

normal but the pulse was rapid and dicrotic, and the general condition growing progressively worse. The skin was smothered with the septic rash.

On February 14th a large subcutaneous haemorrhage appeared in the left iliac region, possibly caused by an embolus which lodged on February 11th at the time of the rigor. Vulvitis also developed.

Dr. Hebblethwaite saw her in consultation on February 15th. The iliac haemorrhage then seemed to be breaking down. The patient was very bad and appeared to be in a hopeless condition. We considered that she was suffering from a virulent infection of the blood stream and that vaccine could not possibly do any good. As a last resort we decided to give her eusol intravenously as used by Captain John Fraser, R.A.M.C., and Captain H. J. Bates, R.A.M.C., for the toxæmia of gas gangrene, as reported in the BRITISH MEDICAL JOURNAL of January 15th, 1916.

On February 16th 40 c.cm. of eusol were given intravenously preceded by 300 c.cm. of normal saline. Her condition at the time of the injection was much worse than on the preceding day. She was semi-delirious, the pulse was weak and thready; there were sordes on the lips, and she was apparently dying.

After the injection she perspired freely, and an hour later she had another rigor, but that night she slept well without a sleeping draught for the first time for three nights. The next day the pulse was much improved in quality, and her general condition was distinctly better. She steadily improved from that time on; by February 20th the bed sore was almost healed, the vulvitis had gone, and the rash was rapidly fading. She was sleeping well, and her appetite was returning.

On February 24th the iliac haemorrhage broke down, leaving an ulcer which was unresponsive to boric fomentations but cleared up after local treatment with eusol. The rest of her recovery was uneventful except for occasional slight rises of temperature.

She came to see me on June 15th, when she was apparently well except for some rapidity of the pulse and anaemia.

No blood culture was made, so the diagnosis was not proved, but clinically the case was typical of an acute sepsis of the blood stream.

The action of the serum was interesting. The first dose seemed to do a great deal of good, and apparently checked the course of the disease for some days. The second dose brought the temperature down, but did not improve her condition; in fact, she got rapidly worse.

At the time of the intravenous injection she had numerous crepitations over both lungs at the back; they did not seem to be increased by the injection, and disappeared in a few days. She was getting progressively and rapidly worse up to the time of the injection, and was apparently moribund when it was given. She improved rapidly and steadily after it, and I have no doubt whatever that it saved her life.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

"SLING ATROPHY" AND KINDRED DISABILITIES.

IN the EPITOME OF CURRENT MEDICAL LITERATURE (June 10th) a note is published on "Sling atrophy of the arm" by Richard and Stern. I would like to call attention to a similar condition in the lower limb.

Paralysis of the tibialis anticus and of the everters of the foot is frequently observed after some injury, such as a "crush" to the ankle, which has not seriously injured either the muscles or their nerve supply. On examination a month after the injury there may be no pain and all passive movements may be reasonably free. Although failure to support the foot in a dorsiflexed and everted position may be a contributing cause, the paralysis or paresis may occur even when this precaution has been observed. The lack of voluntary power seems to be due to some peculiar blending of physical and mental causes, the exact pathology being obscure.

The electrical reactions of the muscles concerned are, after this lapse of time, normal, or nearly so. The patient should be shown that all the movements of the foot can be produced electrically, and encouraged to try to produce them himself. These efforts on his part should synchronize with the artificial stimulus, the strength of which must be gradually reduced as his control increases. Daily treatment for two to three weeks will generally restore voluntary power. The exceptions are patients with hysterical tendencies, with regard to whom prognosis should always be guarded. In general, however, a speedy and complete recovery may be looked for in the absence of any demonstrable physical lesion; but some patients, unless specially

urged and encouraged, will not make any effort to move the foot even though a relaxation splint, massage, and electricity may have perfectly restored the muscles from a mechanical point of view.

Once a state of physical normality has been reached—which will be in from two to eight weeks, according to the severity of the original injury—continuance of electrotherapy, etc., will do positive harm unless there is definite sign of returning voluntary power. The patient's re-education must be taken in hand with considerable vigour. He should be allowed to walk about with an elastic support to his boot to prevent foot drop. It will generally be found, on holding the foot in a posture of extreme dorsiflexion, that he can cause the tendon of the tibialis anticus to tauten and slacken, even though he cannot at all hold his foot in position. In very bad cases even this movement may be lacking; it must then be patiently elicited. This is best done by holding both feet in the same position, and getting the patient to try to move both tendons in unison. Tapping the muscle lightly with the finger-tip will often give the required impetus. By some means or another this very modest accomplishment must be acquired if the case is to get well, for it is the starting point of all else. The movement should be performed rhythmically for some minutes several times a day, care being taken, however, to avoid fatigue. Much patience is necessary; any manifestation of irritability on the part of the teacher may be fatal. The next step is to get the patient to hold the foot momentarily in position while the supporting hand is withdrawn. Finally, active dorsiflexion is essayed, but this should not be until the patient has learned to hold his foot in position for two to three minutes without difficulty.

The above procedure is seldom needed in early cases. If called for, it is in them nearly always successful. When, however, a patient has been treated for many months by elaborate physico-therapeutic methods, he becomes unconsciously, if not consciously, imbued with the idea that he is incurable. Re-education on the lines above described can now alone do any good, and his restoration is likely to be a matter of months rather than weeks. Moreover, it is only possible at all provided that his confidence can be gained, and that he is willing to face cheerfully the probably long course of treatment. Unfortunately this type of patient is generally, and not unnaturally, anxious to escape from the hands of the doctors; and if a man so affected, who has already spent much time in hospitals, has set his heart on getting out of the army, it is quite useless to waste time on the case.

Hypnotism is sometimes of great value, but six months' unsuccessful treatment may produce a fixed idea, even in a man both mentally and physically robust, which requires for its removal a depth of hypnosis only occasionally obtained.

London, W.

FRANCIS HERNAMAN-JOHNSON.

TRISMUS DURING SERUM SICKNESS.

IN the BRITISH MEDICAL JOURNAL of August 12th, 1916, there is an account of this condition by Captain Bolt, R.A.M.C. The symptoms are so disquieting to the medical man in charge of such a case that I record a somewhat similar experience in the hope that further records may show to what extent such occurrences are frequent.

About two years ago I had to treat a case of puerperal fever due, I believe, to severe periodontal disease. The confinement was terminated by instruments. On the next day the temperature began to rise, and reached 104° F. on the third and fourth days with one or more rigors; 10 c.cm. of polyvalent antistreptococcic serum were given, and the uterus explored. A portion of placenta was found, and a swab taken from the interior of the uterus, which yielded on cultivation a pure growth of streptococci from which a vaccine was prepared.

Twenty more c.cm. of serum were administered with the vaccine with most satisfactory results, when a painful condition of the muscles of the neck supervened, with difficulty in opening the mouth. This disagreeable symptom increased till only the spout of a feeder could enter the mouth. There was no rash, or other symptom of serum poisoning, and in forty-eight hours the spasm of the jaw disappeared, during which time 5-grain doses of chloroform had been given every four hours.

Sevenoaks.

JAMES E. BLOMFIELD, M.D.

author of researches on the part played by insects in the diffusion of plague, on human and bovine tuberculosis, on the vibrios in water, and other subjects.

DR. UGO CALCATERRA, who as an official of the Bureau of Hygiene of Bologna had charge of the medical students' quarters, was recently killed on the Trentino front. He had just completed his 30th year. A commemorative meeting of the Communal Council was held at which the Syndic was present. The Health Assessor proposed that prizes in hygiene bearing the name of Calcaterra should be founded.

DEATHS IN THE PROFESSION ABROAD.—Among the members of the medical profession in foreign countries who have recently died are Dr. Karl Fraenken, formerly professor of hygiene in the University of Halle, aged 54; Dr. Hermann Klaatsch, professor of anatomy, anthropology, and ethnology in the University of Breslau, aged 53; Dr. Paul Friedrich, professor of surgery in the University of Königsberg, aged 51; Dr. Frederic Schmid, of Geneva, director of the Swiss Federal Health Bureau, aged 66; Dr. Thomas Hubbarb Russell, successively lecturer on surgery, professor of materia medica and therapeutics and clinical surgery in the Medical School of Yale, and surgeon to the New Haven General Hospital, aged 63; Dr. Pietro Grocco, professor of clinical medicine in the Istituto di Studi Superiori, Florence, and Senator of Italy, well known by the "paravertebral triangle" which bears his name and by many valuable researches on Graves's disease, polycyrcitis, the pathology of the heart, and other subjects, aged 60; Dr. Max Billard, of Paris, author of works dealing with the period of the French Revolution and the First Empire, of which the best known are *Les Tombeaux des rois sous la Terreur*; *Les Maris de Marie-Louise* and *La Conspiration de Malet*; Dr. Xavier Delore, formerly surgeon to the Charité Hospital and assistant professor in the Medical Faculty of Lyons, aged 89; Dr. Robert Allen Blood, surgeon-general of Massachusetts from 1896 to 1904, and president of the Association of Military Surgeons of the United States in 1902, aged 77; Dr. Manuel Gomez de la Maza y Jimenez, professor of botany in the University of Havana, and author of important works on the flora of Cuba, aged 47; Dr. R. Benavides, for many years professor of midwifery in the University of Lima, and president of the National Academy of Medicine of Peru, aged 84; Dr. Giuseppe Cattaneo, surgeon to the San Matteo Hospital, Pavia, and founder of the tuberculosis dispensary there, aged 83; Dr. D. A. Gorton of New York, for many years editor of the *National Quarterly Review* and the *Medical Times*, and founder of the Eugenic Society of America, aged 84; and Dr. Wisner R. Townsend of New York, one of the best known orthopaedic surgeons in the United States, aged 58.

The Services.

EXCHANGES.

CAPTAIN R.A.M.C. (France) desires to exchange with M.O. in any capacity at home, or with M.O. in ambulance train, hospital ship, or base hospital. Address No. 3700, BRITISH MEDICAL JOURNAL Office, 429, Strand, W.C.

M.O. (Territorial), attached artillery unit eighteen months in the line, is desirous of effecting an exchange with R.A.M.C. officer on home service. Hospital work in London preferred. Address No. 3800, BRITISH MEDICAL JOURNAL Office, 429, Strand, W.C.

R.A.M.C. Exchange, Cairo.—London stationed officer, desiring immediate exchange to Cairo Hospital, should apply, stating rank and appointment, to Dr. Nicholson, the London Fever Hospital, N.

AT a recent meeting of the Yale Corporation it was decided to accept a recommendation of the executive board of the school of medicine that a limited number of women should be admitted to the medical school of the university.

THE New York Health Commissioner has invited a number of pathologists and bacteriologists to consider the problems of poliomyelitis and plan out a co-ordinated series of investigations on the subject. Among them are Professors G. J. Adami, of McGill University; Hektoen, of Chicago; M. J. Rosenau, of Harvard; Theobald Smith, of the Rockefeller Foundation; Victor Vaughan, of Michigan, and W. H. Welch, of Johns Hopkins. Associated with these will be Dr. Simon Flexner, Dr. Hideyo Noguchi, and others.

Medical News.

A PSYCHOPATHIC clinic has been established at Sing Sing prison, New York, under the direction of Dr. Bernard Glueck, who was formerly on the staff of the Government Hospital for the Insane at Washington. The object of the clinic is to determine the mental condition of the prisoners and to study the underlying causes of crime.

THE excellence of the work done by the medical men sent out by the London Missionary Society in India, Africa, and China is well known to those who are interested in medical missions. The society has published a general account of what is being done in a pamphlet by Mr. E. A. Preston, entitled *The Healing Hand*. A few details of the work of each of the twenty-four mission stations are given, and photographs illustrating the work are reproduced.

WE have received the first number of a new monthly periodical entitled *Cronache di Medicina Politica*, published at Naples under the editorship of Dr. G. Santoro. Its character and aims may be gathered from an utterance of the great Italian physician and statesman, Guido Baccelli, which is printed on the front page as a motto: "The action of the modern State shows clearly that almost all sociological doctrine rests on political medicine as its natural basis." Among the contents are descriptions by Dr. Giuseppe Tropeano, professor of social medicine in the University of Naples, of a proposed hospital for children at Posillipo, and of the Committee of Social Assistance for mothers and Infants in the province of Cosenza initiated by Dr. Santoro.

AN association of French doctors serving at the front has been formed. Its headquarters are at the Bordeaux Athénée. Its objects are to tighten the bonds of friendship among medical men on active service, to keep a list of dead comrades, to help their families as far as may be possible, and to defend the interests of members. During the war the association will deal with the taxes, rent, and insurances of doctors, and with questions concerning locumtenents, etc. After the war it will endeavour to facilitate the reconstitution of practices by negotiating with the men who have taken the place of those away on military service; it will help young practitioners to find work, and will make efforts to induce public authorities to give preferential treatment in the matter of appointments to men who have served.

THERE are two schools in Paris for the teaching of massage to blinded soldiers, one at the Grand Palais, the other at the annexe of the Quinze-Vingts, a hospital for the blind. The method of instruction employed is that of Dr. Guilbert, which is based on the principle that the blind are the best teachers of the blind. The first step, therefore, was to train a number of teachers. The pupil places his hands lightly on those of the instructor and follows their movements, and the teacher, by touching the elbow or shoulder of the pupil, notes any errors in execution. To supply the anatomical knowledge required for efficient massage, a series of thirteen plates in relief has been prepared with the help of orderlies who before the war were skilled sculptors.

IN a Berlin letter to the *Muenchener medizinische Wochenschrift* (May 2nd, 1916) a pathetic story is told of Berliners appealing to their doctors for extra food cards to supplement the meagre diet afforded by the food ration. It appears that as soon as a new article of food was added to the card system, the consulting rooms of the medical profession in Berlin were stormed by crowds anxious to circumvent this latest attack on their inner man. At first serious difficulties often arose, but energetic protests on the part of the doctors led to diminution in the number of applicants. The German Government must have foreseen that the medical profession would be placed in an invidious position were its decision to be the last word in the matter of feeding the individual; and this consideration probably explains why supplementary cards for white bread and flour cannot be provided by the medical profession. The prescription of cream by doctors is also not permitted; the sale of cream is regulated only by the police. Supplementary butter cards may, however, be secured when application is made by certain physicians. Most of these applications have been found to be fully justified, and only in a few cases has the claim for an additional supply of butter been found on inquiry to be trivial. When it was realized that these claims would be scrutinized before being allowed, the run on the doctors' consulting rooms ceased.