and somewhat swollen features. His tongue was coated with a thin white fur. Loss of taste and appetite, much nausea, giddiness, constipation, stiffness in his trunk and limbs, continued. His temperature was raised to 100.2° F., but the pulse-rate was 66 only. At the end of the third day his symptoms had subsided.

Another cage of sandflies was infected by Private Stansbury ten hours after the onset of a typical attack of phlebotomus fever. Though several of the insects sucked his blood, no trace of their bites remained next morning.

Ten days later, Corporal H. Griggs, R.A.M.C., put his forearm into the cage and was thrice stung. After an incubation period of six days and eight hours he began to feel chilly and to suffer from severe frontal headache, giddiness, pains in his legs and back, anorexia, thirst, and high fever. Next day his symptoms were aggravated; he felt weaker and became faint when he attempted to stand. He was constipated. On the morning of the third day he was prostrated with pains in his head, trunk, and limbs, weakness and giddiness. His face was much flushed, his conjunctivae suffused, his eyes tender and intolerant of light. He had the aspect of severe illness. His tongue was large, moist, and coated with white fur except at the tip and edges. Examination of his blood showed no parasites, and gave negative reactions with the *Micrococcus melitensis* and *B. typhosus*. His leucocytes were reduced to 4,050 per cubic millimetre. His pulse continued slow and irregular throughout the fever. There was no amelioration of the symptoms until the seventh day. He rapidly regained his usually robust health.

A cage containing about seventy sandflies which had been allowed to feed on three patients in the first day of their pyrexia was conveyed for the writer to London by Lieutenant-Colonel J. J. Gerrard, R.A.M.C. Sir William Leishman, Lieutenants H. S. Ranken and F. W. M. Cunningham, R.A.M.C., proffered their forearms to the flies immediately after their arrival at the Royal Army Medical College, London. Sir William Leishman is in doubt whether they attacked him. He could find no trace of a puncture.

Lieutenant Ranken was twice bitten. Minute ecchymoses formed round the site of the stings. Five days later he felt cold and uncomfortable, and suffered from frontal and temporal headache. Next day his malaise continued, and diarrhoea began, which remained uncontrolled until the fourth day. He then speedily regained his health. No pyrexia was noted.

Lieutenant Cunningham was bitten by one *Phlebotomus* only. The mark of the puncture disappeared in twenty-four hours. After an incubation period of five days he began to feel unwell. He had headache, weariness, and general malaise. Diarrhoea began and continued next day. On the third and fourth days he felt well. On the morning of the fifth day he had a rigor, which some minutes later recurred with greater severity; no thermometric observation was then made; his pulse-rate was 90. Shortly afterwards he fell asleep, and woke up feeling well.

Franz[4] has noted that in those cases of sandfly-infection in which the intestinal symptoms are pronounced the temperature may remain within the normal limits.

This experimental evidence shows that the sandfly of Malta, *Phlebotomus papatasii*, can convey the virus, and that the bite of one fly only is sufficient for the purpose; also that the sandflies are infective seven to ten days after sucking virulent blood.

Sandfly fever is prevalent throughout the Mediterranean area. In the first half of last century it was common in Gibraltar—July was the month of greatest incidence. Of recent years the number of cases among the troops has much diminished. Sandflies are now only sparsely scattered on the Rock. When our troops first occupied Cyprus the infection was rampant, but it is now less in evidence. In the old records of the military occupation of the Ionian islands, Corfu, Paxo, Santa Maura, Cephalonia, Ithaca, Zante, Cerigo, which date back to 1817, Pym's febricula occurred in summer epidemics in the British garrisons. July was the month of greatest incidence.

We read that at Santa Maura in the year 1828, the fever began in June and ended in October, but not before almost every individual had been attacked.

Surgeon-General J. G. MacNeece and the writer found that both the fever and the *Phlebotomus papatasii* existed in Crete in 1909. Sandfly fever had been there recognized as an infection distinct from ague by Major A. E. Master and other medical officers. The suffused conjunctiva had caused it to be given the slang name "pink eye."

In Dalmatia the epidemics may assume great proportions. In one station 42 per cent. of the Austrian troops were attacked in July and August. The disease on the Adriatic littoral is a graver ailment than the Malta type. Convalescence may be protracted for weeks on account of mental depression, giddiness, disorders of digestion, etc.

In Egypt between 200 and 300 cases occur in the British garrison every year. The writer's own experience of the Aden summer fever enables him to say that it is similar to, though more severe than, the Malta infection.

In India explosive summer outbreaks occur in many parts, notably in Peshawar and the Punjab generally. As in Herzegovina, the disease may assume a grave aspect, and cholera-like symptoms have been noted. In 1906, 1,220 cases occurred among 3,521 native soldiers stationed at Abbottabad. September was the month of greatest incidence, when there were 556 admissions. The *Phlebotomus papatasii* is widespread throughout India. The epidemics in Chitral and Kila Drosh were closely studied by Captain McCarrison[5] in 1903–4, who suspected that the sandfly might be the agency by which the fever was spread. Unfortunately his experiments failed. He was on the verge of the discovery afterwards achieved by Doerr.

Seventy or eighty cases are recorded each year in the returns of our troops stationed in the Straits Settlements.

For the prevention of the disease isolation of the patient during the first forty-eight hours only of his illness in sandfly-proof nets is required. Doerr[6] has shown that the blood is avirulent after the end of the second day.

Captain Marett's discovery of the pupae and larvae in the crannies of sun-parched walls, coupled with the fact that the sandfly months are the rainless months in every part of the world, suggests that moisture is inimical to them. It seems probable that their numbers might be lessened by spraying their haunts with sea water in the maritime areas where sandfly fever is epidemic.

REFERENCES.
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Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

ACTION AND VITAL REACTION IN NATURE WITH REGARD TO VACCINE-THERAPY.

FOR the cure of disease, if not for the prevention of disease, the results of vaccine-therapy do not as yet seem brilliant. Surely this is not very astonishing when one considers what vaccine-therapy is. For hundreds and thousands of years Nature has been treating her children by a form of inoculation-treatment in all kinds of infections. Nature's treatment, indeed, dates from the commencement of the infectious diseases themselves. At last her method of treatment has been partially discovered, and great honour is indeed due to those who by their efforts discover Nature's secret methods and endeavour to make their discoveries useful to mankind. Nature's auto-inoculation is always going on, and is automatically regulated according to the circumstances of the case. In acute infections, when the amount of auto-inoculation is great, the patient (owing to his weakness) is forced to rest, and so he has to reserve his strength as far as possible, and does not unnecessarily increase the amount of the circulating toxins. In chronic infections and during convalescence Nature encourages a certain amount of exercise and promotes auto-inoculation, whilst we help Nature by providing the patient with pure air, suitable food, etc. By the help of the law of the survival of the fittest this (Nature's) automatic mechanism of vaccine-therapy has during ages been perfecting itself, and though in individual cases Nature's method can doubtless be advantageously regulated or improved on by the skilful modern vaccine-therapist, small wonder is it that the vaccine-therapist's inoculations do

not seem like becoming a panacea for infectious diseases. Probably, in very many cases, Nature's scale of auto-inoculation doses—that is, her automatic adjustment of inoculation—cannot be improved upon. I feel tempted to ask whether some of the apparently brilliant results of the vaccine-therapists are really such triumphs as they at first sight appear to be. Let us take an instance. Every one who has examined many healthy men for life assurance knows how frequently those who have formerly had gonorrhoea pass "threads" in their urine. I think that the presence of such urinary "threads" (free from gonococci) often persists throughout life without causing any inconvenience. I have heard of a man who became miserable in his mind because he had such threads in his urine, and worried his doctor in proportion. At last, I believe, the threads were found to contain staphylococci, and a course of vaccine-therapy led to their complete removal from the urine. Is it not possible that Nature sometimes, like the law, *de minimis non curat*, and that this man's mental condition was really his chief disease? But I do not for a moment mean to deny the possibility of modern vaccine-therapy sometimes achieving real "triumphs."

London, W. F. PARKES WEBER, M.D.

EXTRAUTERINE GESTATION.

MY only reason for reporting the following two cases of extrauterine gestation is the extreme rarity of such cases in this country. The first case was that of a Persian lady, aged 24 years, the mother of two children, the youngest aged four years. She was suddenly seized during the night with severe pain in the right iliac region, accompanied with haemorrhage. She awoke her husband, who found her pale and pulseless. Native hakeems were called, who injected morphine freely, and applied ice to the abdomen. These measures greatly relieved the pain. Thinking the pain was due to suppressed menstruation, as she was some fifteen days beyond her period, Jewish women were then called, who used measures to bring about the desired result. The haemorrhage reappeared. The pain continued at intervals, and a lump gradually appeared to the right of the pubes. Exactly six weeks after the first attack of pain I was called to see her. She was then more or less under the influence of morphine; she looked extremely ill, complaining of much pain, describing it as of a bearing down or expulsive character. The tongue was coated, bowels very constipated, with occasional vomiting. The pulse was small, compressible, 84 per minute. There was pain and difficulty on micturition. Temperature 101°. The abdomen was tense, but not distended. She was removed to the hospital on the same day, and kept quietly in bed, the diet and bowels carefully regulated, so that her general condition improved considerably. The following menstrual history was obtained: Since the birth of her last child four years ago the menses were scanty; the two months preceding her present illness the discharge was scarcely noticeable. There was no history of her having passed casts at any time. A blood count showed a leucocytosis of 18,000 white cells per c.cm. Her husband gave the history of a chronic posterior urethritis. A tumour as large as a pigeon's egg could be felt and seen above and to the right of the pubes, which was very painful on pressure. *Per vaginam* the uterus was very sensitive on pressure; the cervix was short; a soft, boggy mass could be felt filling up Douglas's pouch. On June 20th the abdomen was opened. The tumour could plainly be seen in the broad ligament, close to the uterus. There was much blood clot in the pelvic cavity. The tumour was clamped, ligatured, and removed. A great deal of old blood clot was removed from Douglas's pouch. After the operation the patient was treated by saline transfusion and injections of strychnine. She made an excellent recovery, and left the hospital at the end of three weeks.

Fig. 1.—Tumour removed from Case I.

The second case was that of Mrs. T., a European. She had had one confinement some years previously, which was followed by leucorrhoea and menorrhagia. The history of the attack was as follows:

Whilst visiting a neighbour on July 18th, 1909, she was seized with a sharp pain in the abdomen, with haemorrhage. She could scarcely crawl upstairs to her own home. When seen by me she was constantly retching, with colicky pains in the abdomen, fainting, and great prostration, skin moist, pulse small, soft, and rapid. There was no secretion in the breasts. The abdomen was lax, no bulging could be seen, but there was dullness in the lower abdomen, chiefly on the left side. On vaginal examination a tumour could be felt to the left of the uterus in the broad ligament, which was very painful on pressure; a glairy bloody discharge remained on the finger. When seen again, as soon as a truce was declared, I found her condition so serious that, on consultation with Drs. Lindley and Neligan, it was agreed to operate as quickly as possible at her own house, a diagnosis of extrauterine pregnancy being made. The operation was accordingly performed on July 27th. On opening the abdomen there was considerable pelvic peritonitis, the bowels being matted together. There was also much old clot in Douglas's pouch, which was carefully sponged out. The tumour was easily removed with little loss of blood. The patient suffered severe shock, and in spite of every care gradually sank and died in thirty-six hours. An operation could not have been performed under worse circumstances, as the city was in a state of siege when she first fell ill, and the operation was done at the earliest possible moment, but much valuable time had been lost.

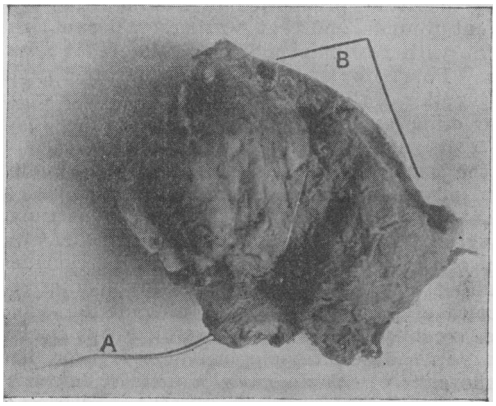

Fig. 2.—Case II. A, Silver wire in Fallopian tube; B, site of rupture.

JOSEPH SCOTT,
Medical Superintendent, Indo-European Telegraph Department.

Teheran, Persia.

THE seventh International Congress of Dermatology will be held in Rome, September 25th to 29th, 1911, under the presidency of Professor Tommaso de Amicis, of Naples, Senator of the Kingdom of Italy. The general secretary is Dr. Gaetano Ciarrocchi, of Rome.

WE are requested to point out that the Jervis Street Hospital is one of those in Dublin which afford special opportunities for obtaining clinical instruction in various branches of medicine and surgery. It has a new out-patient department and separate clinics for gynaecology, ophthalmology, and other specialities. Twelve resident appointments are made annually, four being tenable by qualified practitioners and the rest by senior students. Full particulars can be obtained from Dr. F. Callaghan, honorary secretary to the Medical Board, 38, Westland Row, Dublin.

The Hygienic Institute appears in *Truth's* "Cautionary List," and accounts of other cases in which it has been cast in damages will be found in the BRITISH MEDICAL JOURNAL, vol. i, 1909, pp. 876 and 932; vol. ii, 1909, p. 1198; and vol. i, 1910, p. 421. It seems to have, or to have had, branches in Glasgow, Newcastle, and Hull.

LOCUMTENENT AS RIVAL PRACTITIONER.

SPEED sends the following query: A., in practice in a small country town, sells his practice to B. C. has acted on two or three occasions as locumtenent for A. Is there any (*a*) legal or (*b*) ethical objection to C. setting up in opposition to B.?

*** (*a*) Unless C. has signed a bond not to practise in opposition to A. or A.'s assigns, there is no legal objection to C. setting up in opposition to B. (*b*) Speaking generally, such a procedure on C.'s part would not be ethical, but the mere fact of having once been a locumtenent in a practice does not necessarily make it unethical to practise in that neighbourhood at some future time.

LOCUMTENENTS AND AGENTS' FEES.

MR. PERCIVAL TURNER (London, W.C.) writes: My attention has just been called to your reply to a question on this subject. May I be permitted to most strongly emphasize the fact that an agent is entitled to another fee if the same locumtenent is re-engaged by the same principal? In my terms it stated: "These fees are payable upon each engagement and *every re-engagement* effected directly or indirectly through Mr. Turner," and most agencies have the same rule. I might add that a large number of my locumtenents go every year to the same principals, and, seeing I charge principals no fees, how am I to meet my expenses if I get nothing from the locumtenent? I am glad to state that, out of nearly 1,000 engagements every year, I cannot call to mind a single instance where the locumtenent has raised any question as to my right to my fee.

*** Mr. Turner is of course entitled to speak for himself, but we do not think the custom is general. We know at least one medical agent who only expects to be paid for the work he does—that is, for introducing the locumtenent to the principal. If some five or six years later the principal, who may have formed an acquaintance with the "locum," employs him again without reference to the medical agent, it seems to us preposterous that the latter should expect another fee. As Mr. Turner appears to stipulate for this when the locumtenent comes to him, no doubt he can claim it by virtue of a special contract to this effect; but, apart from that, we do not think he could ever recover the fee.

Medico-Ethical.

The advice given in this column for the assistance of members is based on medico-ethical principles generally recognized by the profession, but must not be taken as representing direct findings of the Central Ethical Committee, except when so stated.

MEDICAL ADVERTISING.

WELCH asks whether a registered dentist would come under the penal clause of the General Medical Council if he attached his name and address to a tooth powder which he supplies to his patients.

*** We cannot pretend to say what the General Medical Council might regard as objectionable advertising, but we should think it better for our correspondent not to put such a label upon the tooth powder, as it would be likely to be interpreted by most people as intended for advertising purposes.

PROFESSIONAL AMENITIES.

J. relates a story of having arranged with a colleague to assist him in an operation, and complains that the colleague left him in the middle of it owing to some misunderstanding as to who was to perform the operation, and he asks our opinion of the case. We have only an *ex parte* statement, but, speaking broadly, we should say that in the interests of the patient and as a general professional obligation no practitioner would be justified in leaving a colleague as described in the middle of an operation.

Contract Medical Practice.

DR. ALFRED PACKMAN (Rochester) writes: Recently I brought an action in the local county court to recover the sum of two guineas from a club patient for setting a fractured ankle. The judge has referred the matter until October 12th next for "further evidence of usual custom," and I should be glad if any members of the Association who have had cases of this kind of a *surgical* nature, and who also look upon them as *extras* demanding special care, skill, and attention, would give me the benefit of their experiences. Two years ago I asked for and received from the "Oddfellows" a letter agreeing that members should pay for all *surgical attendance* as distinct from medical attendance.

Public Health

THE NOTIFICATION OF MEASLES.

AT the meeting of the Hackney Borough Council on September 15th the following important motion was proposed by Dr. A. S. Dawson of Homerton, a member of the Council:

> That it be referred to the Public Health Committee to consider and report to the Council on the advisability or otherwise of taking steps for the compulsory notification of measles as an infectious disease.

In the course of his introductory speech, Dr. Dawson said that measles was responsible for ten times the number of deaths resulting from scarlet fever or diphtheria, while it was the secondary effects of measles which caused degenerates. His desire for notification was not based mainly on professional or personal grounds, though one of his children had died in consequence of the absence of notification, but on the question of principle. It was an opprobrium on their health authorities that they were so supine in this matter when measles had been notifiable for years in Paris. He had hoped Dr. Rushbrooke would second his motion, but in his absence he trusted Dr. Miller would do so. The latter, however, declined to do so, and the motion was seconded by Councillor Wild and agreed to.

EXTRACTION OF TEETH OF PAUPER CHILDREN BY DISTRICT MEDICAL OFFICERS.

C. C. writes saying he holds a Poor Law appointment and is also medical officer to cottage homes for pauper children. He wishes to know whether he can charge the guardians for the extraction of the teeth of these children when they apply to him for relief. He has no written agreement which bears upon this point.

*** If the cottage homes are within our correspondent's Poor Law district he cannot claim any fees for extracting the teeth of any paupers residing therein as these operations form part of the duties of all district medical officers.

Medical News.

THE medical staff of the Ancoats Hospital, Manchester, is making arrangements for a course of post-graduate lectures to commence in October.

MR. C. B. LOCKWOOD will deliver an address on inflammation and its relationship to malignant disease at the opening meeting of the session 1910–11 of the Manchester Medical Society. The meeting will be held in the Medical School of the Manchester University on Wednesday, October 5th, at 8.30 p.m.

THE winter session at the Central London Throat and Ear Hospital commences on Monday, October 17th, on which day an introductory address will be delivered by Dr. Purves Stewart, at 4.30 p.m. Its title is Intracranial Diseases Associated with Nasal, Aural, and Laryngeal Symptoms.

THE annual Welsh Medical Dinner will be held under the presidency of Mr. Robert Jones (Liverpool) at 7.30 p.m. on Friday, September 30th, at the Criterion Restaurant, Piccadilly, London, W. Applications for tickets should be made at an early date to the Honorary Secretary, J. Howell Evans, 25, Berkeley Square, W.

THE fiftieth course of lectures and demonstrations for sanitary officers given at the Royal Sanitary Institute will commence on October 3rd, while the seventeenth course of practical training for meat inspectors conducted by the same body will begin on Friday, October 7th, at 7 p.m. The institute has also arranged for a course of lectures, beginning on Monday, October 10th, at 7 p.m., to assist students entering for the examinations on hygiene in its bearing on school life, and for women health visitors and school nurses.

A COURSE of lectures and demonstrations will be given at the Children's Hospital, Great Ormond Street, on Thursdays, at 4 p.m. The session will begin on October 6th, when Dr. W. S. Colman will lecture on scurvy. On October 13th Mr. Kellock will lecture on torticollis. In addition to these lectures special post-graduate courses of three months' duration are held for systematic instruction in the medical and surgical diseases of children. These courses consist of twenty-four medical and twenty-four surgical demonstrations. The fee is £5 for the medical and £5 for the surgical course, and arrangements can be made for portions of each course. The Dean, Dr. Arthur Francis Voelcker, will be pleased to give any further information respecting these courses.