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EDITORIAL

HOSPITAL NEEDS IN FRANCE.

Most of us knew that the need for hospital supplies in France was very great, but few realized how very great it was until Dr. L. E. Brown-Landone visited Toronto a couple of weeks ago. He spoke with authority, as he came from the scene of action in the northeast of France.

He accentuated the extreme need that exists for such articles as iodine, chloroform, bandages, antiseptics, and surgical instruments. The whole region from Calais to Havre was almost one continuous hospital system, and there were in it 65 hospital centres. He said that in this region there would be cared for a quarter of a million wounded and sick soldiers. If these men could be properly cared for their convalescence would be hastened and the death rate much reduced. These men are the best type of soldiers, as they are the seasoned veteran, and are of greater value than the new recruit.

It was pointed out that France was doing her best, but there was so much to be done that she could not overtake it all. This made any form of help from other countries very welcome. One of the urgent requirements of the day was more nurses. There were hospitals with as many as 500 cases and not a single trained nurse. This was due to the fact that there were so many wounded that there were not a sufficient number of nurses to go round.

Dr. Brown-Landone said that Britain was doing her full share, but the demands on her vessels for the transportation of food to her own troops and the Belgians, and the conveying home of the wounded were so numerous that she could not always forward nurses, ambulances and supplies for the hospitals. Many motor ambulances were in Britain ready to go to France, but for the foregoing reason could not find transportation.

Another feature that was adding to the burden of the hospitals in

France was that the Germans were being steadily driven back. This forced them to leave their wounded behind them to be cared for by France. In the midst of this terrible effort France was showing a remarkable degree of firmness and determination. Some had thought that her people would show, at first, a great outburst of enthusiasm and then subside and take defeat. The very opposite has been the case.

The needs of the day there are supplies, doctors and nurses. There is no doubt but that this country will do her full duty. There is much in the form of supplies that could be sent on to the front and will be sent. The demand for skilled treatment of such a large number of sick and wounded is also urgent. From this country could go many well-trained and competent nurses. These could render a service of the utmost value at this time. The surgeon, too, is needed.

The surgeon skilled our wounds to heal Is more than armies to the nation's weal.

And of the nurse:

Hers was the task of applying soothing balm, And raising him from his bed of pain.

Already a start has been made. The Women's Patriotic League has made arrangements to send, early in February, a consignment of bandages and surgical dressings. The league is asking for donations to assist in this work. The Toronto Academy of Medicine has also acted and appointed a committee consisting of Drs. N. A. Powell, E. E. King, A. A. Macdonald, H. J. Hamilton and C. L. Starr, to organize an effort to secure needed articles. It was suggested by Dr. R. A. Reeve that an effort be made to enlist the co-operation of the profession throughout the Province. Instruments would be a very useful gift.

Since writing the above there seems to have been some doubt east upon the standing of Dr. Brown-Landone.

THE BELGIAN DOCTORS' RELIEF FUND.

The country that gave the medical profession Andreas Vesalius should not now be forgotten in her hour of need. "It is a friend, indeed, runs out into the storm to shake a hand with us." The doctors of Belgium are passing through their storm, and we should not hesitate to "run out into the storm" for the purpose of rendering them what aid we can.

The great Hippocratic Oath lays this obligation on us all. We are bound to charge no doctor for help we render him, and not to withhold our hand if he is in need. But the profession of Canada will not be found wanting. Already a committee has been formed. No doubt local branch committees will be called into existence, that will reach all parts of the country and all members of the profession.

The Belgian doctors are driven from their homes. In many instances the members of their families are separated, and their whereabout is unknown to each other. All this has come upon them because the Belgian people resisted the robber that entered their homes. Just the other day Van Gehuchten, the noted Belgian doctor and scientist, of Louvain, died at Cambridge, where he came to carry on his work. A few days before his death he was informed that both his town and country homes had been utterly destroyed. With great fortitude he tried to conceal his emotions.

He helps twice who helps promptly. The medical profession throughout the world should be one grand brotherhood. In times of peace each shares with the other the benefit of his discoveries. There are no secrets of progress held back. In times like these there should be a sharing with those in distress. The old cry of the Macedonian is heard in the land—"Come over and help us."

The lot of the Canadian doctor is often hard enough. He has to toil in lonely places and at lonely hours, and his rewards financially may be meagre enough. But compared with that of the Belgian doctor at the present moment, it is a veritable paradise. Our own lot will be made all the happier for having taken a part in lifting some of the present crushing sorrow and distress from the shoulders of our confréres in Belgium. Recall a case such as this: A doctor is practically barefoot in the winter, his wife is taken ill by the roadside, and his children are scattered to the four winds; And this is not fancy, but truth.

What one, or two, or three could not do, the whole profession of Canada can do. Already Britain is at work and the medical men in the United States, too. The hundred thousand medical men in the United States, the sixty thousand in Britain, and the ten thousand in Canada have now the greatest opportunity that has ever been vouchsafed the sons of Assculapius to show that they belong to a noble profession.

In the speech of Portia we have these words:

The quality of mercy is not strained; It droppeth as the gentle rain from heaven Upon the place beneath; it is twice blessed; It blesseth him that gives and him that takes.

Few conceptions of the true gift is finer than that found in Lowell's vision of Sir Launfal:

Not what you give, but what you share, For the gift without the giver is bare; Who gives himself with his alms feeds three: Himself, his hungering neighbor, and Me.

We feel that, in proportion to its numbers, the medical men of Canada will not fall behind those of the United States or Britain.

PATENT MEDICINES.

It has been felt for some time that a greater degree of supervision should be had over patent medicines than has pertained in the past. Hitherto these medicines have been looked after in several departments. It is now the intention to have one department for their oversight. This will nable those in charge of the new department to exercise much greater care and to investigate their contents with greatre thoroughness.

Many of these preparations contain large amounts of alcohol and drugs that must be regarded as dangerous. In future a much stricter registration will be enforced. All preparations in future must be registered, and not one preparation by a manufacturer who may place a number on the market.

In case of preparations containing dangerous drugs, the contents have to be registered; but in the case of other patient medicines little supervision was exercised. But there are many instances of preparations that do not contain dangerous drugs in the meaning of the Act, and yet in large doses might be injurious. The new regulations will bring all these preparations under much closer observation.

The Dominion analyst will have ample authority to examine any preparation, and place upon its sale such conditions as may be deemed wise. All this must do good. This country has been exploited for many years in the interest of those who claimed to have wonderful cures for incurable diseases. All this fraudulent setting forth of claims should be made to cease.

ALCOHOL AND LONGEVITY.

Mr. Arthur Hunter, a well-known American actuary, has tabulated the experience of forty-three companies, covering 2,000,000 lives, on the effects of the consumption of alcohol. His findings are of very great value. In this investigation alcohol proves to be a frequent cause of death.

One group contains those who at some time in the past had drank to excess, but who at the time of taking out their policies were of steady habits. This group yielded 289 deaths, whereas the expected should have been only 190. This gives an excess mortality of over 50 per cent. This was equal to an average reduction of four years on the lives of these policyholders.

Among those engaged in the various occupations calling for the making or selling of alsoholic liquors the mortality was markedly above the normal, in some instances as high as 70 per cent. extra.

The report goes on to show that if the countries now engaged in war were to abolish the use of alsohol the loss of life due to the war would be made good in ten years by the improved health of the people.

SOME LINGERING FOLLIES.

Some years ago Col. Ingersoll delivered a lecture on "Our Crimes Against Criminals." He emphasized the fact that our methods of dealing with criminals did not tend to make them better, but in the main worse; and that if we treated normal persons as we do our criminals we would make criminals of them.

One can hardly think of anything more stupid than the custom of prohibiting current reading matter being allowed access to prisoners. After a lengthy period of confinement he emerges without knowledge of the world. The same is true of preventing the receipt of letters.

Then, again, one thinks with a shudder of contempt of the practice of making prisoners break stones simply as an act of hard labor, without this labor having any training object in view, or enabling the prisoners in any way to better their own condition when they leave their cells; or that of their families during the terms of imprisonment. It would be so much better to give them useful and profitable labor, deducting their cost of maintenance from what they earn, and accumulating the balance against the day of their discharge; or to be sent to those they ought to be supporting.

If the prisoners of the country could organize for political purposes, members of Parliament would vie with each other to remedy the injustices now done this class. We do not advocate any weak sentimentality in the matter; but we do contend that the main object of the law should be reclamation, and the idea of punishment should be quite secondary. We hope to see better conditions prevail ere long. In this matter Ontario is certainly taking a first place.

FLY POISONOUS PAPERS.

A good deal of attention has been given to the dangers of these papers. They contain poisonous agents and are placed in shallow dishes containing water. Owing to the sweetening material used in the making of these papers they are specially dangerous to children who may eat the papers or drink the liquid from the vessel in which they are placed.

In South Africa these poisonous papers have been interdicted, and

what is said of these poisonous papers can be said of the other poisonous contrivances for the destruction of flies. In the United States there have been many deaths recorded among children who have accidentally partaken of these preparations.

This matter should come before the attention of those who take an interest in child welfare and preventive medicine. Measures should be taken to stop the sale of all fly-destroying preparations. This would work no hardship upon the householder who wishes to do what is possible to arrest the multiplication of flies. There are preparations on the market that are highly efficient and which are not dangerous. These alone should be allowed the market.

THE ONTARIO MEDICAL ASSOCIATION.

The Ontario Medical Association meets this year in Peterboro on May 25, 26, 27 and 28. We be peak for the association a large attendance. Peterboro is a lovely place to visit, and the members of the profession located in the larger cities and in the smaller towns and villages will find an excellent holiday by paying a visit to Peterboro.

Another attraction will be added, in as much as the Provincial Health Association meets in the same place during the same week. Dr. Hall, of Chatham, the president of the latter organization, will extend to all a hearty welcome, and be glad to see all who can attend the Ontario Medical Association also attend the Provincial Health Association.

These associations are worthy of support. Arrangements are in progress to furnish for each gathering an excellent programme. It would be regrettable if the attendance should not be large. While there is much at present to occupy the attention of all of us, we should not overlook our own medical and scientific associations. The Ontario Medical Association has a long and splendid record. Let this meeting be the best in its history.

THE COLLEGE OF PHYSICIANS AND SURGEONS.

The election and appointment of members to the Council of the College of Physicians and Surgeons of Ontario have been held, and this body is now constituted and ready for the transaction of business for another term of four years. The elected members are:

Division No. 1, Dr. G. R. Cruickshank, Windsor; No. 2, Dr. G. M. Brodie, Woodstock; No. 3, Dr. J. MacArthur, London; No. 4, Dr. A. T. Emmerson, Goderich; No. 5, Dr. J. J. Walters, Berlin; No. 6, Dr. S. McCallum, Thornbury; No. 7. Dr. H. S. Griffin, Hamilton; No. 8, Dr.

E. T. Kellum, Niagara Falls; No. 9, Dr. R. H. Arthurs, Sudbury; No. 10, Dr. A. D. Stewart, Fort William; No. 11, Dr. E. E. King; No. 12, Dr. H. J. Hamilton; No. 13, Dr. F. A. Dales, Stouffville; No. 14, Dr. T. W. H. Young, Peterboro; No. 15, Dr. T. S. Farncomb, Trenton; No. 16, Dr. W. Spankie, Wolfe Island; No. 17, Dr. W. E. Crain, Crysler; No. 18, Dr. J. F. Argue, Ottawa.

The following were elected to represent the homoeopathic practitioners: Dr. Henry Becker, Toronto; Dr. E. A. P. Hardy, Toronto; Dr. C. E. Jarvis, London; Dr. G. A. Routledge, Lambeth, and Dr. A. E. Wickens, Hamilton.

The university and college representatives are as follows: Dr. J. M. McCallum, University of Toronto; Dr. E. Ryan, Queen's University, Kingston; Dr. A. J. Johnson, University of Trinity College, Toronto; Dr. Robert Ferguson, Western University, London; Dr. Sir James Grant, University of Ottawa, Ottawa; Dr. W. L. T. Addison, Victoria College, Toronto.

We have no quarrel with the personnel of the Council, but we have with the constitutional right of three of the appointed members to take their seats. We contend that the Universities of Victoria College, Trinity College, and Ottawa have no right to a representative on the Council. Our reason is found in section 6 (1)a of the Ontario Medical Act. This section reads:

"One member to be chosen from each of the universities, colleges and other bodies hereinafter designated, to wit: The University of Toronto, the Queen's University and College, of Kingston, the University of Victoria College, the University of Trinity College, the Royal College of Physicians and Surgeons, Kingston, the Toronto School of Medicine, Trinity Medical School, the Ottawa University, Regiopolis College, the Western University, and of every other university, college, or body in the Province now by law authorized, or which may be hereafter authorized, to grant degrees in medicine and surgery, and which establishes and maintains to the satisfaction of the College of Physicians and Surgeons of Ontario, a medical faculty in connection therewith."

No one can read this section and come to any other conclusion than that the Universities of Ottawa, Victoria and Trinity are not entitled to representatives on the Council. When the Toronto School of Medicine, Trinity Medical School, and the Royal College of Physicians, Kingston, ceased teaching they ceased to be represented. They have entirely gone out of existence. The University of Ottawa never had a medical faculty either of its own or by affiliation, and should never have been recognized in the medical council. In the cases of Victoria and

Trinity Universities they formerly had medical faculties in affiliation and granted medical degrees; but they have given up both these functions years ago.

Note the wording of the section: "Now by law authorized, or which may be hereafter authorized, to grant degrees in medicine and surgery, and which establishes and maintains to the satisfaction of the College of Physicians and Surgeons of Ontario a medical faculty in connection therewith." Could anything be plainer? To be entitled to representation they must do two things—grant degrees in medicine and surgery, and they must establish and maintain a medical faculty. These three named universities do neither now.

Then look further at the language. "Now by law authorized" means those universities named in the Act when passed; whereas, "or which may be hereafter" means those that may be called into existence after the passing of the Act. Both classes of institutions must grant medical degrees and have an active medical faculty. A lawyer paid a big fee might try to read some other meaning into this section, but no one who regards the ordinary meaning of the language used could come to any other conclusion than the one we are now contending for.

If the University of Ottawa established a medical faculty it would be then entitled to representation; but not at present while this power is dormant.

UNIVERSITY APPOINTMENT.

The Chair of Pathological Chemistry in the University of Toronto left vacant by the resignation of Professor J. B. Leathes has been filled by the appointment of Dr. Andrew Hunter, a distinguished graduate of the University of Edinburgh.

Dr. Hunter occupies a prominent position in the scientific world and although a young man has a brilliant record in Europe and America. He was associate with Professor E. A. Schafer for three years and has done a lot of research work. He was associate professor of Biochemistry in Cornell University, Ithaca, New York, and was afterwards appointed biochemist in the United States Public Health Service. He had an appointment, too, in the University of Leeds, where he carried on investigations in Physiological Chemistry.

His recent investigations on the subject of "pellagra" are of great interest and the University is to be congratulated on securing the services of a man of such high type and attainment. It was feared that it would be almost impossible to replace Professor Leathes, as this field is restricted and the choice is limited to a very small number of really capable men.

THE UNIVERSITY OF TORONTO AND LOYALTY.

Of late we have seen in the press many remarks tending to throw doubt upon the loyalty of the University of Toronto. We have also heard many such remarks uttered in a more or less frank and semipublic manner. We are not going into any personal argument, nor do we intend to refer to the proprietary or otherwise of having German teachers in connection with the University. Our readers are quite familiar with the opinions of able legal men, such as Lord Halsbury, on the matter of the employment, by the state or by state institutions, of aliens whose country is at war with us.

We purpose only at this time to enter our protest against the statements that have been made impeaching the loyalty of the University of Toronto. As far back as 1866 the University sent her quota to defend the country against the Fenian Raid, on which occasion they nobly fought and some of them bravely died. From that day there has not been lacking the University Company in the Queen's Own, a regiment which did its full duty in the suppression of the Riel Rebellion in 1885.

On the present occasion we feel confident there is not a disloyal member on the staff in any of the faculties of the University, nor a single student who does not place Canada above all other considerations in this titanic struggle. There is not one regarding whom the words of Shakespeare's character, Hector, could not be said:

Life every man holds, but the brave man Holds honor far more precious dear than life.

Or, so far as King and country are concerned, whose feelings would not find fitting expression in the words found in "As You Like It":

> I will follow thee, To the last gasp, with truth and loyalty.

We have been at some pains to ascertain the truth, and so far as we can discover, the three German professors taught their respective subjects, but not Germanism. We must not lose our heads. Goethe, Schiller and Kant will ever remain among the immortals in the world's literature. If Britain were at war with Italy that would not blot out Dante's star from the firmament of letters. Germany at the present day is cursed because she is led astray by a war party. A hundred years ago France had her war lords in the persons of Napoleon, Ney, Junot, Soult, Murat, Bernadotte and many others. But France had her Racine, Molière, Diderot, LaPlace, DeCartes, to adorn the domain of letters; and we properly love the French language and its glorious literature, notwithstanding that on many a bloody field, as witness Poitiers, Crécy, Agincourt, Waterloo, Britain fought France.

Germany has given the world Wagner in music, Kant in philosophy, Goethe in poetry, Weierstrass in mathematics, Kuhner in philology, and Koch in science. We thank Germany for these gifts and for the noble language these men used. It is a great boon to any man to know that language, and to read the thoughts of these men. Rome had her Marcus Aurelius and her Seneca; but she had also her Nero and Caligula. Russia has had her Peter the Great; but she has also had her Ivan the Terrible. France has had her Henry of Navarre; but she has also been cursed with her Henry XIII. Germany has had her Frederick the Noble; and now she is ruled by tyrants and treaty-breakers.

One hundred years ago the Germans fought with Britons at Waterloo against France for the liberty of Europe. To-day Britons are fighting with the French on the Aisne against the Germans, once more for the liberty of Europe. A university cannot, therefore, be accused of disloyalty because it provides facilities for her students to learn the language Goethe spoke, or to learn the philosophy that Kant taught, not even second to that of Plato.

Because Germany is now under the grip of the influence and teaching of Treitschke, Bernhardi, Buelow, Haekel, Bethmann-Hollweg, and last, but not least, William II., that is no reason for branding the University as disloyal because German is taught. We believe the University from the president down is thoroughly loyal and always has been. The fact that she had on her staff three German professors when the war broke out did not, and could not, have had the slightest influence to make her disloyal. The University has Frenchmen on her staff to teach the French language, and she followed the same course in the case of the German language. Long ago she had Fornieri, an Italian, to teach Italian; but that did not make her disloyal, nor her undergraduates craven-hearted at Ridgeway.

We hope we have heard the end of this cry about the disloyalty of the University. The action of the University in the matter of the German professors was a mere incident that did not in the least affect the heart of the University, nor the blood-stream of loyalty that courses through the veins of teachers and students alike; and furnishes no justification for a cry of disloyalty.

THE RED CROSS OF CANADA.

The Canadian Red Cross has great cause to be proud of its achievements. The cash receipts for 1914 amounted to \$279,291.97, as shown by the statement of the treasurer, Col. the Hon. James Mason. Of this

sum \$168,125 came from the seven provincial and local branches; from sundry donations there came \$73,856, and from Women's Institutes \$26,123.58.

In addition to the large sum of money mentioned, the society has

received clothing and supplies that are valued at \$300,000.

The Red Cross Society has supplied military hospitals at Quebec, Valcartier and Toronto. It has also sent large quantities of needed supplies to hospitals in Britain and France. It has supplied eight motor ambulances for the Canadian contingent, and twelve motor ambulances and one motor kitchen, now at the front.

Disbursements as follows have been made: Coach for hospital train, \$9,234; British Red Cross, \$73,776.85; Clevedon Hospital, \$9,800; Canadian Commissioner for Motors, \$24,675.95; clothing and supplies, \$32,040.60; for London office, \$2,052.27; ambulance, \$7,088, and balances in the hands of the Canadian Commissioners in London, of Lieut.-Col. C. A. Hodgetts, and in the banks of England and Toronto to the amount of \$108,392.48.

There have been shipped to Britain 3,548 packages. In all 733,168 garments have been distributed. Large quantities of food and comforts and medical supplies have been sent to Britain and the Canadian military hospitals. His Royal Highness the Duke of Connaught was present at the annual meeting in Toronto on the afternoon of 22nd January.

RELIEF BELGIAN MEDICAL AND PHARMACAL PROFESSORS.

Dr. H. A. Bruce, \$50; Mr. P. C. Larkin, \$50; Dr. D. J. Gibb Wishart, \$50; Dr. R. A. Reeve, \$25; Dr. K. McIlwraith, \$25; Dr. King Smith, \$10; Dr. Geo. Porter, \$5; Dr. Powell, \$10; Dr. C. A. Warren, \$5; Dr. W. H. Harris, \$25; Dr. R. C. Griffith, \$10; Dr. E. R. Frankish, \$5; Dr. E. R. Hooper, \$5; Dr. J. G. Caven, \$5; Dr. T. A. Davies, \$5; Dr. W. H. B. Aikens, \$25; Dr. Mortimer Lyon, \$5; Dr. Robert Home, \$5; Dr. E. A. P. Hardy, \$5; Dr. A. O. Hastings, \$15; Dr. G. P. Sylvester, \$5: Dr. Gordon Rice, \$5; Dr. Allen Baines, \$10; Dr. A. J. Johnston, \$5; Dr. B. E. McKenzie, \$10; Dr. C. J. Currie, \$5; Dr. C. E. Treble, \$10; Dr. C. S. Hawkins, \$5; Dr. J. H. McConnell, \$15; Dr. F. A. Cleland, \$10; Dr. A. T. McNamara, \$5; Dr. W. J. Defries, \$5; Dr. G. H. Garliner, \$5; Dr. C. W. Clendenan, \$5; Dr. S. Moore, \$5; Dr. J. R. Serson, \$5; Dr. W. A. Burr, \$1; Dr. J. W. Wigham, \$1; Dr. H. R. Holme, \$5; Dr. J. M. Cotton, \$25; Dr. W. A. Cerswell, \$5; Dr. H. J. Hamilton, \$25; Dr. R. T. Noble, \$15; Mrs. Mabel B. Irish, \$15; Dr. R. A. Thomas, \$10; Dr. W. A. Thomas, vaccine to the amount of \$100; Dr. W. H. Moorhouse, \$2.

ORIGINAL CONTRIBUTIONS

THE SURGICAL TREATMENT OF INFANTILE PARALYSIS.*

BY CLARENCE L. STARR, M.D.,

Surgeon, Hospital for Sick Children.

THE question which one must face at the outset in the consideration of this phase of the subject of to-night's discussion is: When does medical treatment end, and surgical treatment begin?

A canvass of the opinion of the majority of surgeons actively treating the results of this terrible malady, will elicit the fact that most of the cases are handed over to the surgeon too late for him to fulfil one of his chief functions, namely, the prevention of deformity. For this reason, the writer would urge that the cases of infantile paralysis should receive surgical attention much earlier than is generally the case, and would suggest that so soon as the temperature returns to normal and all pain has disappeared the case should be consigned to the surgeon. This time in most cases would be about the end of the third week.

1. One's first efforts should be directed to the preservation and restoration of muscle function.

How can this be attained? Massage here plays a very important role. It is possible by systematic and thorough massage to keep up the nutrition in the muscles which are paralyzed, and stimulate any muscle fibres which are active, to greater activity. This massage is preferably done by the parents because it must be continued over very long periods. If a masseuse is employed the apparent progress is so slight, even after long intervals, that the treatment will be discontinued. The results are negative rather than positive. One cannot see very much improvement under the massage treatment, but if it is discontinued the bad results are apparent. What the father and mother lack in scientific methods they will probably make up in faithfulness.

The massage should be started as soon as the pain has disappeared and should be given twice daily for periods of thirty minutes to one hour—depending upon the extent of the lesion. Mr. Robert Jones, of Liverpool, some time ago pointed out that a large number of muscles failed to regain their power, even after restoration of the nerve cells, because they were permanently overstretched. This feature is undoubtedly a factor in the slowness of recovery of some muscles. Therefore it will assist materially in restoration of function of paralyzed

^{*} Read before the Academy of Medicine, Toronto, December 1, 1914.

muscles if they are held relaxed and not allowed to stretch even to their limit.

Two illustrations will suffice to show what is meant. In paralysis of the upper arm, the most important function to recover is the abduction, so one devotes great attention to the possible restoration of the deltoid.

It has been demonstrated that this muscle will recover its power in much shorter time if the arm is held abducted at right angles to the trunk and a special splint is made to hold the arm in this position day and night. This apparatus is removable and the massage is carried on daily during its use.

In paralysis of the lower extremity, the power of the quadriceps is the most important. This also will recover most rapidly if the limb is never allowed to flex at the knee, but is held in a completely extended position.

The easiest method of keeping this position is by means of a caliper splint made like a Thomas knee brace, or a double upright splint reaching to the thigh with no joint at the knee. At night a trough splint should be worn to keep the leg extended.

The writer has seen muscle restoration even after two years of apparent complete paralysis, by this constant relaxation.

With an apparatus of this sort, the patient can walk, and besides being easier to care for, the writer feels certain that the efforts made to walk and use the muscles of locomotion has a stimulating effect on the nerve cells and increases the possibility of their recovery.

What may be said about the much vaunted electrical treatment? Electricity is unfortunately the dernier resort of many members of the profession, and it is used usually by rule of thumb without any definite method in view; hence faradism, galvinism and static electricity are used indiscriminately.

If we are to avoid the possibility of being classed with the charlatans, we must come to some clearer views on the subject of the treatment of infantile paralysis by electricity. One knows that in the bulk of cases of poliomyelitis the muscles lose all response to faradism within a few weeks, and hence it seems absolutely impossible to hope that one would get any benefit after that by the use of faradic current. It is equally well known that the galvanic response very often continues, and it seems reasonable to suppose that a moderate amount of utility might be expected from a slowly interrupted galvanic current. A pendulum device might be attached to a galvanic battery so as to interrupt the current at moderate intervals, and this form of electricity might be used; but in the writer's opinion the time spent in this way might, with greater advantage, be spent in massage.

II. One of the most serious conditions resulting from a very extensive paralysis of a limb is the great degree of atrophy. The atrophy is noticeable not only in the soft structures, but in the bones as well, and this atrophy of bone is noticed in the character of the bony tissue, in the narrowed diameter of the bone, and in the decrease in the length. For this reason, the second point that I would call your attention to is the necessity of attempting to combat the atrophy. As the atrophy is generally one of disuse, it stands to reason here again that the massage will be of distinct benefit. I am sure it is within the experience of many of you to see cases of flail paralysis of one limb, which becomes, in the course of three or four years, short to the extent of as many inches. This is a very serious disability and one which is, in large measure, preventable. It has been the writer's experience to see a similar case alongside the one described above, in which the atrophy has been to a large extent prevented, and the shortening diminished to a very moderate amount. For this reason, even if the entire limb is paralyzed. and all hope is abandoned of regaining muscle power, the massage should still be continued during the growing period to assure reasonable blood supply, and thus hope to prevent such shortening.

III. In the third place, treatment should be directed to the prevention of deformities. These, in the upper extremities, are not very serious, but in the lower extremity may be so severe as to be completely disabling. Comparatively few children affected with anterior poliomyelitis escape without the involvement of one entire extremity. If this happens to be the lower extremity, the most heart-breaking deformities may occur before muscle recovery has reached its limit of improvement.

Starting from above downward, the most constant deformity is fixation and abduction at the thigh. This results from two causes: First, from the fact that the child sits a great deal; the thigh being flexed, this encourages the contraction of the anterior ligaments of the hip. The Tensor fascia femoris muscle and sartorious in the majority of cases escape, and contraction of these muscles materially aids in the flexion and abduction of the thigh. This is a difficult deformity to correct, and for this reason every effort should be made to prevent it. Its prevention is moderately simple. It simply means that a child so afflicted must not be allowed to sit for any length of time. It may be recumbent, or, much better, may be encouraged to lie prone on a hard surface, such as the floor; and it is the writer's practice to tell parents to give such children playthings and picture books on the floor, the child lying on its stomach to play with them. You will readily see how this prevents any flexion contraction at the hips, also makes for the shortening of the hamstrings and permanent flexion at the knee. This contraction of the hamstrings obviously keeps the quadriceps on the stretch

and prevents the possibility of its recovery. The prevention of recurrence of this condition is quite easy. The child must not be allowed to sit with the knee bent; hence should sit on the floor and on a couch rather than in a chair, or, still better, should have a splint applied to prevent flexion in te early stage.

Probably the most crippling of all the deformities to the lower extremity are those connected with the feet, and they are produced through several influences. First, gravity tends to produce toe-drop, and permanent toe-drop allows the calf muscles to contract, giving us a distinct equinus deformity. This relaxation of the calf muscles probably is responsible for the much larger number of cases having active muscles of the calf than active extensors on the front of the leg. To prevent this defect one must keep the foot at right angle to the leg. This may be done by operative means, as suggested by Mr. Robert Jones, of Liverpool, who advocates the excision of an eliptical piece of skin in front of the ankle point of sufficient width, so that when the edges are stitched together they hold the foot fixed at a right angle. It may be argued, of course, that the skin will in course of time stretch again and the deformity recur; but, as a matter of experience, one finds that the relaxation of the extensor muscles, thus produced, often results in the recovery of these muscles before the skin does become stretched.

Th next influence which is to be noted is the lack of balance due to the inequality of muscle pull. For instance, the tibials may not have been paralyzed, or may have recovered early, while the peroneals show no sign of power. This, of course, would result in a varus position from the activity of the tibials unopposed by the peroneals. The reverse of this also might happen—the peroneals being active and the tibials paralyzed, resulting in a valgus deformity. Both of these deformities are hard to prevent absolutely, but with care can be moderately controlled by appropriate splints, if started early.

The remaining deformity is the calcaneus deformity, produced by the active contraction of the extensors unopposed by the paralyzed calf muscles. This can be partially controlled also by elevating the heel of the boot so as to produce a moderate toe-drop.

IV. It happens most frequently that the surgeon is not consulted until the deformities described in the last section hav ealready occurred, so leaving the question of prevention we proceed to a consideration of the correction of deformities.

The flexion at the hip, due to contraction of the structures we have named, is corrected by tenotomy of the tense structures by means of a division of the sartorius at its attachment to the anterior superior spine, and also of the tensor fascia famoris, especially of its anterior portion. After such division, if the child is put on a Bradford frame (simply a frame of gas pipe covered with heavy canvas) which is bowed upward in the middle, it will be quite obvious that a child so placed and fastened on such a frame will have the hips raised to a highre plane than the feet or shoulders, and consequently these previously contracted structures cannot shorten again. After three or four weeks of massage and passive movements, and such suggestions as were spoken of in the preventive treatment, these deformities can be kept from recurring.

Flexions at the knee, if not of long standing, can sometimes be corrected by stretching, and if they have been long continued it will need a tenotomy of the hamstrings. A tenotomy of the internal hamstrings may be done quite safely subcutaneously, but the biceps on the outer side should always be divided by open incision because of the proximity of the external popliteal nerve, which is almost sure to be divided in an attempted subcutaneaus tenotomy.

In order to relieve the pull of the active hamstrings, and to assist the defective quadriceps, transplantation of the biceps into the patella, or into the tendinous portions of the quadriceps where is joins the patella, has been advocated. This will be considered in a later section in detail with the larger subject of the transplantation of tendons.

The correction of the various deformities of the foot may be accomplished by manual stretching of the shortened structures, or, where necessary, by a tenotomy of such shortened structures. It is obvious, of course, that if these deformities are produced by lack of balance of unopposed muscles, these deformities will recur. They may be, to a degree, prevented by the application of plaster of Paris bandage, or such splints as we have spoken of in previous paragraphs. It is in this field that the greatest advance has been made in the last few years by means of operative interference. In order to avoid the long continuance of splints, which need constant attention to keep them efficient, arthrodesis has been advised and widely practised. The object of this type of operation is to produce an ankylosis of an unstable joint, thus giving a firm foundation. It has been performed at the hip, knee, ankle and astraglo-scaphoid points. The writer feels that this type of operation has distinct usefulness, but to a much more limited extent than was at first hoped. In the hip, an ankylosis produced by flattening the upper surface of the head of the femur and mortising it into a similar flattened surface made in the upper surface of the acetabulum. will result in an ankylosis at the hip, thus giving the possibility of balance while all muscles running from the pelvis to the thigh are paralyzed. It is the general opinion of surgeons of any experience in this department of surgery that any ankylozing operation at the knee is inadvisable, as a much more useful limb can be hoped for by means of a

splint with an automatic lock joint at the knee, than can be had by making the limb stiff.

In some deformities of the foot, an ankylosis of the ankle with the foot at right angles, or if the limb is somewhat short, with a slight equinus, will produce a stable foot and enable the patient to get about without apparatus. It is surprising how difficult it is to produce a satisfactory ankylosis, especially in children, and one is constantly finding cases with greater movement after such attempts.

It is quite apparent that arthrodesis can only be affected in children of ten to twelve years of age, and older, because before that time the astragalus is so largely cartilaginous that bony surfaces cannot be approximated without destruction of a very large portion of this bone, and a consequent ill-fitting mortise results. In cases of varus deformity, the removal of the head of the astragalus and the posterior articular surface of the scaphoid, in older children ,will correct the deformity, and by ankylosis then prevent its recurrence.

The possibility of tendon transplanting was first advocated by Nicoladoni, but never received any adequate attention until taken up actively by Lange, of Munich, and following his work a tremendous impetus was given this type of surgery. It also has been long enough in operation for us to be able to draw definite conclusions as to its possibilities, and as one cannot enter into a detailed consideration of all of the types of tendon transference, a general consideration of the principles involved will be taken up.

First, it has been definitely proven that a tendon cannot be transferred and attached to another tendon with any hope of success, because these tendinous attachments unfortunately stretch, and the deformity recurs. Hence it is now recognized that a tendon so transferred must be attached directly to bone through a hole drilled in its substance, or inserted under the periosteum into a groove in the bone. In cases where the tendon is not sufficiently long to reach such attachment, it may be lengthened by a strand of heavy silk.

In the second place it has been demonstrated that it is impossible to hope for any results from a transference of a muscle whose cross section is very much smaller than the one whose function it is to take up. For instance, one cannot transfer an active peronei to the os calcis to take the place of the paralyzed calf muscles, because the weight necessary to be lifted would soon overstretch such muscles and they would cease to functionate.

In the third place, one cannot transfer a muscle whose function is normally diametrically opposed to the one whose place it is to fill. For instance, the transference of one of the peroneal tendons, whose function it is to abduct the foot, to take the place of a tibial, whose function it is to adduct the foot, will result in failure. On the other hand, the transference of the attachment of the extensor longus hallucis from its insertion into the proximal phalanx to the head of the first metatarsal, will prove very satisfactory and result in this muscle acting as a dorsiflexor of the foot instead of the great toe.

For the correction of the calcaneous, or the calcaneo-valgus deformity, the operation of Whitman has proven most satisfactory. This consists of the removal of the entire astragalus by a cresentic incision just below the external malleolus, dividing the peroneal tendon and the external lateral ligaments of the foot. Then, by dislocating the foot to the inside, the astragalus is removed, and the internal lateral ligaments separated from the internal malleolus. This allows the displacement of the whole foot backward, so that the articulation of the lower end of the tibia rests upon the anterior end of the os calcis. This brings the centre of gravity more nearly to the middle of the foot and allows the heel to project backward, the posterior surface of the scaphoid impinging upon the anterior surface of the lower end of the tibia. After this operation the foot is put in plaster of Paris with slight toe-drop and fibrous ankylosis results, giving in the majority of instances a most useful foot.

In the early stage it was found difficult to prevent the silk from cutting out, and this has never been entirely overcome. In other instances, the silk gradually loosened and worked its way to the surface and it had to be removed. It was found by experience—and this point may be found applicable in general surgery as well—that silk of large size simply sterilized by boiling, would extrude itself in nearly all instances, if placed close to the surface. To prevent this, Lange suggested that the silk be boiled in a sublimate solution—1 to 1,000—for half an hour or more, and subsequently boiled in parafin. It has been the writer's experience, that silk thus prepared will stay permanently buried.

One of the most recent advances in the permanent correction of deformities of the feet has been advocated by my associate, Dr. Gallie, and bids fair to revolutionize the treatment of these troublesome deformities. It consists in the fixation of the proximal portion of the tendon of a paralyzed muscle into a groove in the bone sufficiently deep to bury it, the endon and the groove being covered over by the periosteum and fastened by kangaroo suture. This procedure is applicable, of course, only in cases of permanent paralysis, and for this reason would be used only when the muscle had been paralyzed for—say from two to four years. As an illustration of its application, one might consider a case of calcaneous deformity where the calf muscles had been paralyzed sufficiently long to warrant one in feeling that they were

permanently destroyed. Through a long incision on the back of the leg alongside the tendo-achilles, the posterior surface of the tibia is exposed just above the ankle joint. The periosteum is incised longitudinally and raised to the extent of one-quarter of an inch on each side. The periosteum being retracted, a groove is made in the bone sufficiently wide and deep to allow the tendo-achilles to be buried. The foot is placed at a right angle and the tendon drawn sufficiently taut to hold it there and then inserted in the groove, the periosteum being brought over the surface of the tendon and stitched to it. The wound is closed and a plaster dressing applied for two months, when firm fixation of the tendon in this position results. It is quite obvious that with the tendon attached to the os calcis below the ankle joint, and to the tibia above the joint, it must prevent the lowering of the heel completely. The application of this principle to any of the deformities is easily worked out.

V. The last point which the writer wishes to consider is the possibility of restoring function to a limb which is practically a flail, but without deformity, by means of apparatus. The wisdom of the amputation of such a member and the substitution of an artificial limb has been debated on many occasions. The bulk of opinion is against this procedure, as in most instances, no matter how flail-like the limb may be, it still is sufficient to act as a core for the application of what may be considered an artificial limb about this. A long support reaching from the foot to the pelvis may be applied, with a stop joint at the ankle to prevent toe-drop, and an automatic lock joint at the knee, which will enable such a patient to get about very comfortalby.

LEPROSY TREATED WITH RADIUM AND DIATHERMIA.

Dr. C. E. Iredell reports a case, running an active course, where a single exposure to radium for twenty-five minutes led to the complete disappearance of a leprome on the lower lip. Several exposures of the ulnar nerve to radium materially reduced the pain in the region of distribution of this nerve, but much better results were obtained in this respect by the employment of non-coagulating diathermia. This latter method of treatment also gave excellent results in the relief of the intestinal pain which was very severe and persistent in this case. Not only was the intestinal pain relieved for a considerable time after each diathermic treatment, but a most obstinate and painful form of constipation promptly gave way to normal easy exacuations within only a few hours of the treatment. Neither method of treatment, radium or diathermia, seems, however, to have been more than merely symptomatic, and the disease, though somewhat checked, shows no evidence so far of being cured.—Lancet and N. Y. Med. Jour.

CURRENT MEDICAL LITERATURE

MEDICINE

PROBLEMS IN MENTAL PATHOLOGY.

E. Goodall in the first of the Croonian Lectures (Lancet) discusses a few of these problems, one of the most interesting of which seems to be the relationship between syphilis and paresis. The suggestion is made that paresis is merely an unusually late manifestation of syphilis of the brain. Whereas 17 per cent, of syphilities develop tertiary lesions in the brain, the number that develop paresis is only 5 per cent. There is a certain amount of presumptive evidence that in those syphilitics who develop paresis there is an underlying neuropathic inheritance. A close analogy is pointed out between the sleeping sickness that ensues after trypanosome infection and the general paralysis that follows syphilitic infection. The evidence is strong which tends to support the hypothesis of a toxic origin for paresis, namely, the exacerbations and remissions suggestive of a toxic process; the temperature variations of unknown causation, and the polynucleosis of the blood accompanying the exacerbations. The author refers to the recent use in cases of paresis of hexametheylenetetramine, a drug which, at any rate in institution cases tends to prolong life by maintaining the patient for a longer period in a stationary state or in a remission. Its favorable action may possibly be due to the prevention of secondary infections.—Med. Record.

ERYTHROMELALGIA.

E. G. G. Little reports the case of an elderly woman with an eruption on the hands and feet, which he regards as possibly of the same class as some cases which have been described as erythromelalgia. The patient had had for some two years a pronounced redness of the palms and soles, accompanied by considerable tenderness and pain in these parts. The color was a vivid pink, and extended over the whole palm and slightly on to the flexor surface of the wrist, in between the fingers and along their inner and outer surfaces nearly to the dorsal aspect, and covered the whole plantar surface of the feet. There had never been any exudation or exfoliation, and the symptoms had persisted unchanged during the five weeks that the patient had been under observation. She had no treatment, either local or general, and had not taken any drugs which could account for the symptoms. She appeared otherwise in fair health.—Proceedings of the Royal Society of Medicine.

INSOMNIA AND SUICIDE.

Dr. C. Ernest Pronger (Lancet) states that one of the commonest causes of suicide is the suffering of obstinate insomnia. Although little or no mention is ever made of the relation of refractive errors to the production of insomnia, this has been found by the author to be one of the most frequent causes of the condition, if not, indeed, the most common of all. It is not the gross errors which so often lead to insomnia. but rather the slight ones, such as do not lead to such visual defect as to demand the wearing of glasses for their correction. The causative relation is simple; the refractive error leads to a continual effort in the use of the eyes which produces a cumulative nervous strain, and the latter is reflected in sleeplessness. The proper correction of the refrective error promptly restores the nervous equilibrium and the insomnia is cured. That this is actually the fact is abundantly shown by the cases reported by the author. It has been sought to discover certain hereditary relationships as underlying causes of insomnia, and in the opinion of Pronger these are both common and simple, consisting of the well known inheritance of visual defects-chiefly slight degrees of astigmatism-and of the nervous temperament. The correction of the visual defect prevents the manifestations of the nervous temperament. It is the duty of the practitioner to have any patient with obstinate insomnia submitted to a careful ophthalmic examination .- N. Y. Med. Jour.

NASCENT IODINE IN THE TREATMENT OF PULMONARY TUBERCULOSIS.

E. G. Reeve, in the Practitioner for September, 1913, reports the results obtained among 76 cases in a large infirmary by the intensive liberation of iodine in the organism through the interaction of chlorine on potassium iodide. Chlorine water is first prepared by allowing two drams (8 grams) of concentrated hydrochloride acid to act on one dram (4 grams) of potassium chlorate in a dry 24 ounce (one litre) bottle. When the colored gas reaches the neck of the bottle, the latter is tightly corked and the reaction allowed to continue for fifteen minutes, after which water is gradually introduced and shaken with the gas, until the bottle is filled. The treatment consists in giving the patient 30 grains (2 grams)) of potassium iodide in a half pint (250 c.c.) of water at breakfast time-7 a.m.-and four hours later, one ounce (30 c.c.) of chlorine water in a half pint of lemonade. At first 3 ounces of chlorine water are given daily, at two hour intervals. This produces signs of iodism, which pass off after four or five days. At the end of three weeks the dose of chlorine water is increased to 4 ounces, and later to 5, without further ill effects.

This treatment produces a marked inflammatory reaction around all infective foci in the body. This results in an initial rise in temperature in nearly all cases, most pronounced about the third day. Later, the temperature shows an improvement. The beneficial effects of the treatment appear very rapidly, the sputum becoming steadily more mucous. and decreasing in quantity to a practically insignificant amount. Corresponding improvement in the cough, with eventual complete cessation. and relief from insomnia, takes place. All but three of the patients gained in weight, the increase being about 12 ounces a week in favorable cases. The appetite was augmented. One third of the cases treated for three months became free from tubercle bacilli in the sputum. Mixed infection in the sputum was overcome in each of a series of thirty cases in which it had been found to exist. In those patients whose condition was known by physical signs, there was great improvement as regards the moist sounds, though the dullness showed little change, and in a few cases increased. On the whole, the effects of the treatment are beneficial. though the author is not as yet able to state whether it will produce permanent cures. An advantage of the plan is that after the first week the patient does not need to be under constant surveillance and can continue to work.—The American Practitioner.

PNEUMOSAN IN PULMONARY TUBERCULOSIS.

A. E. Carver's (Lancet, August 8, 1914) experience of this new remedy has been very favorable. He states that he has been able to secure arrest of the disease in eleven cases, marked improvement in thirty-five, improvement in thirty-three, and no appreciable change in fifteen, while nine deteriorated under treatment. This series of 103 cases included all stages. Patients in the first two stages of Turban gave the most favorable results, as was to be expected. The dose used initially was 0.25 c.c. for an adult, this being increased slowly until 1 c.c. was given at each dose. No local reactions were encountered, though there was pain in the arm in a few cases the day after the injection. A rise in the temperature was fairly common.—The American Practitioner.

TREATMENT OF HEART BLOCK.

A. D. Hirschfelder, in the St. Paul Medical Journal for June, 1914, refers to the treatment of the apparently dead patient during the complete stoppage of the ventricle, lasting as long as a minute or even longer, after the impulse from auricle to ventricle has been suddenly cut off. Hypodermic injections are futile in these circumstances, cir-

culation having ceased. The best method now at one's disposal for meeting this emergency is to place one hand in the left axilla and the other over the ventricle and squeeze the ribs together as vigorously and roughly as possible. In the case of a thin-chested woman with heart block thus treated by the author, the ventricle resumed its beating very quickly. In an experiment on a dog, it was found that the heart similarly resumed its actively upon rhythmical slapping.

In cases of partial heart-block there occurs frequently a high degree of block due to overaction of the vagus; in these patients normal conditions can often be restored by giving vigorous doses of atropine, digitalis may be harmful. In patients with complete block, on the other hand, one need not hesitate to give large doses of digitalis and continue its use. Thus, the patient above referred to was kept well for a long time by continuous digitalis administration. When in bad condition she was given fifteen minims (one c.c.) of the tincture three times a day: during the intervals when she was in good shape the amount was decreased to five minims (0.3 c.c.), this being given every day and as a permanent dose. Whenever her medicine ran low and she did not use it, she came back to the hospital with fainting spells, which ceased when digitalis was resumed. The drug evidently increased the contractile power of the ventricle and partly kept it from forgetting its habit of contracting. To be sure, digitalis cannot be considered a panacea for these cases, for in some vomiting is produced before a sufficient cardiotonic dose can be attained .- N. Y. Medical Journal.

SYPHILIS AND INSANITY.

Savage's experience (Practitioner, London, May, 1914), both in hospital and in private practice, is that syphilis is the dominant, if not the sole, cause of general paralysis of the insane. Syphilis may be a cause of congenital mental defect; it may be a cause of preventing healthy development of the brain; or it may interfere with development by the senses, and may thus lead to defective education. It may give rise to convulsions, which may either become established, as epilepsy ,or may lead to mental weakness. It may also affect the moral development; and patients with a syphilitic inheritance have, in Savage's experience, not infrequently been morally defective in one way or another, and incapable of recognizing their social duties. Syphilis may cause hypochon driacal feelings, and the presence of stigmata may make the patient believe that he is a suspect, and may thus give rise to delusions of suspicion, melancholia and suicide. Congenital syphilis is almost certainly the cause of adolescent general paralysis. Ordinary general paralysis,

locomotor ataxy with mental symptoms, are associated in nearly all cases, in Savage's experience, with a history of syphilis. Besides this, there are many forms of dementia depending on arterial degeneration which may produce general brain decay, or local troubles, such as softening or apoplectic seizures.—The American Practitioner.

TREATMENT OF LYMPHOSARCOMA BY BENZOL.

R. G. Moorhead (*The Medical Press*, June 24, 1914) reports: The results obtained in cases of leucemia by the internal use of benzol suggest that the same remedy might be of value in cases of lymphosarcoma. If it should prove to have any effect in these cases, a ray of hope would be held out to patients suffering from intrathoracic or intraabdominal growths, for which at present no treatment of any value is available.

A diagnosis of lymphosarcoma was made, and it was determined to try benzol. A drachm of the drug was given at first, but the dose was rapidly increased until 5 drachms daily were given. X-ray exposures have also been given twice weekly, the rays being concentrated over the manubrium sterni.

The result up to the present is as follows: The glands in the neck have almost completely disappeared, the dulness over the manubrium sterni has gone, the patient's stridor has gone, and the cough and huskiness are much less. The patient sleeps now without trouble, and in every way feels much better. An X-ray examination still shows opacity over much the same area as before, but the outlines are apparently less defined. The spleen is no longr palpable. There has been a slight diminution in th white cell count; and, so far, no unpleasant symptom has developed from the benzol.

PITUITARY EXTRACT AND HEART FAILURE.

E. Zueblin reports a series of cases representing a clinical study of this subject. He finds that a too extensive dose of pituitary extract in advanced age may result in a sudden harmful rise of pressure. The sudden change may be desirable for the vessels of the brain and may be complicated with hemorrhage and apoplexy. In a weakened and tiredout myocardium the distended organ may be rapidly reduced to a more normal size. In cases with but little reserve strength left, there remains a possibility that pituitary extract may help the immediate needs and that after the diminution of dilatation has become noticeable, the patient, before intolerant to the ordinary cardiac stimulation, may again

be able to stand a careful test with these routine remedies. In doubtful cases, in which there may be selerotic changes, especially selerosis of the coronary vessels and stenocardia, pituitary extract may hasten a fatal result.—Medical Record.

SUCCESSFUL TREATMENT OF TIC CONVULSIF WITH CAL-CIUM CHLORIDE.

Emmerich and Loew report cases of this sequence. One patient was 49 years old and 20 years before had been attacked by cloni in the trapesius, splenicus and other neck muscles on the right side, also the flexors of the right forearm and of the fingers of the right hand. His head was drawn to the right side a number of times a minute. Many years later when seen by one of the authors the patient was a physical wreck. The number of tics per minute had increased visibly until they now numbered 45. There was some muscular hyperthophy on the affected side. The tics had become more violent and at times the head was literally snapped to the right. It was found that the patient had always been a great meat eater. Vegetables and fruits he seldom touched, nor did he drink milk. The amounts of lime and magnesium consumed were found to be very low, despite the fact that he took plenty of nutriment. As is known, lime deficiency is responsible at times for weakness of the muscles and clonic convulsions. The amount of magnesia taken was large enough to disturb the lime metabolism. Patient was placed on vegetables rich in lime and a 20 per cent. solution of chemically pure calcium chloride. The tic frequency gradually came down to 7 per minute and finally ceased while muscular strength and energy returned. Another favorable result was also secured in the same manner. Oppenheim has stated that these tics of the neck and shoulder are among the most refractory of all diseases. One of the authors (Loew) had made the discovery that the affection is due ot calcium deficiency in the cell nuclei. However, the mineral must be given for months at a time to obtain positive results. The authors believe it worth a trial to administer this treatment to myoclonic subjects.—Med. Record.

THE SUN'S RAYS IN THE TREATMENT OF TUBERCULOSIS OF THE FOOT.

Leuba (Deutsche Zeitschrift für Chirurgie, Bd. 125, H. 5-6) reports on the treatment of tuberculosis of the foot from the Rollier Institute in Leysin. The general technique of the treatment is as follows: Upon the arrival of the patient, if the disease has not yet local-

ized itself, the patient is kept in bed until he becomes acclimatized. After a period varying from three to fifteen days, during which the bed of the patient is placed upon the terrace throughout the forenoon, the treatment by means of the sun's rays is begun. No physiological method of treatment requires such rigid individualization as heliotherapy; the patient must be enabled to expose the entire unclothed body to the sun's rays. In order to accomplish this object great care must be exercised in order to avoid erythema, bullous dermatitis, and disturbances of the nerves and heart. The experience of Rollier in the last ten years shows that by the proper dosage these conditions can be entirely avoided. On the first day the foot alone is exposed to the sun three to ten minutes at intervals of fifteen to twenty minutes; on the second day three to ten minutes for the foot and three to five minutes for the leg, and three to five minutes for the thigh. In this manner there is daily exposed a new part to the sun's rays. After a varving number of sittings the skin becomes more or less pigmented, and the patient can endure the sun's rays for four hours or even longer without harm. The region of the heart is protected by small moist compresses, and at first the head is protected by a white linen covering or by means of an umbrella fastened to the bed, until, after a while, this precaution is unnecessary.

By this means since 1903, 94 cases of tuberculosis of the foot have been treated by means of the sun's rays. Of these 94, 42 were suffering from fistulæ and were brought to Leysin as the last resort after amoutation had been refused. The most of the remainder were suffering from other forms of tuberculosis and came to the institute in a serious condition. The youngest patient was two and a half years old and the oldest sixty-seven years. The localization of the disease was in 54 cases in the tibio-tarsal joint, in 11 the calcaneus, in 19 the tarso-metatarsal joint, and in 10 the tarsal joint. Investigation in December, 1912, showed that of the 35 cases without abscess 33 were cured and two improved; of 17 cases with abscess 15 were cured, one stationary, and one death; of 42 cases with fictulæ 39 were cured, two improved. and one stationary. In two of the stationary and one of the improved cases amputation had to be carried out after a more or less lengthy trial of heliotherapy. One of the cured cases returned with a recurrence four years later. In three of the improved cases it was not possible for various reasons for them to remain in Leysin for a complete cure. In five cases in which cure of the foot tuberculosis was obtained the heliotherapy is being continued either on account of localization of the disease in another joint or because of pulmonary tuberculosis; 82 cases have been cured for varying periods and have returned to their former occupations.

Of all the conservative methods of treatment, heliotherapy produces results in the shortest time. Many cases suffering from the disease from two to eight years and treated by means of injections of iodoform and tuberculin, partial resection, curettement, etc., and who entered the institute in a quite hopeless condition, were cured within a year by heliotherapy.—Therapeutic Gazette.

SURGERY

UNDER THE CHARGE OF A. H. PERFECT, M.B., SURGEON TO THE TORONTO WESTERN HOSPITAL

OBSCURE FACTORS IN SEPSIS.

Doubtless some of the sepsis for which the surgeon reproaches himself is due to more or less hidden, or undiscovered, pus foci in the patient. Crile has shown how the physical injury of an operation is augmented when there is a low threshold of resistence due to fear and other emotional causes. But fear is not the only thing to be considered. Aside from emotional causes of a lowered threshold there are certain physical causes. Is it not reasonable to suppose that such conditions as Rigg's disease, accessory sinus infections, ozena and subtonsillar disease are at the bottom of some of the sepsis? These are conditions often overlooked, and we admit that it is probably not often that they cause mischief. But that they do cause some trouble we firmly believe. An abdominal case is rushed into the hospital for immediate operation; there is no time as a rule to go into these matters; yet abscesses at the roots of the teeth not discernible except by the X-ray may be accountable for late trouble. Then often enough, after the trouble shows itself. the surgeon looks his patient over and finds an old otitis. It is well to bear these things in mind and as far as possible eliminate them, or, if that cannot be effected, deal with them in a manner calculated to limit their potency for harm .- The Medical Times.

PROSTATECTOMY.

E. L. Keyes, New York (Journal A. M. A., Dec. 19, 1914), describes his technique in prostatectomy with special reference to hemorrhage. He exposes the bladder by supropubic incision and enucleates the prostate between two fingers in the rectum and two fingers in the bladder. A curved staff is inserted into the rectum and a long Peaslee or Rever-

din needle, threaded with a piece of catgut 18 inches long, is plunged along the groove of the staff into the perineum and passed along it until it can be felt in the bladder. The staff is then withdrawn, two Walker bladder retractors introduced to elevate the torn edges of the bladder neck and make it plain to the exploring finger. The needle carrying the catgut is inserted through the edge of the bladder neck just deep enough to get a good hold at the lateral angle. Then the eye of the needle is brought up into the suprapubic wound and the catgut disengaged. The needle is then withdrawn from the puncture in the bladder neck and reintroduced at a corresponding point on the opposite side and again threaded with the catgut, allowing plenty of slack, and rapidly withdrawn through the perineum. If an indwelling eatheter is to be used it must be now introduced. After the needle has been withdrawn we have a suture, both ends passing through a single puncture in the perineum, passing through the deep urethra and to the bladder neck and catching its lower segment at its two angles. Traction on the end of the bladder loop pulls the end down into the urethra; it thus controls hemorrhage mainly, Keyes thinks, by tension on the bladder neck. After the bladder neck has been firmly pulled down, the two ends of the suture are tied about a short rubber tube laid against the perineum. Drainage is provided for through the usual suprapubic tube or by a catheter in the urethra, or both. The suture is divided and withdrawn eighteen to twenty-four hours later. By this technique the immediate hemorrhage has been promptly checked and the ultimate bleeding made much less than it would otherwise have been. He has not had any fistula or inflammatory complications along the line of the suture in the perineum. The article is illustrated.

SUBCUTANEOUS INJECTION OF OXYGEN IN SEPTIC AMPUTATIONS.

Dr. A. A. Warden, writing in the British Medical Journal, praises the subcutaneous injections of oxygen. Some of the mast disappointing cases in the present war are the compound fractures. Partly owing to the impossibility of giving early and effective treatment they arrive at a base hospital, or even a more distant centre, very seriously infected. Varying with the nature of the fracture, the size and character of the wounds, and the length of time that has elapsed, there may be merely local sepsis and sloughing, cellulitis far beyond the proxinal joints, or extensive gangrene may have already set in. As has so frequently been said in the surgical literature of war, each case must be treated on its merits, but the principle may be laid down that the surgeon's duty is to

save as much as possible. It is questionable if it is doing a man a service to disarticulate a limb at the hip or a right arm at the shoulder. It is often worth while giving such a man the chance of a more useful limb by such measures as abundant injections of oxygen both above the apparent limit of infection and deeply into the tissues nearer the wound, and free incisions and drainage.

In any case it may be said with fair confidence—and I appeal to the experience of many others to confirm me—that it is reasonably safe to incise through tissues evidently involved in a process of severe infection, as indicated by obvious signs of comminuted fracture with a black and gaping wound, oedema, and cellulitis. A large injection of several litres of oxygen with Bayeaux's instrument into the stump during the operation, or soon after it, will go far to assure a satisfactory result. The flaps can be rapidly formed and very loosely sutured; they need not be left altogether unstitched.

It may be thought that oxygen is not easily obtainable; but since the oxyhydric flame has been so much used in motor and other industries very small town has its cylinders of oxygen. Even if Bayeaux's instrument (which accurately measures the amount and regulates the rate of injection) be not available, a simple system of the oxygen bag adapted to a tube passing through some dilute antiseptic solution can easily be organized.

My points, then, are:

- 1. Be economical in lopping off limbs.
- 2. Do not hesitate, in aiming at the preservation of tissue, to cut in deeply infected areas.
- 3. Drain freely.
- 4. Inject oxygen abundantly—till there is widespread emphysema.

 It is not toxic and it will be absorbed in twenty-four hours.

Our experience here as well as in other parts of France make it unnecessary to illustrate these principles by the details of special cases which are of daily occurrence. A recent instance is that of one of our patients now convalescent:

E. C., aged 25, a French soldier of the —— Infantry Regiment, wounded in the trenches near Dixmude by an exploding shell which fell a few yards away. Though wounded at 8 a.m. on Saturday, November 21st, it was not till Tuesday morning that he reached the base hospital. In the interval he had been carried on a comrade's back for several kilometers, passed most of one night in a horse ambulance and another in a train. Though he had been dressed several times the shattered fracture of both bones of the leg and the wounds leading to them

were very gravely infected, a red blush of cellulitis extending above the knee. I amputated through the knee-joint, pus welling freely from my incision, stitched the flaps loosely together, draining freely and the same day injected about three litres of oxygen gas well above the dressing in the upper part of the thigh. Like many other similar cases the wound is healing perfectly.

PERFORATING GASTRIC AND DUODENAL ULCERS.

Mr. F. Conway Dwyer, president of the Royal College of Surgeons in Ireland, read an address on "The Treatment of Perforating Gastric and Duodenal Ulcers." For many years he had given up the use of lavage, which he believed to be responsible for many untoward results. He removed the septic fluid with large swabs, and relied on pelvic drains for getting rid of any fluid left behind. Although formerly he was of opinion that gastro-enterostomy should be done, if the patient's condition permitted it, in the cases to be detailed he had performed that operation only in one case, and then only because the perforation was so large and the edges so friable that when the rent was sewn up he feared the lumen of the bowel was too much narrowed. Details were given of 12 cases which had been under his care during the past fourteen months. Eight made a complete recovery, three did not survive operation more than a few days, and one died a fortnight after operation from pneumonia. Mr. H. Stokes showed a case of regeneration of ruptured sciatic The case was one of arthritis of the hip-joint, accompanied by intense pain. Operation was performed for excision of the hip-joint, in the curse of which the sciatic nerve was accidentally ruptured. The suturing of the nerve was done about three weeks after the excision. Two and a half years had elapsed since the operation, and the case was shown to demonstrate the amount of regeneration that had taken place. The small loss of sensation now present in the case was most remarkable. Mr. W. C. Stevenson showed cases treated by radium emanation needles: (1) A case of malignant polypus removed by Mr. Graham about the end of May, 1914. The whole of the anterior wall of the antrum was afterwards removed for recurrence, but the tumour began to grow again. The patient came under Mr. Stevenson's care at the end of June with a large gland on one side and a smaller one on the other, accompanied by considerable proptosis of the eye. He inserted six needles into the gland, and two or three days afterwards six more needles were put in, and left in for about twenty-four hours. When the needles had been inserted four times the tumour showed considerable diminutition. A recurrence of the swelling having taken place six weeks after

the first application, further needles were applied, and the patient showed the effects of the radiation. He had put on a considerable amount of weight. Although he had to take hypnotics regularly before the treatment, since the radiation was started he was able to do without them. (2) Case not yet treated. Opinion was invited whether it was suitable for surgical interference. He intended to bring the patient forward again after treatment. (3) A case pronounced by Professor McWeeney to be epithelioma of the palate. The ulcer now seen was only about half of its original size. Mr. A. Blayney read a paper on "Intestinal Stasis," discussion on which was postponed.—British Med. Journal.

ANTISEPTICS VS. ASEPSIS.

A number of years have elapsed since Pasteur gave to the world the results of his epoch-making investigations concerning the role played by microscopic organisms in causing abnormal conditions in animals and plants. In consequence of these same investigations, it was but a short time before the late Lord Lister applied destructive agents to minute forms of life. It was then that antiseptic surgery was brought forward by its brilliant originator, and the carbolic acid spray became famous. Many conditions that had been the terror of the operator at once became amenable to treatment, and quite unforeseen results were obtained. Antisepsis ruled for many years.

There was, however, a new school arising, that of asepsis. Its sponsors took the stand that if these contagious maladies were due to the presence of living atoms, it would be better to get rid of them before beginning operation. This seemed logical, proved practicable, and eventually asepsis relegated antisepsis to a secondary position. For many years much time was devoted to the elaboration of technique, to the perfection of the operating room and to the cleanliness of both operator and patient. A lowering of mortality and morbidity followed, and it seemed as if the pinnacle of perfection had been attained, that asepsis was the one and only method.

That this is not entirely true seems to be indicated by the reports that are coming to us of the surgery on the battlefields of Europe. Modern methods are truly wonderful, but no amount of human energy or forethought could have provided sufficiently for the appalling number of wounded that now need attention. It is no longer a matter of operating upon aseptic wounds, but of treating injuries that are in a state of infection that defies description. Asepsis has had to give way to its predecessor, antisepsis, and many are the lessons that are being learned

by many surgeons. The discussion going on at present in England as to the use or non-use of pure carbolic acid—always the favorite British antiseptic—is but one phase of the question. Probably, when this war is over, certain discarded methods will have been found very valuable in times of stress. Asepsis, of course, can never be discarded, but antisepsis evidently will reappear on a more solid footing.—N. Y. Med. Jour

HYDROCELE.

The treatment of hydrocele, with special reference to phenol injection, is the subject of a paper by R. H. Herbst, Chicago (Journal A.M.A., Dec. 19, 1914). It is, he says, rarely an independent malady. There is usually some underlying factor, hence he objects to the open operation as a method of treatment. At least a preliminary tapping and evacuation of the sac is always indicated before choosing between the open operation and the injection of phenol. If preliminary tapping is the practice it will prevent the too common error of opening the sac and finding an advanced tuberculosis behind it or syphilitic lesions that might have been cured by specific treatment. Eliminating these effusions into the sac of the tunica vaginalis, which accompany acute affections of the epididymis and which usually disappear as the acute process subsides. Herbst holds that the results following tapping and injection of phenol are as good as are any seen following the open operations, provided the sac be washed with sterile water after the serum has been evacuated and before the phenol injection. The recurrences following the injection of phenol without preliminary washing were due to the serum protecting the sac wayy and preventing the action of the phenol. To avoid this it has been his habit to test the return fluid for albumin and continue the washing until the fluid gives no return to nitric acid. The injection of sterile water also prevents the not infrequent accident of injecting the phenol into the scrotal tissues. During the emptying of a wellfilled tunica vaginalis the receding sac wall is likely to draw away from the end of the cannula without the knowledge of the operator. If this does occur and the water is injected, it does not return, but remains in the tissues which appear edematous. In this case the sac must be allowed to fill again with serum before attempting the phenol injection. The use of the Belfield hydrocele trocar and cannula will practically always prevent this accident, because it fixes the sac by passing through two of its walls. The refilling of the sac, which is commonly seen during the first twenty-four hours after the injection, is usually due to the action of the phenol and disappears spontaneously in a few days. For the number of years that he has been practising this method of washing

out the sac he has seen very few recurrences, and these did not reappear after a simple evacuation. When the sac has become greatly thickened, excision is greatly preferable to either eversion or injection. He has not seen any toxic effect of the phenol nor atrophy of the testicle after injection.

WORK OF THE "CLEARING HOSPITALS."

Sir Anthony Bowlby records his experiences as consulting surgeon to the British expeditionary forces in the Ypres district. The magnitude of the work confronting the surgeons at the clearing hospitals may be realized when it is stated that on many days from 500 to 1,000 or more wounded have arrived at a single clearing hospital in twenty-four hours. Many of the wounded arrive in a dying condition, especially if there is a wound of the brain. Chest wounds are tolerably common. The abdomen is to a great extent protected in the trenches, and abdominal wounds are not as relatively common as they were in South Africa. Injuries of blood vessels have in many cases caused gangrene without causing serious bleeding. Tetanus is not as common as on the Aisne owing to the different nature of the ground and the preventing inoculation. While true "hospital gangrene" has not been observed in any hospital in France, "spreading gas gangrene" has attacked 0.5 per cent. of all the recent wounds of all the armies. True pyemia has not been seen or heard of by the author.-Medical Record.

GYNÆCOLOGY AND OBSTETRICS

MASTITIS IN PREGNANCY.

Dr. John T. Williams reports a case of antepartum mastitis during the eighth month of pregnancy in a mother of five children. She had a painful, tender swelling in her left breast, which she had been rubbing with warm sweet oil, and also had fever and general malaise. She was treated with ice packs, bandaging aid saline catharsis, but the lump grew larger and more brawny and painful, so in four days it was incised and the pus evacuated. Improvement immediately followed, with temperature falling to normal, but five days later the opposite breast became hard and painful, and the temperature rose to 102.5 deg. Under

ice and salts this breast softened up rapidly, but in two days the left breast again became "caked," with a rise of temperature. Ice was again applied, which this time brought about a rapid subsidence. Within a month the patient was delivered, and on the fifth day the left breast again became inflamed, but quieted down rapidly under ice and saline catharsis and gave no more trouble since. She was nursing the baby on both breasts, although the amount of milk was somewhat scanty, so that supplementary feeding was required.

Fleck reported a case of mastitis in a primipara, in the ninth month following a case of facial erysipelas, both breasts becoming red, swollen and painful, an abscess developing in the right breast the first day after labor, which was opened, and the patient recovered, the left breast subsiding without operation.

Callman reported a case of double mastitis during the sixth month of pregnancy following eczema and impetigo of the nipples. Fluctuation developed, first in the right breast, which was opened and pus evacuated, and fifteen days later in the left, which was also opened, but only a turbid fluid was obtained. Patient recovered and was delivered of a breech at full term by manual extraction.

Davis reported the case of a primipara who developed a breast abscess after being accidentally scalded by hot coffee. This abscess was incised and pus obtained, from which a pure streptococcus culture was developed. She recovered and later passed through a normal labor.

In each of these last three cases, as well as in the first one, the child had to be fed by the bottle.

The general etiology of breast abscess has already been discussed. In the first case the underlying cause of the abscess was the old trauma, the parenchymatous tissues on the inner side of the breast having been bruised in the fall, and the cells, most severely injured, had never fully regained their normal healthy condition, but were in a state of lowered resistance. Then, as the patient was rather ill nourished, she may have had some pyogenic organisms in her blood, since she had the abscess in her finger, and, with her general bodily resistance lowered by her attack of whooping cough, it gave the pus organisms a most favorable chance to mulitply and find an excellent breeding-ground in the breast tissues, already weakened by the old trauma and engorged with an extra amount of blood preparatory to lactation, and in that way the abscess formed, in spite of all measures taken to prevent or abort it.

In Dr. Williams' case the infection in all likelihood entered through the nipple by way of the milk ducts, as no history of trauma could be obtained in this case, the hot applications and massage further enhancing the abscess formation. In Fleck's case it is likely that the nipple may have been the port of entry although the blood stream cannot be ruled out, and it is very likely that, with such an infection as facial erysipelas, the blood would be filled with organisms which would find an excellent nest for infection in the engorged breast, especially where the general bodily resistance had been lowered by the previous disease.

In Callman's case it is most likely that infection took place through the nipples, since they were involved in the impetigo and eczema, but there was a possibility of the organisms travelling through the dense network of lymphatics rather than through the ducts. In Davis's case there was no visible solution of continuity at the site of the burn, and it is most likely in this case that the streptococcus was already present in the milk ducts, and attacked the tissues when their resistance was lowered by the burn.

Unfortunately no cultures were taken, except in Davis's case, which showed pure streptococcus. Rubeska has shown the staphylococcus aureus and albus as the most frequent cause of breast abscess, the staphylococcus being relatively rare. Köstlin found the staptylococcus albus on the nipple in each of 100 pregnant women. In 23 of these the staphylococcus aureus, 25 the streptococcus, 14 sarcinae, 3 staphylococcus citreus, and in 2 the micrococcus tetragenus were also present. He examined the fluid from the breast in each of these cases and found it to be sterile in each of these cases and found it to be sterile in 14 per cent. In the other 86 per cent. the staphylococcus albus was present, and in 2 per cent. the staphylococcus aureus as well.

The fact that in 3 out of 5 cases trouble was present in the opposite breast, shows that breast engorgement is an aid in the formation of breast abscess during pregnancy.

Therefore, the occurrence of mastitis in pregnancy is as follows: In the majority of women organisms are present on the nipples and in the milk ducts in greater or less number, according to the patient's habits of cleanliness and care of the nipples, or else in some women they may be present in the blood stream, according to the patient's general physical condition. These organisms are ordinarily innocuous, especially in a good general condition of bodily resistance, but when engorgement occurs, conditions favorable to their growth are developed, and when the breast tissues have been injured before or during the pregnancy by trauma, and their resistance is thus further lowered or when more virulent organisms are present, the tissues are attacked and suppuration takes place.

The prophylaxis of breast abscess during pregnancy is the same as during lactation, i.e., scrupulous cleanliness of the nipples, and bathing

with alcohol and boric acid solution, and the prompt treatment of any soreness or tenderness by ice packs, cold astringent compresses of lead and opium wash, firm bandaging and saline catharsis.

- 1. Organisms are present on the nipples in 100 per cent. and in the milk ducts in 86 per cent. of all pregnant women.
- 2. When the tissues have been injured by trauma and their resistance lowered, or the breasts have become more engorged, or the organisms are of unusual virulence, they attack the tissues and produce inflammation.
 - 3. The prophylaxis of breast abscess in pregnancy consist in:
- (a) Absolute cleanliness of the nipples, and avoidance of injury to the breasts.
- (b) Prompt treatment of mastitis by bandaging, ice packs, cold astringent compresses and saline cathabsis.—Boston Medical and Surgical Journay.

MALARIA AND THE PUERPERIUM.

After noticing the facts in regard to the relations of malaria and the puerperal condition, as noticed by physicians in the tropics and elsewhere, M. J. Seifert, Chicago (Journal A. M. A., Dec. 19, 1914), reports the case of a woman, aged 25, who had never lived in a strictly malarial region, or suspected malarial infection, who suffered from irregular chills and fever in two consecutive confinements, and never at any other time, with no pelvic involvement and with positive microscopic findings of the tertian parasite in her second confinement, which, he says, is worthy of attention. She had also suffered from chronic nephritis, and malaria was only diagnosed, or sought for in the diagnosis, until almost every other possible disease had been excluded. The most important part of this paper, as he says, is the lesson to be learned in regard to the need of thoroughness of diagnosis. Another unusual experience in the case was some late gonorrheal complications, lochial discharges and pelvic tenderness, occurring thirty days after labor, long after other conditions were normal. The whole complex was a confusing one and emphasizes the fact that all cases of fever after childbirth are not necessarily puerperal septicemia.

CANCER OF THE BREAST.

Dr. William L. Rodman, of Philadelphia, gave an address on this subject. He stated that the proper treatment for cancer was early

Much had been said about the X-ray and radium, neither of which had been of demonstrable worth from the standpoint of permanent cure. He had not in his experience seen a case of cancer cured either by the X-ray or radium permanently. Of those cases reported to have been relieved or cured, the original tumor or growth might have been benign instead of malignant. He believed more in the X-ray than in radium, and what had been accomplished by radium had been done better by the X-ray. He thought the profession was running after false gods when they gave up surgical operation for these new fads. The speaker said that between 12,000 and 15,000 men and women died annually from this deceitfully terrible disease. If the disease were taken in time, when only suspicion was existent, a cure could be effected: but in the majority-and it was a tremendous majority-of cases the patient came too late, or the diagnosis was made too late, to be cured. A careful study of precancerous conditions should be made and all measures of early diagnosis and precaution should be carried to the ultima thule of safety. Cancer was strictly local in the beginning, as shown by every evidence, clinical, surgical and indicative. Part of the evidence that it was primarily a local disease was that it was not painful in the first year or eighteen months. It was only when adhesions began and secondary ulcerations appeared that the disease was painful. In the beginning it was strictly painless. The patients ate and slept well and went through the ordinary routine of life as if there were nothing the matter with them. If an operation was performed in the early stages, before the disease had become constitutional, a cure would result If, however, cancer of the breast were allowed to continue until there was an enlargement of the glands under the armpit, only 25.4 per cent. of the cases would be cured. The disease became secondary, or constitutional, only by transfer from the primary focus, as when it entered and attacked the lymphatic glands. Until this transfer had occurred Dr. Rodman maintained it was strictly local.—Medical Record.

THERAPEUTIC NOTES

AN IMPROVED CAMPHORATED OIL FOR SUBCUTANEOUS INJECTION.

O. Crouzon, in Bulletins at mémoires de la société médicale des hôpitaux de Paris, April 24, 1914, refers to the fact that the large amounts of camphorated oil now frequently injected in the treatment of pneumonia, collapse, acute peritonitis, etc., sometimes leave annoying

local indurations and may even lead to abscess formation. To avoid this he has sought to devise a solution which would be more rapidly absorbed, and now uses the following combination:

| Ŗ | Camphoræ | | | | | | | | | . gr. xv (1 gram) |
|---|------------|------|------|--|--|--|--|--|--|-------------------|
| | Ætheris | | | | | | | | | . mxxi (1 gram) |
| | Olei olivæ | | | | | | | | | 3iiss (10 grams) |

The olive should previously have been washed with alcohol and sterilized. If the preparation is to be put up in ampoules the glass bell of the vacuum apparatus used must be kept well filled with ether vapor to prevent escape of the latter from the solution. If desired, the proportion of olive oil may be reduced to eight to one of camphor, in order to make a solution of exactly ten per cent. strength.

Clinical experience with the foregoing solution clearly showed its superiority over the official comphorated oil. Thus in two cases of typhoid fever with adynamia and heart weakness to which 108 c.c. and 425 c.c. of the ordinary preparation had been given in the course of twelve and twenty-four days, respectively, hard local masses, followed by abscess formation, resulted—the therapeutic effect proving, however, of distinct value. Similar untoward results were witnessed in a number of other cases. The use of the camphor ether combination in a series of other cases, on the other hand, caused merely slight induration in some instances, and was never followed by abscess formation. In one patient a daily average of twenty-four c.c. (6 drams) of the preparation was injected for twenty-four successive days without any local trouble save slight, evanescent induration. On the whole, the new combination seems far superior to the old, and should be regularly used in preference to it.—N. Y. Med. Jour.

TREATMENT OF HEMORRHOIDS.

Walter Wolff, in his recently issued Taschenbuch der Magen und Darmkrankheiten, recommends the following laxative combination for relieving constipation in cases of hemorrhoids:

| R | Magnesii oxidi | 3iiss | (10 grams) |
|---|---|--------|------------|
| | Sennæ pulveris | 3iiss | (10 grams) |
| | Sulphuric præcipitati | 5iiss | (10 grams) |
| | Potassii bitartratis | 3iiss | (10 grams) |
| | Sacchari pulveris | 3iiss | (10 grams) |
| 1 | I. Sig.: One level teaspoonful three ti | imes a | day. |

TREATMENT OF COCCYGODYNIA.

Nervous or reflex coccygodynia calls for appropriate treatment of the underlying condition, along with local remedies. Radical surgical treatment is out of place. For true coccygodynia medical treatment is only temporizing. There are two forms of surgical treatment. The first is excision of the coccyx. Most writers from Nott, who performed the first excision, on, testify to the efficacy of this operation. Simpson advocated section of the muscle-insertions on the coccyx, but this plan was discarded as being unsatisfactory. Whitehead, Odell, of early writers, and Fullerton, more recently, advocate the method of excision.

Excision will probably cure every case of true coccygodynia, if the assumption that the lesion is in the bone or the sacrococcygeal articulation be correct. It will not cure reflex or neuralgic coccygodynia. The operation is extremely simple. A linear incision is made over the coccyx and the end of the sacrum, and with rongeur and elevator the coccyx is disjointed and peeled out. The only drawback to the operation is that the muscle insertions in the coccyx are of value to the perineum, so that the loss of the coccyx weakens that structure.

The other form of surgical treatment is the injection of alcohol. De Vésian, in 1907, first used this method in an obstinate case of reflex coccygodnia, getting the idea from the treatment of facial neuralgia by the injection of alcohol.

De Vésian's case was that of a woman of 43. There was no history of injury to the coccyx, external or obstetrical. There were inflammatory masses in the pelvis, which De Vésian considered the cause of the coccygodnia. Operation was refused by the patient. Under local treatment the pelvic condition ameliorated, but the pain in the coccyx was still very severe.

After trying other forms of local treatment for the coccygodnia, De Vésian determined to try the injection of alcohol. He used 60 per cent. alcohol. With the index finger of the left hand in the rectum, the needle was inserted back of the rectum and anterior to the coccyx. At the depth of 3 cm., 2 c.c. of alcohol were injected along the sacro-coccygeal articulation and the needle withdrawn. Two cubic centimeters of the alcohol were then injected along the posterior surface of the coccyx. But one injection was necessary and the relief was immediate. The patient was under observation for four months, during which time she had no pain.

F. C. Yeomans has treated seven cases by this method. His technic is as follows: With the patient on the left side, the right index finger in the rectum determines the point of greatest tenderness. This, he has found, is just below the tip of the coccyx. The needle of the syringe

is introduced to this point of maximum tenderness, and 10 to 20 minims of 80 per cent. alcohol are injected slowly. The pain is severe but lasts but a few minutes.

Yeomans has found in general three to five injections necessary for a cure. The internal is from three to five days. He reports no recurrence, the time of observation varying from one month to four years.

In the past two years I have had several opportunities to use Schlosser's treatment for neuralgia. I have in that time seen but one case of coccygodnia. This case was treated by me with alcohol injections, so far (eight months) with no return of the pain.—Boston Medical and Surgical Journal.

LOCAL TREATMENT OF GONORRHOCAL EPIDIDYMITIS

Having raised the testicles, the question arises, what application are we going to use, hot or cold? It is quite true that the cold application, and even an ice bag, very frequently gives the quickest relief. Nevertheless I am not in favor of them, because I cannot get rid of the impression that induration, with its subsequent sterility, is more common in cases in which ice cold applications have been used. I therefore prefer frequently changed hot applications. My preference is for large gauze compresses wrung out of a hot solution of aluminum acetate containing some glycerin:

| Ŗ | Liquoris alumini aceta | tis | | | | | | | | | 3viii |
|---|------------------------|-------|-----|---|-----|-----|------|------|-------|-----|-------|
| | Glycerini | | • • | • | • | | | | | • • | 3viii |
| 1 | Aquæ | • • • | • | • | • • | • • | • | | 1 | • | . Oj. |

The compress is to be covered with oil silk and, if the patient must be up and about, the whole put into a well-fitting suspensory bandage. The compress should be wrung out of the hot solution every hour.

These applications have a decided effect in reducing the swelling and moderating the pain, and if continued for several days have, in my opinion, a decided effect in preventing any permanent induration in the epididymis.

The application of compresses is very troublesome, as it requires a special nurse, and we therefore must sometimes get along altogether without them, or after using them for twelve to twenty-four hours we change off to ointments. A good ointment properly applied is also very beneficial. My favorite formula is:

| Ŗ | |
|---|---|
| | Guanacolis |
| | Ichthyolis |
| | Adipis benzoati, q. s. ad |
| | M. Sig.: Apply externally twice or three times a day. |

Very delicate patients are sometimes hypersensitive to guaiacol. I have seen it bring on a condition very near collapse. Where the patient is very young and delicate, I therefore frequently replace the guaiacol with methyl salicylate.

Again, there are cases, where the foregoing ointment cannot be prescribed for an apparently trivial, but to the patient all important reason: it soils the underwear and the bed linen. In such cases the following ointment will be found very useful:

| R | |
|---|---------------------------|
| | Methylis salicylatis |
| | Morphine sulphatis ors iv |
| | Atropinæ sulphatis gr i |
| | Adipis lane |
| | Adipis benzoati |
| | M ft ung |

The diseased testicle, with its epididymis, is drawn down so that the scrotum is tense over it; the ointment is gently but thoroughly rubbed in; some is then spread thickly on a layer of cottom, in which the testicle is enveloped, some oiled silk is put over it, and the whole is kept in place by a few turns of a gauze bandage, or a well-fitting suspensory bandage may be used. At first this ointment is to be changed twice or three times a day, but later a good application of it once in twenty-four hours is sufficient.—N. Y. Medical Journal.

CYANIDE OF GOLD AND ARSENIC IN THE TREATMENT OF LUMPUS.

Juan de Azúa reports good results following this method of treatment introduced by Bruck. The drug, which should be kept in green bottles or ampoules. is used in a ten per cent. solution, in distilled water and should be injected intravenously in dozes of six centigrams. This method has also been employed in the treatment of syphilis, apparently with good results.—Revista Clinica de Madrid.

"DON'TS" IN THE TREATMENT OF INSOMNIA.

H. Crichton Miller emphasizes three points in the treatment of insomnia: (1) Never let the insomniac drug himself. (2) Never let him know what he is getting or how much. This is necessary, so that the physician or nurse can adjust the dose without the knowledge of the patient. (3) Never under any circumstances allow the patient to go to sleep with the hypnotic by his bedside, with the idea that he will not take it unless he needs to. It means that the patient's mind is started

on a train of speculation as to whether he will or will not need the drug, even after the light is out and conditions are favorable for sleep. The patient will probably say: "I will not take it now; I will wait another half hour." The upshot of this is that the wretched patient gets five hours' sleep instead of eight, because during three hours the draught was in the bottle instead of in his stomach.—Medical Press and Circular

BED SORES.

As soon as patient had soiled himself, he should be washed with warm water and castile soap. Then zine oxide ointment (U. S. P.) is rubbed into the skin with the finger tips. The patient is given an allover rub with fifty per cent. alcohol, to which alum has been added in the proportion of ten grains to the pint, at least once a day and after every soiling if there is any redness of the skin. Following this, the zine oxide ointment is rubbed in.

When the skin is broken, bathe it with warm water and castile soap, follow with warm saturated solution of boric acid and pat dry with gauze. Then apply the following dusting powder:

| Aristol | | | | | | | | | | | | | | | |
|--------------|--|--|--|--|--|--|--|--|------|--|--|--|--|---|-------|
| Boric acid . | | | | | | | | | | | | | | | |
| Lycopodium | | | | | | | | | | | | | | 8 | parts |

Do this every two hours and relieve pressure at once with pneumatic ring.

When the sore has extended below the skin, the same treatment is used with the addition of irrigation with hydrogen peroxide before the boric acid solution. A few layers of sterile gauze are used for dressing; too much will increase pressure. They are fastened with a light muslin gauze bandage.

Old bedsores with little or no tendency to heal should be stimulated. Ice cold compresses for a few minutes followed by hot ones will sometimes accomplish this. Or they can be cauterized once or twice with lunar caustic or pure carbolic acid. The following ointment is stimulating:

| Silver nitrate | | | | | | | | • | | | 1 | part |
|---------------------|---|--|--|--|--|--|--|---|--|--|------|-------|
| Balsam of Peru | | | | | | | | | | | . 10 | parts |
| Zinc oxide ointment | , | | | | | | | | | | 100 | parts |

Resistant and multiple bedsores, especially in very emaciated patients, should be kept in a continuous bath at 98 to 99 degrees F. This will keep the patient comfortable and afford the most favorable condition for healing.

PERSONAL AND NEWS ITEMS

Ontario.

Dr. T. E. Kaiser, Oshawa, took an active interest in the building of the Oshawa armoury, and gave valuable assistance in the raising of money for the Patriotic Fund and in the collection of troops. For these services the Department of Militia has conferred on him the title of honorary major in the Canadian militia.

Hon. W. J. Hanna did not hold out much hope to the deputation which waited upon him recently asking for a grant of about \$5,000 in aid of the outdoor departments of the Toronto hospitals. He said that while in sympathy with the objects of the deputation the Province must at this time exercise extreme economy.

Dr. J. J. Farley, Belleville, has sent \$5, and Dr. W. H. Moorhouse, London, \$2, to the Belgian Relief Fund.

Dr. Casgrain, of Windsor, brother of the Postmaster-General, will command a stationary hospital to go with the second contingent, and it is understood that several Montreal physicians will be on his staff. Dr. Migneault, of Montreal, accompanied Dr. Casgrain.

There were a number of mild cases of smallpox at Todmorden, near Toronto, a week ago. They were at once placed under quarantine.

Dr. and Mrs. Fredric Davidson entertained, in honor of their guest, Dr. Brown-Landone, after his lecture before the Women's Canadian Club, at a most enjoyable tea at their residence in Madison Avenue, Toronto.

Major Gorrell, of Ottawa, in charge of the Canadian Red Cross work during the temporary absence of Col. Hodgetts in France, is busy preparing for the opening of the new Canadian hospital in the residence loaned by William Waldorf Astor at Clevedon, in the Oxford district, Mount Vernon Hospital, at Hampstead, to be opened as No. 2 General Hospital, is still undergoing the necessary alterations.

Dr. Howard Burnham, son of Dr. G. H. Burnham, of 47 Warren Road, Toronto, is in charge of a British Red Cross party for Montenegro. Dr. Howard Burnham is a 1914 medical graduate of the University. Previous to the war he was a house surgeon in the Toronto General Hospital.

Dr. Norman Wallace, formerly of Alma, is with Dr. Don Armour, in the Canadian Hospital, London. Dr. Stewart of Calgary, is also in the same hospital.

Drs. T. B. Richardson and J. O. Malloch, both of Toronto, have recently been very ill, but are now convalescing.

Dr. C. Stewart Wright has located at 99 Bloor Street West, Toronto, and will confine his practice to orthoperic surgery. He was for some time with Dr. B. E. Mackenzie.

There will go from Hamilton with the second contingent Dr. G. D. Farmer, Dr. D. P. Kappele, Dr. W. L. Silcox and Dr. W. F. Nicholson.

Sir William Osler has tendered his services in aid of the McGill Base Hospital, which, with professors, students and nurses, will go to the front in early spring.

On a recent date the British Red Cross Society had three hospital trains, 700 motor ambulances, and a large number of motor lorries running in France. These modes of conveyance are equally available for the French as for the British.

An interesting result of the war is the drop in income among the fashionable doctors in Britain. This is due to the public mind being diverted to the issues of the day. The authorities cannot cope with the applications for positions in the army medical service.

Tag Day at Harvard University brought in a goodly sum of money. The funds will be used for the purchase of four motor ambulances for Red Cross work in Europe.

At the recent meeting of the Nu Sigma Nu Medical Fraternity in Philadelphia, the highest honor was awarded Prof. J. Playfair McMurrich for his work in anatomical research.

The British Foreign Office has accepted the offer of McGill University to furnish a base hospital. Dr. H. S. Birkett will be in charge. There will be with him Drs. Adami and Elder.

Honorary Fellowship was conferred by the Toronto Academy of Medicine upon Professor Leathers on the occasion of his departure from Toronto for his new sphere of duty in connection with the University of Sheffield.

Dr. C. J. Hastings, Medical Officer of Health for Toronto, was elected first vice-president of the American Public Health Association, which held its meeting in Jacksonville, Fla.

Mr. W. J. Gage has been made chairman of the executive committee of the Victorian Order of Nurses, Toronto, in place of the late Mr. D. R. Wilkie.

The students of the School of Pharmacy, Toronto, a short time ago, presented Dr. J. T. Fotheringham with a handsome gold watch as a token of their high regard for his services to the school.

The smallpox outbreak has spread from London into the Lobo township, and the schools were ordered closed and a number of families quarantined.

On 10th January a party of 17 Japanese nurses and four surgeons from the same country spent a day in Niagara Falls sight-seeing. They were en route from Japan to Southampton, where they will enter an English hospital and assist in caring for the wounded. The party left via New York. With only a few exceptions, the members of the party speak English. They came by way of San Francisco.

The death rate in Toronto from typhoid fever, scarlet fever and

diphtheria combined last year was 28.3 per 100,000.

When the first contingent left for Valcartier the Woman's Auxiliary to the Army Medical Corps was organized, being composed of the wives and relatives of officers, wives of doctors also coming in with some friends interested and actually representing four units, viz., No. I. General Hospital, No. X. Field Ambulance, No. XI. Field Ambulance, No. XIII. Feld Ambulance. The objects accomplished so far are providing comforts for the men of the A. M. C., those who have gone, and those yet to go; hospital supplies for all branches of the A. M. C., stretcher-bearers, drivers, etc. The families of those left behind are helped by visiting and giving assistance necessary to the wives and children, and through the kindness of the House Committee of Bloor Street Baptist Church, a Christmas tree was held for them with a supper and simple gifts. Mrs. J. T. Fotheringham is president of the society; Mrs. C. J. Currie, corresponding secretary.

Dr. John R. Rutherford left an estate of \$54,000. His wife gets annuity, and the remainder goes to his three children.

Members of the Provincial Board of Health will deliver lectures during the winter. The tour will extend from January 11th to February 5th, including the following places: Thornbury, Clarksburg, Meaford, Dundalk, Shelburne, Grand Valley, Arthur, Mount Forest, Mildmay, Wingham, Clinton, Seaforth, Lucknow, Kincardine, Hensall and Exeter.

Dr. W. G. Charlton was elected the first Mayor of Weston recently with a majority of 58 votes over ex-Reeve Dr. E. F. Irwin, who was seeking re-election.

Drs. Herbert E. Clutterbuck, of 148 Grace Street, and Perry Goldsmith, of 84 Carlton Street, Toronto, are serving in British military hospitals in Boulogne, France. Letters have been received regularly by their families, but absolutely nothing relating to their activities has been included because of the censor's regulations. Dr. Clutterbuck has not even mentioned where he is stationed. Dr. Clutterbuck went to

England in April last, and was made a Fellow of the Royal College of Surgeons. He received an invitation to join the staff of the Dreadnought Military Hospital in London, but realizing that there was a greater need of surgeons in France, he volunteered for active service. He was sent to France the next morning. Dr. Goldsmith went to England with the Queen's Own Rifles, and was later detailed to Boulogne. He was on a British hospital train which was shelled by the Germans. He escaped injury, but one of the nurses had her nose blown off.

Medical officers hereafter who pass men physically unfit that are sent to the divisional concentration camp may be called upon to pay the loss incurred by the Government in the payment of railway fares and subsistence allowance. A notification to this effect has been issued by Lieut.-Col. J. T. Fotheringham and sent to medical inspectors pointing out that medical officers have no discretion in accepting any minor grades of defects but are required to abide strictly by the regulations.

Lieut.-Col. W. Scott, of the Canadian Medical Service, has been appointed to Queen Alexandra's Military Hospital in France.

Dr. Perry G. Goldsmith, of Toronto, was on a train in France which was shelled. He made a narrow escape from injury. A nurse on the train had her nose shot off.

Dr. Hugh A. Stevenson was elected Mayor of London by a majority of 672 over ex-Mayor Graham, who was a candidate.

The chairman of the Board of Trustees of Queen's University, Kingston, received notice from the British Army Council through the Minister of Militia that the offer of the medical faculty to furnish a stationary hospital in the war zone cannot be accepted at present. The council expresses its warm appreciation, but regrets that in the present situation there is no opening for taking advantage of services so generously placed at its disposal.

Dr. David Jamieson, M.P.P., of Durham, will be the speaker in the Ontario Legislature for the coming four years.

Quebec.

The Quebec Municipal Board of Hygiene and Statistics has commenced the publication of a sanitary bulletin, the first number of which was issued in October. It will appear monthly and will contain information concerning public health, prevention of disease, and recent discoveries in matters pertaining to hygiene and health. Important articles will appear both in English and French, others being in either one language according to the source of information.

From Abroad.

On Dec. 21st the total of the New England Belgian Relief Fund amounted to \$143,523.72, the Massachusetts Red Cross Fund to \$90,-263.22, the Russian Relief Fund to \$7,829.50, the Polish Relief Fund to \$5,700.71, the New England British Relief Fund to \$14,101.52, and the Boston branch of the American Ambulance Hospital Fund to \$46,017.95.

Dr. Joseph A. Holmes has reported to the United States Bureau of Mines that an improved method of extracting radium has been devised that will reduce the cost from \$120,000 to \$40,000 for a gram.

A national committee, the secretary of which is Dr. H. Edwin Lewis, of New York, has been organized to obtain funds for the relief of physicians and their families who are destitute in Belgium. Among the other New York physicians interested in the movement are Col. Charles E. Woodruff, U. S. Army Medical Corps, retired, and Drs. William Seaman Bainbridge, Parker Syms, Louis F. Bishop, J. Wallace Beveridge, Smith Ely Jeliffe, and H. Sheridan Baketel.

The first mention of ambulances seems to be in Hirstius's De Bello Africano, where he says that after the battle fought near Ruspina, Labienus ordered his wounded to be carried in wagons (plostris) to Adrumentum. But the credit for the establishment of field hospitals and ambulances on any considerable scale seems to be due to Isabella the Catholic of Spain. During the war of Granada (1483-87) the Queen caused a number of large tents, known as "the Queen's Hospitals," to be always reserved for the sick and wounded, and furnished them with the requisite attendants and medicines at her own charge.

The publishers, Messrs. Félix Alcan et R. Lisbonne, of the excellent Revue de médicine and Revue de chirurgie, have issued a notice that the mobilization of the editors and their collaborators in the field hospitals, as well as the enlistment of the compositors in the army, has compelled suspension of publication. When the war is over it is the intention of the publishers to make good the missing numbers, and all the issues for 1914 will be supplied. The fidelity of collaborators and subscribers is counted upon, not without good reason we feel sure.

A recent letter to a number of surgeons of the United States, written by Sir Ryckman Godlee, of London, chairman of a committee organized in Great Britain in aid of their Belgian colleagues, in which Sir Ryckman appeals for aid in relieving the distress in Belgium, has resulted in the organization of a committee of American physicians for the aid of the Belgian profession, which will volunteer to accept subscriptions in money and surgical or pharmaceutical supplies, and distribute the same, to the best of their ability, among the Belgian sufferers.

Dr. Alexis Carrel, of the Rockefeller Institute, in New York, now a surgeon in the French army, was until recently in charge of a military hospital in Lyons. At present he is making a tour of inspection of the French military hospitals at the front.

Three American surgeons sailed recently for foreign service under the American Red Cross. Dr. P. A. Smith, sailing on the *Potsdam*, is from Enid, Okla. He will be the third assistant staff officer at the Imperial Royal Reserve Hospital in Vienna. The two other surgeons, who sailed on the *Dwinsk* for Russia, are Dr. John Mann, of Petersburg, Va., and Dr. T. L. Haslett, of Pittsburg.

Sir J. Bland Sutton, in closing a debate on wounds in war, remarked that he had himself given up carbolic acid because he was specially susceptible to its ill-effects. He used perchloride for a long time, but had lately been trying iodine and was well satisfied with it. It was a striking fact that these septic wounds cleared up rapidly with fomentations, especially peroxide of hydrogen. When the sepsis subsided foreign bodies could be cleared from the wounds, which then healed with great rapidity.

We regret to have to announce that Dr. Albert Van Gehuchten, professor of neurology in the University of Louvain, who has recently been residing and working at Cambridge, died on December 9th, after a short illness. Prof. Van Gehuchten made many valuable contributions to the physiology and pathology of the nervous system.

Dr. A. F. A. King, of Washington, D.C., the author of a very popular text-book on obstetrics, died on 13th December, at the age of 74.

Dr. Isaac Burney Yeo died recently at the age of 79. He had been physician to King's College Hospital and to Brompton Hospital. He was the author of a favoriet work on treatment.

Dr. Angelo Celli, professor of hygiene at the University of Rome and chief of the Italian National Board of Health, died unexpectedly at Monza on November 3rd, 1914. He was born at Cagli, in Pesaro, in 1857, and graduated in medicine at the University of Rome. In 1886 he was appointed professor of hygiene at the University of Palermo, where in 1887 he founded the local Pasteur Institute. He became professor extraordinary in 1888 at the University of Rome, where he also established a Pasteur Institute in 1889. In 1890 he succeeded Tommaso Crudeli as professor of hygiene at Rome.

Dr. William Henry Baker died of heart disease at his home in Waltham, Mass., on November 26th, 1914. Dr. Baker was born in Medford, Mass., on March 15th, 1845. He was graduated from the Harvard Medical School in 1872, and then served as house officer at the Boston City Hospital and at the Woman's Hospital in the State of New York.

Coming to Boston, he made a specialty of gynecology, and in 1875 established the Free Hospital for Women in East Springfield Street, modeling it after the Woman's Hospital. In this year he became clinical instructor in gynecology at the Harvard Medical School, and from this position advanced through the grades, becoming professor of gynecology in 1882 and retiring, after twenty years of service, in 1895.

Lieut. (Dr.) A. G. A. Fletcher, late of Toronto, and who went to Britain with the first Canadian contingent, has entered the regular army medical service, and has been attached to the 10th Devonshire Regiment.

The Fifth Royal Highlanders were quarantined at Salisbury as diphtheria had broken out in the ranks. The epidemic was not serious. Other battalions were warned in order to avoid the lines of the Montrealers. No deaths have been reported.

An aeroplane helped save a life at Villacoubley, near Paris. A mechanic in the motor works there was caught in the mechinery and was bleeding to death when a message was telephoned to the doctor in charge of the military hospital, near the St. Cyr Aerodrome. He seized his instruments, took the observer's place on Maurice Farman's military biplane, and reached Villacoubley, eight miles distant, in five minutes. There he rapidly sutured the arteries and saved the man's life.

The increase in the number of women entering upon the study of medicine in London makes it urgently necessary to increase the laboratory accommodation of the London (Royal Free Hospital) School of Medicine for Women, the only one in London at which women con obtain a medical education. Mrs. Dr. Garrett Anderson has issued an appeal for assistance to procure the needed laboratory facilities.

Seventeen Japanese nurses and three Japanese surgeons, headed by Dr. Jiro Suzuki, surgeon-general of the Japanese army, are now in France.

According to a report from Basel, an official statement gives the German losses among army doctors during the first five months of the war as 342, of whom 112 are slightly wounded, 40 seriously, 1 ill, 65 dead (including those who died of disease), 75 missing, and 46 captured—in all, nearly 3 per cent. of the total number of doctors in the German army.

In the annual statement of the National Association for the Study and Prevention of Tuberculosis, published on New Year's Day, it is shown that more than \$20,500,00 was spent last year in the campaign against tuberculosis in this country. Sixty-six per cent. of the money was derived from public funds, either Federal, State, county or municipal, and the remainder was contributed by private individuals.

Announcement is made by Dr. J. William White, a member of the board of trustees of the University of Pennsylvania, that the university is preparing to send abroad eight or ten surgeons to take charge of the Philadelphia ward in the American Military Hospital in Paris.

The treasurer of the Committee of American Physicians for the Relief of the Belgian Profession reports for the week ending January 2, 1915, contributions amounting to \$257.50; contributions previously reported amount to \$405, making a total of \$662.50.

A detailed list of the thirty cases of human plague recognized and reported in New York from the beginning of the outbreak in June to the end of December, has been published by the United States Public Health Service, and a similar statement of plague infected rats caught and reported up to December 12th. The last cases of human plague occurred on September 30th.

The registration statistics of thirty American universities for 1914, published in the issue of *Science* for December 25th, show that, including summer-session enrolment, the first eight are Columbia, California, Chicago, Wisconsin, Pennsylvania, Harvard, Michigan and New York. Exclusive of summer students, the order is Columbia, Pennsylvania, Califarnio, Michigan, New York, and Harvard. The largest medical school is that of New York, with 439 students. The Michigan medical school has 378. Johns Hopkins 274, Columbia 378, Tulane 343, Harvard 321, Pennsylvania 290, Illinois 287, and Ohio 281.

In the summer of 1914 the total number of medical students in the Swiss universities was 2,205, of whom 327 were at Bâle, 117 at Berne, 879 at Geneva, 316 at Lausanne, and 566 at Zürich.

Report from New Haven, Conn., states that on Dec. 27th a fire broke out in the Grace Hospital of that city. The seven patients in the portion of the building involved were rescued by nurses. The damage is estimated at \$10,000.

Dr. E. W. Taylor has retired from the office of editor-in-chief of the Boston Medical and Surgical Journal, and has been succeeded by Dr. Robert M. Green. The Journal has been incorporated as a charitable institution and will be published in future by the new company, and not by Mr. W. M. Leonard as heretofore. We wish both the editor and journal every success.

Dr. Oswald Dinnick, formerly of Toronto, has given up an important position in London and gone to the front as first lieutenant R. A. M. C.

It is officially reported a short time ago that there were twenty-six cases of meningitis among the members of the Canadian Expeditionary

Force, and that there had been sixteen deaths from the disease. The Toronto regiment established its own hospital, under Dr. Alfred Haywood, formerly of the Toronto General Hospital. There was little sickness in the Ontario brigade.

Recently there have been some deaths in factories where a varnish containing tetra chlor-ether is used. The inhalation of the fumes causes serious disease of the liver.

Cerebro-spinal meningitis occurs sometimes in epidemics, sometimes sporadically. It is infectious. Its germ was discovered by Weichselbaum in 1887. It was not recognized as a distinct disease until the nineteenth century, being first described at Geneva in 1805. It was later noted in Paris in 1814, Metz and Genoa in 1815, Westphalia in 1822. In 1837 it prevailed among troops in garrison in the south of France. In 1846 it first showed itself in Great Britain, where it was popularly known as "spotted fever" and "the black death." Small outbreaks occurred in Dublin in 1885 to 1900. There was an outbreak in New York in 1905, and in Scotland and Ireland in 1906-7-8.

Among the many appeals now made there is none more worthy than that for aid to the Red Cross work among the Montenegrins. They are a brave but poor people. Lady Roper Parkington, 58 Green Street, Park Lane, London, is treasurer.

OBITUARY

GEORGE ERNEST MILLICHAMP.

Dr. George E. Millichamp died at his home, 193 Bloor Street East, Toronto, on 7th January. He was in his 43rd year, and was born and educated in Toronto, taking his course in Jarvis Street Collegiate Institute and the University of Toronto. Ten years ago he married Miss Acres, who survives him with two children. He had been in very poor health for over a year, and his death, though sudden, was not unexpected.

G. H. DESJARDINS.

Dr. Desjardins died at his sister's home in Montreal on 9th January. He was born at Terrabonne in 1848. He received part of his education in the College Masson, of that place. He was attached to the army in Italy for some time and was in several engagements. After the restora-

tion of peace he studied medicine and graduated from the University of Rome. On his return to Canada he obtained his degree of medicine from the University of Victoria, with which he was for some time associated as one of its professors. For ten years he lived and followed his profession in Boston, and was president of the Boston Medical School. On his return to Montreal he was one of the promoters of the Institute of Nazareth and one of its benefactors. He also took an active part in the foundation of the Institute for the Blind. In addition to these activities, he interested himself greatly in municipal affairs. He was an esteemed citizen and an honored member of the medical profession.

ROY WILSON.

The death occurred on 22nd January, under specially sad circumstances of Dr. Roy Wilson, only son of Dr. R. J. Wilson, 20 Bloor Street West, Toronto. The young doctor, in his 25th year, graduated from University of Toronto last spring with his degree of M.B., and in the fall joined the staff of Toronto General Hospital, where his work was regarded with much favor. When the war broke out he was one of the first to join the University Officers' Training Corps, and was looking forward with enthusiasm to military service. Six weeks before his death he was seized with a serious malady and the news of his death on the day of the inspection of the University Corps was received with keen regret by his immediate comrades. Dr. Wilson was a member of Ki Delta Si fraternity, of which he was treasurer for many years and later president. He belonged to one of the oldest families in York county, his grandfather, the late Robert Wilson, settling here in 1848. His mother predeceased him nine years ago.

BOOK REVIEWS

FEVER.

Its Thermotaxis and Metabolism. By Isaac Ott, A.M., M.D., Professor of Physiology, Medico Chirurgical College, Philadelphia; Member of American Physiological Society; ex-President of American Neurological Association, etc. Lectures delivered at the Medico Chirurgical College. New York: Paul B. Hoeber, Medical Publisher, 67-69 East 59th St. Price, \$1.50 net. 1914.

The author states that he has devoted much thought and study to this subject for a period of forty-five years. The study of fever includes bacteriology, pathology and physiology. The ancients thought that fever arose in the heart, and this view was held until 1660. Bacon held that heat was an expansive motion among the minutes particles of bodies, a conclusion which is held to-day. The author discovered, in 1885, 1887 and 1891, that puncture of the tuber cinereum in the anterior part of the thalamus caused the temper to rise. He then proved that this rise was due to over-production of heat and not to diminished dissipation. Other observers since have shown heat regulation is a function of the tuber cinereum. It has been shown that some other portions of the brain, as the corpus striatum and the floor of the third ventricle, and also some centres in the spinal cord. The author refers to the work that has been done by a number of observers on heat centres in the cortex of the brain. He gives his views as follows:

Thermogenic-tuber cinereum and corpus striatum, minor thermogenic centres in the spinal cord, thermo-inhibitory, cruciate and sylvian thermolytic, polypnocic in tuber cinereum, vaso-motor and sudorific. The author further contends that thermolysis is carried on by the polyprocic centre in the tuber cinereum, the vaso-motor centre and the sudorific centres. He states that in continued fever the increase in heat production does not last many days, but that the fever continues because of an altered relation between heat production and heat dissipation. Fever can be caused by the injection into the veins of various toxines. These stimulate the cells and cause increased metabolic change and consumption of energy. Hence the true theory of fever is a neurotoxogenic process The very pertinent question is asked whether or not fever is beneficial. The author points out that animals which were injected with less than the fatal dose of staphylococci, pneumococci, or colon bacilli lived longer and at least half of them recovered, whereas the control animals all died. The book is a most interesting one and comes from the pen of a noted investigator.

SURGICAL MATERIALS.

Surgical Materials and Their Uses. By Alexander MacLennan, M.B., C.M., Glas.; Visiting Surgeon, Glas.; Gev. Royal Hospital for Sick Children; Assistant Surgeon, Western Infirmary, Glasgow; Consulting Surgeon in Glasgow, East Coast Railway; Honorary Consulting Surgeon, Royal Infirmary, Stirling; Consulting Surgeon to the County Council of Lanarkshire. With 277 illustrations and diagrams. London: Edward Arnold, 1915. Price 4s. 6d. net.

This book deals with bandaging, splints, dressings, antiseptics and asepsis, sutures and ligatures, and instruments. This is a typical book on minor surgery, and, as such, merits the very highest commendation. The subjects taken up are all handled in a most judicious, clear and

accurate manner. The diagrams are both numerous and excellent and assistant very much to a clear understanding of the text. The paper, type and binding are such as one would expect from such a well-known publisher. Altogether we can very warmly recommend this book, especially to students.

INTERNATIONAL CLINICS.

A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Paediatrics, Obstetries, Gynaecology, Orthopaedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and other topics of interest to Students and Practitioners. Edited by Henry W. Cottell, A.M., M.D., of Philadelphia With the colloboration of many distinguished writers. Vol. iv., twenty-fourth series, 1914. Price, \$9.00 a year. Philadelphia and London: J. B. Lippincott Company.

This volume contains sixteen articles on diagnosis and treatment, ten on medicine, two on medico-legal subjects, and one on medical illustrations. The various articles are, as usual in this series of volumes, of excellent merit. They have all been prepared by those well qualified for the task. Each section displays the marks of care in its preparation. The illustrations are numerous and useful. It would be impossible to discuss the several articles, but we may state that the reader will find much in the volume from which he will derive profit and will repay him for the time he spends upon it.

CARCINOMA OF THE THYROID IN THE SALMONOID FISHES.

An Investigation and Experimental Study Conducted by the Gratwick Laboratory of the State Institute for the Study of Malignant Disease, Buffalo, N.Y., and the United States Bureau of Fisheries. By Harvey R. Gaylord, M.D. Director, State Institute for the Study of Malignant Disease, Buffalo, N.Y., and Millard C. Marsh, Biologist, State Institute for the Study of Malignant Disease, formerly Scientific Assistant, United States Bureau of Fisheries. With the collaboration of F. C. Busch, M.D., Internst, and B. T. Simpson, M.D., Pathologist, State Institute for the Study of Malignant Disease. Washington: Government Printing Office, 1914.

This report is one of the very greatest importance, and is the outcome of an unusually large amount of observation. It is along methods of this sort that the true nature of cancer will be discovered. Many very interesting conclusions are drawn. Among these might be mentioned that the disease of cancer of the gills of the salmon may become eudemic and epidemic in hatcheries. By scraping the wooden troughs in which the disease has become eudemic an agent can be obtained which is capable of spreading the disease. This agent is destroyed by boiling. Feeding the fish on protends increases the tendency to the disease. Some

varieties of the salmon have a remarkable immunity to the disease. A number of spontaneous recoveries occur, and this number is distinctly increased by restoring the fish to natural conditions of water and food. The incidence of the disease increases with the age of the fish. The disease does not seem to be transmitted directly from one animal to another. Boiling the water prevents the spread of the disease. It is held that eudemic goitre and cancer of the thyroid in the salmon are the same disease.

LONDON DERMATOLOGICAL SOCIETY.

Transactions and the Second Annual Report of the London Dermatological Society with List of Officers and Members. Price, 2s. 6d. London: John Bale, Sons and Danielsson, 83-91 Great Titchfield Street W., 1914.

This report contains a number of excellent papers and discussions on dermatology. These are by experts and will afford much valuable information to all who consult them. The report is issued on the best quality of paper and the type is clear.

BIBLICAL LIBRARIES.

A Sketch of Library History from 3,400 B.C. to A.D. 150. By Ernest Cushing Richardson, Librarian of Princeton University. Princeton University Press, Princeton. London: Humphry Milford, Oxford University Press, 1914. Price, \$1.25.

This book deals with Babylonian period, the Patriarchal period, the Egyptian period, various Jewish periods, the Persian period, the Greek period, the New Testament periods and the Roman period. There is in this volume the evidence of much research and sound bearing. All those who are engaged in library work will find in it much to interest them and a fund of valuable information as well. It is quite a revelation to read about the size and wealth of the ancient collections of manuscripts and coins. In our Persian collection, after it had been robbed on three different occasions, there remained enough gold and silver to make up the sum of \$5,000,000.

MISCELLANEOUS

MORE MEDICAL MEN.

The following medical men, who have have commissions on the reserve, have volunteered: Major Campbell Moyers, R.G.; Capt. D.

McGillivray, R.G.; Capt. Duncan Anderson, 9th M.H.; Capt. A. H. Caulfield, 9th M.H.; Lieut.-Col. Horace Bascom, of Whitby, 34th Regt.; Lieut.-Col. T. W. H. Young, Peterboro, commanding 10th Brigade, C.F.A.; Major R. H. Arthur, Sudbury, 97th Regt.; Lieut.-Col. George Acheson, Hamilton; Major H. H. Alger, 49th Sterling Regt.

INFECTIOUS DISEASES IN ONTARIO.

The prevalance of smallpox and diphtheria in Ontario at present is giving some concern to the Provincial health authorities. During December there were nearly three times as many cases of smallpox in the province as during December, 1913, while diphtheria cases increased by over 200. December, on the whole, was an unhealthy month, compared with a year ago, the only decrease noted being in scarlet fever.

The detailed returns to the Provincial Board of Health for the month, with comparisons, were:

| | 1 | 914 | | 13 |
|---------------------------|--------|---------|--------------|--|
| Diseases | Cases. | Deaths. | Cases. | Deaths. |
| Smallpox | 94 | | 37 | |
| Scarlet fever | 226 | 5 | 241 | 9 |
| Diphtheria | | 29 | 294 | 17 |
| Measles | 372 | 1 | 148 | 3 |
| Whooping cough | | 7 | 31 | BATTER! |
| | | 65 | 103 | 52 |
| | | 14 | 59 | A STATE OF THE PARTY OF THE PAR |
| | | | 2 | 1 |
| Cerebro-spinal meningitis | | 3 | 1 | î |
| Totals | 1,427 | 124 | 916 | 93 |
| Tuberculosis | 113 78 | 14 | 59 2 1 | 52 10 1 1 |

DOCTORS READY TO SERVE.

The following is a list of thirty-seven medical men, who have recently qualified for military field medical men who are willing to serve with any contingent, and who are arranged according to seniority in qualification for military service: J. W. Humphrey, F. M. Walker, C. C. Birchard, F. S. Park, J. B. McMurrich, R. H. Thomas, G. G. Clegg (at Hurst Concentration Camp), L. C. Palmer, W. T. Little, J. D. Hayes, J. G. Fitzgerald, H. L. Reagin, O. J. Day, E. A. P. Hardy, A. Pain, A. C. Rowswell, R. Y. Kenny, H. G. Willson, F. E. Watts, G. N. Urie, V. H. McWilliams, J. V. Brown, N. C. Sharpe, H. E. Ferguson, A. A. Fletches, M. G. Thomson, G. F. Boyer, R. W. MacIntyre, F. J. Livingstone, E. Boyd, W. E. Struthers, A. H. Caulfield, J. W. S. McCullough, W. L. Whittemore, R. H. Paterson, G. D. Porter, F. A. Dallyn, H. C. Parsons.

THE POSITION OF BELGIAN DOCTORS AND PHARMACISTS.

By Prof. C. Jacobs, University of Brussels.

Belgium, a blood-stained and ruined country in the horrors of despair, claims the help of her friends to whom her freely consented sacrifice has brought a ray of hope in the dreadful nightmare of the past three and a half months.

I raise my voice with a feeling of intense pity on behalf of thousands of our weeping brethren in their Calvary of suffering, but it is my pride to carry out this duty to my country. All the evils of war have been thrust upon us at the same time—a useless and cruel holocaust of human lives, a decimated, despairing, and starving population, ruined homes, and, far worse than all, our children—the only hope of our country—are being mown down by want and disease.

Our doctors have not been spared, they, too, are bearing a heavy share of the general suffering. And now long weeks—nay months—of trial stand before them, during which they know that they will have to bear a terrible burden. They will have to devote themselves untiringly, giving all their care and time, and even their lives, if need be, to the cause of their country; and yet many of them are homeless, deprived of their laboratories, instruments, and their medical stores. What will become of those that still remain of our people, threatened as they are by the grim havoc of war and by contagious disease, its constant follower?

In anticipation of these inevitable consequences it has become my duty, as the spokesman of my Belgian colleagues, to appeal to the medical and pharmoceutical world that an impulse of international fraternity may come to the aid of Belgian doctors and pharmacists. Is it realized that we in Belgium have suffered and are suffering? Duty, and duty only, has bound our doctors and pharmacists to their posts in the devastated localities; some of them are carrying on their profession in the ruined remains of destroyed buildings, whereas others have to improvise at haphazard any kind of shelter for their Samaritan work. Need I describe the manner in which they sustain themselves, and how they manage to nourish their wives and children?

I have witnessed such misery amongst them! Some have had to work as navvies in order to have a few pence in their pockets; others have told me that they have not seen bread for a fortnight, but had lived exclusively on potatoes. Others had a meager bunch of straw laid on the bare ground as a bedstead; the only pair of boots owned by one of them was falling to pieces in tatters. Men I have seen were dressed in torn garments and their children were in rags. One of my col-

leagues had to live on wayside herbs for three days and three nights, and his wife shared his fate! A professor of a university, bereft of everything, was, when I saw him, in dire want of a bed, and another of equal academic standard was wandering haggard over the country-side, searching in vain for a beloved family. And some of our ranks have been taken as hostages, others have been shot, and their widows and orphans have been left deprived of everything.

This description presents a genuine picture of the distress of the Belgian medical profession, but when these educated people are struck down by want they will never beg for charity; it must be brought to them. It is impossible to calculate how many of them are in this sore distress, and some have been so for days and weeks, but it is easy to see that the distress must be very widespread. Considering now the medical men only, Belgium contained 4,800 doctors.

At least 1,000 of the doctors are now absolutely proverty-stricken, and 2,000 to 3,500 doctors are suffering cruelly through this war. We had 1,800 pharmacists all over the country, and at least 300 of them are unable to earn their living, and all of them, with very few exceptions, are deprived of the most necessary trading stock. I dare say that my estimate is below reality.

Consider the immense suffering that our medical brethren have gone through and are still going through. Their pathetic and lamentable distress should unite all in the desire to relieve it. These practitioners have given a lesson to the world of unfaltering energy, but now their breaking courage will have to be kept up. In this emergency I call on the medical profession to rally to our help. It will be for us a great debt of honor and of eternal gratitude.

THE WAR AND MEDICAL STUDENTS.

Sir Donald MacAlister, president of the General Medical Council for Great Britain, makes the following statement in the British Medical Journal:

The Registrars, Deans, and other officers of the Schools of Medicine, and of approved scientific institutes throughout the United Kingdom, have been good enough to furnish me with returns, showing the number of medical students in attendance this session, as compared with the number in attendance last year. As the statistics have an important bearing on many questions touching the future supply of qualified practitioners for the service of the country, I would ask you to publish the following figures:

Decrease in Enrolments, October, 1914 (as compared with preceding year).

| First-year students | 56 | fewer |
|----------------------------------|-----|-------|
| Second-year students | 237 | |
| Third-year students | 237 | " |
| Fourth-year students | 211 | " |
| Fifth (and higher) year students | | " |

The aggregate number of medical students now pursuing their curriculum with a view to qualification is thus about 1,000 smaller than in 1913.

Unless many senior students return to their studies within the next few months, the result will be that the number of young qualified practitioners added yearly to the ranks of the profession will during the next few years be from 200 to 300 less than before. This is equivalent to a diminution of about 25 per cent. of the average number annually added to the *Medical Register* on qualification. The number annually removed from the *Register* by death or otherwise has for some years past been about 800.

In view of the additional losses among senior practitioners due directly or indirectly to the war, the prospective diminutoin of our

reserve supply calls for serious consideration.

ALBERT VAN GEHUCHTEN.

Albert van Gehuchten, professor of anatomy, pathology and treatment of diseases of the nervous system in the University of Louvain, died in Cambridge on December 9th.

The arrival of Professor van Gehuchten, of Louvain, in Cambridge was cordially welcomed. Both on personal and scientific grounds it was felt to be not only a great privilege to receive him, but also a rich promise of help and inspiration for our schools. On the painful events which led to his visit I will say nothing except this, that both his town and country houses were burned, and with them many scripts containing records of the last ten years of his work. With a courage worthy of his great nation he restrained his grief, and in a buoyant and hopeful spirit began work anew. Yet we saw only too well how bitter were the moments when at times his grief could not be restrained.

The studentship maintained by the generosity of Dr. R. C. Brown, of Preston, at our Research Hospital hoppened to fall vacant, and by the assistance of Sir William Osler a like stipend was provided from the Rockefeller Fund; and, although the wards of the Research Hospital were occupied by wounded officers, the laboratory—an independent building—was placed at Professor van Gehuchten's service. In a few days it was manifest to Mr. Strangeways, and others of our circle, what a brilliant colleague we had secured. His methods were remarkably skilful and accurate, and with these opportunities his spirit and energy

were renewed, and his bodily health seemed restored. One evening he complained of pain in the left iliac region, and twenty-four hours later we made a diagnosis of volvulus. Dr. Cairns, of Huddersfield, who was in surgical charge of the hospital, decided that operation was urgent, but, under all the circumstances, desired further assistance. Most kindly Mr. Waring came down at our request, a laparotomy was performed, the volvulus was released, and all went well. In a few days convalescence seemed established, the patient felt confident of recovery, was attending to his correspondence and receiving a few friends, when suddenly he complained of a terrible oppression in the region of the heart, and in a few minutes he passed away from a world of sorrow.

At his funeral the Roman Catholic Church was filled by a large congregation of university and townspeople, and of his professional and other colleagues and compatriots now in Cambridge, the Vice-Chancellor being one of the pallbearers. It was universally felt that in van Gehuchten biological science had lost one of its most skilful investigators and most brilliant exponents.

EUROPEAN WAR NOTES.

In a recent letter to the public daily press, Mr. Robert Bacon has called renewed attention to the needs of the American Ambulance Hospital at Paris:

"The American Ambulance Hospital in Paris has cabled an urgent appeal for more volunteers to drive motor ambulances in France; 180 men and 100 ambulances are wanted as soon as possible.

"A word of explanation of what the American Hospital is: Its present organization consists of the main hospital at Neuilly, on the outskirts of Paris, located in the Lycée Pasteur building, which had just been completed at the outbreak of the war. It is at present equipped with about 450 beds. A second hospital unit has also been established at a point nearer the firing line, about 20 miles from Paris. This contains about 200 beds.

"In addition there is a flying ambulance corps, consisting of about 60 motor ambulances.

"To enlarge this work and increase its effectiveness a call for volunteers is now made. The reports from the surgeons working in the hospital show that the majority of the cases brought to them have been so delayed in reaching medical assistance that gangrene and blood poisoning have frequently unnecessarily set in, and that some of those only slightly wounded have succumbed because of inattention before reaching

"To date each ambulance has averaged the transportation of over 50 wounded a day, and there are many emergency calls when they are pushed to the fullest extent of their endurance. It is not especially easy work, and every volunteer is subject to the military discipline of the organization."—Boston Medical and Surgical Journal.

TYPHOID BANISHED BY USE OF VACCINE.

The war has demonstrated beyond all question, according to members of the Medical Commission, the effiaciousness of anti-typhoid vaccination. Most of the members of the active army had been vaccinated before the war, but the reservists and teritorials drafted, and sent to the front later had not, and as a result, towards the end of October a large number of cases of typhoid developed.

The Medical Commission sent doctors to the firing line, and they

vaccinated a whole army corps of 40,000 men.

By the end of December the good results of this treatment became apparent, the only cases remaining being among the men of two regiments, which the doctors were unable to reach.

BELGIAN RELIEF FUND.

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Geo. H. Craydon, Edmonton, President Alberta Pharmaceutical Association; Robt. Martin, Regina, President Saskatchewan Pharmaceutical Association; Jas. E. Emery, Vancouver, President British Columbia Pharmaceutical Association; E. E. King, editor Canadian Practitioner; Jno. Ferguson, editor Canada Lancet; W. A. Young, Canadian Journal Medicine and Surgery; Geo. Elliott, Dominion Medical Monthly; Andrew McPhail, Montreal Journal Can. Med. Association; Duncan Anderson, Public Health Journal.

STATEMENT FROM COMMITTEE.

Toronto, January 6th, 1915.

Dear Doctor:

At the request of Sir Ryckman Godlee, of London, a meeting was held and a central executive committee for Canada appointed to undertake the raising of funds to assist the Belgian physicians and pharmacists who are in dire distress.

We will co-operate with Sir Ryckman Godlee's committee for Great Britain and Ireland, and the committee in the United States and other countries which are neutrals or allies in the war.

Our committee considered the best way to get at the entire profession in Canada would be to have associated with us on this committee the president of the Canadian Medical Association and the presidents of the various Provincial and County Medical Associations, as well as the presidents of the medical societies in the various centres, and the deans of the medical colleges throughout Canada, with the addition of representatives of the Canadian pharmaceutical profession.

That some immediate help is urgently needed will be made evident by reading the enclosed copy of a letter from Prof. Jacobs, the delegate from the Belgian committee having similar aims. The Belgian committee will act as the intermediaries through which the help will be sent, and are now despatching to Belgians in portable form, packets of medical and pharmaceutical material, as well as surgical instruments.

This appeal for funds to the medical and pharmaceutical profession is to enable Belgian practitioners and pharmacists to carry on their work effectually, as soon as military and political circumstances will permit. Further money is required to help the refugee Belgian doctors in England, most of whom have nothing in this world left to them.

Will you undertake to arrange a meeting and the appointment of a local committee, at as early a date as possible, to raise subscriptions from the physicians and manufacturing and retail druggists in your locality. Subscriptions collected should be forwarded to the Hon. Treasurer of the Central Executive Committee, Dr. D. J. Gibb Wishart, 47 Grosveror St., Toronto.

Should circumstances not permit your active participation, may we ask that you so inform us at as early a date as possible, that we may appoint a substitute to undertake the work in your district.

Any amount that the doctors or druggists feel like contributing will be gratefully accepted. For your information we might say that many of the medical men here are contributing \$25, others \$5 and \$10, but any subscriptions of a smaller amount would be equall yacceptable. As the need is urgent, we hope you will give this matter as early consideration as possible.

Yours sincerely, H. A. BRUCE, Chairman. W. McKEOWN, Secretary.

WORK OF BRITISH RED CROSS.

According to a statement issued by the British Red Cross Society, the number of auxiliary home Red Cross Hospitals accepted by the War Office up to Dec. 12th was 598, containing 16,950 beds. These latter are distributed among the army commands as follows: London, 933; Eastern, 4,324; Southern, 5,445; Northern, 2,610; Aldershot, 796; Western, 2,641! Irish, 201. Up to the same date the society had despatched 700 motor ambulances to France.

During last week 453 cases of stores and garments were sent abroad, the greater portion to Boulogne, Calais, and Dunkirk, while 215 hospitals in this country were supplied with 479 cases of stores. It is stated that in consequence of the recent lull in the fighting, the extreme pressure that existed previous to the middle of November has been considerably relaxed. "The chiefs of the Army Medical Department at the War Office have stated, in the frankest terms, that the aid given by the society during the recent period of high pressure was invaluable. They allow that the despatch of large quantities of stores to Boulogne—daily, and at a few hours' notice—practically saved the situation. They, however, insist that, under present conditions, the military stores can supply their own hospitals with all that is indispensable, and that there is no necessity for the Red Cross to supply anything but suc hextra comforts as it may think fit to provide.

"It has accordingly been decided that, as long as no sudden and unexpected demand arises, the stores department of the Red Cross will continue to supply the following: (a) The hospitals abroad, actually under its own authority, and for which it is directly responsible; (b) the ambulance trains, with comforts and garments; (c) the rest stations at, or near, Boulogne; (d) the ambulance ships, with garments for the wounded; (e) the military hospitals abroad, with such comforts and garments as are not included in the army schedule, and which it may wish to provide.

"Should an emergency arise—involving a large and sudden increase in the sick and wounded arriving at Boulogne, or any other base—the stores department will assist the Royal Army Medical Corps to the

utmost of its powers, by sending stores of all descriptions to France in large quantities and in the quickest possible time."

At the end of last week the Red Cross personnel posted for war service abroad numbered 1,251, including 94 surgeons, 97 dressers, 298 nurses, 203 orderlies and 440 chauffeurs. Up to the present 411 Red Cross detachments have been mobilized, and 100 partially mobilized, while 189 are employed, but not mobilized.

LETTER FROM DR. H. E. CLUTTERBUCK.

Dr. Clutterbuck, of Toronto, was in Britain studying for his F.R.C.S. diploma, which he has received, and has been in France along with Dr. Perry G. Goldsmith, of Toronto. They have been engaged in caring for the wounded in a hospital at Boulogne. Quite recently he wrote Mrs. Clutterbuck as follows:

"We will redress the sufferings of Belgium in so far as that is possible in a material way, I am certain beyond a doubt, and that before a year is closed. But the nearer view we get of the German culture the more we realize that this is not ordinary war, but involves the honor of our race, and at such a time all private considerations must give place to the common danger. Let no one doubt the magnitude of our task.

or he will be living in a fool's paradise.

"The flashlight picture I send shows our ward on Christmas Day. The men had a dinner of turkey, mashed potatoes, Brussels' sprouts, and plum pudding, with apples, bananas, and oranges, while those who wished were given ale. After that we had a concert with a graphophone. Three of the French soldiers sang 'La Marseillaise,' and then one of them, as an act of courtesy, made an attempt to sing a German Christmas carol for the benefit of a wounded German prisoner. Afterwards they all shook hands quite cordially.

"Christmas crackers were also distributed, and for the photograph

the men wore the funny paper caps contained therein.

"We have quite a few wounded Germans, one poor boy of 19 from Hamburg being shot through the chest. He has since recovered and

been sent on to England.

"The hospital is constructed from an old sugar warehouse, and we have in it two operating rooms, an X-ray outfit, laboratory, and sterilizer. It is not an old chateau, and is near the railway yards, just across from two submarines. Yesterday an aeroplane flew overhead.

"The photograph seems to make the ward look smaller than it really is. We have accommodation for about 500 in the hospital. The surgeons dressed as chefs, with paper caps on, to distribute the Christmas cheer. A few weeks ago one of the Canadian hospital units was detached from the base on Salisbury Plain and sent to France, and until such time as they get a hospital of their own individual members have been attached to the various hospitals here, and the one we got at our hospital is no other than Dr. Perry Goldsmith, my old Toronto friend. He is the short man with the woman's apron on. He came into my ward to have his picture taken."