smooth, and the cavity contained no pus; the surrounding lung tissue being almost black and solid. A bronchus of the second dimension communicated by two openings with the cavity. The drainage-tube had passed into the cavity at a spot rather below its centre. The right lung was engorged and oedematous, and on incising its base pus could be pressed out, showing the passage of this fluid from one lung to the other. Heart normal.

Remarks.—This case, although unfortunately fatal, is published not only for its clinical interest, but as a contribution to the literature of a mode of practice unusual in this country, and also in the hope that it may serve as some guide in the treatment of similar cases in the future. In the first place, it may be observed, whilst no untoward symptom occurred from the operative interference, the man experienced marked and early relief from the cleansing and disinfection of the putrid lung cavity. It is true, cough and dyspnoea were both greatly increased on each occasion during the time the washing-out was being done, but the distress was not continued, and a comparatively long period of quiet followed. Again, the risks of sepsis were immediately greatly diminished, and the patient rendered less offensive to himself and others. It will be noted in connexion with this point that at the post-mortem examination pus was found in the right lung, having been carried there mechanically, and it seems reasonable to me to conclude that the pathological condition was, at least in part, due to its presence. The only healthy portion of lung was the left upper lobe, and the man's death appeared immediately due to the implication of the right lung in the pneumonic process, supervening as it did upon pre-existent grave constitutional disturbance. Cases of abscess and gangrene of lung are at all times of the most serious character, but in spite of the fatal issue in the present instance, the bias of my mind, as the result of the method adopted here, is in favour of further investigation and treatment upon similar lines.

Nottingham.

THE MICROBE OF RABIES.

PRELIMINARY NOTICE.

By G. F. DOWDESWELL, M.A., F.L.S., &c.

IN view of the great interest now taken in this subject in consequence of the brilliant investigations of Pasteur, I think it desirable to take an early opportunity of stating that I have found the microbe which appears clearly to constitute the virus of this disease. It is a micrococcus, not very minute, and of the usual form. It stains, however, with some difficulty; and this accounts for its having hitherto escaped observation. In the cases of dogs which I have as yet examined, its principal seat is evidently the central canal of the spinal cord and medulla oblongata; thence it pervades the other tissues of the central nervous system, occurring (sometimes in vast masses) around the walls of the bloodvessels, and in some cases within the vessels amongst the red blood-corpuscles. In the cortex of the hemispheres I have found it, but in very small numbers, and, so far, only in the perivascular and peri-cellular lymph spaces. In the cerebellum I have not found it at all, neither have I as yet succeeded in finding it in the salivary glands. I shall shortly publish the methods by which it may be stained with certainty. I must, however, state that it does not stain by hæmatoxylin, either with or without a mordant, as asserted by Fol.¹ I have repeated his methods carefully. Neither does it occur within the nerve fibres, as he states; and, lastly, it is fully three times the dimensions which he gives. I may add that it does not occur in the same situation, treated by the same methods, in normal animals. In the one case of a rabid dog, which I had examined to control my previous observations, the tissues were placed in alcohol so shortly after death as to preclude the possibility of the occurrence of septic organisms. In addition to which, all saprophytes, as far as yet observed, stain very readily with the usual aniline dyes, which this microbe does not. I must point out, in justice to the genius of Pasteur, that these observations on the occurrence of the microbe go far to confirm his statement of the seat of the virus; it may further afford a means of diagnosis in any doubtful case.

Preparations of the microbe were shown at the meeting of the Royal Microscopical Society on the 9th inst.

The Brown Institution.

TRAUMATIC TETANUS, TREATED WITH CHLORAL HYDRATE IN CONJUNCTION WITH URETHAN; RECOVERY.

By WILLIAM THOMAS JACKMAN, M.R.C.S., &c.

THE following brief notes of a case of tetanus which recovered under the influence of the new hypnotic, urethan, in conjunction with chloral hydrate, are of interest as suggesting a new use for this valuable drug.

J. C—, a lad aged fifteen years, came under my care on March 15th, 1886. The patient presented well-marked symptoms of tetanus, which were evidently the result of an injured finger on his right hand. This had been crushed by cogged wheels five weeks previously, and had healed up slowly under simple local treatment. The lockjaw was complete, and the opisthotonus well marked; severe paroxysms of pain were complained of, which were greatly exaggerated at night. The patient had noticed his neck and jaw muscles gradually becoming stiff for the past few days, but attributed this to a chill. Chloral hydrate in 20-grain doses every three hours was ordered. This relieved the paroxysms of pain slightly during the day, but the lockjaw, opisthotonus, and rigidity of the muscles of the legs remained the same, and the pains were just as severe and frequent during the night. Fluid nourishment was administered and the chloral treatment continued until March 25th, when, as no abatement of the symptoms was apparent, after consultation with my partner Mr. T. Simpson, it was decided to discontinue the chloral during the night, and in its place give the patient four grains of urethan every two hours, from 6 P.M. to 6 A.M. The first night of this treatment showed a marked decrease in the severity of the symptoms, and the patient made gradual and uninterrupted progress until April 20th, when his recovery was established. The failure of the chloral hydrate to relieve the severe symptoms during the nights, and the well-marked improvement under the influence of the urethan, seem to point to the latter being likely to prove a very valuable drug in the treatment of tetanus, either prescribed alone or as above in conjunction with chloral hydrate.

Coggeshall.

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

A CASE OF EXPLORATION OF THE KIDNEY FOR SUSPECTED CALCULUS.

(Under the care of Mr. WARRINGTON HAWARD.)

THE question of operation in cases of suspected renal calculus is one which not unfrequently presents itself to surgeons connected with large hospitals. If the patient, in good health otherwise, has symptoms of the presence of a calculus, which symptoms from their severity prevent him from following his employment, and medical treatment has done no more than to produce temporary alleviation, most surgeons would follow the course adopted in the following case, and explore the kidney. This case is an example of the difficulty sometimes met with in discovering the stone, even when present, its small size preventing its being felt by the finger or struck by the exploring-needle. We have seen more than one instance of this difficulty in finding the stone, and in one case it was only found after the removal of the kidney, this severe measure being justified by the severity of the symptoms occasioned by the presence of this small calculus. For the following account we are indebted to Mr. R. Margerison, late surgical registrar.

¹ Comptes Rendus, Dec. 14th, 1885, vol. ci., p. 1276.