In May, 1915, the patient said he felt perfectly well and wished to marry, but there was onesixth of albumin in the urine. There were still slight œdema and a positive Wassermann reaction. The blood pressure was 150 mm. He was very anxious to have treatment by salvarsan, and it was agreed by both Dr. Phillips and myself that, seeing the failure of long-continued mercurial treatment, it should be given. This was administered by the intravenous method, through a very small needle, 0'3 grm. on May 15th, 0'4 grm. on May 29th, and 0.6 grm. on June 12th. There were no unfavourable symptoms on any of these occasions. On June 10th the albumin was one-sixth and the Wassermann reaction positive, but on June 24th it was reported negative and the albuminuria was slightly lessened in amount. On August 31st he still had a trace of albumin, but was otherwise very well.

Remarks on the Case by Dr. SIDNEY PHILLIPS.

It is no longer open to question that syphilis in its early as well as in its later stages may give rise to nephritis, and, indeed, the dependence of one upon the other is probably more common than is generally appreciated. The present case was very typical of early syphilitic nephritis in its clinical course.

1. It commenced about the fifth month after infection, which appears to be about the usual period, though it may be later or may be much earlier. In one reported case it occurred before the secondary roseola.

2. The onset was insidious and without marked symptoms or derangement of health.

3. The percentage of albumin in the urine tended to be very high, and the albumin came down on warming the urine long before the boiling point was reached, forming a voluminous and peculiarly white deposit even when the urine was high-coloured.

4. There was a great tendency to rapid and extensive dropsical effusion which cleared up with unusual rapidity. In this case, as in others reported, there was also pleural effusion.

5. Throughout the case the patient's feeling of good health was quite out of proportion to the gravity of his symptoms. Even with extensive dropsy and great albuminuria he always averred he felt quite well, and he had none of the symptoms usually met with in nephritis from other causes.

6. The blood pressure was not much raised except on one occasion, and though there is not sufficient evidence of the effects of blood pressure in syphilitic nephritis, in this case, as in others I have seen, the tension does not appear to be much raised. In *late* syphilitic nephritis the blood pressure may be very high with extensive arterial. degeneration.

The treatment by salvarsan was adopted after due consideration, notwithstanding that albuminuria is said to increase the dangers of its administration, as mercurial and iodide treatment had failed. In several cases treated by me or coming under observation salvarsan has not produced untoward effects when albumin was present. It was given with great care in small doses by Mr. Macdonald, and so far has resulted in the disappearance of the Wassermann reaction; its ultimate effect remains to be seen.

## Clinical Notes :

## MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

## A NOTE ON A RELAPSING FEBRILE ILLNESS OF UNKNOWN ORIGIN.

BY J. H. P. GRAHAM, L.R.C.P. LOND., M.R.C.S., MAJOR, R A.M.C. (S.R.).

WITHOUT being in a position to present a complete account of these cases, a sufficiently accurate description can be furnished of a clinical condition of which I have seen numerous instances during several weeks.

CASE 1.-- A private belonging to an infantry regiment was admitted to the casualty clearing station from a field ambulance, where he had been detained suffering from a febrile illness of three days' duration and of sudden onset. His condition on admission was marked by frontal headache, dizziness, severe lumbago, a feeling of stiffness down the front of the thighs, and severe pain in the legs referred chiefly to the shins. He also complained of nausea, some pain along the costal arch, and about an area in the left flank close up to the ribs in the posterior axillary line there were pain and some tenderness radiating forwards and also downwards towards the iliac crest. The temperature was  $103^{\circ}$  F. The patient said that his condition was much as it had been from the onset except that the pains, at first fairly equal all over the body, had now settled more definitely in the places named and had become intensified. Beyond the raised temperature there were no objective symptoms. Phenacetin (gr. x.) was at once administered and later soda salicylate (gr. xx.). Ι'n 36 hours the temperature had fallen to 97°, and it remained at about that point during three days. I may say at once that I do not attribute this very marked fall to the drugs, for these have not had like results in many exactly similar cases, nor does a continuous administration prevent the relapse which always ensues after a variable period. With the fall of temperature the pains subsided except those in the shins, which persisted during the day and became very much worse towards evening, preventing sleep till the early hours of the morning in spite of anodynes. temperature, after remaining round about 97-98° for three whole days, rose to  $100^{\circ}$  on the fourth morning, and for 36 hours remained at about that point, when it again came During this second febrile period all the down to 97°. pains returned and continued as during the first febrile period, but when the temperature fell this second time all the pains completely disappeared, and the man said that although he felt worn out he was comfortable at last.

CASE 2.—A private (R A.M.C.) belonging to a clearing station was "warded" at 6 P.M. suffering from violent headache, giddiness, severe lumbago, and pains in the thighs and legs; he also had nausea and pain along the costal arch and in the left hypochondrium. The temperature was 102° F. The onset of illness was quite sudden. During three days his condition varied very little, except that the pains in the lower limbs corcentrated in the shins and the nausea passed off. The lumbago and shin pains were severe enough at night to prevent sleep. Then the temperature fell to 99° and remained at about that point during four days, at the end of which period it rose to 103°, at about which level it remained for 36 hours and then fell to normal. Directly the temperature fell the first time and during the four days during which the remission lasted the only thing that troubled the patient was a feeling of exhaustion and the nightly return of the pain in the shins and back; these pains were severe and prevented sleep. When the tempera-ture rose again after the period of remission all the symptoms of the initial febrile period returned, but completely dis-A few appeared when the temperature fell a second time. days after this patient had been under treatment another man was admitted from the same unit, the onset and course of whose illness were precisely the same, except that in this instance the lumbago was not so severe.

HOSPITAL SATURDAY AT NEWTON ABBOT (DEVON). —As a result of the recent Hospital Saturday collections at Newton Abbot the sum of £245 has been raised for the local 'hospital.

During a period extending over many weeks I have been receiving cases in considerable numbers presenting clinical features which do not differ in any material respect from those given above. The onset of the illness is in some instances quite sudden; this seems to be the rule, for it is only rarely that a history of any preceding malaise can be obtained, and there is a total absence of any constant or definite prodroma. The giddiness which accompanies the headache is a very constant feature and causes a good deal of distress; some patients say that even when lying down any movement is liable to cause giddiness, and several have told me that they had fallen down in a fainting fit at the start of their illness, the fit being really an attack of vertigo.

Before the pains concentrate in the shins, which they do eventually and give great distress towards evening and into the night, there is usually a sense of stiffness and soreness about the whole of the lower extremities. The lumbar pain sets in early, is severe, and in some cases quite as unbearable as it is in the invasion period of small-pox. The lumbar pain does not appear to have anything to do with the pain along the costal arch and in the epigastrium—that is, there is not a true girdle pain; also, the pain in the flank is not continuous with the lumbar pain, rather it appears at times to be linked up with the pain along the costal margin and to come forward and extend downwards along the line of the colon. I have thought the pain in the left flank might arise from the spleen but I cannot be The nausea and vomiting I believe are sure. central in origin, for the tongue is moist and comparatively clean almost invariably, though constipation is admittedly the rule and I have never seen diarrhœa present.

The only skin abnormalities I have observed have been herpes about the lips not infrequently; in one case it was very profuse under the chin, but I have never seen it on the trunk or limbs. Sometimes the face is a good deal flushed at the outset. Occasionally I have noticed an ill-defined eruption consisting of widely discrete papules scattered about the chest and abdomen, but this condition is so inconstant, and when it is present it is so ill-defined and may be accounted for in many other ways than as constituting part of the disease, that I do not wish to lay much stress on it at present.

The exhaustion following the acute stages of this disease is very marked. Though the duration of the pyrexial period and also of the period of remission and of relapse vary it is only within narrow limits; the initial period is about 96 hours, the period of remission is seldom longer, while the period of relapse usually extends over not more than 48 hours.

## A CASE OF INFLUENZAL MENINGITIS.

BY C. VINCENT BOLAND, M.R.C.S., L.R.C.P. LOND., LATE TEMPORARY HOUSE PHYSICIAN, EVELINA HOSPITAL.

A CASE of influenzal meningitis which occurred recently at the Evelina Hospital but for bacteriological examination might have been diagnosed as cerebro-spinal meningitis, and is for that reason, I think, worth recording.

The patient, a well-nourished male baby four months old, was admitted into the Evelina Ward on August 9th, having been brought up to the hospital by the mother "because the child had become drowsy, would not take the breast, and kept its

head bent backwards." He was a full-term baby, breast-fed, and had been perfectly well until August 5th, when he became very fretful and restless, would scream out suddenly during the night, and seemed to have pain in the head. About August 8th the irritability and screaming stopped, the child became drowsy, and head-retraction was noticed for the first time. No history of convulsions or vomiting could be obtained.

On admission the child was semi-conscious, the head was very retracted, and rigid to such an extent that it was possible to raise the child up with one hand on the occiput without lessening the amount of retraction. The temperature was  $102^{\circ}$  F.; pulse 152, of good volume and regular; respirations 50 and regular. There was no hydrocephalus nor was the fontanelle bulging. The child was quite blind, but had no squint or rolling movements of the eyes. The pupils were equal, slightly contracted, and reacted to light. Ophthalmoscopic examination of the fundi showed absence of optic neuritis or atrophy. There was nothing abnormal to be found in the chest or abdomen, and the latter displayed no scaphoid retraction. No paralysis could be discovered anywhere, the knee-jerks were brisk, and Kernig's sign was positive. Immediate lumbar puncture revealed that the cerebro-spinal fluid was slightly under pressure and turbid, and on examination the pathologist reported that it contained 1000 leucocytes per cubic millimetre; polymorphs 96 per cent., and lymphocytes 4 per cent. Noguchi's test was positive, and stained films showed the presence of a small number of Gram-negative bacilli which on culture gave a fine growth of B. influenzæ.

The child grew steadily worse daily, becoming more unconscious; the temperature oscillated between 99'8° and 104°. Lumbar puncture was done daily, the fluid never being under very great pressure, but becoming increasingly more turbid, so that about two days before the child died no more of it could be got away through the needle owing to the contents of the theca being now thick and purulent. On August 20th opisthotonos and conjugate rolling movements of the eyes started, but there were no pupillary changes. The child also developed a right facial palsy, and feeding had to be done with the nasal tube as he was unable to swallow. On the 22nd the child died after 13 days in hospital, having the previous day developed rigidity in both arms and legs.

At the post-mortem examination a large deposit of thick greenish-yellow pus was found in the subarachnoid space over the vertex, especially over the frontal lobes, and at the base. There was also a thick deposit over the upper surface of the cerebellum. Pus was also found between the dura and arachnoid in the middle fossæ, over the cribriform plate, and along the falx cerebri. The convolutions were very flattened and the white matter very soft. The ventricles were greatly dilated and distended with turbid fluid.

'THE inaugural address at the London (Royal Free Hospital) School of Medicine for Women will be delivered by Dr. Florence Willey on Friday next, Oct. 1st, at 4 P.M., the subject being "War and the Medical Education of Women." The school has received an anonymous gift of £1000 for the extension fund, which now reaches £18,237. The total sum required is £30,000, and donations may be sent to the Duchess of Marlborough, honorary treasurer of the fund, 8, Hunter-street, Brunswick-square, London, W.C.