local footholds, or septic foci, existing all unsuspected by their hosts, who go for treatment for quite different reasons. One need only instance arthritis. In this disease it is a very common experience to cure the complaint solely by treatment directed to the local septic focus. Such foci may be found in the mouth, in the posterior nasal space, in the maxillary sinuses, in a bronchial catarrh, in the ear, in the big bowel, in the gall ducts, in the kidneys—and, in fact, almost everywhere.

Now if such comparatively coarse structures as joints should thus be affected and destroyed by low-grade septic organisms, it is obvious that it is more than likely that the more delicate nervous centres would also be liable to be a prey to similar attacks. With the evidence which we have of the effects produced by the spirochæte, the proposition has surely only to be suggested to be at once accepted. Therefore it is contended that in all cases of nervous disease, the preliminary to all treatments should be a thorough search for, and cure of, all septic foci.

This search is not at all unnecessary even if the syphilitic origin of the complaint be admitted. It is gradually coming to be recognized

that the symptoms known as syphilitic may now be divided into two classes, viz., syphilis, *pur et simple*, and syphilis plus sepsis. It is, therefore, just as important to detect the septic foci in this disease as in any other. Consider how much improvement is effected in many syphilitic conditions of the nervous system, and consider also how much more might possibly be accomplished if the other causes of infection were at the same time removed. Syphilis, in fact, predisposes to other septic infections, just as any other invading organism does. It follows, then, that chronic sepsis of any kind is apt to be a mixed one, and the failure of treatment directed against any one, may be due to others being undetected and unattacked. So that the perfect cure of oral sepsis, discovered in a sufferer from disseminated sclerosis, if it be not followed by amelioration of the symptoms, does not necessary prove that the principle of that treatment was wrong, but only that it was not the source or not the whole source of the disease in question.

In books on nervous diseases, the cause of sclerotic conditions is given in a very indefinite manner as due to possible congenital conditions, or as following fevers, injury, etc. They mention in the same indefinite manner the possibility of a toxin, but when they come to treatment the same round of rest, massage, electricity, etc., is given. This is just the same course which used to be prescribed for arthritis at the Spas, before the Spa physician recognized the *rôle* of sepsis in its causation. It was long before this view gained general acceptance, and no doubt it will be long before similar acceptance is granted to the idea of the septic cause of sclerotic nervous conditions. But as President Wilson has said, "principles are eternal," and that which causes sclerotic changes in kidneys, liver and lungs, must also be the cause of sclerotic conditions in the nervous system.

It should be mentioned that just as the use of rest, massage and electricity in nerve complaints is followed by temporary improvement, the same temporary result is obtained in arthritis. Since the use in addition of treatment, directed against the toxic elements of the disease, has become more common, far better results and many more cures are obtained. These cases are constantly being reported in current medical literature.

In fact the more one considers the matter the more one discovers how the condition of sepsis pervades the whole field of medicine. The late Mr. Labouchere was fond of saying that "medicine was mostly a matter of aperients." In so far as that the intestinal tract is a large source of sepsis, this opinion is correct. Examples crowd into one's mind of common experience corroborating this view. The well-being experienced after a suitable aperient is simply a case of increased effi-

ciency from the removal of toxins. A doctor who suffered from attacks of cardiac irregularity, often lasting for months, consulted various specialists without experiencing relief. On one occasion when the condition had existed for four months, a general practitioner told him that he only required an intestinal disinfectant in the shape of a dose or two of calomel. This cured him at once, and he now informs me that a grain of calomel will always remove the symptoms in a few hours. He can obtain similar results, though not so quickly, by abstaining from food, drinking large quantities of water, and taking walking exercise. In either case his cure is conducted on sound bacteriological principles.

In cases of epilepsy, the routine continuous administrations of bromides to control the attacks is merely an instance of treating a symptom without attacking the cause. The writer is entirely convinced that far better results free from injurious effects are to be obtained by other means. Just as the doctor's heart above-mentioned is peculiarly susceptible to toxins manufactured in his alimentary canal, so are the nerve centres in epileptics peculiarly susceptible to similar intestinal bacterial results. The treatment then consists not so much in controlling the symptoms as in attacking the source. Strict intestinal antisepsis by diet and drugs, and regulation of the general health by fresh air, exercise and suitable diet so as to conduce to the normal and efficient action of the whole body, is not only theoretically right, but practically is now in many quarters admitted to give the best results. It may be objected that if the attacks of epilepsy are due to intestinal toxins, how is it that a regularly acting cause produces an intermittent result? Why, for instance, does an epileptic seizure end, and how do you on that theory explain *petit mal*? The answer would be, that just as the doctor in the heart case can cure the uncomfortable action of his cardiac irregularity by exercise, so does nature in a fit work off the excess of toxins by the violent muscular work performed in an epileptic seizure. The recovery from *petit mal* represents nothing more than the ebb and flow of the battle between the opposing forces of the bacterial toxins on the one hand, and the defensive forces of the body on the other. If one watches the procession of epileptic patients at an out-patient department for these cases, one is struck with the aspect of chronic toxæmia which characterizes them all from the youngest upwards. The conditions of epilepsy and convulsions in children have much in common. In the latter the toxic conditions have long been admitted. Whoever thinks of treating them by bromide alone if at all? Calomel or other antiseptic aperient is always the sheet anchor of treatment, followed by strict dietetic instructions. How seldom are such methods adopted in at any rate the out-patient department treatment of epilepsy? To what is the

success of epileptic colonies due, if not to the effect which a life directed to general conditions of health has on the intestinal functions? It is unfortunate that the colonies are only used for those advanced cases where the "habit of epilepsy" has become confirmed, a point to which we will return later on.

In most nervous diseases a septic element can be found, and indeed the number of such conditions being admitted to the category is constantly being increased. Neurasthenia has at last been admitted, grudgingly by some, in a whole-hearted manner by others. The result of partial or complete admission by the physician in charge is represented by the treatment which he adopts. Who believing entirely in the toxic cause treats the condition by electricity as their main weapon of attack? If one were formulating principles for treatment of nerve diseases, the first would be "Search for a septic element," and it would be to this element that treatment would be primarily directed. Not of course solely, for few cases are as simple as that. Most cases are instances of vicious circles, and other points in the circumference demand attention if the war is not to be too prolonged.

The symptom of *petit mal* and the ebb and flow of the battle, has its counterpart in many other nervous conditions. Many such notoriously exhibit stages of progression and periods of comparative calm. This again is only to be expected, and is to be explained by an increase or diminution in, or absorption of, toxic material. Especially would one expect this in the case of intestinal sources, where the conditions fluctuate more than in most other foci. In disseminated sclerosis, such periods of increase with remissions and improvement are quite the rule, and there is accumulating evidence of the septic origin of this complaint. The writer has under his care a case which commenced after an attack of colitis contracted in Egypt. Even after two years, a vaccine made from the faeces brought about such an improvement that the patient, who previously was quite unable to move a step, could in a few weeks with one hand on a bath chair manage to walk a mile. Other cases may be found in the medical journals of recent years. For instance, Dr. Bolton, of Nottingham, records a case of disseminated sclerosis where the well-established symptoms, which had existed for six years, were almost entirely removed by antiseptic measures applied to the septic focus, in this case a chronic atrophic rhinitis. He says that "under the antiseptic nasal treatment her walking powers improved, and she gained control over the sphincters. Three years later the nose still receives attention, but nothing is done for the spine. The sphincters give no trouble, walking is still improving, and she is able to perform all her ordinary duties without difficulty. Apparently the cause has

been found and kept under control and the disease checked." In another case of disseminated sclerosis recorded by Dr. Lyon Smith, treated by a vaccine made from the cerebrospinal fluid, the improvement is mentioned as most striking. In *THE LANCET* of September 5th, 1914, Mr. White Robertson in discussing the paths of infection in streptococcal fibrositis from oral sepsis, says that Morse-key paralysis, telegraphist's, writer's and typewriter's ramps, are all instances of streptococcal fibrosites. He insists that the toxæmia has got in its work, as it always does, at the point of overstrain or injury or prolonged fatigue.

If one admits that in the cases so far mentioned there is a septic element, one is tempted to inquire whether this principle obtains in the realm of psychiatry. From an attack of the "blues" cured with a simple dose of calomel, one is led to view melancholia as an exaggerated "blue," but requiring more detailed anti-toxic or anti-bacterial remedies. No one treats insanity without consistent removal of intestinal bacterial products—in other words, without great attention to the daily evacuations. Like the epileptics, most cases of mental disorder present evidences of aspect, colour, odour, perverted secretions, etc., showing the presence of a toxæmic condition. The improvement of the mental condition moves *pari passu* with the improvement in all these matters. So convinced is Mr. White Robertson of this, that in the article above quoted he gives his opinion that all cases in mental hospitals should be thoroughly examined by X-rays and bismuth meals. The road to success in many of these conditions lies in a liberal dietary, which not only enables the weakened and poisoned nervous system to be renovated, but, stimulating nutrition generally, aids in removing toxins from the tissues—and, what is even more important, it prevents intestinal stasis by leaving a large residue which promotes efficient evacuations.

Many cases are known to the writer of melancholia with delusions which have been cured by a course of vaccines after other methods had failed. Two ladies who had had prolonged courses at Harrogate, amongst other therapeutic measures, were cured by the removal of their pyorrhœas by vaccines combined with local surgical measures. A case now under treatment has complete relief for nearly a fortnight after each inoculation, and the interval of relief is gradually lengthening. It is not for a moment contended that for such cases as these spa treatment is unsuitable. On the contrary, as the writer pointed out in his Presidential address in 1912 at the Balneological Section of the R.S.M., spa treatments are eminently useful in all septic conditions when administered in conformance with the principles of bacteriology. In the above cases the failure of the spa treatment was due to the measures being solely directed to the removal of toxins without efficiently removing the

source of the supply in these cases of pyorrhœa. With cases of mania, it may be inquired why they often get well, and also why they often relapse. Text-books on mental diseases note the fact, but ignore the reason. Surely the explanation is the same? A patient recovers if—and only if—he can, with or without assistance, deal with the toxic cause, in just the same way as one recovers or not from an infectious fever. If that be so, how much more likely is recovery to take place should treatment be adopted in conformity with this principle?

The success of treatment by hypnotism and suggestion is in part due to the ease with which it cures constipation. All those who practise psychotherapy know that this part of the treatment can, at any rate, be secured with reasonable certainty, and that it will be followed at once by such improvement in the general condition, that confidence in the method on the part of the patient and his friends will be early assured. So that here again by attacking a source of poisoning, benefit is gained. It is not often, however, though as in the two cases of mental depression alluded to, it was so, that the septic element constitutes the whole cause of the complaint. One may add another principle to the rules which should guide us in managing nervous disorders, viz., "That in every case of nervous disease there may be a mental element," and that, "A diseased condition, if sustained long enough, produces a habit which is apt to remain long after the cause is removed." The habit is psychical, and the flaw is central, not necessarily peripheral. Many examples might be given. For instance, a man has a painful disease or injury of his leg. The limb is removed by amputation, he does not lose his pain, but still feels it in the amputated part. Surgeons, in trying to cure this condition by further operations on the scar, know how unsatisfactory such operations are apt to be. Really such success as attends their efforts is due to suggestion, *i.e.*, to the strong expectation of relief on the part of the patient. Any practitioner of psycho-therapy knows he can obtain better results by suggestive methods. How otherwise explain the immediate cure of lameness with instant discarding of crutches, which attends the forcible movements of diseased joints to the sound of a brass band by travelling quacks? The explanation is that first a joint becomes painful. The patient finds that by fixing the joint by muscular action, the pain is relieved or removed. At first the least relaxation induces discomfort. This is experienced often enough to induce a mental habit, soon transferred from the conscious to the subconscious mind, by which the joint is kept fixed without the intervention of the conscious attention. The joint under this rest treatment becomes cured, but the fixation being now in the hands of the subconscious mind, remains. Suggestion is the means of dealing with the sub-

conscious mind. All the paraphernalia of brass band, forcible movement, the pile of discarded crutches, the insistent assurance of relief, are but means of exciting the expectant attention necessary for cure. Cures of similar cases are effected in a less theatrical manner by medical practitioners every day, notably at the spas. There the balneo-therapeutic measures carried out create the mental atmosphere required to produce the necessary change in the sub-conscious mind. The frequency with which various neuralgias, headaches, ties, and other pains are removed by psycho-therapeutic means alone, proves that they were existing after the cause had gone.

Another principle should be mentioned—viz., that in organic diseases of the nervous system the functional disturbance generally extends further than the direct influence of the organic lesion justifies. For instance, "in cases of apoplexy, the lesion acts on adjacent parts like shock, setting up functional disturbance." (Bernheim.) It is well known how a hemiplegic's powers may be improved months after the attack by exercises, and by methods of encouragement which in essence act on the principle of suggestion. We cannot make destroyed nerve elements anew, but we can call up activity in those which were only functionally out of gear. In fact we can remove the habit remaining after the cause has disappeared. Charcot was alluding to the same condition when he said that hysteria and disseminated sclerosis often existed together, because he found that he could remove by suggestion many of the symptoms of this disease. The removable symptoms he considered as due to hysteria, though it is obvious that a "habit" acquired in a progressive period of the disease, reinforced as time goes on by auto-suggestion, constitutes the right explanation. Nicoll, in urging the use of hypnotism and suggestion in the treatment of organic nervous complaints, draws attention to the same point, using paralysis agitans as an example. He points out that patients suffering from this disease are unable to walk properly, or fall when they attempt to get about. One fall suffices to make the patient even more insecure and causes a want of confidence which soon becomes a habit, still further diminishing his powers of locomotion. The writer has observed the same thing in cases of locomotor ataxy. In one case a patient, well able to walk about, gave up after a fall all attempts to use his legs for ambulatory purposes. There are, then, sound reasons for using suggestion in organic nervous complaints. But there is more to be gained by this method of treatment than simple removal of the unnecessary mental concomitants of the disease. In many organic diseases the path of impulses from the centre to the periphery may be interrupted, but there are often alternative routes which are capable of adoption if only the necessary means

be used. Suggestion offers a powerful but harmless means of doing this. Frankel's method of treating ataxia is an attempt to restore the voluntary co-ordination of certain movements by making special uses of the sense of sight. There is no question here of doing away with morbid anatomical changes in the spinal cord, but only of finding an alternative means. Lloyd Tuckey has observed the severe pains in a case of tabes dorsalis disappear under treatment by hypnotic suggestion, and the common experience of the relief of the pain of cancer by such means are all illustrations of the underlying principles, and urgently call for its more extended use in cases of organic disease.

What is here maintained is well illustrated in the case of epileptic attacks. Dr. Campbell Thomson, in his recent book on "Diseases of the Nervous System," says many patients find out for themselves that they can frequently ward off an attack by force of will, and that this power should be encouraged. He suggests that the moment a fit threatens, the patient should clench his teeth and grasp something tightly, preferably his own arm. He says that in many instances the discharge can in this way be avoided. Here is a good illustration of treatment by increasing the strength of the conscious mind, and also an illustration of an appeal to the sub-conscious. In no case would such treatment be successful in warding off a convulsion from a poisonous dose of strychnine administered for the first time. In epilepsy the centres have so frequently been stimulated by intestinal poisons that the mind learns the initial symptoms, and though the dose may not be able to cause an explosion when the conscious mind is strongly opposed, these symptoms cause an expectant attitude in the sub-conscious mind, which fibres the mine. If this expectant attitude of the sub-conscious mind can be done away with or lessened by the means Dr. Thomson advises, the fit does not occur. How much more likely, then, is this line of treatment to be useful in epilepsy if the antitoxic treatment be combined with a systematic form of appeal to the sub-conscious mind in the method known as suggestion. In fact, this treatment is so well known to be of use that discussions have arisen as to how suggestion acts in these cases, and as to how best to use it. Some have thought that the benefit arises only from the renovation of the nerve centres in the restful sleeps given by hypnosis. We hope enough has now been said to show that more than this is accomplished. In any case, the fact of its usefulness is undoubted.

Next to the cure of constipation, suggestion probably finds its most frequent opportunities in the cure of insomnia. In this complaint again, the habit is apt to remain long after the cause has gone. These are the cases *par excellence* for the psycho-therapist. Every such practitioner knows that these conditions are among the easiest with which he

has to deal, and that in well-established cases suggestion offers possibilities which are not within the range of any drug treatment. There are many ways in which suggestion may be used for the cure of insomnia without the induction of hypnotic sleep. The writer's routine treatment is to explain to the patient the mechanism of normal sleep, to show how the habit has been broken, and to teach the patient how the habit of sleep may be recovered. This has been summed up for the patient in the following verse, which the patient has to mentally repeat while carrying out the plan:—

“First I must get quite comfy,
Limbs all relaxed and free;
Breathing so calmly, deeply,
Sleep's stealing over me.
Drowsy—so drowsy—drifting
Down into slumber deep,
I feel I am really going—
Going—going—to sleep.”

By this method not only is the patient's attention kept from wandering, but a strong auto-suggestion is added. It very rarely fails.

The writer's intention is not here to teach the practice of suggestion, but only to make out a plea for its more systematic use. When attending the discussions which have been taking place recently in London on the nervous conditions produced by the war, one could not but be struck with the almost universal. Want of knowledge of the practice of suggestion exhibited by the members at the meetings, more especially on the part of those who were most averse to this treatment. This, however, is not to be wondered at when one reflects that England is almost the only country in Europe which has no school for the treatment of hypnotism and suggestion, and no hospital systematically devoted to its use and instruction. Even the physicians who specialize in psycho-therapy seem to have educated their natural gifts in a haphazard manner, and from their remarks it is obvious that their acquaintance with the ordinary text-books is very limited. Here when, owing to the war, there are such numbers of persons requiring this special form of therapeutics (which is supplied by all other combatant nations to their armies) there is an urgent need for the establishment of such an institution.

In conclusion, then, the object of this paper will be attained, firstly, if it be successful in directing more general attention to the septic element present in so many diseased nervous condition, and especially in obtaining recognition of the work of Drs. Orr and Rows in this connec-

tion; secondly, in securing assent to the existence of certain principles which govern the mental side of nerve disorders; and, thirdly, if it helps in the establishment in this country of a school for the study and teaching of psycho-therapeutics, and notably of that branch known under the terms of hypnotism and suggestion.

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SOME PHASES OF THE NEPHRITIS PROBLEM.*

By HENRY A. CHRISTIAN, Harvard University.

IT was Bright who first gave us the stimulus to study diseases of the kidneys by pointing out the relationship of renal disease to certain clinical symptoms. From his day down to the last century practically all of the investigations concerned themselves with the attempt to correlate changes in renal structure, as found post mortem, with the clinical evidences of the disease observed during life. Such studies did not lead very far, for it became evident that there was no very definite structural relation between renal disease and symptoms. Beginning in 1900, this problem was approached experimentally by the production of acute renal changes in animals, and among the earliest results of such experiments was Schlayer's division of renal lesions into tubular and vascular. Schlayer sought to show the relation of each of these types of lesion to definite clinical phenomena. Further work along such lines soon showed that in man the renal lesions which produced definite symptoms were never strictly confined to one or the other of the two types, but that each was present to some degree in every lesion. O'Hare and I reached the conclusion from work on animals and man that there was little relation to be made out between changes in renal structure and renal function.

*Summary of a lecture delivered before the Harvey Society, Academy of Medicine, New York, March 11th, 1916.

Then came the era of study of renal functional changes by following the excretion of certain substances, either normally present in the urine or introduced from without. These included the determination of analyses, urea, water and salt excretion, the excretion of phenolsulphonephthalein, potassium iodide, and lactose, and retention of non-protein nitrogen in the blood. Efforts were also made to induce in experimental animals conditions of chronic nephritis, since the acute ones did not resemble sufficiently closely the common conditions found in man. The most successful method was perhaps that of simultaneously damaging the kidney with uranium nitrate and colon bacilli worked out in our laboratory. This produced a condition closely similar to that found in man, but not identical with it. For the identity to have been satisfactory we should have been able to produce the associated symptoms such as elevated blood pressure, edema, dyspnea, etc. Studies on induced nephritis in animals did lead to one observation of considerable importance to man, namely, the observation that the administration of various diuretic substances always tended to shorten the life of the damaged animal and never seemed to be beneficial. This indicated the need for a reconsideration of the clinical therapeutic use of these diuretic measures, and some remarks on this subject will be made subsequently.

Our attention was then turned to the subject of functional renal tests and their evaluation. Schlayer advocated the use of potassium iodide to determine tubular function and lactose excretion for vascular or glomerular lesions. Our work with these tests convinced us that they were of little use, since in man both tubes and vessels are simultaneously involved. We also found that sodium chloride excretion and nitrogen retention gave very little in the way of definite results in human cases of nephritis. We found that the excretion of both these substances was distributed in most cases of acute nephritis and not, as Vidal reported, that there was a delayed nitrogen excretion with normal salt output. Other cases were found in which there was some degree of salt retention, but these were not cases of nephritis.

Such studies, again, led us to the belief that it is improbable that we can correlate closely the post mortem renal changes with the clinical conditions seen during life, since we did not find any definite relation between function and anatomical change, and since, as we have mentioned, human cases of nephritis do not fall into distinctive functional groups. Functional tests seem, however, to be of service in discovering the presence and extent of renal disturbances rather than the class of lesion.

The most valuable and satisfactory tests are those of rate of excre-

tion of a dye, water, salt, and nitrogen. Of these the phenolsulphenophthalein test is perhaps the best and has the advantages of simplicity and ready applicability without the need of complicated apparatus. Determinations of excretion or retention of water, salt, or nitrogen demand absolute control of diet for longer or shorter periods of time and are therefore often not applicable, particularly in very ill patients. Ambard worked out the laws of excretion of urea and other substances, which have been reduced to a calculable numerical index by McLean. They are of value, but are not readily applicable except under hospital conditions.

Our observations have shown that the several functional tests usually run more or less parallel. For example, where phthalein excretion is defective it is usual to find delayed excretion of salt and nitrogen. As diagnostic methods the tests are of limited value, since where they are indicative of renal disturbance there is usually definite clinical evidence from which a diagnosis can be made with ease and certainty. In very early cases the phthalein excretion is usually nearly normal and the blood nitrogen is not disturbed. In some such cases the dietary tests may show a delay in salt excretion which suggests a nephritis, and there may also be slight albuminuria with some casts and a lowered urea excretion. It is still too early, however, to make any positive statement regarding the relation of such findings to the subsequent development of a chronic nephritis. There is great danger of over enthusiasm. We cannot yet state the relative value of the several tests from a diagnostic point of view.

In prognosis the tests are of much help. By them we can determine with considerable accuracy the degree of renal damage, but are not much aided in the estimation of the probable duration of life. This latter failure of the tests is due in large measure to the fact that most renal lesions progress in an irregular manner with exacerbations and remissions. For the tests to give any help in forecasting rate of progress of the condition they should be repeated at intervals over a long time. It is also necessary to bear in mind that the influence of circulatory disturbances on the results of the tests may be considerable and may lead to errors in estimating the severity and rate of progress of the renal disturbance. There is a great tendency for many physicians to base their conclusions on the results of laboratory tests rather than to weigh the latter in the light of observed clinical evidences. This tendency is strongly manifest in the case of these new renal functional tests and must be guarded against if we are to avoid serious errors. We have not as yet enough information collected for long periods of time to warrant laying much stress on the indications given by these

tests, and we must continue to use judgment based on close clinical observation of the cases. All of the tests should be applied in conjunction with such close clinical scrutiny and the ultimate histological examination of the kidneys in a large number of cases studied for years if we are to reach a correct valuation of the diagnostic or prognostic worth of these two laboratory methods.

These functional tests have a third field of usefulness which is in need of further cultivation. This is their relation to the management of our cases of renal disease. It seems logical to base our dietary regulations on the results of the dietary excretion tests and to restrict the intake of those substances which are faultily excreted or retained in the body. The rationality of such restriction lies in the known value of rest in restoring a disturbed function to a higher level of efficiency. Its rationality is also supported by the empirical restriction of salt and nitrogenous substances which has long been practised with favorable results in many cases. Certainly we know that restriction of salt is beneficial in cases with edema and salt retention. Where there is nitrogen retention the restriction of nitrogen intake has led to improvement, but we do not yet know the degree of such improvement, or whether the function of nitrogen excretion is improved by such rest. In the case of water we know that its restriction is of value in edema, but we need more extensive observations to determine its ultimate value.

In the management of cases there is also the question of the value of the common supposed diuretics. This problem needs much further careful study, but we can state that it is possible to increase the water output in edematous cases with theocin or theobromine sodium salicylate. But in such cases we have met with effective diuresis only when the heart showed some degree of inefficiency. If the renal damage alone is great enough to cause edema, diuretics are generally ineffective so far as increasing water output is concerned. Where we have been able to induce an active diuresis we have observed a period of greater decrease in renal function lasting for a few days after its cessation. We have little evidence that diuretics actually increase the elimination of the hypothetical toxic substances. From our animal experiments and from some observations on man it seems possible that diuretics may actually do harm, and we have little or no means of determining the extent of the harm done. In fact, our knowledge of diuretics is very slight and fragmentary, and apparently our conceptions of their value need extensive revision.—*New York Med. Journal*, March 18th, 1916.

CURRENT MEDICAL LITERATURE

DYSTOCIA DUE TO CONSTRICTED OS.

J. Owen-Jones and Charles E. Morris write to the *British Medical Journal* for January 29, 1916, on a case of constricted os which came under their care. Such cases are extremely rare.

A young woman had suffered from procidentia uteri; the uterus had been ventrofixed by operation, but the procidentia recurred. She became pregnant for the first time, and on a Sunday began to have labor pains. On the following Tuesday the nurse, having been sent for, called the writers in, because she could not find the os uteri, although the globose head appeared to be low in the pelvis. By digital examination the cervix was found completely relaxed, but the os externum could not be felt; inspection through a good speculum, after some considerable search, revealed a very small opening, which would just admit a director. It was decided to administer a suppository containing one half grain of morphine, and await events. After the expiration of twenty-four hours the pains were strong and regular, and the pulse was increasing in frequency; the speculum enabled a three pronged cervical dilator to be inserted into the os; the blades were separated to their limit (one inch), when amniotic fluid, mixed with meconium, escaped in quantity. The os was now, with the greatest possible ease, dilated by a sweeping movement of the finger, and gave way to the full extent in a very few minutes. A dead child was naturally born, the second stage of labor occupying about half an hour.—*New York Med. Jour.*

THE DUCTLESS GLANDS AND ATYPICAL GROWTH.

Seelye W. Little (in *New York Med. Jour.*) says that it is well known that the ductless glands have a great influence on cell growth, on inhibition of cell growth, on cell differentiation or inhibition of the same, with a consequent marked peculiarity in size, shape and development of various organs, or even of the entire individual. The same is true of the remarkably selective action on particular tissues of ductless gland influence. If there were no other evidence, the presumption would be very strong that there might be a similar connection between ductless and what are known in general as pathological "new growths." This presumption, the writer believes, becomes a conviction when one deliberately sets side by side all the facts concerning ductless glands and all the facts concerning such new growths as cancer. He sets down in tabular form the more important significant facts and finds that no fact of either set can disprove the theory, and many offer direct proof in favor of it. Nevertheless some hitherto unknown fact may absolutely disprove what seems not to be certain. Until disproved this theory seems

to the writer the most profitable and hopeful for the physician confronted with the care of a case of inoperable cancer. An argument based on the facts that ductless glands have an influence on cell reproduction, on metabolic functions, and in that matter of cell specialization, leads him to conclude that cancer development is dependent upon failure of some ductless gland or the cells depending upon it. If the theory is true, one ought to find plenty of evidence of it in a cancer patient. This, the writer believes, he finds in an accurate personal and family history of any ten cancer patients taken at random. Finally the author concludes that by exclusion, by reasoning from known facts, and by clinical trial, any case of atypical growth which cannot at present be otherwise explained or otherwise helped, should be treated by ductless gland therapy, since such treatment is by no means mere haphazard guess work. Even with the present equipment is it certain that we have a check and sometimes even a control of the growth called cancer in appropriate ductless glands therapy?—*Medical Record*.

SYPHILIS OF THE STOMACH.

G. M. Niles, Atlanta, Ga. (*Journal A. M. A.*, Feb. 19, 1916), reports a case of syphilis of the stomach in a young man of 28 which he considers of interest on account of the difficulty of differentiation of the condition from cancer of the stomach and illustrating the value of the Wassermann test in these conditions. Syphilis of the stomach is more frequently recognized now than formerly, and Lockwood, in 1913, estimated that there were on record then about fifty cases of gastric syphilis. Nonspecific ulcerative conditions it must be remembered, however, may occur as frequently in syphilitics as in normal persons. It is said the late Hunter McGuire, once said that much of his success was due to the fact that in obscure cases of disease he treated the patient for syphilis, and Niles thinks that many long suffering dyspeptics who have suffered all kinds of treatment without cure might receive benefit from specific treatment for syphilis.

PROPHYLAXIS AND TREATMENT OF SCARLET FEVER.

Chantemesse, in *Bulletin de l'académie de médecine* for December 7, 1915, reports his experiences in a French military hospital with Milne's management in scarlatina. The procedure, which is applied as soon as the diagnosis is made or even if the condition is only suspected, consists in swabbing the tonsils and entire pharynx with a ten per cent.

solution of phenol in oil, and in rubbing oil of eucalyptus quickly over the patient's entire body, including the scalp. The throat swabbing is repeated every three hours, day and night, for the first forty-eight hours, then twice daily for a week longer. The eucalyptus rubbing is carried out twice a day on the first two days, then daily for twenty days, and finally on alternate days up to the thirtieth day. Phenol intoxication, which might occur in small children through ingestion of the oil containing it, is guarded against by keeping a watch over the color of the urine in these little patients. Among thirty-one cases of scarlet fever treated under his supervision, Chantemesse observed no instance of transmission of the disease. The only person who acquired the disease in the hospital was a nurse who received the patients on admission and made the first prophylactic applications to their throats and skin surfaces, and was therefore exposed to the virus before its transmission could be prevented. Beside emphasizing the prophylactic value of Milne's method, Chantemesse praises the latter as a remedial agency. Twenty-seven of his thirty-one cases went through only mild, uncomplicated attacks as a result of the treatment applied, the temperature always dropping to normal within forty-eight hours and complications not appearing. In the remaining four cases fever persisted ten days. These had been admitted only when the eruption had already existed several days and fever was already high. In two the swollen tonsils prevented proper disinfection of the pharynx, in another nephritis pre-existed, and in the fourth intense albuminuria was noted on admission. The only complications observed in the entire series were one instance of otitis media and one of temporary albuminuria, each condition appearing during convalescence, about the thirtieth day of the disease. Rubbing the oil of eucalyptus over the skin at the time of appearance of the eruption was observed, in one case out of ten, to cause itching, which, however, always disappeared permanently within twenty-four hours upon discontinuing the procedure for one day and applying talcum powder. All patients were kept on a milk diet until the twenty-first day.—*New York Med. Jour.*

CHEMICAL THERAPY OF PNEUMONIA.

G. B. Cavazzutti, in *Semana Medica* for December 9, 1915, states that, apart from the symptomatic and supportive treatment of pneumonia, there are now three other methods, serum therapy, vaccine therapy, and chemical therapy. The serums are the anti-pneumococcic and that from convalescents from pneumonia. Of the vaccines, the hap-tinogen of Mendez is giving good results in Argentina. Two new drugs

are of value, of which the first, optochin, in doses of 0.25 gram six times daily by mouth is efficient before hepatization is established. This action sustains Roemer in his contention that the fibrin in the lung protects the pneumococcus from the antiseptic action of medication. The other drug is soziodalic acid, usually administered in the form of the salt of sodium or potassium, in daily doses of 0.05 gram hypodermically. It seems greatly to shorten the disease, frequently bringing about the crisis in twelve to twenty-four hours. Soziodalic acid is a white crystalline solid, soluble in water, containing iodine fifty-four per cent., phenol twenty per cent., and sulphur seven per cent., and combines readily with almost all metals to produce crystalline salts.—*New York Med. Jour.*

SEBORRHEIC ALOPECIA.

When the scalp is red and inflammatory, the following are useful applications:

℞ Liq. carbonis deterg., m. xx.
Acid. hydrocyan. dil., m. v.
Glycerini, m. x.
Aquam rosam, ad ℥i.

or

℞ Liq. plumbi subacet. fort., m. x.
Liq. carb. deterg., m. xv.
Glycerini, m. xxx.
Aquam rosam, ad ℥i.

W. K. Sibley in *The Practitioner and Medical Record*.

USE OF RESORCIN IN SEBORRHEA.

W. K. Sibley says that for alopecia due to this condition resorcinol will generally be found most efficacious in a 2 per cent. solution. It is freely soluble in water, and should be rubbed into the whole scalp once a day. Even in a 2 per cent. solution, especially if it has been made some time, it will have a slight staining effect on fair or white hair. Care must always be taken that no alkaline preparations, such as alkaline soaps, are applied to the scalp, or a considerable dyeing of the hair will ensue; if therefore it is desirable to add an oil to the preparation used, some tincture of soap bark (tinct. quillaïæ) and not an ordinary soap should be used, such as:

℞ Resorcin, gr. x.
Ol. ricini, m. xxx.
Tinct. quillaïæ, m. xv.
Aquam rosam, ad ℥i.

—*The Practitioner and Med. Record.*

SOME OBSERVATIONS ON 600 HEART CASES.

Mark H. Wentworth (*Boston Med. and Surg. Jour.*) writes that between March, 1912, and May, 1914, he assembled at the Boston Dispensary 600 cases of children between the ages of six weeks and fifteen years with one or another form of heart weakness, rheumatism, or chorea. Of the whole series there were but 30 which had rheumatism not followed by a heart disturbance of some sort, and most of these were admissions of comparatively recent date. This series was carefully tabulated with reference to the character of the heart lesion and its etiology. Of all the cases in the series, 270 were apparently caused by rheumatism or tonsillitis, 82 by acute infectious diseases. The etiology was undetermined in 239 cases. The writer finds that children are far more liable to attacks of rheumatism than others, recurring attacks are more frequent in them, and cardiac involvement followed rheumatic infection is more frequent. He doubts the wisdom of always recommending the removal of the tonsils and seldom advocates it except in cases which have had marked recurring attacks, or in which it is evident from the past history that the child is subject to tonsillitis. Two hundred and fifty-seven observations were made on the blood pressure, an effort being made to see how it was influenced by rest, and by rest and tincture of digitalis medication. In the cases in which no drug was used, the patients having simply stated periods of rest and supervision of their hygiene, the effect upon the systolic pressure showed nothing striking, though there was a tendency to a slightly rising pressure. Under the influence of digitalis, which was combined with rest, the results on the systolic pressure showed a much greater and more uniform tendency to rise. The diastolic pressure when treated with digitalis showed much the same readings as when the patients were given rest only. Digitalis should not be used with a free hand or indiscriminately. Its action should be carefully watched. Where no appreciable effect is noted on the pulse, one should examine the heart and general circulation before increasing the dose. In cases showing degeneration of the heart muscle digitalis may be absolutely contraindicated. In cases of tachycardia the writer has found that minute doses of aconite or strychnine may be used to better advantage than digitalis in reducing the accelerated pulse.—*Medical Record.*

THE SOLDIER'S HEART.

James Mackenzie (*Brit. Med. Jour.*), who has charge of an inquiry into disorders of the heart for the medical history of the war, has been

associated with Dr. Wilson and together they have examined 400 cases. They find that 90 per cent. of the cases that have been certified and treated as heart affections were not primarily heart cases, and that the principles applicable to these cases are widely different from those applicable to cases of heart failure. The signs and symptoms in these cases are great vasomotor instability, a sense of fatigue and exhaustion, breathlessness on moderate exertion, more infrequently pain over the region of the heart. The heart's rate is often not increased; in some it is persistently increased. Murmurs, systolic in time and heard in different regions, are frequent, while an increase in size is not at all uncommon. Irritability and depression are frequently noted. This condition is brought on by the strain of life in the trenches or may be the reaction of the heart to toxin. In the treatment of these cases the patients are encouraged to take moderate exercise so long as it gives them pleasure and causes no distress or discomfort, but to stop or slow down as soon as a sense of exhaustion, breathlessness, or pain is experienced. The writer suggests that this view of the nature of the soldier's heart should be communicated to the medical officers, in order that the diagnosis should be in conformity with the actual condition, and in this way prevent the grievous injury that is done to the sick soldier by implanting in his mind the depressing idea that he is suffering from an affection of the heart.—*Medical Record*.

BRONCHOPNEUMONIA IN CHILDREN.

The following non-depressing expectorant is recommended by Marfan (*Med. Press and Circular*):

℞ Ergotin, gr. xv.
Strychnine sulphate, gr. 1/12.
Mucilage, ℥ij.
Distilled water, ℥iv.

M. Dose for infants under six months of age, a teaspoonful twice a day; between six months and a year, three teaspoonsful a day; from 1 to 2 years, four teaspoonsful a day; and above 2 years, five teaspoonsful a day. If there is any diarrhea the following mixture is to be preferred:

℞ Solution of acetate of ammonia, ℥iij.
Tincture of cinnamon, ℥xv.
Infusion of coffee, ℥j.
Syrup of cinchona, ℥ij.

M. Sig.: Four or five teaspoonsful in the 24 hours.—*Medical Record*.

CITRATED WHOLE MILK IN THE FEEDING OF INFANTS.

Eric Pritchard (*Practitioner*, February, 1916) concludes that the citrated whole milk method is physiologically unsound because it allows no latitude for adaptation to the individual digestive, assimilative, metabolic, and secretory activities. It affords little scope for the study of the influence of variations in the diet, and if the principles of percentage feeding are understood, a satisfactory food can be synthesized in a variety of ways to satisfy the physiological requirements of any particular child. Dried milk, if properly modified and of good quality, has all the advantages and few of the disadvantages of so called dairy milk.

Ronald Carter, writing in the same journal, obtains much better results by abandoning all routine methods and concentrating on the individual requirements. He found the citrated milk most useful in wasted infants.—*New York Med. Jour.*

TREATMENT OF MYOCARDITIS.

James M. Anders, in the *Pennsylvania Medical Journal* for January, 1916, states that in the treatment of chronic myocarditis, prophylactic measures are of great importance. During the stage of compensation gentle exercise is allowed. The diet should be regulated, and cases which are clearly dependent on lues should have mercury and salvarsan. In the stage of insufficiency, absolute rest is essential. Stimulants may have to be used. In these cases digitalis of little value. Morphine and heroine, in combination with salts, are advisable. A prescription which is of value is:

℞ Strychninegr. 1/40;
Caffeine citrategr. ij;
Sparteine sulphategr. 1/4.

Venesection may have to be performed in excessive hypertension with the danger of apoplexy.—*New York Med. Jour.*

THE ALLEN TREATMENT OF DIABETES.

J. T. Halsey, in the *New Orleans Medical and Surgical Journal* for February, discusses in detail the Allen treatment of diabetes, which is in a number of particulars, as our readers are aware, a radical departure from that which in recent years has been generally approved and accepted as the best. The chief and most important features of this treatment are:

1. Inauguration of treatment by a period of absolute fasting, lasting ordinarily from one to four or five days, in extreme cases for ten days.

2. Underfeeding, i.e., giving much less than is ordinarily considered an adequate ration, for a period of variable length following that of absolute fasting.

3. Determination of individual tolerance for carbohydrates and proteins, as well as for fats which in general have been regarded as harmless or even beneficial in diabetes, whether mild or severe. The degree of tolerance should decide the quantity of these foodstuffs to be permitted.

4. Careful avoidance of an increase of weight unless the patient is decidedly underweight.

The advantages alleged for demonstrated are: More rapid and certain abolition of the glycosuria and of its cause, the glycemia. More rapid and more successful building up of the carbohydrate tolerance, in other words, of the ability to oxidize carbohydrates. Prompt and complete relief of the acidosis or acidemia, and as a result prevention of, or, if present, the clearing up of diabetic coma.—*New York Med. Jour.*

SYPHILIS IN NEUROLOGY.

Dr. Joseph Collins concludes his paper in the *N. Y. Medical Journal* of 26th February, as follows:—

Occurrence.—Syphilis of the nervous system displays itself not infrequently in the guise of practically every disease of that most vital part of the body.

Symptoms.—The symptoms of syphilis of the nervous system are in many instances neither pathognomonic nor suggestive. They are often indefinite and inconclusive. Objective symptoms particularly are lacking. Multiplicity of symptoms is not the rule, it is the exception.

Diagnosis.—The diagnosis cannot be made in the majority of instances from consideration of the symptoms alone. Information obtained from study of the blood serum and cerebrospinal fluid, substantiated by repeated examination and corroborated by others working with different technic is absolutely trustworthy and of more diagnostic value than the clinical evidence.

Prognosis.—These disorders, apparently unrelated to syphilis, and usually unsuspected, are of good prognosis, unlike the syphilitic nervous diseases that have progressed to the production of pathognomonic objective symptoms.

Treatment must be of the disease and the patient—for the former salvarsan and mercury; for the latter consideration and encouragement.

TRENCH FEVER.

Incapable of learning by experience, the opponents of antityphoid inoculation are still carrying on their agitation against that invaluable method of protecting our troops abroad. One of their less creditable methods of attack has been to insinuate that perhaps the military medical authorities hide cases of enteric fever by falsely returning them under other names. This, at any rate, was the interpretation placed by the Under Secretary of State for War upon a question asked in Parliament on January 20th by Mr. Will Thorne, who wished to know whether "cases bearing the name of paratyphoid fever, trench fever, pyrexia, and other pseudonyms of enteric fever were included in the totals" given for enteric fever.

It is, perhaps, too much to expect that members of Parliament should follow closely the rapid progress of scientific medicine, but they ought surely to be on their guard against falling into such a trap as this and being made a means of not only diffusing information manifestly incorrect but of spreading an odious insinuation. The great value of antityphoid inoculation has been shown again and again—most recently in a reply by Mr. Tennant to Mr. Thorne in the House of Commons on January 10th—and the fact is so firmly established in this and in other countries as to require no further emphasizing here. Moreover, any one who has taken an intelligent interest in the statistics of sickness in the British army in Flanders, not to mention India, ought surely to have been aware that the disease called paratyphoid fever is distinct from typhoid fever, and that an attack of one does not protect from the other, so that inoculation for the one could not be expected to prevent the other.

With regard to trench fever, however, the belief that it is a form of typhoid has been until quite lately more difficult to combat, because it is only now that the identity of trench fever as a separate disease has been established. By a coincidence, at the very time when Mr. Thorne was asking his question the paper published in this issue by McNee, Renshaw, and Brunt, officers serving in the R.A.M.C. in France, was on its way to us, for it came into our hands on January 25th. Their investigation shows that trench fever is a distinct specific fever of relapsing type not due to any virus previously known. The relapses may be one or

several in number; in either case the characteristic symptoms are headache and pain in the legs and the small of the back.

Trench fever, they find, may be transmitted to others by intravenous or intramuscular injections of the blood as a whole, but not by the plasma or serum alone, whether this be filtered or not. These observations, taken together, prove that the virus is not a "filter passer," and also that it is probably contained within the leucocytes or red blood cells themselves. Not being a "filter passer," it seemed reasonable to expect that the germ, whatever it might be, would be of sufficient size to be detected microscopically, but, though the authors have examined many blood films at all stages of the disease, no parasite of any sort has so far been detected. Punctate basophilia in the red cells is the only abnormal change that has been noted in the cases. The present position with regard to trench fever is, then, in some respects analogous to that with regard to typhus, as recent researches have shown that the virus in this instance also is not a filter passer, and that the injection of blood will produce the disease in monkeys. From time to time different bacilli have been claimed to be the cause of typhus, but so far none has been generally accepted. It is interesting, however, to note that both typhus and relapsing fever are spread by lice, and it is possible that trench fever is another louse-borne disease. The fact that the disease has occurred only among men who have actually lived in or near the trenches or men constantly in contact with sick and wounded men from the firing line—that is to say, men of the Royal Army Medical Corps—is suggestive.

It is difficult to see how the virus of the disease can get from the blood of one man to another unless it is carried by an insect. Further research might include the possibility of the germ existing in the saliva, urine, and other excretions, and we have no doubt that in the course of the investigation other means of trying to cultivate it than those apparently hitherto employed will be tried; it is possible that it may be an organism that does not grow in bile salt broth. Some protozoa will live and thrive in the water of condensation of haemoglobin agar, and delicate bacteria will grow and multiply on its surface readily as well.

It is clear that the study of this interesting disease has been very difficult, as has been the case with others in which no definite organism can be found by ordinary bacteriological methods, and great credit is due to Captain McNee and his colleague for the great amount of light they have thrown upon an intricate problem. It is a great advance that, as is pointed out by Colonel Sir Wilmot Herringham in a note prefacing the article, trench fever can now be defined and isolated from a mass of cases of obscure fevers.

No doubt until clinical suspicions were aroused cases were confounded, not wholly without reason, with such protean disorders or symptoms as influenza, neuritis, myalgia, or even rheumatic fever. It is wholly distinct from enteric fever, though naturally, as Sir Wilmot Herringham justly says, that disease should be suspected until its presence has been disproved where armies in the field are concerned. The fever is still occurring among the British forces in France; and as it is a fruitful source of invaliding, the results of further investigations into its cause and mode of transmission will be awaited with interest.—
British Medical Journal.

TRENCH FEVER.

Capt. J. W. McNee, M.D., Lieut. A. Renshaw, M.D., and Capt. E. H. Brunt, M.D., concluded their article in the *British Medical Journal* on Trench Fever in the following terms:—

1. The disease is a definite entity, and of infective nature, as is proved by its ready transmission from one person to another by the blood.

2. There are two clinical types of the disease: (a) A short fever of about a week's duration, followed frequently after a few days by a short single relapse; (b) a longer illness characterized above all by the number, sharpness, and periodicity of the relapses.

3. The symptoms of both types are clinically identical, the most constant and characteristic being headache, and pain in the legs and small of the back.

4. The two types described are, in our opinion, merely varieties of one and the same disease. In addition to the identity of symptoms, the experimental evidence for this is strong, a typical "short" variety having been shown capable of giving rise to a typical "long" one.

5. The incubation period varies, possibly with the dose of the infective virus introduced. The shortest incubation period in our experimental transmission was six days, and the longest twenty-two days.

6. The disease is transmissible in every case by the whole blood, whether injected intravenously or intramuscularly.

7. The disease is not transmissible by the serum. In the one instance in which the serum proved infective, haemolysis of corpuscles had occurred before injection.

8. It follows as a corollary to the preceding statement that the virus is not a "filter passer" in the serum, as we thought from analogy that it might be. All our experiments with filtered serum were negative.

9. The plasma was infective in one experiment, but haemolysis of red cells had occurred, so that the plasma was haemoglobin-tinted. The filtered plasma in another test was not infective.

10. The above results seemed to point to the virus being contained *within the blood corpuscles themselves*, whether leucocytes or red cells.

11. Blood corpuscles, after washing five times in saline to remove the plasma, were still found to be infective. This further supports our view that the virus is intracorpuseular.

12. Very many blood films at all stages of the disease have been examined without a parasite being detected. The blood has been examined fresh, under dark-ground illumination, and dried films have been stained in varying ways, without result.

13. Blood corpuscles were broken down, and the haemoglobin-tinted fluid passed through a filter in an attempt to prove the virus an ultra-microscopic one confined to the corpuscles. The fluid when injected, however, was not found to be infective.

14. The only constant morphological change in the blood is the presence of punctuate basophilia. This was so marked in some cases as to require very careful investigation to differentiate it from an intracellular parasite. The blood counts, differential and ordinary, did not yield any important results.

15. As regards the means by which the disease is transmitted in nature we have as yet no evidence to offer. The fact that only two classes of men are affected—those from the trench zone and men of the Royal Army Medical Corps—is, however, suggestive. The disease is either contagious from man to man or, what seems much more likely, is carried by one of the common flies or parasites found in the trenches. During the past summer lice, mosquitoes, midges, and flies of other kinds have all been common in the Flanders war zone.

We wish to express our thanks to all officers of the Royal Army Medical Corps who have helped so much in this investigation, and especially to Surgeon-General Porter, Colonel Sir William Leishmann, Colonel Sir Wilmot Herringham, Lieutenant-Colonel W. P. Peake, Captain G. W. Andrew, and Captain Vick.

THE TREATMENT OF ABDOMINAL WOUNDS.

Professor Quénu has subjected to a critical analysis 62 cases of this kind, evacuated from the front to the Hôpital Cochin and the Val-de-Grâ. In a report to the *Société de Chirurgie* in June, 1915, he discussed the relative chances afforded in these cases by abstention and by

operation. Out of a total of 217 cases reported since the beginning of the war, that had not been subjected to operation, there was a mortality of 78 per cent. In September, another series of 53 cases was reported, in which the mortality was 54 per cent. From different sources he obtained a total of 375 cases not operated on, in which the mortality amounted to 80 per cent. Quénu points out the figures lack something in accuracy, for some of the wounds shown as penetrating wounds of the abdomen were, in all probability, only parietal wounds. The point is to settle what should be understood by the term penetrating wound. He considers that, obviously, this term should only be applied to wounds which have opened the peritoneal cavity, just a penetrating wound of a joint implies a wound which has actually opened up the joint. A wound confined to the kidney, the rectum, or to the extra-peritoneal parts of the colon is, therefore, not a penetrating wound. Confusion has arisen between the terms, deep and penetrating, in reporting these cases.

Quénu suggests the following nomenclature for wounds of the abdomen. The two main divisions are penetrating wounds and non-penetrating wounds.

Non-penetrating wounds	{	Parietal	
		Visceral	
	{	Simple	
Penetrating wounds	{	Uni-visceral	{
			Liver
			Stomach
			Spleen
			Small or large intestine,
			etc.
		Multi-visceral	{
			Liver and stomach
			Liver and colon
			Small and large intestine
			Colon and kidney, etc.

One of the first problems to be solved is how to distinguish a penetrating from a non-penetrating wound. Can this be done by the symptoms of abdominal reaction or by the situation of the wound or wounds?

Quénu agrees with the surgeons at the front that the early symptoms are often not definite enough to determine whether the peritoneum has or has not been involved. In some cases, the clinical picture leaves no doubt. In others, the belly, when examined directly or very shortly after the injury, remains supple and slightly, or not at all, painful. Usually, a total or partial contraction rapidly comes on, but even this contraction, accompanied, or not, with vomiting, may be observed in

non-penetrating wounds, which run deeply in the abdominal parietes, and have infected it, giving rise to symptoms of peritonitis by nearness.

The situation of the wounds is of importance. A distinction must be drawn between cases with two wounds, one of entry and one of exit, and with only one wound, the projectile having remained in the tissues. In the case of two wounds, it would seem quite easy to reconstruct the track of the bullet and deduce from that the fact of penetration. If they are close together, there is every reason to suppose the wound is tangential, and purely parietal. If both are on the same side of the belly, but at some distance apart, so that the line joining them forms the chord of the arc of a wide circle, penetration has most probably occurred, although that is not invariably the case. A comparatively slowly moving projectile, such as shrapnel, a fragment of shell or bomb, is easily deflected in its course by the costal cartilage, or a thick and contracted muscular wall, so that, in spite of appearance, the wound remains tangential. In one case reported, a piece of shell had entered one finger's breadth to the right of the middle line in front on a level with the costal margin, and had come out four fingers' breadth to the right of the middle line behind. The two wounds were almost at the ends of the antero-posterior diameter of the belly, but the track, when opened up, was outside the peritoneum.

When only one wound is present, it is very difficult to arrive at any conclusion without the help of radiography. Generally speaking a wound near the navel or the iliac fossa is more likely to be penetrating than one in the flank.

In his analysis of cases, Quénu was able to avail himself of the various methods of examination, and was helped to some extent, in classifying his observations, by the characters of the later stages of the lesions. The nature of the discharge from the wound gives some indication, but even with this mistakes may arise. Fæcal smelling pus may come from an abscess in the neighbourhood of the intestines, without having any actual communication, whilst fæcal matter may be escaping from an extra-peritoneal wound of the large intestine. It must be remembered, too, that a wound which is non-penetrating, in the first instance, may become penetrating at a later stage, owing to the breaking down of a contusion.

All these and other methods of investigation, including operations, in the 62 cases under analysis showed 28 were non-penetrating, of which 25 were parietal and 3 visceral. In 9 there were two wounds, and in 16 only one. One of the former and 9 of the latter had been returned as penetrating wounds, while 3 were purely thoracic wounds, with an

abdominal wound of entry. The original diagnosis was, therefore, proved to have been incorrect in more than half the number of cases. The visceral wounds affected the colon, 1 being primary and 2 secondary.

Of 27 penetrating wounds, 9 were simple, and 19 had involved viscera. The latter comprise 1 wound of the stomach, not operated on, which recovered, 3 of the small intestine, all operated on early, with recovery; 5 of the large intestines, with 2 deaths; 2, with probable perforation of intestines, in which fatal peritonitis had supervened during transport; and 8 wounds of the liver, of which 5 were operated on, and all recovered.

In 7 of the 62 cases, the data obtained were few and uncertain, so that these have been classed as doubtful.

As the result of his observations in these cases, Quénu comes to the following conclusions:—

1. The wounded men sent back from the front with abdominal wounds, and who recovered without operation were, in nearly half the cases, at least, 28 out of 62, suffering from non-penetrating wounds.

2. The majority of those who had a simple penetrating wound presented an omental hernia in the wound when operated on. Had it been possible, it would have been better to have operated at once on these cases at the front.

3. The penetrating wounds of viscera, which healed spontaneously, were reduced to a very small number, 6. Of these, 1 was an hypothetical wound of the stomach, 3 were wounds of the liver, with a track some distance from the hilum, and 2 were of the large intestine, with a track at the side and behind.

4. These special conditions of the wounds of the liver and of the large intestine, which healed spontaneous, must be remembered when the question of indications for operating is under consideration.

5. The observations, which have been carried out as impartially as possible, seem to bring forward an argument, indirect but important, in favour of the case for intervention.—*Revue de Chirurgie*, November, 1915.) *Practitioner*, London, March, 1916.

PERSONAL AND NEWS ITEMS

Dr. E. H. Young, formerly of Rockwood Hospital for the Insane, Kingston, has been appointed assistant superintendent of the Asylum for the Insane, London.

Dr. W. K. Ross, of the Asylum at London, has been transferred to the Rockwood Hospital, Kingston.

Dr. C. A. Temple, of Toronto, has been appointed medical officer to the 8th Artillery Brigade, with the rank of Captain.

Dr. G. C. Heyd, son of Mr. L. F. Heyd, barrister of Toronto, has been appointed Professor of Surgical Anatomy in the New York Post Graduate Medical School.

Dr. Johnson, of Grand Harbour, N.B., has removed to the West, and Dr. Weldon, of Mace's Bay, has taken over his practice.

Dr. Lewis Hunt, formerly of Halifax, has been elected Mayor of Richmond, England.

All will be pleased to learn that Dr. Murray MacLaren, of St. John, N.B., has had the honor of C.M.G. conferred upon him. Dr. MacLaren has long been connected with military affairs, and since the outbreak of the present war has been specially active. He is commanding officer of No. 1 Canadian General Hospital.

The American College of Surgeons has secured from its fellows an endowment fund of \$500,000. The interest is to be used in furtherance of the objects of the college. The college is not a teaching body, but hopes to raise the surgical standard, and seeks to co-operate with medical colleges.

The British Red Cross and St. John Ambulance have been working together through a joint committee. Up to the 20th October, 1915, the expenditures amounted to \$8,211,355. Of this sum, \$2,232,000 was expended on motor ambulance cars.

Four ambulance trains have been provided in France by the Red Cross Society at a cost of \$220,000. Ambulance launches have been provided for service in the Mediterranean and Persian Gulf.

The Toronto General Hospital has inaugurated a clinic for the treatment of contact cases of tuberculosis, and a second one for venereal diseases.

The by-laws proposing aid to the Berlin and Waterloo Hospital, and to the Stratford Hospital were defeated.

Dr. A. B. Rutherford, of Owen Sound, has been appointed acting medical officer during the absence of Captain Murray on active service.

Dr. John L. Todd, of Montreal, has been elected a Fellow of the Royal Colonial Institute. He is in France with the McGill Hospital.

Drs. Noel, Camerand and Ethier, of Sherbrooke, interviewed Premier Gouin to the effect that the medical bureau at Sherbrooke be empowered to open a dissecting laboratory in that city. Careful consideration of the matter was promised.

The Medicine Hat General Hospital last year treated 1,458 patients. The average daily cost was \$1.21.

The members of the Civil Service at Victoria have decided to furnish a ward, to be named the Sir Richard McBride ward, in the Royal Jubilee Hospital.

Dr. Fort, of Wolhachin, has been appointed medical superintendent of the Mission Hospital at Lytton.

Messrs. A. Davis and Sons, of Kingston, have donated \$1,000 to Queen's Medical Faculty, to equip 40 beds in the Queen's Hospital at Cairo, Egypt.

The jury that heard the trial on the death of Mr. German drew the attention of the Government of British Columbia to the fact the Christian Scientists were practising for gain.

Dr. Daniel Phelan, attending physician and surgeon for many years to the Penitentiary at Kingston, has retired, and has been granted a good pension.

Dr. W. T. Connell will have charge of Medicine, and Dr. R. Hanly of Surgery at the institution.

Sir James Grant and Lady Grant celebrated on 22nd January the diamond wedding anniversary. Sir James was born in Scotland in 1836.

Dr. William Oldright, so long and favorably known in Toronto, is residing at 1,057 Shore Avenue, Chicago.

Dr. J. P. Macdonald, of Huntsville, has been appointed medical officer to the 127 Battalion of Muskoka.

Dr. W. C. Cosbie has been appointed medical officer to the 58th Battalion at Bramshott Camp, England.

Dr. George Rennie, of Hamilton, has been appointed assistant director of medical services at Dover, England. He has been raised to the rank of Colonel.

Dr. D. W. McPherson, of Toronto, with the rank of Lieut.-Col., is now in command of the Canadian Convalescent Hospital at Epsom, England.

Dr. D. P. Kapelle, of Hamilton, who has second in command of the 5th Field Ambulance with rank of major, has been raised to the rank of lieutenant-colonel, and been given command of a field ambulance of his own.

Dr. Roberts, Medical Officer of Health for Hamilton, has been relieved from duty for some time on account of ill health. It is hoped he will be able to resume his former duties.

According to latest accounts Dr. Ross, of Kingston, is to be head of the Ontario Hospital at Orpington, with Mr. I. H. Cameron as chief surgeon, and Dr. Graham Chambers, as chief physician.

The Child Betterment Journal, published monthly in Chicago, and edited by G. Frank Lydston, M.D., is making an effort to reduce the number of deaths of children due to the use of poisonous fly destroyers. The effort is worthy of encouragement.

Martin H. Smith Company announce their removal from 105 Chambers Street, New York, to 150-156 Lafayette Street.

A memorial to Florence Nightingale in the crypt of St. Paul's Cathedral was unveiled by the Queen on February 14th. It is placed on the wall of the archway that leads from the tomb of Nelson to that of Wellington. The Archbishop of Canterbury, in addressing Her Majesty, said that the success of Florence Nightingale was due to the fact that to a buoyant faith, a courageous hope, and a large love were added penetrating judgment, potent personal influence, and also unrivalled administrative skill. The memorial, which is of white marble, showing a half-length portrait, is the work of Mr. Walker, the sculptor of the statue unveiled last year in Waterloo Place.

The American Journal of Gastro-Enterology has combined with The Proctologist and hereafter will be published (beginning with the March number, first of year) as The Proctologist and Gastroenterologist, from St. Louis. Dr. Lewis Brinton, Philadelphia, and Dr. Anthony Bassler, New York, will have editorial charge of Gastroenterology; Dr. A. L. Benedict, Buffalo, editor of Dietetics; Dr. Rollin H. Barnes, St. Louis, will be managing editor and publisher.

Mr. Stanley Boyd, whose death was announced in the last number of the journal, was born at Shrewsbury, May 18th, 1856, his parents being Major James Boyd, 86th Regiment, and Emma, daughter of Henry Newton, a burgess of Shrewsbury. He spent his boyhood at St. Heliers, Jersey, where his parents resided, and was educated at a private school there. He came to London in 1872 with an introduction to G. A. Parkes of Netley, by whose advice it is probable he was guided in taking up medicine as a profession. At the time of his death he was senior surgeon to St. Mary's Hospital.

Dr. Henry Leopold Elsner, professor of medicine at Syracuse University, died very suddenly, of heart failure, in Washington, D.C., on February 17. Dr. Elsner was born at Syracuse, N.Y., on August 15, 1855, and after taking his medical degree at the College of Physicians and Surgeons, New York, in 1877, did postgraduate work in Vienna. Returning to his native city in 1880, he became lecturer on clinical medicine in the Medical Department of Syracuse University in 1881, eventually becoming professor of medicine.

Professor Pavlov, whose death in St. Petersburg, where he had so long taught, was announced on February 12th, was not only one of the

greatest physiologists of his day, but is to be numbered amongst the most distinguished men of science that Russia has produced. The work by which he first became generally known related to gastric digestion, and especially to its nervous mechanism.

The American Red Cross has under consideration the sending of another party of Red Cross nurses for service in the prison camps in Russia and Siberia, where, it is said, there is urgent need for further help.

Sleeping sickness is known to have been on the increase among the native population of the West Coast of Africa for at least a hundred and sixty years. The islands of Principe and San Thomé—lying off the Bight of Biafra, colonized mainly from the Gaboon and the Congo, for many years used as an entrepôt for slaves destined for Brazil—both of them Portuguese colonies devoted to the growing of cocoa, have suffered very severely from sleeping sickness during the last forty years.

Rat-bite fever is a specific infectious disorder of rare occurrence following on the bite of a rat. It has been observed in Europe, Asia, and America, but it is commoner in Japan than elsewhere, being called "sokodu" in that country. It has been caused, also, by the bite of a ferret and of a South Africa squirrel. It was first brought into general notice by Miyake in 1899, when he reported eleven cases of his own; it appears that fifty-three cases were reported in 1915, with a single autopsy. In 1914 the bacterial cause of rat-bite fever was isolated for the first time, and named the *Streptothrix muris rattii* by its discoverer, Schottmüller.

The news of the death of Sir William Turner, principal and vice-chancellor of the University of Edinburgh, will be received with a sense of personal loss by thousands of friends and old pupils in every part of the British empire. He was in his 85th year, but had been attending to his university work with his usual alertness and acuteness of mind until about a week ago; he then began to suffer from gastric trouble by which his strength was rapidly exhausted.

We regret to announce the death of Sir Francis Henry Lovell, Dean of the London School of Tropical Medicine, which occurred at his house in Hampstead on January 28th. He was the eldest son of Henry Hill Lovell, D.C.L., of Apsley in Bedfordshire, and was born in 1844. He received his professional education at St. Bartholomew's Hospital, and obtained the diploma of M.R.C.S. in 1865 and that of L.S.A. in 1867. In 1873 he was appointed Colonial surgeon at Sierra Leone, and in 1878 was transferred to Mauritius where he became chief medical officer, president of the General Board of Health and a member of the Legislative Council. In 1893 he was appointed surgeon-general of Trinidad

and Tobago and was a member of the Executive and Legislative Councils. He retired from the Colonial Service in 1901.

The Fifth Annual Conference of the Ontario Health Officers' Association will be held in Convocation Hall of the University of Toronto on Tuesday and Wednesday, May 30th and 31st, 1916.

The first school in the world for the education of tuberculous specialists, plans for which were made by Dr. Edward Livingston Trudeau shortly before his death, will be opened at the Trudeau Sanitarium, Saranac Lake, N.Y., in May next. The new course of study will be essentially postgraduate work for practising physicians, research workers, and advanced students interested in the cure and prevention of tuberculosis by the fresh air treatment. The institution will be equipped with facilities unequalled anywhere for the study of the disease. Special attention will be given to clinical and laboratory diagnosis, the use of the x-ray, and management of institutions.

The plaintiff in a trial in Baltimore recently was awarded \$7,500 for the loss of his sight as the result of drinking whiskey which had been diluted with wood alcohol. The jobber and the saloonkeeper were held jointly responsible for the damages, the testimony showing that the drink had been diluted as claimed and that the victim lost his sight a day or two after he had drunk a part of the two pints purchased.

Dr. William Louis Rodman died on March 8th at his home in Philadelphia, of pneumonia. He was born at Frankfort, Ky., September 7, 1858; obtained the degree of M.A. at the Kentucky Military Institute in 1875, and that of M.D. at Jefferson Medical College, Philadelphia, in 1879. He was President of the American Medical Association in 1915.

The city of Buffalo has appropriated \$600,000 for the establishment of tuberculosis pavilions for advanced cases of tuberculosis in connection with the new Municipal General Hospital. About three hundred beds will be provided.

Dr. Charles F. Bolduan, director of the Bureau of Public Health Education of the Department of Health of the City of New York, has received a letter from Dr. A. K. Chalmers, health officer of Glasgow, Scotland, who said that two shipments of London-made shaving brushes had been received in Glasgow, and that each brush had been found to contain anthrax germs. The health department announces that hereafter all importations of shaving brushes will be thoroughly examined for the presence of the germs.

The New York Association for the Blind has received, by the will of the late Roscoe H. Channing of this city, a bequest of \$25,000, to be known as the Susan Channing Bequest in Aid of the Blind.

By the death of John Wyllie, Emeritus Professor of Medicine and

Clinical Medicine in the University of Edinburgh, which took place at his residence, 44 Charlotte Square, Edinburgh, early on the morning of January 25th, another notable figure has been removed from academic circles in the Scottish metropolis. In the Seventies of the past century there flourished a club known in Edinburgh as the "Round Table," a body remarkable for the high destiny of nearly all its members; the survivors of the nineteen or twenty members of these days now number only four or five, and they mourn the loss they have sustained in John Wyllie's decease. Edinburgh University drew largely upon the Round Table for its Professoriate, as the names of Sir Thomas Fraser, Crum Brown, William Rutherford, John Chiene, Alexander Dickson, and John Wyllie prove; and the extramural school had reason to be proud of many of the others, including Drs. Joseph Bell, Argyll Robertson, Angus Macdonald, Claud Muirhead, Charles E. Underhill, John Duncan, and Blair Cunynghame. Wyllie played his part nobly both in the extramural school and in the university, and did not fall behind any of his companions of the Table Round in the honour he brought to Alma Mater.

The Canadian casualties were announced a short time ago as being 13,961 of which 2,335 were killed outright, 988 died of wounds, and 298 died of sickness, while 9,235 were wounded and 1,012 are reported missing.

Dr. J. L. Wright, who graduated in medicine at Toronto University and went west in 1905 has just joined the colors and has been appointed surgeon-major of the 104 Battalion.

A London cable says: Another compliment to Canada is the offer made by Premier Asquith's sister-in-law, Mrs. Tennant, of Lympne Castle as a Canadian convalescent hospital. Offers have been made to Mrs. Sandford Fleming to transfer her hospital now at Selling, near Canterbury, to Lympne.

Dr. Hastings, Medical Health Officer of Toronto, was ill for a short time, but is now recovering his wonted strength.

Dr. Allan Kinghorn, a Varsity graduate of 1904, and a Toronto boy, has been appointed senior medical officer with the British forces at Abercom, Rhodesia.

Hon. Dr. R. A. Pyne and Mrs. Pyne have returned home from Britain. Dr. Pyne was engaged across the sea for some time in completing arrangements for the opening of the Ontario Hospital.

Dr. Conn, Medical Health Officer of Scarboro Township, was painfully injured at the C.P.R. level crossing at Main Street, as the result of being thrown out of his cutter when the horse took fright and bolted, on 15th March. He sustained a number of severe body bruises and cuts.

Mr. Justice Middleton discharged Dr. Tyrer, who had been found guilty by the judge of performing an illegal operation, on suspended sentence.

The Speakers' Chambers of the Ontario Legislative Buildings was the scene of a brilliant function recently, when a reception was given for the staff of the Ontario Hospital unit.

The teachers of Toronto have equipped a room in the Soldiers' Convalescent Home on College Street with every device for machano-therapy. W. K. George, on behalf of the Military Hospitals Commission, thanked the teachers for their generosity in providing such up-to-date equipment, and said he was told that when they commenced their furnishing of the Knox College Home the teachers intended to do handsomely again. He was sure that the gifts of the teachers were appreciated both by the commission and the men.

The following Canadians practising in the United States have died recently: Dr. H. M. Jewett, Providence, R.I.; Dr. J. F. Kearns, La Junta, Col.; Dr. John Wiley, Fort Fairfield, Maine; Dr. W. Roe, Rochester, N.Y.; Dr. H. L. Foster, Reed City, Mich.; Dr. John E. King, Anamosa, Iowa.; and Dr. James B. Book, Delmit, Mich.

President Poincaré of France opened early in March the hospital for French wounded, presented by the Canadian Government.

Dr. J. B. Jupp, of Woodstock, who went overseas some time ago on active service was ill recently with pneumonia at Folkestone Hospital.

Toronto's death rate for 1915 was 11.7 per 1,000. In 1905 it was 14.1, and has been gradually decreasing since.

The Toronto Medical Health Officer has asked for an appropriation of \$320,000 for his department for this year. Last year the expenditures were \$309,000.

The Ontario Hospital at Orpington was opened on 21st February. It has accommodation for 1,020 beds. The hospital was opened by Hon. Bonar Law, Colonial Secretary. The hospital is located in a beautiful part of the country.

OBITUARY

ALFRED BOULTBEE.

Dr. Boulton was born in Madras, India. He was brought to Toronto when a young boy. He was educated at Upper Canada Col-

lege, and graduated in Medicine from the University of Toronto. He gave up practice about ten years ago. He is survived by his widow and four children. He was in the forty-seventh year of his age.

THOMAS W. SPARROW.

Dr. Sparrow died in Toronto recently at the age of 83. He had resided in Toronto for thirty-eight year. He received his early education at the Guelph Grammar School, and his medical course at the Physio-Medical College, Cleveland, Ohio. He did active service during the American civil war.

HARRY ROBERT FRANK.

Dr. Frank, of Brantford, Ontario, died at his home last December, aged 44. He was a graduate from Trinity University in the year 1894.

JAMES I. GLENDENNING.

Dr. Glendenning, of Streetsville, died there on 2nd December, at the age of 60. He was a graduate of Toronto and Victoria in the class of 1880.

JAMES S. NIVEN.

Dr. Niven died at his home in London, Ontario, on January 25th. He was in his 69th year. He was a graduate from Ireland. His son is Major Niven of the Princess Patricia Regiment.

HENRY BRYDGES YATES.

Dr. Yates was born in Montreal in 1865. He was educated in England and graduated in Arts from Cambridge in 1888. He then returned to Montreal and graduated in Medicine from McGill in 1893. He joined the Canadian Army Medical Corps, and was with the McGill Hospital. He was raised to the rank of Lieut.-Colonel. He was taken ill with a severe cold which caused his death. During his service in France he held several very important positions.

JAMES NOEL BARRY.

Dr. Barry, of Montreal, died there of pneumonia on 12th January. He was a graduate of Laval University, and was in his fifty-eighth year. He leaves a widow and eight children.

R. W. BRUCE SMITH.

Dr. R. W. Bruce Smith, Inspector of Prisons and Public Charities, and a physician of wide reputation, particularly in connection with the treatment of mental diseases, passed away at his home, in Toronto, on March 28th. Dr. Bruce Smith had been ill for about a year with heart trouble, but recently his condition had seemed to improve and the news of his death came as a shock to his colleagues in the Provincial service, and to the wide circle of his friends.

The late Dr. Bruce Smith had been Inspector of Prisons and Charities for about twelve years, but before accepting that post he was recognized as a specialist in nervous and mental diseases, and was retained as an alienist in many noted legal cases. He first practised medicine at Sparta, Ont., after having graduated from Victoria and Toronto Universities. He moved from Sparta to Seaforth and after some years there, was in 1894 appointed physician to the Hamilton Asylum. Later he became assistant superintendent of the asylum at Brockville, where he demonstrated his ability so thoroughly that the post of Inspector of Prisons and Public Charities for Ontario was offered him. Dr. Bruce Smith entered upon his new work just a year before the Ross Government went out of power, but Hon. W. J. Hanna upon taking over the control of the Provincial Secretary's Department was equally appreciative of his subordinate's value and during the years following when Hon. Mr. Hanna worked out the reform of the public institutions of the province he was given valuable assistance by Dr. Bruce Smith.

In 1894 he had the honour of being elected president of the Ontario Medical Association. He was also a vice-president of the Canadian Medical Association, a member of the British Medical Association and a fellow of the British Gynaecological Association.

 BOOK REVIEWS

PHYSICAL DIAGNOSIS.

Physical Diagnosis. By John C. DaCosta, Jr., M.D., Assistant Professor of Medicine, Jefferson Medical College, Philadelphia. Third Edition, Thoroughly Revised. Octavo of 589 pages with 243 original illustrations. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, \$3.50 net. Canadian Agents: J. F. Hartz and Company, Toronto.

For the busy physician this is an excellent book, because it is not too bulky, and because it is so thoroughly reliable. We have gone over this volume with much care, and can recommend it very cordially. The

various systems are taken up in regular order, and the methods of examinations fully set forth, with the findings in each case. The author has had a large clinical experience, and has also been a careful student. He makes use of his knowledge to produce a really valuable and readable book. He has the faculty of being able states his views in clear language. The work is well illustrated, and is got up in a very attractive form.

PROGRESSIVE MEDICINE.

A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., and Lughton F. Appleman, M.D., March 1, 1916. Lea and Febiger, New York and Philadelphia. Price, \$6.00 per annum in paper.

This number contains surgery of the head and neck by C. H. Frasier, M.D.; Surgery of the Thorax, by G. P. Müller, M.D.; Infectious Diseases, by John Ruhräh, M.D.; Diseases of Children, by F. M. Crandall, M.D.; Rhinology and Laryngology, by G. B. Wood, M.D., and Otology, by T. L. Saunders, M.D. It is a real pleasure to again review Progressive Medicine. The articles are worthy of unstinted praise. This volume is particularly valuable, covering as it does so many important subjects.

TEXT-BOOK ON THE PATHOGENIC BACTERIA AND PROTOZOA.

Pathogenic Bacteria and Protozoa for Students of Medicine and Physicians. By Joseph McFarland, M.D., Professor of Pathology and Bacteriology in the Medico-Chirurgical College, Philadelphia. Eighth Edition, Thoroughly revised. Octavo of 807 pages with 323 illustrations, a number of them in colors. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, \$4.00 net. The J. F. Hartz Company, Toronto, Canadian Agents.

About the highest praise that could be accorded a book is that has attained to its eighth edition in the few years that have passed since the first edition appeared. It needs no words of ours to state that the author is known to be an authority of very high standing on the subject matter of this book. For the student of bacteria this is an ideal work. Nothing is omitted, and everything is so well said. The volume is fully illustrated, and many of the plates are in colors. The work is of special value on account of the valuable information it contains regarding infections and their method of spreading. Congratulations to both author and publishers.

THE OPHTHALMOSCOPE.

The Description of an Ophthalmoscope, being an English Translation of Von Hehnholtz's "Beschreibung eines Augeuspiegels," Berlin, 1851. By Thomas Hall Shasted, A.B., A.M., M.D., LL.B., F.A.C.S., Superior, Wisconsin; and the First Translation of this Classic into any Language. Chicago: The Cleveland Press, 1916.

It will prove a decided pleasure and boon to the medical press to have this classic of Von Hehnholtz translated into English. The valuable work of Hehnholtz is known all over the world; but this book enables those who cannot read the German to have access to the original. The book is an octavo one of thirty-three pages. It is beautifully illustrated. The paper and binding are of the best. It is a real pleasure to review this book and to recommend it.

THE CLINICS OF JOHN B. MURPHY, M.D.

The Clinics of John B. Murphy, M.D., at Mercy Hospital, Chicago. Volume V Number I (February, 1916). Octavo of 194 pages, 33 Illustrations. Philadelphia and London: W. B. Saunders Company, 1916. Published Bi-Monthly. Price, per year: Paper, \$8.00. Cloth, \$12.00.

No. 1 of volume 5 is now to hand. This excellent series of clinics is a most valuable one for the surgeon. The reports of the cases are both complete and thorough. Each number is well illustrated. Dr. Murphy is doing a real service by the publication of the experiences derived from his wealth of clinical material.

CENTRAL INDIANA HOSPITAL FOR INSANE.

The Sixty-Seventh Annual Report of the Board of Trustees of the Indiana Hospital for the Insane, Indianapolis, 1915. Wm. B. Burford, Indianapolis, Printer and Publisher.

This report gives an account of the work of the institution during the year 1915. The value of the property is given as \$2,071,032. The number of patients treated during the year was 2,000, and at the end of the year there were resident 1,687. The report shows that for the district served there is one insane to every 538 of the population.

FOREST PROTECTION.

The Commission of Conservation, Canada, compiled under the direction of Clyde Leavitt, M.Sc.F., Chief Forester to the Commission, and C. D. Howe, Ph.D., and J. H. White, B.A., B.Sc.F. Printed by Wm. Briggs, Toronto, 1915.

This volume sets forth the steps that have been taken by the Government of Canada, through the Commission of Conservation, for the protection of the Canadian forests. Most valuable services have been rendered to the country. It is now being realized what a valuable asset our spruce, pine and other timber forest have come to be. The government does well to continue the commission.

MISCELLANEOUS

BRITISH CASUALTIES.

On January 27th the Prime Minister furnished the following statistics of the casualties in all fields of operations down to January 9th. The total is 21,240 in excess of that given by the Prime Minister for the casualties to December 9th, 1915. The number of killed shows an increase of 8,215, and of wounded 14,525; the number of missing shows a decrease of 1,500. The figures are as follows:

<i>France.</i>		
Killed	5,318	82,130
Wounded	10,217	248,990
Missing	1,691	52,344
Total	17,046	383,464
400,510		
<i>Dardanelles.</i>		
Killed	1,745	26,455
Wounded	3,143	74,952
Missing	353	10,901
Total	5,241	112,308
117,549		
<i>Other Theatres.</i>		
Killed	918	11,752
Wounded	816	15,165
Missing	101	2,656
Total	1,835	29,573
31,408		
<i>Grand Total.</i>		
Killed	128,138	
Wounded	353,283	
Missing	68,046	
		549,467

FREE VACCINE, ETC.

In the Legislature recently Hon. W. J. Hanna, in moving the second reading of a bill to amend the Public Health Act, made particular reference to the free supply of biological products by the Provincial Board of Health. He stated that in one item alone, that of antitoxin vaccine, the Province had provided free of charge for 300,000 Canadian soldiers. The biological products were now being furnished free of cost to the people in the Province and the medical profession. He quoted from a resolution passed by the Academy of Medicine at Toronto com-

mending what the Provincial Board of Health was doing in this respect, saying it merited and received the warm approval of the Academy.

It is provided in one section of the bill that any person who sells publicly or privately any of the biological products offered by the board shall incur a penalty of \$100, and in default of payment shall be liable to imprisonment for a period of three months.

DR. BODDY'S EXPERIENCES IN NISH.

Dr. Edmund Boddy, of Rochester, N.Y., recently arrived at the Hague, from Serbia, coming by way of Bulgaria, Roumania, Austro-Hungary and Germany.

Dr. Boddy went out in August, 1915, as a sanitary expert to the Serbian Government. He found himself the only surgeon left in Nish when the Serbians quitted the city. Thousands of wounded from Leskovatz, in the south, and Pirot, in the east, poured into Nish simultaneously, and Dr. Boddy, with three American nurses, took charge of three hospitals. He did not change his clothes for five weeks, and was so emaciated from overwork that he required an additional photograph for the passports owing to his changed appearance.

For his work Dr. Boddy received the thanks of the Bulgarian army authorities.

EXAMPLES OF HEROISM AMONG NURSES.

Recently four nurses were cited in the French Army General Orders for exceptional devotion to duty.

A 15½-inch shell burst within 30 feet of Mme. Juliette Perdon, while she was caring for wounded at Villers during its bombardment. She continued waiting upon the sick and wounded and declined to leave the hospital until every person had been taken out safely.

Mme. De Sain Martin, a nun, remained at Senlis during the occupation by the Germans. She nursed the German wounded and went through the streets of Senlis in peril of her life to obtain the aid of a German military surgeon.

Mme. Carpentier, Superior of the Convent at Senlis, remained there during the occupation and was able by her courageous attitude to protect all those under her authority.

Mme. Octavie Malahieude, another nun, remained in Senlis during the occupation. She engaged in service among the hospital patients afflicted with contagious diseases. She has worked every day since without having had a single day's rest.

MEDICAL PREPARATIONS

NEW YORK PHARMACEUTICAL CO.

Medicine and law are alike in this respect, that neither can be thoroughly established. Good laws cannot be enacted on the spur of the moment; they represent the gradual growth of a social habit or custom, so that by the time the law is ready to be enacted by a legislative body it has already become a practical law among the community.

The same thing is true of a remedy. Medicine comes and medicine goes, but only those based upon logic and having proved their therapeutic efficiency by the incontrovertible evidence of clinicians continue to live and grow in popularity. Such a product is Hayden's Viburnum Compound. Its reputation rests upon a half century of actual testing at the bedside and in the physician's office, and its reliability is as dependable as that of a law which has been operating in a community for a long time.

THE STORM ABDOMINAL SUPPORTER.

A very useful little booklet has recently been published by Katherine L. Storm, M.D., Philadelphia. The booklet describes supports of service in several abdominal conditions, also the directions for measurement. For further particulars readers are referred to the advertising section of this issue.

ARTIFICIAL LIMBS.

The Winkley Artificial Limb Co., of Minneapolis, Minn., (manufacturers to the United States Government) manufacture artificial limbs that are very highly recommended by physicians and surgeons, upon request they will send their new illustrated catalogue to any physician or surgeon.

GLYCO-THYMOLINE.

Messrs. Kress & Owen, manufacturers of Glyco-Thymoline, have decided to drop all medical advertising, owing to the high cost of material used in their product since the war. This is done rather than increase the cost of Glyco-Thymoline to the consumer.

JAMUM COMPOUND IN DIABETES.

Regarding this modern strictly ethical product now widely used in the treatment of diabetes literature will be sent to members of the medical profession upon request. The National Drug and Chemical Company are the wholesale distributing agents for Canada.