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EDITORIAL

THE MARRIAGE OF DEFECTIVES.

It is never a good thing to interfere with the liberties of the individual except when such interference would prove a good to the public. When the welfare of the public is at stake, good government demands that the liberty of the individual be restrained. In no phase of modern life is it more justifiable to interfere with the liberty of the individual than in the matter of curtailing the ease with which mental and physical defectives may marry.

We do not propose going into any of the theories about heredity. One thing stands out as the result of wide observation that parents who are healthy of body and sound in mind are by far the most likely to have children who will partake of these two fine endowments—*mens sana in corpore sano*. We endorse very cordially the views of Dr. C. K. Clarke, Medical Superintendent of the Toronto General Hospital, to the effect that he "condemned the present marriage system under which imbeciles and mental defectives are able to obtain marriage licenses and be married without difficulty."

This raises the wider question that there should be some institution for the care of the feeble-minded. They must be gathered up and segregated. This is by far the most economical way to deal with them, as it is both humanitarian and preventive. In some instances these persons might be taught some trade; but in all cases they can be kept out of harm's way, and the propagation of their kind arrested. This latter is by far the most important result to be gained by the isolation of these people.

All the provinces of Canada should give this matter earnest thought, Much has been done; but much remains to be done. Because much has been done is no reason why more should not be done. We urge now, as we have urged many a time in the past the establishment of an institution for the care of the feeble-minded.

THE EFFECTS ON THE SOLDIER OF CRUEL CONDUCT IN WAR.

The effects of war on the human mind are very composite. In some it brings out the noblest qualities that man is capable of evincing, while in others it reveals characteristics compared with which the fury of the enraged tigress would be considered mild. This difference is largely due to the motive that governs the soldier, as the result of the mental attitude of his country and his superior officer towards war in general, the rights of the people of the enemy country, and what may be regarded as means to be adopted to win.

In the present war Germany approached it, indeed had long taught that war is a good thing, and is the surest way to make a nation great. It was the common teaching of the rulers in Germany that no nation reached its best except by war and conquest. Then, again, it is part of their teaching that the strongest should rule, and they mean by this, the strongest in material and physical force. Their chief teacher Nietzsche says "the saddest sight in the world is when the strong do not rule." But a still further code in Germany's attitude towards war is that anything you do against the enemy country is legitimate warfare, if it has the effect of causing loss of life the destruction of property, or the production of pain. Such a system of teaching will in the end break down the moral tone of an army and prove one of the most potent agencies in its defeat. "Self abasement will pave the way" to its own downfall. Odin in their eyes may appear strong; but in the final test will not prove so strong as the eternal moral laws of Jehovah, whom their war teachings ignore.

Have we any evidences of the effects of this teaching on the German army? Yes, many. In the first place hospital ships and ordinary passenger ships have been wantonly sunk. The Red Cross emblem has been used a means to gain a military advantage. Great works of art and cathedrals and colleges have been destroyed. Unarmed men, women and children have been tortured in most unmentionable ways, and cruelly murdered. Women and children have been used as a screen behind which the German troops fought. Prisoners with their doctors and nurses have been enclosed in a building and burned alive. The employment of disease-producing germs is another device.

Now as to the effects of all this on the soldier. General Hinderberg is authority for the saying that the victory in this war will belong to the army with the most enduring nerves. If he is a true prophet, he predicts the defeat of his own country. The cruel soldier is not the brave soldier. The German officer who shot Edith Cavell through the head when she fell exhausted before she reached the spot of execution,

is lower than a brute, and like the *brute* will be conquered by man. We see this in the inability of the German soldier to face the enemy in the open. They fly from the hand to hand fight. They will not come out into the open sea. They attack the enemy with a poisonous gas, and they put poisonous germs in their shells. They make an illegal use of science take the place of moral courage.

One of the best evidences we have of the breaking down of the *nerves* of the German soldiers is found in the steadily increasing number of suicides among her troops. Efforts have been put forth to stop this by cutting off the pensions from the wives and children of those who end their lives in this manner. But it is not effective, and the numbers of German soldiers who are taking their own lives are steadily on the increase. This is a far surer sign of coming defeat, than that Germany might meet with a signal reverse on the battlefield. Once more—"self abasement paves the way."

THE DOCTOR IN THE ARMY—HIS PLACE AND VALUE.

From the Iliad we learn, as translated by Pope:

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

In the present war the place and value of the physician and surgeon, and his co-worker, the scientist, have performed a most valuable service for the state. If they have not been able to control the bullets and shells, they have been able to repair in a remarkable way the damage wrought by these, and to hold in check all sorts of infections, both as regards the active soldier, and the wounded. The havoc resulting from disease and gangrene in bygone wars reveal the position of the scientist in the present war.

The Army and Navy of the first French Republic came well nigh to destruction for lack of medical men due to the suppression of the faculties of medicine in old France. Pestilence, disease, and gangrene was destroying more than the war itself. The result was that all medical men in France of suitable age and health were compelled to serve in the army and navy. Even students in their last year of study were forced into service. Every available building was filled with sick and wounded soldiers. Among the soldiers mortality was frightful. It was the field day of the bacillus. Compare that condition with the one now found in France, and one can at a glance see what science has accomplished.

SYPHILIS.

On this much debated subject new facts are from time to time coming to light. One of the new teachings is that the spirochaeta pallida is not the real cause of the disease, and its destruction does not effect a cure. The reason for this view is that this form of the infecting organism is only the male generative element. The real infecting agent is a spore and that spirochaeta is only one phase of the life history of the organism. It is the destruction of this spore that is necessary to effect a cure. If it will be shown in the future that there is a true stage of sporing the treatment and pregnosis must be based upon this knowledge.

Too high praise cannot be spoken of the nurses from the United States who went to the relief of the disease-stricken Serbians. The difficulties they had to encounter, the trials they had to endure, the dangers they had to face, and the awful sights they had to witness, were such as would try the bravest of the brave. But they faced the ordeal all for the love of humanity, and they won out.

Another fact that has been well established by ample experience is that the disease directly curable in proportion to the early stage at treatment is commenced. It is very doubtful if a perfect cure can be obtained when the disease has made considerable headway, and has become generalized. This experience lends force to the argument in favor of the view that there is a sporing process in the life of the organism.

When we come to the question of the treatment of the disease, it is becoming more and more evident that the only absolutely trustworthy remedy for the final cure of the disease is mercury in some form. The arsenical preparations, under names, such as salvarsan and neo-salvarsan, and some others, do not effect a radical ridence of the organism from the body. While these remedies are very valuable as aids in many phases of the disease, they must be supplemented by mercurials if the best results are to be obtained. We are inclined to think that if full trust is placed in salvarsan or neo-salvarsan to the exclusion of mercury, positive harm well result, and relapses and late sequels prove increasingly frequent.

Another fact that has been worked out by much observation is that the Wassermann reaction must no longer be regarded as evidence of active infection. The reaction may be quite positive long after infection has ceased to be present. It is, therefore, not a reliable guide for the administration of treatment. It is of far more value as a corroboration of diagnosis. It would be incorrect to say that a positive reaction calls for salvarsan, or its continuance until the reaction is negative.

With regard to marriage, it would appear that whether the treatment has been by salvarsan, or mercury, or a combination of these, the only safe rule is to postpone marriage for two years after symptoms have disappeared. In the matter of treatment there is a growing feeling that a course of mercurials is necessary before consent to marriage should be granted.

ONE DOOR OF ENTRY.

If one wishes to see to what an absurd state of things several doors of entry to the right to "practise" may lead, he has only to look into the state of affairs in Ohio. In that state there are now fourteen separate cults busily at work trying to set to rights the ills of humanity. The Act in that state also says "any other branch of medicine and surgery that may now or hereafter exist and not here specified." It will be seen that the door is here thrown wide open for other sects. These various cults, however, are under a state board, and in this way the condition of practice may be regulated somewhat on the grounds of efficiency. Persons who obtain a certificate to practise any one of these cults must limit his work to such a form of practice; but has the right to diagnose and administer his method of treatment.

In the state of New York, in 1907, an Act was passed that recognizes only one standard and provided only one license and the same educational standard. The state of New Hampshire has followed this course. In all the states where several standards have been allowed the invariable tendency has been to lower the educational attainments of those who undertake to treat those seeking their advice. This state of confusion must be avoided in this province.

THE MEDICAL COMMISSION.

The medical profession of the Province of Ontario is now fully aware of the fact that the Government of the Province some time ago appointed the honorable Mr. Justice Hodgins to investigate the claims of the various bodies that seek the right to practise medicine or some branch of it; and to report thereon.

Already a number of bodies have appeared before Justice Hodgins. As might be expected the most divergent views have been expressed. Such bodies as the Ontario Medical Association, the University of Toronto, and the Toronto Academy of Medicine contended that all who seek to practise medicine, or any branch of medical science, should first

take a full course of study and obtain the license of the province. It is then open to any one to call himself an osteopath, a chirapractor, or a Christian scientist. The essential, however, is that before any one shall be granted the privilege of diagnosing a disease, or advising a remedy, whether material or a mere suggestion, he shall first have a thorough training in all the branches of a medical course of study.

If any one wishes to be an osteopath, or a chiropractor, and give his treatment to patients under the direction of a qualified practitioner, as any rubber, or masseur would do, this full course of study would not be necessary. But the case is entirely altered when such a person takes it upon himself to diagnose the case, and order any given form of manipulation or rubbing as the proper treatment. This brings the person within the class where it is absolutely necessary that the law lay down stringent conditions in the interest of the people.

If any person is permitted to prefix the title "Dr." to his name on his door plate, how is the passerby to know his qualification? He may have had only a few months' training, and be in the possession of the most limited amount of knowledge of the branches that constitute a medical course of study. Such a case as this is an ordinary example. A certain person was complaining of headaches, some difficulty in vision, and some nervous disturbances. He sought the advice of a chiropractor who manipulated the sufferer's spine. The real disease was chronic nephritis. Another young woman, ill with some form of insanity, is given treatment by a Christian scientist. A third person who has tuberculosis of the elbow joint has his chance of recovery destroyed by the ignorant handling of an osteopath. It is against this sort of thing that the public must be protected.

Now, how is this to be done? In one way only. The medical profession which has always stood for the good of mankind must do so now in a very special sense. It must make its influence felt upon the members of the Legislature. These members must be made to feel that the medical profession is not seeking privilege for itself; but a protection for the people. It must be sounded loud and often that the medical profession raises no objection to one designating himself an osteopath, provided he first is compelled to take a proper course of study and pass the examination tests. It is the duty, therefore, of every practitioner to take this matter up with the representative in the Legislature from his district, and impress upon him the necessity for only one portal of entry into the profession.

"As art is long and time is fleeting" it is the duty of all to up and doing. City and county associations could do much. It is very requisite that a good Act be secured; for there are now in existence a few very

unfortunate judgments. One of the worst of these is the one delivered by the late Chief Justice Armour to the effect that a person does not practise "medicine" who does not give drugs. This is altogether too narrow a view to take. It had, however, the unfortunate effect of opening the door to an influx of all the varieties of drugless practitioners. But this judgment is now the law of the province and can only be counteracted by a statute setting forth in clear language what the practice of medicine really means.

We urge upon the members of the medical profession to give this matter their serious consideration. So much rests with them. They alone are in the best position to educate the members of the Legislature from their ridings. This is the main point. There are twelve hours in the day. See that they are properly used.

AN IMPORTANT JUDGMENT.

A few weeks ago Mr. Justice Clute gave a judgment in the case of an action brought against a practitioner, which is of the utmost importance. The case was a unique one, especially in one particular.

The plaintiff was a woman on each of whose breasts an operation was performed. The lady consulted a doctor about a lump in one of her breasts. The doctor said he also detected a lump in the other breast, and secured the patient's consent for the removal of both lumps. This doctor referred the case to a surgeon of experience, who removed the lump in one of the breasts. While the patient was under the anæsthetic, the doctor who had been first consulted said that there was a lump in the other breast, and that the surgeon doing the operation should remove it also, as the patient had given her consent. The breast was prepared and the operation was performed.

Some time after the operation trouble arose in the arm of the second side operated on. An action was brought against the surgeon who performed the operation, alleging assault, on the ground of doing an operation on a part of the body where consent had not been given. In this respect the plaintiff was in conflict with the doctor first consulted.

After hearing a considerable amount of evidence on this branch of the case, Mr. Justice Clute held that a surgeon is justified in performing a second operation under circumstances where the case demands that more be done than was at first detected or revealed. It was held that a surgeon might even be open to blame if he did not perform such further operation, if it could be shown that such was necessary for the cure of the patient.

This is an exceedingly important judgment, and is destined to prove of much value. We feel confident that no surgeon will abuse the privilege accorded by such a judgment. It will always be recognized as the proper procedure to secure in advance the patient's consent to all that may have to be done; but in unforeseen contingencies this judgment may furnish much needed protection.

THE TAKING OF INFANT LIFE.

Recently a case occurred in a Chicago hospital that has given rise to a good deal of discussion. Dr. H. J. Haiselden who had charge of the case declined to perform some operation that might have saved or prolonged the baby's life. His contention was that of the child lived it would of been malformed, mentally defective, and probably become a criminal. The parents consented to allow the baby to perish.

It must be well within the experience of many medical practitioners to have seen children come into the world where death would be decidedly preferable to life with all the infirmities of mind and body, that such a life must mean. But this raises the wide and important question of how is the decision to be arrived at with regard to permitting such a child to die as would be seriously maimed physically or mentally; or making an effort to prolong its life, and doing the best for it that can be done to attain the best result.

Coroner Hoffman, of Chicago, after a consultation with Dr. J. D. Robertson, Health Commissioner, and Dr. H. G. W. Reinhardt, who performed the autopsy, decided to hand the case to a jury of experienced medical gentlemen. The six chosen were: Dr. John B. Murphy, world-known surgeon; Dr. Arthur Rankin, professor of anatomy at Loyola University; Dr. Howard Chislett, dean of Hahnemann College; Dr. D. A. K. Steele, dean of the Physicians' and Surgeons' College at the University of Illinois; Dr. Henry Lewis, professor of obstetrics, Cook County Hospital; Dr. Ludwig Hektoen, professor of pathology, Rush Medical College and University of Chicago.

The permission to take the life of a deformed infant by allowing it to die for lack of proper attention, or of more actively bringing about its end, must be very carefully safe-guarded. Should the time ever come when it may be thought proper to end the life of monsters, this cutting short of their lives must needs be done under conditions of very great care. Provision must be made for the most careful consultation and weighing of the facts of these cases. It must never be forgotten that the duty of the medical profession is to assuage pain, to cure dis-

ease, and to prolong life. The raving maniac has as much right to live as the most distinguished citizen, but under widely different conditions. With the vast majority of people, including the medical profession the verdict will be, "The doctor's duty is to save life and leave the rest to Time." What the future may hold in store for monsters is not his concern.

The Jury of the six eminent Chicago medical men already named found as follows:

"We believe that morally and ethically a surgeon is fully within his rights in refusing to perform any operation which his conscience will not sanction. We find no reason to believe that the parents of Allan J. Bollinger were denied the privilege of consultation.

"We recommend strongly that in all doubtful cases of this character a consultation of two or more surgeons of known reputation for skill, ethical standing and broad experience should decide upon the advisability or inadvisability of operative measures. Dr. Haiselden testified at the inquest that fifteen physicians were called by him to see the Bollinger baby and all refused to operate.

"We believe that the physician's highest duty is to relieve suffering and to save or prolong life."

WOMAN'S COURAGE.

The present war has brought some remarkable instances of bravery on the part of women, especially nurses.

On one occasion a number of nurses removed some wounded soldiers into a church, and were busily engaged in caring for them. The soldiers were part French and part German. The Germans began dropping shells upon the church; but the nurses remained with the wounded, and rendered every assistance in their removal to a point of safety.

There is an instance of a nurse remaining with her patients under fire, and in the greatest of danger ministering to them, and even carrying some of them to places of better shelter.

The story of Miss Edith Cavell will never grow dim—nor her memory fade. Her name is truly one of those "that are not born to die." She faced the firing squad a genuine conqueror; while the actions of those who put her to death bear all the marks of the coward. At no moment is a true hero so completely victorious as at the moment of such a death as Edith Cavel met without a sign of fear. On the other

hand the really brave man would have refused to fire at the risk of losing his own life for his act of disobedience.

In the beautiful Ægean Sea some time ago a British transport vessel was torpedoed. A French vessel was instrumental in saving a number of the persons on board the sinking ship, which was the Marquette, bearing New Zealand troops and nurses. The captain of the French vessel is authority for the action of the nurses who with one accord called out: "Fighting men first." A number of the nurses perished in their devotion to duty; and the French captain remarks that this incident should never die in British history.

Then, again, but a few days ago the Anglia, a British hospital ship was sunk in the English Channel by either a mine or torpedo. On board were many wounded and sick soldiers returning from France. The nurses remained steadfast at their posts assisting the sick and wounded into the small boats, and a rescue vessel that came on the scene. As a result of this performance of duty twenty nurses went down with the sinking Anglia. They could have escaped, but chose the path of duty, though it meant the loss of their lives.

HYPOCHLORITES AS ANTISEPTICS.

The revival of the use of hypochlorous solutions for treatment of wounds in war, marked by the publication in this journal of the paper by Professor Lorrain Smith and his colleagues at Edinburgh, giving the results of their experimental observations on the antiseptic action of hypochlorous acid (July 24th), and that by Dr. H. D. Dakin on the use of a particular hypochlorite solution (August 28th), which he considers, and Dr. Carrel appears to agree with him, presents certain advantages, is one of the interesting developments of military surgery brought about by the experiences of the present war. A report by Dr. John Fraser on the value of hypochlorous acid in the treatment of cases of gas gangrene, published last week, contains striking evidence of the remarkable effect of the Edinburgh hypochlorite preparations to which the names "eusol" and "eupad" have been given. We understand that the Medical Director-General, R.N., has arranged with Sir Watson Cheyne, one of the consulting surgeons to the navy, to test the value of the hypochlorite solution devised by Dr. Dakin, and that they are now working together in a hospital ship employed in the Mediterranean. We hope that the medical profession as a whole may shortly have an opportunity of learning the results of their investigations and experiences.—*Brit. Med. Jour.*

ORIGINAL CONTRIBUTIONS

NOTES ON THE EXAMINATION OF RECRUITS FOR ACTIVE SERVICE.*

By Major Frederick Winnett, Medical Officer Queens Own Rifles.

HOPING it would be interesting at present to give some experience gained in the examination of recruits, I have taken a period when I kept a record of 1,000 consecutive examinations, showing 477 rejected. The following is a tabulation:—

Rejections in 1,000 *Consecutive Examinations.*

Defective vision	162	Defective teeth	117
Small chest	63	Varicocele	50
Flat foot	25	Varicose veins	90
Hammer toe	14	Heart disease	7
Non-descent of testicle	5	Halux valgus	5
Overlap toes	10	Short	8
Deformed or absent index finger	3	Hernia	6

One each of adenoids, venereal warts, over age, alcoholic, stammer, psoriasis, cross-eyed, hydrocele, arm deformed, elbow weak.

The standard demanded has varied from time to time, and each examiner interpreted the same according to his experience.

Recruits were examined by the regimental surgeon and then by the medical officer of the battalion to which they were assigned.

This second examination often took place some time after recruiting, and rejections caused annoyance to all concerned.

Vision.—One standard is demanded for all arms of the service, viz., each eye 20-20, or if one eye read 30-20, the other must read 15-20. This, says Dr. Jas. MacCallum, is absurd, as it demands one hypermetropic eye. In England there is a second standard for non-combatants of 100-20 which you will notice preserves 16 p.c. of recruits for the service.

Teeth.—British army regulations reject a man who has lost ten teeth. Our instructions required good molars on at least one side with effective incisors. At first a full plate was not accepted, later it was, and then with a more urgent demand for recruits, everything went, trusting the A.D.C. to make them right.

Height and Chest.—For Infantry 5 ft. 3 ins. as a minimum was required with a normal chest of 33½ ins. Later on it was modified to 33 ins. under 30 years and for over that 34 ins.

The British Army regulations have a sliding scale, requiring for a

* Read at the Clinical Association, Toronto Western Hospital.

man 5 ft. 5 ins. at age of 18 years a girth of 33-35, while for one 6 ft. and age 22 years or over a girth of 35-37.

Varicocle.—At first there were so many condemned to operation that it became a positive outrage, and men who had pursued laborious occupations without even suspecting any trouble, were operated on and left with a swollen and painful organ. Operating surgeons complained at being required to operate in mild cases.

The British regulations call for operation only when the enlarged veins hang in a loop below the testicle, or where the organ hangs decidedly low or is atrophied to one-half the normal size.

Flat Foot.—Examiners require recruits to hop about to test the foot. I have never seen any advantage of this for all hop equally well. A print of the wet foot is interesting, but a flat foot with inner displacement of scaphoid is sufficiently evident. I know letter carriers with such feet who walk twenty miles daily without discomfort.

Unfortunately a falling arch cannot be diagnosed without the recruit admitting pain.

Varicose Veins.—What degree is considered objectionable and what is not curable is always debatable.

Hæmorrhoids.—Without a manual examination internal piles are not detected while the external ones are of no importance.

Hernia.—Ordinary efforts made at examination often fail to bring down a hernia and may not be detected.

In a recent letter from Col. Rennie, he said, "Men with no teeth, false teeth, or bad teeth are no use. We have to send them back. Flat feet and varicose veins are also very useless subjects."

My experience this year in 150 operations on recruits includes:—

Variocele	38	Varicose veins	34
Hernia	25	Hammer toe	8

LECTURE ON THE EFFECTS OF THE GASES EMPLOYED BY THE GERMANS.

By MM. R. Dujarric de La Riviere,
Of the Institut Pasteur; and
J. Leclecq,
Professeur agrege at the Faculte de Lille, Medecins aides-majeurs aux armees.

(Selected.)

WE have had the opportunity of examining, in the military hospitals of Calais, a series of 112 cases of the soldiers who had suffered, in the vicinity of Langemarck, from the effects of inhalation of the irritant gases which had there been employed by the Germans. We

have also been able, in the subsequent course of our hospital service, to follow out the succession of symptoms which evolved in 40 of those cases during a period of eight days. And we had eleven of those which had been most gravely affected under personal observation for an interval of fourteen days.

All those soldiers who had inhaled the noxious gases about 4 p.m. on April 23rd, 1915, arrived at Calais some few hours after their removal from the front. It would, we believe, be merely a waste of time and trouble to furnish forth a full and detailed separate report of every one of those cases taken singly. Accordingly, we will just endeavour to present to our readers a generalized and composite tableau of the clinical aspect and course presented by this special variety of intoxication. We will, however, embrace the opportunity of describing the characteristic forms of evolution that were presented by the cases which had been placed under our observation, and we will also indicate in rapid detail the anatomo-pathological and histo-chemical facts that we have been enabled to establish by our own examinations.

Relation of Facts.—We obtained from the patients themselves a full description of the environment and physical conditions under which the toxic symptoms had originally appeared. The German troops had systematically arranged before their first line of trenches a series of tubes, at intervals varying from two to four metres, from which, at certain given moments, vapours were emitted, that first presented a yellowish hue, which was then followed by a greenish tint. Those vapours were pushed forward by a favorable wind, and soon reached the French lines after trailing over the intervening space along the surface of the ground. When they reached the soldiers these at once felt a painful sensation of intense prickling in the eyes, nasal fossæ, and throat; and an incessant and spasmodic cough was set up immediately. Next in order appeared a sensation of oppresive constriction of the thorax, accompanied by dyspnœa, and laborious effort in maintaining the respiratory movements. Severe pains were felt in the throat and along the course of the trachea. The patients themselves described the sensation which then developed as that of a *"brûlure intrathoracique."* The accompanying cough rapidly became more painfully difficult, as well as incessant and capricious in the irregularity of its violence. The quantity of expectorated matter was abundant; and, in the majority of the cases, this soon became tinged by the presence of a greater or less proportion of blood. The patients thus affected also experienced a general feeling of mental obfuscation, which was also accompanied by one of an abnormal sensation of physical fatigue. A certain proportion of their comrades had not been able to fly from the onflowing wave of

gas (*vague gazeuse*); these had died after copious vomiting of blood. In other cases, however, the victims although terribly broken down, both physically and mentally, were able to drag themselves towards the rear; there they both spat and vomited blood, and also passed blood-stained urine.

General Symptomatology.—At the time of their entry into hospital, most of those patients presented an aspect of extreme fatigue and depression. The eyelids were puffy and the eyes tearful; in some of the cases obvious signs of conjunctivitis had also developed. The malar eminences and the ears were tinted of a violet rose hue, the lips were also of a violet tint; the nose was pinched, and the features generally presented a drawn aspect. The general aspect of the patients presented all the evidences of dyspnœa and asphyxiation. Everyone was shaken with a continuous, painful, spasmodic cough; and at the time of the greatest violence of the paroxysm of coughing, the patient always compressed the sides of the chest between his hands—so obviously painful were the movements of the thoracic muscles. Many of them also complained of stitches in the side. The cough produced abundant expectoration, frothy and reddish, sometimes even obviously blood-stained. Speech was painful and interrupted. The original stupefaction, prostration and general asthenia partially persisted.

The physical examination of the patients immediately revealed the condition of the mucous membranes of the superior respiratory tract, which were reddened, engorged, and inflamed. The tongue was dry and furred in some of the cases.

Percussion of the thoracic wall elicited sonority of normal character, but in some instances a slight degree of approximate dulness was found to be irregularly distributed over patches on either side of the thoracic area. But in the majority of our cases the vibrations displayed a slight augmentation of frequency. On auscultation, there were observed, in some cases: sibilant râles, or large moist sonorous râles; and, in others: small, very fine mucous râles, with true crepitant râles, indeed, gave the auscultator the impression of the *bruit de tempête* described and thus named by Recamier. We did not ascertain the existence of any notable modifications of the voice, either in its higher or lower notes. There was no pleural reaction apparent. Thus to sum up the phenomena briefly, examination of the lungs showed that the patients were affected with an inflammatory condition of the whole respiratory tree, reaching even as far as the finest bronchial ramifications. The expectoration was abundant in quantity, and consisted partly of a gummy glutinous portion that adhered to the vessel; and partly of a portion of different physical appearance, which was highly aerated and a little purulent.

The pulse was slightly accelerated, but full and regular; the vascular tension was apparently increased. The cardiac sounds appeared normal. The temperature was, as a rule, slightly elevated, oscillating between 37 deg. and 38 deg. (98.8 deg. and 100.6 deg. F.); in some cases, however, it attained a range of 39 deg. and 39.5 deg. (102.2 deg. and 103.1 deg. F.).

In the majority of the cases, we observed a furred condition of the mucous membrane of the alimentary tract; accompanied with want of appetite, and a sensation of discomfort, or of burning, along the course of the œsophagus and over the gastric region. Palpation of the stomach was generally rather painful. Some of the patients presented for many days a degree of gastric intolerance which was almost absolute, and suffered from recurrent attacks of vomiting, of alimentary *débris* and of biliary matter. In some instances, the vomited matters contained a small quantity of blood, and those cases afterwards presented a little melæna. The intestine, however, generally functioned normally; but some of the affected soldiers suffered subsequently from diarrhœa for a number of days.

In a certain number of the cases, the liver was enlarged and painful; the whole mass of the organ was of hypertrophic dimensions, and its margin extended two or three fingers' breadth below the level of the false ribs. The gall-bladder was not distinctly painful. In the great majority, the spleen appeared to have remained normal. In two instances, however, while the liver was but slightly enlarged, the splenic area of dulness could be recognized on percussion to have increased by over two fingers' breadth. The patients presented at the same time a slight sub-icteric coloration of the skin, or, to speak with greater precision, a special anæmic tint of both the general integument and the conjunctiva.

In more than half the cases, pains in the lumbar region were complained of; and the majority passed urine of diminished quantity, concentrated in consistence and of high colour. The kidneys were not, however, very sensitive on palpation.

Evolution.—The pathological phenomena presented by the gas-intoxicated soldiers evolved and ran their course in very variable fashion, according to the general condition and physical features of the affected subject; and, more especially, in proportion to the degree of the intoxication. The great majority of our patients (about 80 per cent.) recovered quite rapidly. The various phenomena dependent on the irritation of the mucous membrane of the respiratory passages very soon became attenuated in the degree of their virulence, the expectorated matters did not become purulent, the urine soon regained its normal appearance,

and the whole general condition of the patient was definitely ameliorated in the course of a few days.

In twelve of our gas-intoxicated patients, the pulmonary phenomena continued throughout to dominate the whole clinical picture by their special aspect and evolutionary course and development. None of those, however, actually assumed a really disquieting appearance at any stage. The patients, in each individual case, presented definitely the signs and symptoms of a *generalized bronchitis*, accompanied by a freely purulent expectoration, and a temperature ranging between 37 deg. and 38 deg. (98.8 deg. and 100.6 deg. F.); this condition lasting for a period of about eight or ten days. All those cases have gradually evolved in the direction of cure.

Five of our patients developed the signs and symptoms of *bronchopneumonia* a few days after their arrival at the hospital service. The dyspnœa assumed an appearance of more obvious importance, and the range of temperature ascended progressively. The cough recurred more frequently. Auscultation revealed—coincident with the physical signs of generalized bronchitis—the existence of small soft and distant blowing sounds were heard. In this group of cases, the entire evolution of the pulmonary troubles lasted for a period of ten or twelve days; and all the patients, under the influence of an energetic course of therapeusis, are now well on the way to a complete cure.

We have observed two cases of well-defined pneumonia. Each of those two patients displayed an area of massive dulness, which extended over the whole altitude of one lung, a sudden elevation of temperature to a range between 39 deg. and 40 deg. (102.2 deg. and 104 deg. F.), fine crepitant râles, some degree of *frottement* on the affected side, and the adhesive and rusty expectoration which was absoltely characteristic. In one of those cases, the course of the pneumonia evolved definitely towards cure in the recognized classical fashion. The other case, on the contrary, rapidly developed the phenomena distinctive of cardiac insufficiency; the pulse becoming small, threadly, and compressible. The temperature slowly subsided, and the patient succumbed to cardiac collapse after an evolutionary course of seven days. We have had the opportunity of carrying out an autopsy in this case, and will afterwards present the reader with the complete protocol.

It now remains for us, in order to complete the description of the varieties of pulmonary forms observed throughout our series of cases of gas -intoxication, to consider three examples of pulmonary gangrene of the pneumonic type. The symptoms of its development began to appear, in each instance, about six or eight days after the onset of the original attack. On auscultation of the lung, moist and cavernous râles

were audible at various different points on the surface of the thoracic cage; while the signs characteristic of the generalized bronchitis, which had previously existed, were found to have completely disappeared. The expectoration had become extremely profuse, and presented a special mawkish odour, which was, however, but slightly fœtid. The temperature chart presented very extensive oscillations. The patients assumed the aspect characteristic of extensive infection, and their condition soon became precarious; they are still under treatment in the hospital.

Besides those various pulmonary manifestations to which we have above referred, we have also had the opportunity of observing clinical forms in which the syndrome of hæmolytic icterus occupied the most prominent place. Some of our patients—two in particular—presented livers enlarged *en bloc,* emerging fully three fingers' breadth below the margins of the false ribs, and distinctly painful on pressure; while the superficial splenic dulness was perceptible over two fingers' breadth. The integuments presented a specially distinctive anæmic tint, subicteric, and very clearly apparent; the urine contained a little albumen and a rather large quantity of hæmoglobin. One of those patients died of pneumonia. The other is still under treatment; his anæmia has gradually disappeared, and his general condition is now satisfactory.

Histological and Bacteriological Examination of the Expectorated Matters.—We have many times repeated our histological and bacteriological examination of the sputa in those cases. The examinations have not permitted us to follow the histological modifications.

At the commencement, in the majority of cases, the histological formula has been characterized by the presence of a thick, hyaline mucus, cylindrical epithelial cells, and a few polynuclear globules. On the subsequent days, we noticed the presence of fibrin in the form of elastic fibrils, while the polynuclear cells were few in number.

The bacterial flora presented varied aspects in our cases; but, in addition to the ordinary microbic forms, it was found possible to display evidence of the presence of the anaerobic bacteria which we are accustomed to meet with in specimens of pulmonary gangrene; and, more especially, of the *bacillus perfringens* and *bacillus serpens.* To sum up briefly: examination of the sputa demonstrated the existence of a pronounced congestion of the pulmonary tissues; while, in addition to this, having displayed the nature of the microbic flora, it proved in some of the cases that we were in presence of the possibility of a secondary gangrene of the lung substance.

The final examinations revealed to us the development of more pronounced lesions, and having specially in view the case of pulmonary

gangrene: on a field of thick mucus, of hyaline appearance, were found detached a great number of polynuclear cells which had undergone more or less alteration; cylindrical and alveolar cells; a few red blood discs, with some albuminoid and fatty granulations. The fibrin was abundant, and presented itself in the form of isolated elastic fibres; and more frequently still in tangled masses. The bacterial flora was made up more especially of specimens of the anaerobic varieties: *bacillus perfringens, bacillus serpens,* and *bacillus ramosus.* Some specimens of the tetragenic and more ordinary microbes were also present.

Examination of the Urine.—We have examined the urine of each of our patients after repeated intervals. In some instances we ascertained the presence of a small quantity of albumen. In a certain number of the cases the albuminuria has proved persistent. In many specimens of urine, we succeeded by the application of chemical methods, in demonstrating the presence of a certain quantity of hæmoglobin. In two of the patients, who presented a sub-icteric tint of the integuments and a notable degree of hypertrophy of the liver, the hæmoglobinuria persisted for a good many days. We have also been able to demonstrate the presence of a greater or less proportion of biliary pigments in the urine of a good many of our cases. The histological examination of the urine has furnished us with no additional instructive facts worthy of notice.

M. Dehorter, senior assistant pharmacist, kindly undertook to analyze the urines of our patients from the toxicological point of view. By this examination he has succeeded in demonstrating the fact that we were dealing with the phenomena of an intoxication produced by the combined action of bromine and chlorine.

Autopsy.—We carried out the *post-mortem* examination of a patient who had succumbed to the pneumonia consecutive to intoxication by the noxious gases, and we here present the protocol of that autopsy.

The body was that of an adult, æt. 41, and of robust constitution. The cadaveric rigidity was limited to the muscles of the limbs and those of the inferior maxilla. The areas of cadaveric lividity were very strongly marked on the posterior aspect of each of the limbs and of the trunk. We found no trace of the development of the initial phenomena of putrefaction; there was, however, a slight degree of abdominal tympanites. There was no trace of external violence discoverable on any part of the body; nor, indeed, any other detail worthy of further special notice.

On opening the body we found that the right lung did not collapse. When examining the right pleura, deposits of fibrinous material were

discovered at the peripheral margin of the lung, and adhesions of recent organization between the parietal and visceral pleuræ. There was also a very little citron-coloured fluid in the pleural cavity of this side. In the left pleural cavity a small quantity of citron-coloured fluid was also found, but there was no discernible trace of inflammatory action, either recent or of old standing.

In examination of the respiratory tree we noticed, in the first place, the congestion of the upper respiratory mucous tracts, including the back of the throat, the pharynx, and the epiglottis. The laryngeal mucous membrane itself was more vascular throughout than in the normal state; it was also the seat of a slight generalized œdema. The surfaces of the lining membrane of the trachea and larger bronchi were encumbered with the accumulated purulent secretions. The mucous membrane was highly congested throughout, with marked turgescence, and even presented hæmorrhagic stains in some places. Precisely corresponding lesions were found in the lining membrane of the medium-sized bronchi.

The right lung presented externally a violet-red coloration. On palpation its structure was found to be dense; it neither collapsed nor crepitated under pressure. Throughout the whole range of its structure it was found to represent a veritable pneumonic mass. On section of its substance it presented the known appearance of the lesions of a case of pneumonia in the stage of gray hepatisation. In certain parts of the lung substance, and more especially towards the base and around the smaller bronchial ramifications, there were even found cavities of anfractuous outlines, which were sculptured in the pulmonary parenchyma; these contained the greyish *débris* of sphacelated lung tissue. The lung structure in general exhaled a fœtid odour, thus clearly indicating the fact that we were dealing with the presence of foci of pulmonary gangrene.

The left lung had preserved an almost normal aspect. It crepitated under the pressure of the fingers. The elasticity of its tissues had been preserved almost intact; in the small and medium-sized bronchi a coating of purulent mucus was found lining the surface of the mucous membrane. The bronchial mucous membrane, generally, was in a congested state.

The heart presented a normal aspect externally. The pericardium was healthy, and contained a very small quantity of citron-colored fluid. On laying open the cavities of the right side of the heart the ventricles were found to contain blood-clots of fibrinous consistence, which had formed at the moment of the death agony. Slight traces of sclerosis were observable at the level of the attachments of the mitral and sigmoid valves.

The aorta was healthy, merely presenting some fibrinous blood-clots, which were adherent to the muscular pillars of the ventrical wall. One of those solid clots extended into the orifice of the pulmonary artery. The tricuspid and pulmonary valves were normal.

In addition to the clots, the cavities of the heart contained a considerable quantity of very fluid serosity. We have also noticed the same exceptional fluidity of the blood throughout the whole course of the autopsy.

With regard to the upper portion of the digestive tract: the mouth, pharynx, and œsophagus presented normal appearances. The stomach contained about half a litre of fluid aliments. The mucous membrane was highly vascularized, and presented patches of extravasated blood in some places. The tissues of the wall of the small intestine were congested throughout; the duodenum, like the stomach, presented some hæmorrhagic patches.

The liver presented hypertrophic dimensions, and displayed a clear yellowish coloration, such as we observe in cases of acute toxic degeneration of that viscus. The general substance of the organ had, however, preserved a nearly normal consistence.

The pancreas seemed to be unaffected, but there were some small extravasations of blood found towards the extremity of the tail of the organ.

The spleen was slightly enlarged, and its substance was extremely diffluent; although the autopsy had been made soon after death and before any traces of the appearance of cadaveric putrefaction had set in. It could, indeed, be compared to nothing so well as to a membranous envelope filled with a reddish broth.

The kidneys were large and pale in tint, the substance being greatly decolorized throughout. The renal parenchyma appeared, nevertheless, to have preserved its integrity almost completely.

The suprarenal capsules were healthy in appearance.

The bladder was normal.

On opening the cranial cavity we immediately observed the escape of an abnormally large quantity of cephalo-rachidian fluid. It was also noticed that the convexity of the surface of the brain was the seat of a slight congestion, which was accompanied with rather well-marked œdema. In some parts of the cortical substance slight sanguineous extravasations were found. Both cerebrum and cerebellum were of normal consistence and presented nothing noticeable on section.

The spinal medulla appeared normal throughout its whole length. The rachidian membranes were, however, the seat of rather well-marked congestion and increase of vascularity.

To summarize in brief: the body of the patient presented, on the one hand, the general signs of the intoxication produced by irritant gases: pronounced congestion of the whole respiratory tract; abnormal vascularization of the digestive tube; massive degeneration of the liver, spleen and kidneys; and, on the other hand, the lesions of massive pneumonia of the right lung, with patchy gangrene of the base of that organ. Death must accordingly be attributed to pneumonia and consecutive pulmonary gangrene resulting from the adbsorption of toxic gases.

Conclusions.

1. We have had the opportunity of observing at Calais a relatively considerable number (112) of soldiers, who had been exposed to the action of the irritant gases (vapors of chlorine and bromine) emplayed by our German enemies at Langemarck. In presence of the relatively short distance, which separates Calais from the front, we there found ourselves under conditions peculiarly favorable for the exact observation of our patients after an interval of barely a few hours had elapsed from the occurrence of the intoxication.

2. The action of the irritant gases had produced a varied series of clinical manifestations. In the majority of our cases the bronchial or pulmonary phenomena were prominently placed in the foreground of the clinical picture. But the occurrence of hepatic and renal lesions was also sufficiently frequent to secure special notice—sometimes, indeed, even dominating the general clinical tableau—while associated in the majority of instances with broncho-pulmonary phenomena.

3. In many instances our patients presented pulmonary phenomena which were not actually of grave import, while, in other cases, the pulmonary lesions were of a profound quality; for instance, the cases of broncho-pneumonia, pneumonia, and, above all, those of pulmonary gangrene, of which we have been enabled to follow up the complete evolution throughout its course.

4. Two patients have presented the clinical tableau of hæmolytic icterus, and a third suffered some days from hæmoglobinuria. Most of our gassed patients passed concentrated urine of high color, which contained an abundance of biliary pigments. A large number of the cases suffered from permanent albuminuria.

5. The histo-chemical and bacteriological examination of the expectorated matters have enabled us to follow up throughout, so to speak, the whole evolutionary course of the bronchial and pulmonary lesions. Characterized at the outset by the presence of the elementary fragments produced in desquamation, together with some polynuclear cells, the histological formula of the sputa soon became modified by subsequent

degrees so as to yield evidence of the results of congestion, and, in some cases, of actual necrosis of the pulmonary tissues.

At the commencement, the specimens of bacterial flora which presented themselves were merely those of everyday occurrence. It is important, however, to note that a certain number of specimens of the sputa contained some anaerobic varieties of bacteria—more especially the *bacillus perfringens.* In those cases of pulmonary gangrene of which we have already reported the observations, the bacterial flora proved extremely rich in anaerobic varieties.

6. Finally, the autopsy of a patient who succumbed to pneumonia has come to confirm the data which clinical observation and laboratory experiment had previously furnished.—*Medical Press.*

DISSOCIATED SYMPTOMS IN TRAUMATIC INJURIES OF LARGE NERVE TRUNKS.

MM. Déjerine, Déjerine and Mouzin, in *La Presse Medical,* remarks that most nerve trunk injuries by projectiles give rise to disssociated symptoms because of unequal involvement of the various fibres constituting the nerve at the point injured. The evidences of dissociation oftenest met with include: 1. Inequality of paralysis, noticed when the muscles supplied by the injured nerve are studied one by one in active and passive movements, as well as through palpation durinb resisted movements; 2, inequality of disturbances of tonicity, frequently revealed by careful observation of the position in which the limb is held by the patient; 3, inequality of the reaction of degeneration, and, 4, the location of the area of greatest sensory impairment, which may be restricted to one or a few of the cutaneous fasciculi of the nerve, comparison being carefully made with the area of greatest sensory impairment commonly observed in complete interuption of the nerve. As for treatment, in partial nerve compression or irritation, the operative indications are the same as in complete compression or irritation, intervention around—and not in—the nerve being alone advisable. In partial nerve interruption, the indications vary with the extent of injury found on exploration and the results of the preliminary functional examination of the nerve. Where but few fasciculi have been spared, the hardened tissues should be excised and the whole nerve sutured. Where the fasciculi presumably in a condition of complete interruption are of but little functional importance, nothing should be done directly to the tissue of the nerve. Where some important fasciculi are interrupted and other important ones unaffected, the keloid tissue at the site of interruption should be enucleated and the interrupted nerve tissue sutured, the unaffected fibres being left intact as a lateral loop.

CURRENT MEDICAL LITERATURE

ANTITYPHOID AND ANTIPARATYPHOID VACCINATION.

Fernand Widal, *Bulletin de l'Académie de Médicine,* expresses these views: Antityphoid vaccination, as now carried out, fails to protect against paratyphoid infections, the frequency of which has recently been found in French military hospitals actually to exceed that of typhoid infection. This is ascribed in part to a recrudescence of paratyphoid infections owing to the poor hygienic conditions to which the soldiers in the field are subjected, but mainly to the pronounced reduction in the incidence of typhoid fever resulting from antityphoid immunization. Successive separate immunization against the typhoid bacillus and the A and B paratyphoid organisms being impracticable owing to the number of injections and length of time required, Widal investigated the possibilities of simultaneous vaccination against two or all three of these organisms. The mixtures urged each contained one billion organisms to the c. c. and were sterilized by subjection to a temperature of 56 deg. C. for half an hour. For inoculations against the typhoid organism alone two and a half billion bacilli had been given in four injections, in double and triple inoculations, respectively, five and seven and a half billions were given. Experimental and clinical investigations showed that a satisfactory immunity could thus be established against each of the organisms inoculated with perfect safety and without any increase in the local and general reaction beyond that caused by antityphoid vaccination alone. Seven and a half billion organisms were even given in three doses without any unusual reaction. —*New York Med. Jour.*

RECTAL AND ANAL FISTULA.

Dr. Julius and Frankel, of New York, in discussing the treatment of this condition in the *New York Medical Journal,* remarks as follows:

To guard against incontinence, avoid cutting the sphincter in more than one place, no matter how many the branches or openings the fistula may have; I met once a case that had a double horseshoe shape fistula, but did not communicate subcutaneously. These openings must be connected to the main channel and attended to as outlined above.

The after treatment is important and must be carried out with utmost surgical care to guard against infection and recurrence. This consists in giving the patient some form of opium. Tincture of opium,

eight to ten dops three times a day, will cause constipation for at least three or four days. Moist antiseptic dressings are to be applied during the first two days, twice daily. On the third day, and subsequent to that, daily, the wound is opened and the very bottom of it is swabbed with tincture of iodine; a small moist sterile dressing is applied, which is in turn covered by large flaps of gauze and a T-shape binder to keep the dressings firm. At the end of four or five days an olive oil enema is given, also some mild laxative by mouth. After every bowel movement a thorough washing of the parts is done, a swabbing with iodine, and a small moist dressing is applied, covered with large sterile flaps of gauze, kept in place by a suitable binder.

After about ten days the granulations usually have reached the height of the skin. The patient may then leave the bed with the following instructions: The bowels must move daily, followed by a washing with castile soap and warm water, and a mild antiseptic salve applied (boric acid salve) covered by sterile gauze and kept in place by a suitable binder. These instructions are to be observed until the parts are completely healed. Regular habits of rest, eating, and drinking must be established and rich food and midnight dinners avoided.

Summary.

1. Never operate for fistula when abscess is present. Just incise the abscess and hint at a possible subsequent operation.
2. Locate the opening or openings; inject some coloring matter.
3. Insert a groove director and cut through all overlying tissue.
4. Connect all tracts or branches with the main channel.
5. Never cut the sphincter in more than one place.
6. Dissect (do not curette) all granulating and cicatricial tissue.
7. Attend to after treatment yourself or appoint a good assistant. Never rely on nurse or orderly if you want no recurrence.

THERAPEUTICS OF MAGNESIUM CHLORIDE.

Rosenblith, according to *Presse médicale* for September 30, 1915, informed the Académie de médecine on September 28th, that he had been using magnesium chloride for wounds in a strength of sixty c. c. of a twenty-five per cent. concentration in one litre of water. Cicatrization is rapid under this treatment, suppuration is cut short, and cytolysis is avoided. Rosenblith got the idea of using this new dressing from observing its effects in rheumatic and similar pains when combined in hypodermic injections with two per cent. sodium iodide solution.—*New York Med. Jour.*

PERSONAL AND NEWS ITEMS

Edward A. Minchin, Professor of Protozoology in the University of London, died recently at the age of 49. He was a world wide authority on the subject of Protozoa.

Every one must admire the courage of Miss Mary Davies in inoculating herself with a cultivation of the bacillus of gas gangrene, and then asking Dr. Kenneth Taylor, of the Ambulance Americaine, Neuilly-sur-Seine, to test a method of treatment by quinine hydrochloride which he had devised. Although the injection was made into the muscles of the leg, Miss Davies was fortunately quite well again in twenty-four hours. Miss Davies is the youngest daughter of the late Sir Henry Davies, K.C.S.I.

Tissot, according to *Presse medicale* for September 16, 1915, at a meeting of the Académie des sciences ,on September 13th, maintained that for a long time he had used unmodified hypochlorites in the treatment of wounds and he saw no reason to adopt the modifications recently suggested by Carrel. Pure hydrochlorites, as a matter of fact, were an excellent stimulating agent in cicatrization.

Nine physicians and thirty-eight nurses, comprising the major part of four American Red Cross units which have been serving in Germany and Austria for the last ten months, arrived in Petrograd, October 4th, in charge of Dr. Carey A. Snoddy, of Knoxville, Tenn. They will care for Austrian and German civil and military prisoners in Russia. The Americans are acting under the auspices of the American Red Cross, although the German Government is defraying their expenses. Headquarters will be established at Moscow, and the physicians and nurses will be distributed among the various camps throughout the empire.

At a meeting of the St. Clair County Medical Society, held recently in East St. Louis, Ill., steps were taken toward having the State Legislature enact a law making it necessary for applicants for marriage licenses in the State to produce certificates of good health. Resolutions to that effect were adopted and forwarded to the State society.

Surgeon-General Sir Lionel Dixon Spencer, K.C.B., one of the most distinguished officers on the retired list of the Bengal Medical Service, died at his residence in London, after a long illness, on September 22nd, aged 73. He was born at Gateshead on June 16th, 1842, educated at the Newcastle Medical School, and took the degree of M.D. St. Andrews in 1862, and the diplomas of M.R.C.S. and L.S.A. in 1864 and 1865 respectively.

The usual monthly meeting of the Executive Committee of the

Medical Sickness and Accident Society was held on September 17th, when Dr. F. J. Allan was in the chair. The accounts presented showed that the sickness claims experienced were under the expectation, in spite of the sums paid to members wounded on active service, which might be classed as an additional risk. The new business had been well up to the average, the combined tables for sickness and endowment assurance still being popular. The rise in the fees of locumtenents had caused many members to increase their sickness benefit in the society as a precaution in case of illness. Prospectus and all information can be obtained from Mr. Bertram Sutton, Secretary, Medical Sickness and Accident Society, 300, High Holborn, W.C.

Doctor Sternberg, Brigadier-General, U.S.A., died on November 3, 1915, at his home in Washington. He was born in Otsego county, N.Y., in June, 1838, and received his preliminary education at Hartwick Seminary. He obtained his M. D. at the College of Physicians and Surgeons (Columbia University) in 1860; and received an honorary LL.D. at the University of Michigan in 1894, and from Brown University in 1896. He was appointed assistant surgeon, U. S. A., in 1861; captain assistant surgeon in 1866; major surgeon in 1875; lieutenant colonel deputy surgeon general in 1891; brigadier general surgeon general in 1893; he retired on June 8, 1902.

The status of the woman physician in England has changed greatly since the beginning of the war. Positions on hospital staffs which have heretofore been held exclusively by men, are now offered to women, and the demand is considerably in excess of the supply. Before the war, for instance, an infirmary physician in the Whitechapel district, always a man, received $500 a year and emoluments, while now the infirmary is advertising for a woman physician and offering a salary of $1,000 a year and emoluments. It is reported that the Woman's Medical School of England has trained 600 women physicians and that 220 students are registered there.

The Wisconsin sterilization law, passed by the Legislature of 1913, will, it is reported, be put into actual operation some time in November, when twenty-four inmates of the home for feeble-minded in Chippewa Falls will be submitted to surgical treatment for this purpose.

The *Deutsche militärarztliche Zeitschrift* publishes the following report of casualties in the medical corps of the German army and navy for the first thirteen months of the war: Wounded, 437; missing, 125; captured, 95; killed, 119; died of wounds, 45; died of disease, 98; killed by accident, 20.

The Russian Red Cross has published a list of forty-six Sisters of Mercy who are alleged to have been killed during Austro-German bombardment of Russian hospitals.

The Turkish Government has informed the State Department at Washington that the American Red Cross will not be permitted to send surgeons and nurses to the aid of the Armenian people of the Turkish Empire. The number of Armenians thus far massacred by Turkish soldiers or sold into the harems is estimated at over 850,000.

Attorney-General Woodbury, in an opinion given to the New York State Educational Department, holds that general practitioners may employ osteopathy in cases where the condition of a patient warrants such practice, but they may not advertise and hold themselves out to the world as osteopaths, unless they are licensed to practice that system.

Dr. William G. Spiller has been appointed professor of neurology in the medical department of the University of Pennsylvania, to fill the vacancy caused by the recent resignation of Dr. Charles K. Mills. Doctor Mills, who has been connected with the institution for forty-two years, was appointed emertus professor of neurology.

Guy's Hospital, London, has received $125,000 from the trustees of the will of the late Sir William Dunn for the endowment of a lectureship in pathology in Guy's Hospital Medical School, to be known as the Sir William Dunn Lectureship in Pathology.

The Medico-Chirurgical College of Philadelphia is reported to be on the eve of union with the Medical Department of the University of Pennsylvania. The students and equipment of the former will be transferred to the latter.

According to the most reliable reports to hand, there is a considerable number of cases of Asiatic cholera in Germany and Austria.

With the view of lessening the number of cases of blindness from wood alcohol, the United States has forbidden its use in preparations for internal or external use.

By the will of the late Dr. Dudley P. Allen, formerly Professor of Surgery in the Western Reserve University, $200,000 has been left to the Cleveland Medical Library as an endowment fund.

A vigorous interstate campaign against the mosquito will be pushed forward during the summer of 1916. The report is to control diseases spread by this insect.

Dr. W. A. Henderson joined R.A.M.C. in England a short time ago, and was appointed physician-in-chief to the hospital ship at the Dardanelles.

Dr. H. R. Casgrain, of Windsor, who was with hospital stationed at Lemnos was seriously ill with dysentary. He has recovered and has been invalided home for some time.

Dr. (Capt.) Staunton Wishart, son of Dr. Gibb Wishart, of Tor-

onto, was on duty at Alexandria and was ill with dysentery, but has recovered.

The numerous friends of Dr. R. W. Bruce Smith will be glad to learn of his improvement.

Dr. C. A. Coon, who acted for some time as Medical Superintendent of the Kingston General Hospital, has resigned and gone into general practice in Kingston.

Dr. J. A. Sutherland, who has been in practice in British Columbia for a number of years, has gone to the front in the French Medical Army Corps.

The Ontario Military Hospital is located at Orpington, England. It is to consist of a number of huts and control administration building.

The McGill Base Hospital is located in France, and is very efficient. It is on the tent plan and under the command of Col. H. S. Birkett.

Some time ago the governors of the Regina Hospital decided to erect a nurses' home; but owing to the demands for money at present it was agreed to defer the erection of the home temporarily.

Dr. Harry Morell, of Regina, is attached to the Duchess of Connaught Hospital at Taplow-Bucks, England, as pathologist.

The Montreal General Hospital has been very busy of late. It has had over 400 in its wards. While the outdoor departments have been very much crowded.

Canada has provided some 5,000 hospital beds in England and an equal number in France. The numbers of persons serving in these hospitals are from 1,400 to 1,500.

The National Welsh School of Medicine, at Cardiff, has laid the foundation for a new physiological department. Sir William J. Thomas has provided the funds for the building now under erection, and has promised an additional sum of £60,000.

The St. John County Sanatorium is now almost completed. Dr. H. A. Farris has been appointed medical superintendent.

The Notre Dame Hospital, of Montreal, last year, cared for 1,317 men and 1,147 women patients.

Dr. J. A. Leduc has been appointed head physician to the Foundling Hospital of the Grey Nunnery, Montreal, in succession to the late Dr. Carmier.

The offer of the Canadian Government to provide a hospital in France for the treatment of French wounded has been accepted by President Poincairé. The hospital will contain 500 beds.

Mr. I. H. Cameron, of Toronto, has been gazetted a lieutenant-colonel.

The base hospital furnished by Laval University is up to full equipment. It is under the command of Lt.-Col. G. E. Beauchamp.

The Militia Department has accepted the offer of Dalhousie University, Halifax, to equip a base hospital. Dr. John Stewart is taking an active interest in organization.

Dr. William Gilbert Grace, the noted cricketer, died on 23rd October, at the age of 67. He was the most famous cricketer who has ever guarded a wicket. He toured the world several times.

The 41st annual meeting of the Hospital for Incurables was held recently. There were 234 patients, and a staff of 50 doctors. There was no deficit to report, but a balance of $2,106. Dr. W. H. B. Aikins submitted the report of the medical staff.

The Convalescent Home, which Sir William Jones offered to establish in England, has been located at Chatham House, Ramsgate. It is doing excellent work.

It is understood that extra precautions are being taken to prevent the occurrence and spread of contagious diseases among the troops located in Toronto. It is fully expected that the measures adopted will reduce such cases to a minimum.

Sgt.-Major William Chivers, who was severely wounded at Ypres, in the breast, by a rifle bullet, and in the leg by a piece of shrapnel, speaks very highly of the efficient care the soldiers receive in the hospitals. He was in Toronto a short time ago on his way to London, Ontario.

The University of Toronto base hospital, No. 4, is now at Saloniki, Greece. It was at Alexandria for a short time. No doubt its services with the Allies, now in Serbia, will be most valuable .

The latest accounts to hand inform us that Col. H. R. Casgrain, M.D., who was at Lemnos in the Aegian Sea in charge of a hospital there has recovered so as to return to England. He was accompanied by Mrs. Casgrain, who went with him in charge of the nursing staff. The hospital is one of 600 beds, and very efficient in every way.

Dr. George C. Nasmith, director of the laboratories of Toronto Department of Health, will return at an early date on leave of absence. He went with the First Canadian Expeditionary Force and rendered very valuable services on sanitary questions. He is required in Toronto for a time to help in the solution of some matters concerning public health.

Dr. M. F. Coglon has been appointed Medical Superintendent of the Kingston General Hospital.

Between April 25 and October 30, no less than 75,000 soldiers were removed from the Gallipoli campaign on account of illness. The diffi-

culty in procuring pure water was very great. The number of officers who had to be invalidated home through sickness was 3,200. Dysentery was very prevalent.

A new and complete Nurses' Home was recently opened in Oshawa in connection with its excellent hospital. The Oshawa people have good cause to be proud of both their hospital and home.

A number of Canadians at Folkestone, England, have offered to furnish a convalescent hospital for Canadian soldiers. The hospital to contain 50 beds exclusively for Canadians. The hospital will be under the control of Mrs. McDougall, Ottawa; Mrs. Rennie, Hamilton, Mrs. Hughes, Kingston, and Mrs. Cowan, Portage la Prairie.

The College of Physicians and Surgeons of Saskatchewan has had its offer of a hospital accepted, and is now mobilizing a stationary hospital of 400 beds.

Dr. K. H. Van Norman, who has been for three years First Assistant Superintendent of Johns Hopkins Hospital, has resigned to enlist in the Canadian Army Medical Corps. He has been granted a commission as captain.

At the Annual Meeting of the Toronto Hospital for Incurables the following officers were elected: President, Mr. Ambrose Kent; Vice-President, Col. Noel Marshall; First Lady Directress, Mrs. Grant McDonald; Second Lady Directress, Miss Mortimer Clark.

Dr. H. C. Sutton, of Port Credit, has enlisted in the Army Medical Corps for Overseas Services. He graduated from the University of Toronto a year ago.

Dr. J. Jordan, of Meaford, Ontario, has joined the Canadian A. M. Co., and is medical officer of the 95th battalion.

Dr. G. Sterling Ryerson, of Toronto, has been doing most efficient work for the Canadian Red Cross Society. As the president of the society has devoted much time to its interests.

A painful accident happened a short time ago to Dr. John Gallinger, of Eganville, when on a visit to a friend in Toronto. He was examining a revolver when it was accidentally discharged, the contents entering the abdomen. He was in Toronto to take his final examination.

It has been shown that some of the untoward and dangerous results following the use of meningitis serum are due to the tricresol employed as a preservative.

Dr. J. R. L. Christian, of Edmonton, was recently in Toronto, visiting his sister, Mrs. J. A. Macdonald. He was on his way abroad to join the R. A. M. C.

Drs. Robert Home and William Cruse, both of Toronto, have gone abroad as army surgeons, and have joined the R. A. M. C.

Dr. F. J. R. Forster, of Stratford, has enlisted for service in the R.A.M.C. He received notification some time ago of his acceptance. He will be given special work on diseases of the nose, throat and ear.

Sunday, 14th November, was observed as tuberculosis Sunday in many churches. Special instruction was given to children in the schools on Monday, 15th.

The average daily losses in the Dardanelles for the entire period from May to October were 795, Harold J. Tennant, Parliamentary Under Secretary for War, told the House of Commons. The great bulk of these men, Mr. Tennant said, were the sick, who aggregated 90,000. Of the sick, he added, eighty per cent. might be expected to return to the fighting ranks.

Ontario has done well in the matter of giving. In the recent campaign for Red Cross funds Ontario contributed most liberally. Hon. Mr. Stanley wrote to Sir John Hendrie thus: "It is difficult for me to say anything which will adequately convey to you the feelings of gratitude which we bear to Canada for the magnificent help which she has given. In money, material, and last, but not least, in men, Canada has indeed set a splendid example to the whole of the rest of the Empire."

King George has instituted a new royal order, the Order of the Red Cross, to be awarded for special services in nursing the sick and wounded.

The Toronto Chapter of the Graduate Nurses of Ontario is doing excellent work in the way of supplying dressing for the Red Cross in France. Already a very great deal of valuable material has been sent forward. The Chapter has sent nurses out of town to teach the proper method of preparing the various articles for the front.

The number of medical students registered this year at McGill University is 507, as compared with 568 a year ago. Dr. A. D. Blackader is acting dean in the absence of Dr. H. S. Berkett, who is in France with the McGill Hospital.

There are 67 students in the Medical Department of the Western University, London. Considerable new equipment has been added, and a physical laboratory has been installed. A diploma of public health will be granted.

The new students at Dalhousie University Medical Department number 22. Most of the fifth year men are enlisting for service as soon as they receive their degrees. The Arts Departments are now in the new building, and the old building is in use for the medical and dental departments. Dr. John Cameron, of Middlesex Hospital, London, has been appointed to the chair in Anatomy as successor to Dr. A. W. F. Lindsay, deceased.

The University of Alberta is now giving instruction during the first three years of the medical course. Arrangements have been made with the universities of Toronto and McGill to give the teaching in the fourth and fifth years.

A hospital is to be erected at Newcastle, N.B. The funds for the building have been secured, and it is hoped to raise an endowment fund for the institution.

The corner-stone of a new hospital at Port Hope was laid in the early part of October. Cost will be about $24,000, of which the late Mr. Helen furnished $20,000.

Dr. Daniel Phelan, who held the office of surgeon to the Kingston Penitentiary for nineteen years, has resigned.

Last year the Carleton County Protestant Hospital admitted 2,743 patients. The overdraft was reduced by $2,500.

In the City of Quebec there was opened recently a hospital for infectious diseases. The hospital is under the control of the Grey Nuns.

Dr. B. J. McConnell has been appointed coroner for the City of Winnipeg. He graduated at Queen's University.

At the Annual Meeting of the College of Physicians and Surgeons, of Alberta, Dr. Crang, of Edmonton South, was elected president.

The new hospital at Grand Forks, B.C., has been completed at a cost of $20,000.

The Red Cross and St. John Ambulance of Vancouver has raised $34,000 for hospital No. 5, the one sent from British Columbia.

The University of Alberta has licensed the following to practise medicine in that province: Drs. G. H. Ingram, W. D. Sorensen, R. T. Washburn, and S. Astrof.

Many will regret to learn of the death of Dr. Lorne Graham, of Wallacetown, Ont., when the transport on which he served, was torpedoed in the Aegean Sea.

Dr. David Cheever, in charge of the Second Harvard Unit, sailed from New York on 17th November, taking with him 30 surgeons and 36 nurses. They are to land in London and proceed from there to France.

A gift of $40,000 has been made to the Western Reserve University Medical Department in memory of the late Dr. Hunter H. Powell. It is hoped to raise a similar sum in memory of Dr. Dudley P. Allen.

The Supreme Court of the State of New York has annulled a marriage on the ground of fraud on the part of the husband who knew he had tuberculosis but concealed this fact from his fiancée.

A number of cases of foot and mouth disease in the State of Illinois have been traced to the use of anti-hog cholera serum prepared from the blood of infected hogs.

The will of the late Luther Hills Pierce, of Chicago, contains a bequest of $100,000 to the Eastern General Hospital located at Bangor, Maine.

It is pleasant to learn that the publication in France of the Revue de Medicine and the revue de Chirurgie has been resumed.

Columbia University is planning a department of Sanitary Science and Public Health. A suitable course of instruction will be given for those taking this department.

The Health Department of New York announced on November 4, the first conviction in the campaign being waged against medicines and appliances falsely advertised as cures. The manufacturer of "Holman's Ague, Liver, and Stomach Pads" having pleaded guilty in Special Sessions to the charge of misleading was fined $100.

Mrs. Drewry of Spencer Co., Ky., is reported to be the mother of nine children in eighteen months. Mrs. Drewry, who is about thirty years old, gave birth to five children in May, 1914, and on November 5, 1915, to four boys. Seven of the nine, all boys, have thus far survived.

In the death of Edward Livingston Trudeau, a distinguished member of the medical profession, disappears from its numbers. In 1884, he founded the Saranac Sanitarium, the first of its kind, for Consumptives.

All through the war zone of France all sorts of buildings have been fitted up for hospital purposes. There the sick and wounded Frenchman, German, Belgian, Canadian, Singulese, Turco, may be found, and there the nurse from France, England, Canada or the United States may be seen doing duty, and speaking often in no other language than that which passes through the gentle hand or sympathetic eye: for they know not each other's tongues.

The McGill Hospital in France is a marvel of efficiency in every way. A first class laboratory, a modern x-ray equipment, a full staff of competent physicians and surgeons, ably helped by a corps of highly trained nurses, all go to make this one of the best hospitals at the front.

OBITUARY

THE RIGHT HON. SIR CHARLES TUPPER, BT., M.D. EDIN.

One of the Fathers of Canadian Federation, a distinguished politician, and probably the oldest medical graduate of the University of Edinburgh, Sir Charles Tupper has passed to his rest, full of years and

honors, at the patriarchal age of 94. Few men have lived more vigorously, first in the rough and tumble of a large general practice in Nova Scotia, and then in the more turbulent area of politics; yet he retained good health of mind and body nearly to the end. Like so many distinguished Nova Scotians, he was of New England stock, and descended from Thomas Tupper, who emigrated from England in 1635.

Charles Tupper was born in 1821, the son of a Baptist clergyman; he had his early education at Horton Academy, U.S., and in 1839 went to Edinburgh University, graduating in 1843 with a thesis "On the Mechanism and Management of Parturition, illustrated by a report of 116 cases." He was never tired of talking of the happy life spent there as a medical student. Simpson, then newly appointed to the chair of midwifery, was his favorite teacher, and he kept up warm friendships with many of his old professors. Only a few months ago he promised the writer to jot down the reminiscences of his Edinburgh life. Returning to his native town, Amherst, he very quickly had a large and widespread practice. He was fond of surgery, and there were few men among us who could talk of personal experiences in pre-anaesthetic days. He told the writer of an amputation at the hip-joint for sarcoma performed on a farmer's wife, on the kitchen table, with a sailor as assistant. The patient lived eighteen miles away, so he was never able to make a second visit. Three months later the farmer drove to Amherst with his wife strong and well.

In 1855 Sir Charles entered public life as member of the Nova Scotia Assembly, and immediately pushed to the front rank in local politics, becoming successively Provincial Secretary, and in 1864 Premier of the Province. In the preliminaries to confederation, 1867, he took a prominent part, and was a member of the Westminster Conference. In 1870 he became President of the Council in the Dominion Government, and Minister of Customs in 1872. Following the fall of the McDonald Government he was the life of the Conservative party, and to him more than to any other was due their return to power in 1878. In 1884 he retired from the ministry, and took the position as High Commissioner in London for the Dominion. For a short period he was again in the Ottawa Cabinet as Minister of Finance, but returned as Commissioner to London, where he remained until 1896. In this year he became Prime Minister of Canada. After the defeat of his party he was the leader of the Opposition, but in 1900, after the general election, he retired from public life. In 1888 he was created a Baronet of the United Kingdom.

At intervals in this busy life he practised his profession at Halifax, Ottawa, and for a year or more at Toronto. He took an active part in

the formation of the Canadian Medical Association, and to the end retained keen interest in the progress of medicine.

Canada owes a deep debt to Sir Charles Tupper, and his political opponet, Sir Wilfrid Laurier, very truly said that next to Sir John A. Macdonald, the man who did most to bring about the federation of the Canadian provinces was Sir Charles Tupper. With a strong and daring personality, he had all the qualities for success in public life—calmness and clear judgment in victory, resolution and hopefulness in defeat. Nothing in his history was more remarkable than to have "stumped the country" successfully for his party when in his 80th year. A strong Imperialist, Sir Charles once remarked that "the two aims he has always kept in view . . . have been the strengthening of the golden link which connects England with the first and greatest of her colonies, and the holding aloft of the standard of right of the nation so that she may prove herself worthy of the proud position she has made her own." His life is an illustration of the brilliant success of the doctor in politics. We have to go to France or to the South American Republic to parallel his career. But he never really served two masters; from 1855 he was a politician first, and a practitioner only when stranded by the exigencies of party.

A few months ago, in reply to a question as to what he attributed his kindly old age, said, "A good constitution, a good digestion, and a capacity to sleep." It was in truth his good arteries, which were scarcely palpable when the blood stream was pressed out. Yet here was a man who in 1880-1 was ready to throw up the sponge, as he was believed to have Bright's disease! Some years ago, in a paper "On the advantages of a trace of albumin and a few tube casts in the urine of men above 50 years of age," the writer mentioned his case. In 1881 he saw Andrew Clark, who gave most sensible advice, but was inclined to take a grave view of the renal condition. The advantage of the discovery was never better illustrated, as he ever after lived a careful life. Of Sir Charles's sons, the elder, Stewart, died a few months ago, and the baronetcy falls to his son, a barrister in Winnipeg.—W. O., *British Med. Jour.*

W. T. STUART.

Dr. William Theophilus Stuart, a professor in the University of Toronto and the Dental College, and one of the founders of the latter, died on Saturday morning, 13th November, at his summer home "Holyrood," Oakville, after a week's illness. For many years he was a professor at Trinity Medical College. He held four honorary degrees from

the University of Toronto. He was one of the organizers of the 48th Highlanders, and held the rank of Major in the regiment. He was born in Markham, being the son of Rev. James Stuart, a Presbyterian minister, and has been connected nearly all his life with the University. He is survived by a widow, two sons, Hamilton and John, and a daughter, Miss Florence, all living in the city. He was in his 63rd year.

LESLIE TUTTLE.

Dr. L. Tuttle, of Tweed, a highly-esteemed resident, died there on 13th November. He took an active part in public affairs, and had been treasurer of the village for many years. He leaves a widow, a daughter, and two sons.

LOUIS P. TREMBLAY.

Dr. Tremblay, of Montreal, died at the Hotel Dieu, on 7th September. He was a graduate of Laval University. He was in his 32nd year, and leaves a widow and one child.

ROBERT McDONALD.

Dr. McDonald died in Hagersville, Ontario, in the latter part of August. He graduated in 1868 and practised for some time in Fullerton. He was born in Oxford County in 1850. In 1810 he was president of the Haldimand County Medical Society. He left two daughters and one son.

MARY FYFE.

Dr. Mary Fyfe, of Montreal, died there. She graduated at Bishop's College, Lennoxville. She was in practice 20 years.

JAMES K. SIMPSON.

Dr. Simpson, who had practised in Juneau, Alaska, for some years, died in Victoria, B.C., in the latter part of September. He was born in Ashton, Ont., 53 years ago.

PERCIVAL C. CASSELMAN.

Dr. Casselman, of Morrisburg, Ont., died in the Royal Victoria Hos-

pital in Montreal, 30th September. He was born in 1873, and graduated from McGill University in 1899. For some time he was connected with Dr. Gardiner's private hospital in Montreal, and later settled in Morrisburg. He leaves two children.

R. J. S. WHEELER.

Dr. Wheeler, of Birtle, Manitoba, died in the Winnipeg General Hospital, on 16th September. He was in his 53rd year. He was born in Ireland and graduated from Dublin University. He came to Canada about thirty years ago. He is survived by his widow, three daughters, and one son.

JOSEPH H. PETERS.

Dr. Peters, of Hamilton, died at Fergus, on 7th October. He was a graduate of the University of Toronto, and had been in practice in Hamilton for four years.

KENNETH JUNOR.

Dr. Junor died in Toronto in the latter part of September. He was born in St. Mary's, Ontario. He spent some time as a missionary in Formosa. He then practised for some time in Brooklyn, N.Y.

W. A. CAMERON.

Dr. Cameron died of typhoid fever in Moncton on 1st October. He was born in Nova Scotia and graduated from the University of Toronto a year ago. He was in his 27th year.

S. B. CORBETT.

Dr. Corbett died in Vancouver, B.C., 9th September. He was born in 1846, and graduated from Victoria University in 1867. He had practised formerly in Winnipeg.

J. A. R. LEONARD.

Dr. Leonard, Montreal, died on 16th September, in his 65th year.

He was born at St. Vincent de Paul, and graduated in 1876 from the Montreal Ecole de Medicine et de Chirurgie. He practised at St. Cunegonde.

A. J. P. GARNEAU.

Dr. Garneau was born at Lotbiniere and graduated from Laval University. He practised at Fall River, Massachusetts, where he died on 21st September.

PROFESSOR CHARLES BOUCHARD.

Professor Bouchard, who died recently after a long illness in a nursing home at Lyons, was for many years one of the chief figures in academic medicine in Paris. He was born at Montier-en-Der, in the Haute Marne department, in 1837, and graduated in 1866, and was appointed professor of general pathology and physician to the Lariboisière Hospital in 1870. He was elected a member of the Académie de Médecine in 1880, and of the Académie des Sciences in 1887, and had been president of both these learned bodies. He wrote a book on pathology, which was the popular students' text-book of its day, and he was one of the first to recognize the importance of autointoxication. It was, however, as an administrator that he did his most important work, and when dean of the Faculty of Medicine he encouraged many reforms. He was a Grand Cross of the Legion of Honor, and but for the war would have received the Nobel prize in 1914.

At this moment we may recall the part he took in the very earliest movement towards the establishment of the Entente Cordiale. It was in 1904 that some friends of Great Britain in France, and of France in Great Britain, all of them members of the medical profession, got into communication: the result was the visit of a large party of French doctors to London in October of that year, when they were shown some of our medical institutions, and were entertained at a dinner at which very cordial fraternal sentiments were expressed. There followed the visit of a large number of British doctors to Paris in May, 1905, when the modest hospitality which London had been able to show the French party was altogether eclipsed. The Committee in Paris which made arrangements for this visit had Professor Bouchard as its chairman, the late M. Lucas-Championnière as its vice-chairman, and Drs. Tribuolet (Paris) and Sillonville (Aix-les-Bains) as its secretaries.

W. H. CLAPP.

Dr. W. H. Clapp, aged 50, of 167 Lippincott Street, Toronto, died at his home on 20th November. Deceased had been in ill-health for some time and contracted pneumonia about a week ago. He was attended by Dr. J. Guinane, but his condition gradually grew worse until the end came suddenly.

The late Dr. Clapp was born in this city on Church Street, and was a son of the late Dr. John Clapp, one of Toronto's first medical health officers. He had not been in general practice for some years. A widow survives him.

W. H. MONTAGUE.

Dr. Montague died very suddenly in Winnipeg on the afternoon of November 13th. Some time ago he suffered from an apoplexy, and made a great recovery. It was thought he had a second seizure. There was present at the time only a maid, as his wife and daughter were out. Dr. Montague was born in Middlesex County in 1858. He received his medical education in the Toronto School of Medicine, and graduated from the University of Toronto in 1880. He did post graduate study in Edinburgh and obtained the license there of the Royal College of Physicians. He was a member of the Federal House for some years dating from 1887, and was a member of the Cabinet. In 1813 he entered the Cabinet of Manitoba, and resigned some time. He was a fluent public speaker.

BOOK REVIEWS

A TEXT-BOOK OF PATHOLOGY.

By Alfred Stengel, M.D., Professor of Medicine, University of Pennsylvania, and Herbert Fox, M.D., Director of the Pepper Laboratory of Clinical Medicine, University of Pennsylvania. Sixth edition, reset. Octavo of 1045 pages, with 468 text-illustrations, many in colors, and 15 colored plates. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, $6.00 net; half morocco, $7.50 net. Sole Canadian Agents, the J. F. Hartz Co., Toronto.

Professor Alfred Stengel has long been known both as an able pathologist and teacher. We are inclined to think that one cannot write a good medical text-book on any subject who is not first an experienced teacher. It is only in this way that he can find out the real difficulties of the student, and discover the best means of meeting them. The pre-

sent volume, by Professor Stengel, while thoroughly scientific, is also equally thoroughly practical. Dr. Stengel has acquired the ability of stating his views clearly, which one of the essentials in building up any great book. We not reviewed, in a long time, any book that could be more confidently recommended than the present one on pathology. One of the leading features of the work is that it fits in so well with works on medicine and surgery as a companion volume.

The publishers have spared no efforts to make the book attractive in every way. It is well bound. The paper is good, and the type is clear. It is richly illustrated, and with cuts that elucidate the text. Every physician would be much the better equipped for his work by a careful study of these pages. Pathology truly is one of the sure foundations for the practice of medicine.

BLAKISTON'S VISITING LIST.

Physicians' Visiting List for 1916. Pocket size. Limp leather. Price $1.25.

The excellent visiting list is to hand. No better is on the market. It is well arranged for the daily needs of the busy practitioners. The paper and binding are the very best. There is a pocket and holder for the pencil. We can recommend this wisiting list, as it contains much useful information in condensed form.

EMERGENCY SURGERY.

By John W. Sluss, A.M., M.D., Associate Professor of Surgery, Indiana University School of Medicine, ex-Superintendent Indianapolis City Hospital, Surgeon to the City Hospital. Third edition, revised and enlarged, with 685 illustrations, some of which are printed in colors. Philadelphia: P. Blakiston's Son and Company, 1012 Walnut Street. Flexible leather, $4.00.

This is a very handsome book; but far more important than appearance it is a most useful one. It is splendidly bound, printed, and illustrated. The paper is very fine. The book is a very practical one, and full of suggestions for every day use. The directions for the guidance of the surgeon are well featured and sound. This is a book that specially deals when that sort of surgery that comes to one unexpectedly and must be treated in a hurry. The book is just the sort of one that should be in the hands of every busy surgeon. We have seldom had the pleasure of reviewing a book in which the illustrations are so fine and artistic. This book covers what might be called quick surgery; but the book covers the ground in a thoroughly scientific manner. The publishers and author deserve full congratulations for the many excellent

qualities of this book Dr. Sluss on Emergency Surgery. It is truly a multum in parvo, or a surgeon's vade mecum. A book with so many good features cannot have too wide a circulation for the good of the profession and the public.

DISEASES OF THE SKIN AND THE ERUPTIVE FEVERS.

By Jay Frank Schamberg, M.D., Professor of Dermatology and Infectious Eruptive Diseases in the Philadelphia Polyclinic and College for Graduates in Medicine. Third edition, revised. O3ctavo of 585 pages, 248 illustrations. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, $3.00 net Sole Canadian Agents, the J. F. Hartz Company, Toronto.

The excellent work has now reached its third edition. It is only a few years since the first edition appeared. When a book goes through three editions in rapid succession as this one has done, it may be assumed that it has merit. It is quite a natural arrangement to include skin diseases and the irruptive fevers in one volume, as the latter have one of their prominent features made manifest on the skin. While there are many features in this book that are worthy of praise, none are more so than the portions devoted to treatment. The book is of the most practical kind possible, and, consequently, most helpful to its readers.

PRACTITIONER'S VISITING LIST.

The Practitioner's Visiting List for 1916. Four styles: weekly, monthly, perpetual, sixty-patient. Pocket size, substantially bound in leather with flap, pocket, etc. $1.25 net. Philadelphia and New York: Lea & Febiger, Publishers.

The Practitioners' Visiting List embodies the results of long and studious effort devoted to its development and perfection, and is the final result of over thirty years' experience in meeting and anticipating the needs of the practising physician. It is a practical convenience which, once possessed, becomes indispensable to the busy practitioner.

It affords a simple and complete system for keeping the records of daily practice. In addition to the ruled pages for daily calls and their notes, general memoranda, addresses, cash account, etc., it contains specially arranged spaces for data desired for permanent record such as births, deaths, etc. The value of such records is best appreciated by the physician who has been suddenly confronted by the necessity of producing such data after the lapse of years and in the absence of an orderly system for its preservation.

It is issued in four styles to meet the requirements of every practitioner: "Weekly," dated for 30 patients; "Monthly," undated for 120 patients per month; "Perpetual," undated, for 30 patients weekly per

year, and "60 patients," undated, for 60 patients weekly per year.

The text portion of the Practitioners' Visiting List for 1916 contains, among other valuable information, a scheme of dentition; tables of weights and measures and comparative scales; instructions for examining the urine; diagnostic table of eruptive fevers; incompatibles, poisons and antidoes; directions for effecting artificial respiration; extensive table of doses; an alphabetical table of diseases and their remedies, and directions for ligation of arteries. The record portion contains ruled blanks of various kinds, adapted for noting all details of practice and professional business.

Printed on fine, tough paper suitable for either pen or pencil, and bound with the utmost strength in handsome grained leather, the Practitioners' Visiting List is sold at the lowest price compatible with perfection in every detail.

THE MECHANISM OF IMMUNIZATION.

By Henry Smith Williams, M.D., and James Wallace Beveridge, M.D., New York City, 25 East 60th Street. Copyright, 1915. Reprinted from American Medicine, October and November, 1914.

This gives a very carefully prepared exposition of the subject of immunity. It is worthy of study and will well repay the time spent upon it. The authors have done well in issuing this brochure.

THE INSTITUTION QUARTERLY.

An Official Organ of the Public Charity Service of Illinois. Published monthly, September, 1915. Vol. vi., No. 3. Springfield. Editor-in-chief, A. L. Bowen.

This is a very valuable and interesting publication, and gives much useful information on the charities of Illinois, and that would be applicable to similar institutions elsewhere. his issue contains many articles on the care of the feeble-minded, the treatment of drug habitués, the management of public institutions, and general philanthropy. To all who are interested in asylums, etc., we recommend this publication.

MISCELLANEOUS

SURGEONS ARE HEROES.

That the world bestows honor and emolument upon the destroyers of life while indifferent to those who save life is again manifest in the

news columns which dwell insistently upon the glories of the soldier and line officer, but leave the medical journals to note the heroic deeds of the field surgeon. The reason may be found in the methods of history teaching.

School children learn to revere Alexander the Great, the practical results of whose achievements are to-day mere shadows. How many intelligent persons even have read of Hippocrates, whose discovery of the healing power of nature has survived the opposition of twenty-five centuries and saved millions of lives?

While statues of Wellington and other military heroes abound in England, there is but one humble memorial to Jenner who delivered the world from some of its greatest scourges.

The features of Napoleon are familiar; few would recognize the features of his compatriot. Pasteur, whose discoveries have saved a thousand times more lives than Bona-parte sacrificed.

In America, while achievements of military heroes are commemorated in song and story, in bronze and marble the father of anesthesia, Dr. William Thomas Green Morton, who saved millions from suffering and death, is honored only by a modest shaft erected over his grave by his colleagues.

Cramped in the trenches the soldier eagerly awaits the order of attack of defence, inspired by the thought that he is armed for the fray, while the surgeon under the same conditions, must often crawl out and dress wounds while lying flat with shot and shell raining around him. Without the stimulus of combat and the reliance upon being armed that animate other officers, the surgeon presents superhuman courage unexampled in war fare.

VITAL STATISTICS.

There was a general decline in births, marriages and deaths in Toronto during October compared with October of last year, according to the figures issued by the City Clerk yesterday. In addition to this the deaths from contagious diseases of all kinds totalled 34 only, as compared with 47 last year. The figures are as follows: Births, 1,012; marriages, 496; deaths, 447. In October, last year: Births, 1,202; marriages, 573; deaths, 553. The deaths from contagious diseases were: Smallpox, 0; scarlet fever, 0; diphtheria, 5; measles, 4; whooping cough, 1; typhoid, 1; tuberculosis, 22; spinal meningitis, 1. In October, last year: Smallpox, 0; scarlet fever, 1; diphtheria, 7; measles, 0; whooping cough, 2; typhoid, 11; tuberculosis, 25; spinal meningitis, 1.

FALL EXAMINATIONS OF MEDICAL COUNCIL.

The following candidates have passed the Fall examination of the College of Physicians and Surgeons of Ontario: John David Henry White Barnett, St. Mary's, Ont.; John Reginald Boyd, Meaford, Ont.; Robert McDonald Cairns, Ottawa; Bessie Lawrence Collver, Waterford, Ont.; Herbert Joseph Conroy, Peterboro; Joseph Daly, Iona, P.E.I.; John Alexander Dougan, Lindsay, Ont.; Leslie Clinton Fallis, Toronto; Harry Cleaver Purvis Hazelwood, Toronto; Roy Hartley Henderson, Toronto; Frederick Herbert Jeffery, London, Ont.; John Edward Kane, Kingston; Joseph Arthur Labelle, L'Orignal, Ont.; David Easton Lang, Toronto; Albert George Ley, Markham; Donald Sherwood Lighthall, Picton; Oliver John Samuel Little, Seaforth; Leycester Bancroft Lyon, St. Ann's Bay, Jamaica, W.I.; Russel G. MacRobert, Toronto; Charles Gordon Merrick, Kingston; Henry Knight Mitchell, Port Arthur; Edward Wilfred McBain, St. Thomas; Hermann Campbell McCaul, Lakeside, Ont.; Alexander Jameison McIntosh, Toronto; Thomas Arnold Robinson, St. Mary's, Ont.; William Lipsett Robinson, Toronto; Thomas Joseph Sexton, Port Dalhousie; Issachar Reuben Smith, Toronto; John Alexander Stewart, Brockville; Vernon Harcourt Storey, Port Hope; Frederick Henry Sutherland, Toronto; Wilfred Lorne Tyrer, Barrie; Carl William Waldron, Toronto; James Howard Walmsley, Montreal; George Douglas Chown, Kingston; William Henry Godfrey, Toronto.

REJECTED ATHLETES.

A terrible accident to a well known Toronto football player calls attention to the fact that, while a sound body and a lengthened expectancy of life are the results of moderate physical training and athletic exercises, death and disablement threaten those who engage in their most violent forms. Defenders of Rugby, which is supposed to be about the roughest of our outdoor sports, have pointed to the fact that the game shows a very small list of fatalities; but these statistics do not tell the whole story. There are in this country many able-bodied young men who have been noted at different times for their athletic prowess, and who have had the humiliation of being refused by recruiting officers, while thousands of less well developed young men have passed the examination and are now with the colors. A man may be a perfect specimen of physical development, with the exception of a weak ankle, or a knee-cap that is likely to slip, and yet be unfit for military service. These defects do not inconvenience him in ordinary times, but make him hardly more useful as a soldier than if he had a wooden leg or had lost an arm.

If the excitement of an athletic contest, on which perhaps a championship depends, the athlete who is worthy of the name will strain every muscle to the extreme limit, and will take the chance of a broken limb without a moment's hesitation. If he were not ready to give this proof of his courage, he would never attain much eminence as an athlete; and while from the purely sporting point of view this is a commendable and even necessary quality, it is not, from the military standpoint, without its dangers; and it is from the military standpoint that Canadians will be disposed now to regard all questions. How many young men there are who, at the time of the Marathon craze a few years ago, over-exerted themselves, and placed a strain upon their hearts and other vital organs from which they will never recover! How many young men have shortened their lives by desperately tugging on an oar to win honor for their club, and how many more have piled needless muscles upon their limbs and bodies at the sacrifice of their stamina and their powers of resistance to disease! Medical officers who have been weeding out the fit from the unfit in the past twelve-month might tell some startling stories of noted athletes rejected because of some injury thought trifling at the time it was received, and since forgotten, which has yet been sufficient to make its victim useless as a soldier in this great war.

ONTARIO INSTITUTIONS SUPPLY NEW HOSPITAL.

If the prisoners in the Provincial Reformatory and the patients in the provincial asylums have not been able to serve their country by enlisting they have had opportunity to "do their bit" just the same. For six months past the public institutions under Hon. W. J. Hanna have been hard at work turning out material and equipment for the Ontario hospital at Orpington, Kent, England, and the result is shown in the accumulation of between 25 and 30 carloads of supplies.

According to Hon. Mr. Hanna, 12 carloads have already been shipped, including mechanical equipment made at the Guelph Reformatory. The output of the institutions include 8,300 blankets, 1,550 hospital beds, 1,550 mattresses, 1,050 adjustable bedside tables, 2,080 shirts, 1,540 pairs of pajamas, several thousand wash cloths, tray cloths, etc., and over 12,000 towels.

In addition to giving the inmates of the institutions an opportunity to help Hon. Mr. Hanna by producing so much in this way has materially cut down the cost of fitting up the hospital.

ACADEMY OF MEDICINE, TORONTO, NOVEMBER 2, 1915.

The regular monthly meeting of the Academy was held in the Mining building of the University of Toronto, on Tuesday evening, November 2nd, at 8.30 o'clock. The President, Dr. W. H. B. Aikins, was in the chair.

Dr. H. A. Bruce addressed the Academy on the subject, "Some Experiences in the War Zone." The speaker opened his address by showing a number of slides of photographers of the staff of the University of Toronto Base Hospital. These were followed by photographs of various hospitals, Cliveden, with its annex, huts, recreation building and operating room buildings; Le Touquet, with its staff, stables and huts; McGill Base Hospital staff and No. 2 Canadian General Hospital at Treport under Col. Murray MacLaren.

The Red Cross trains of hospital cars carrying some five hundred beds were shown, also a number of slides of hospital ships with their operating rooms. It was stated that the organization was so perfect that a man had been known to leave London, take a transport to France, pass on to the front, go into action, be wounded, passed back to a base hospital and sent to England, reaching London within forty-eight hours of his time of leaving.

Dr. Bruce then showed a number of slides of X-ray plates illustrating the effects of shrapnel and bullets and showing some fragments in situ.

In discussing the treatment of septic wounds, Dr. Bruce stated that carbolic acid and bichloride are but little used. No. 2 Canadian Stationary Hospital has still on hand almost the whole of the supply of these which they took over with them. In the learlier stages of such wounds hypochlorous acid is used in weak dilution or a solution of 25 gm. hypochlorite of lime, 25 gm. acid boracic in 1 litre of water is used on dressings, this liberating hypochlorous acid. This is more powerful than carbolic in the proportion of 160 to 1. Fetor soon disappears and the dressing is later changed to hypertonic saline.

A British Hospital, No. 13, at Boulogne received most of the brain surgery cases for treatment, and a corps of specialists are here stationed to deal with these. Very slight injury to the scalp was frequently found associated with extensive injury to the skull and brain—so frequently that trephining seemed almost necessary in all bullet or shrapnel confusions.

A section of intestine with seven or eight perforations, was shown. This was removed at a casualty clearing station with perfect recovery of the patient.

THE ONTARIO MEDICAL ASSOCIATION.

Organization and preparedness are the watch words these days, and so it seems fitting that the Ontario Medical Association should make plans early for the annual convention to be held in Toronto in May, 1916. Work is now being done, not only to insure success at the next meeting, but also to co-operate with the profession throughout the province in organization of county medical societies along the lines approved of by the Peterborough meeting. The latter is a big task but seems well worth while and should commend itself to the profession.

In carrying out this campaign the Ontario Medical Association will be living up to the best traditions of its founders. In this connection a quotation from one of the Canadian medical journals of 1882—may not be out of place—"The Ontario Medical Association should promote sentiments of mutual respect and fraternity, the plentiful lack of which there is still great reason to deplore." It is the intention of the present executive to do what they can to remedy the faults existant in 1882 and that still survive in an attenuated state in 1915.

It is interesting here to note that the Association has been in existence since 1880, and has held meetings annually since 1881. Dr. Adam Wright and Dr. J. E. Graham first conceived the idea of a provincial organization. At a preliminary meeting held to consider the matter of organization were Drs. Workman, Coverington, Graham and J. H. Burns, Adam Wright and J. E. White. The first president was Dr. Workman. For thirty-five years the Association has prospered. There seems to be no doubt that the executive with the co-operation of the membership will not allow the organization to languish even though under the stress of war conditions.

MEDICAL PREPARATIONS

A SYSTEMIC BOOST.

It is safe to say that the average physician is called upon to prescribe a tonic more frequently than any one other form of medication, unless it be a cathartic. Patients who are patients solely because they are tired, "run down" and generally debilitated, are constant visitors at the physician's office. Such individuals need something that will boost them up to their normal point of resistance and then hold them there: in other words, not a mere temporary stimulation, with secondary depression, but a permanent help to the revitalization of the blood and a general reconstruction. Pepto-Mangan (Gude) is not only prompt in action as an encourager of appetite and better spirits, but is also distinctly efficient as a blood builder and systemic reconstituent. It is

pleasant, non-irritant, free from constipating effect and does not stain the teeth. It is thus a general constitutional tonic of positive service in all conditions of general devitalization.

WHOOPING-COUGH A SERIOUS DISEASE.

In an address before the New York Academy of Medicine, and reported in the Archives of Pediatrics, issue of August, 1914, John Lovett Morse, A.M., M.D., Professor of Pediatrics in the Harvard Medical School, made this significant statement: "The relative mortality from whooping-cough, scarlet fever and diphtheria is essentially the same throughout the country, whooping-cough being almost everywhere more fatal than scarlet fever and less fatal than diphtheria . . . Instead of being a trifling affair, as it is usually considered to be by the laiety, whooping-cough is a most serious and fatal disease. 'Any disease which kills 10,000 children per annuma is,' as Rucker says, 'a serious one. If bubonic plague were to kill that many children in the United States in one year, the whole world would quarantine against our country. A child dead of whooping-cough is just as dead as a child dead of plague.' "

In the same issue of the journal above referred to, the editor, an undoubted authority, says that "whooping-cough causes more deaths in children under one year than any other infectious disease."

In view of these startling facts, is it not just possible that the profession at large, like the average layman, has been too prone to look upon whooping-cough as an inevitable non-comitant of childhood, and to underestimate its seriousness?

The Bordet-Gengou bacillus is recognized as the specific cause of whooping-cough, and the most rational method of treating the disease is by means of vaccine prepared from cultures of this bacillus. It is pertinent in this connection to refer to two such vaccines which are manufactured and marketed by Parke, Davis & Co. One bears the name of Pertussis Vaccine; the other is designated as Pertussis Vaccine, Combined. The first-mentioned vaccine is indicated in cases diagnosed as pertussis, in suspected cases when a definite diagnosis is lacking, and as a prophylactic. The second is indicated in all cases of pertussis, but especially those which have persisted for some time, such infections being usually of the mixed type. The vaccines are administered hypodermically and are supplied in bulbs, in rubber-capped vials, and in glass syringes. The various packages are fully described in an announcement which appears elsewhere in this journal under the caption, "The Vaccine Treatment of Whooping-Cough." The advantages of the vaccine treatment are succinctly stated in the advertisement, which our readers are advised to consult.