TABLE VI.

Source.	Clot.	Neutral red.	Saccharose.	Lactose.	Raffinose.	Inulin.	Salicin.	Coniferin.	Mannite.	Virulence.
1. Recovered in pure culture from the heart's blood of a mouse fed on milk suspected of causing throat illness at Woking.	-	-	+	+	-	-	+	-	-	Mouse died in 48 hours.
2. Recovered in pure culture from the heart's blood of a mouse dead three days after injection with the dust of an inhabited room.	+	-	+	+	-	-	+	-	-	Mouse died in 48 hours.

The first of these two streptococci was isolated from a sample of purulent milk that had been associated with the production of an epidemic of "throat illness" amongst consumers. Dr. R. W. C. Pierce of Guildford kindly provided me with this material. The reactions of the streptococcus are seen to be identical with those of one of the commonest streptococci of sepsis. The second virulent streptococcus was obtained from dust on the floor of an inhabited room. In its response to the differential tests this streptococcus is identical with a streptococcus second in frequency in normal faeces. Dr. Houston, however, it will be remembered, did not succeed in getting a virulent specimen of this or of any other streptococcus from that source.

6. THE STABILITY OF THESE REACTIONS OF STREPTOCOCCI.

On several occasions I have re-examined a streptococcus in the differential tests after it had been in culture for periods up to a fortnight, and up to the present time I have always found that such streptococci respond to the tests in exactly the same manner as when first isolated. In order to put the matter of the stability of reactions to a more severe test I passed 11 streptococci through mice and examined their reactions again on recovery from the animal tissues. Full particulars of these experiments are seen in the report of the medical officer for 1903-04, pp. 417-19. Nine of the 11 streptococci were found to respond to the tests in exactly the same manner as prior to passage through the mouse. Two other streptococci, however, became modified; one streptococcus which previously had given a positive response to saccharose and lactose only was found on recovery from the mouse to give an additional positive reaction in salicin; the other streptococcus lost its power, which was but feeble in the first instance, of producing green fluorescence in neutral red broth. The only two of the nine reactions therefore that there is at present the slightest reason for doubting the stability of are those in salicin and neutral red.

PROVISIONAL CONCLUSIONS.

The differential tests which I have recommended in previous reports and applied during recent years to the careful study of the "strepto-biology" of milk, saliva, water, excremental matters, and morbid and other materials afford in my opinion, a definite basis (hitherto lacking) upon which to classify streptococci. I am not without hope that the foregoing tests for differentiating streptococci may also serve a useful purpose in connexion with serum therapeutics. At present the choice of an anti-streptococcic serum to combat a particular case of streptococcus infection is apt to be speculative in character. This speculative attitude is founded largely on the erroneous impression that streptococci still remain incapable of differentiation. Briefly, the doctrine of the unity of streptococci has arisen chiefly from inability by use of the *older laboratory tests* to discriminate between specimens of streptococci which in point of fact differed conspicuously in origin and perchance also in morphology and in their behaviour subsequently in animal inoculation experiments. So it came to pass that the view gradually gained currency that because one or another time-worn laboratory test failed to distinguish streptococci believed on sound grounds (clinical or other) to be totally different in character, the belief

of dissimilarity must needs be abandoned. The chief object of my paper is to show that the individuality of streptococci is real, not apparent; and that by the use of the tests I have suggested their preliminary classification is already possible and practicable.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND
THERAPEUTICAL.

A CASE OF CONGENITAL UMBILICAL HERNIA CONTAINING MECKEL'S DIVERTICULUM.

BY A. J. LANDMAN, M.B., CH.B. VICT.,
HOUSE SURGEON TO THE MANCHESTER VICTORIA MEMORIAL JEWISH
HOSPITAL.

THE following case seems to be worthy of record on account of the great rarity of the condition.

A female infant, aged one day, was brought to the Manchester Victoria Memorial Jewish Hospital with a swelling at the umbilicus which had been present at birth. The swelling was of about the size of a Tangerine orange and the coverings consisted of the constituents of the umbilical cord spread over it. The cord had been cut and tied beyond the swelling. The umbilical opening was widened out, being about an inch in diameter. On palpation gurgling could be heard within the sac but the contents could not be reduced into the abdomen. Congenital umbilical hernia or exomphalos was diagnosed and laparotomy was performed by Dr. Samuel English, honorary medical officer to the hospital, soon after admission. Chloroform was given, a circular incision was made round the sac, and the sac wall was separated all round from the underlying intestine, to which it was very adherent. The contents of the sac were small intestine, one part of which consisted of a blind diverticulum and this was the part adherent to the sac wall. Into this diverticulum one of the umbilical vessels entered and there was free hæmorrhage on separating the adhesions. The vessel was ligatured. The contents of the sac were replaced into the abdominal cavity and the sac wall was removed. The wound was then closed by a row of catgut sutures for the peritoneum and silkworm-gut for the abdominal wall. The child recovered well from the shock but on the second day her temperature rose to 104° F. and reached 105° on the third day. She vomited bile-stained material and the abdomen was distended and rigid. Death occurred on the third day.

On post-mortem examination the peritoneum was found to contain some sero-purulent fluid and there were signs of a localised peritonitis which had commenced in the neighbourhood of the diverticulum. On examining the intestine the diverticulum was found to be situated about two and a half feet from the ileo-cæcal junction. It was about two inches long and double the width of the small intestine. The specimen was removed and preserved. The spleen was enlarged and the bladder was distended but all the other organs were normal.

The condition found in this case is an interesting anomaly of development. Intra-uterine adhesions had occurred between Meckel's diverticulum (which represents the remains of the vitello-intestinal duct of the embryo) and the coverings of the umbilical cord and prevented its retraction into the abdomen. I am indebted to Dr. English for permission to publish this case.

Manchester.

A CASE OF NASAL OBSTRUCTION FROM AN UNUSUAL CAUSE.

BY JAMES WALKER DOWNIE, M.B. GLASC ,
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OF GLASGOW.

A MAN who was recently referred to me on account of an extensive intranasal ulcerative lesion associated with considerable deformity of the nose also complained of nasal blockage. The cause of the latter proved to be so unusual that I venture to have it noted in THE LANCET as a matter

of possible interest to others. The septal cartilage and the perpendicular plate of the ethmoid bone were absent, so that the anterior half of the nose was transformed into one large cavity, but notwithstanding this the patient had some difficulty in breathing through the nose. On examining the buccal cavity I found the fauces to consist of a single arch extending from the anterior pillar on one side to the same structure on the other. The free border of the soft palate was smooth, the line of the arch was regular, there was no vestige of a uvula, and there were no scars. On exploring the post-nasal space with the rhinoscopic mirror, however, the uvula was brought into view. The free border of the soft palate and the uvula were curved upwards and the uvula, considerably larger than the average in size, lay against the posterior nares with the tip directed upwards. The posterior nares themselves were contracted as a result of cicatrization following on extensive ulceration, and the same ulcerative process had apparently affected the greater part of the upper surface of the soft palate. As a result an extensive cicatrix had formed and this had dragged the uvula upwards and forwards until it lay in contact with, though not adherent to, the posterior border of the vomer, in which position it formed a serious obstacle to nasal respiration.

Glasgow.

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.

WESTMINSTER HOSPITAL.

A CASE OF ANKYLOSTOMIASIS.

(Under the care of Dr. ALFRED M. GOSSAGE.)

A MAN, aged 31 years, a soldier, was admitted to the Westminster Hospital under the care of Dr. A. M. Gossage on August 1st, 1905. He had served for 11 years in India and while out there had had several attacks of ague. Early in 1902 he had an attack of acute dysentery of a severe type lasting a couple of months and ending in recovery. In August, 1903, he had another attack of dysentery which "kept on." He was invalided home and landed in England in April, 1904. As he still suffered from diarrhoea and weakness he was kept as an in-patient in an army hospital from June to August, 1904. He improved considerably but still passed several fluid and slimy motions a day though these no longer contained blood. For the next five months his health varied, sometimes better, sometimes worse, but he always had some diarrhoea and, on the whole, he became weaker. In February, 1905, he was brought into the Westminster Hospital and was considered to be suffering from colitis. He was weak, rather anæmic, and had pain and tenderness over the sigmoid flexure; the motions were fluid, dark, and very offensive but did not contain blood or slime. There was rapid improvement and the motions became quite normal in character after daily injections of boric acid. Almost directly after he left the hospital the diarrhoea returned and he again became extremely weak.

On readmission on August 1st he was markedly lethargic and mentally very depressed and there was profound anæmia. He still complained of pain in the left iliac fossa and there was tenderness in this region. There were from five to six dark, semi-solid, and very offensive stools in the day. He had practically no desire for food but complained of considerable thirst. Nothing abnormal was found in the heart or the lungs. The marked anæmia gave rise to the suspicion that parasites were present in the intestine and on August 3rd an examination was made of the fæces, resulting in the discovery of large numbers of the ova of ankylostoma duodenale from which the embryos emerged in two or three days. A blood examination showed considerable anæmia of the chlorotic type and a great increase in the number of the eosinophile cells. The details were as follows: red corpuscles, 3,710,000 per cubic millimetre;

white corpuscles, 13,000 per cubic millimetre; polymorphous fine granular cells, 56 per cent.; polymorphous coarse granular cells, 24 per cent. (eosinophile); mononuclear cells, large 11 per cent., small 9 per cent.; and hæmoglobin, 32 per cent. For three days the patient was kept on a diet consisting mainly of milk, with only a little bread-and-butter besides, and then on the evening of August 6th a dose of castor oil was given. On the next morning after defæcation without further food three doses of 20 grains each of thymol were administered at intervals of one hour, followed four hours after the last dose by one ounce of house mixture. No unpleasant symptoms were observed after the thymol and the next day the patient suddenly became ravenously hungry and instead of being depressed and lethargic he became quite cheerful and alert. This was the first time practically that he had had any appetite for three years. The examination of the fæces resulted in the discovery of from 40 to 50 ankylostomata of both sexes and on the two subsequent days some 15 more were passed. A rapid improvement took place in the patient's appearance and strength but the motions remained loose and rather frequent. The blood examination on August 14th was as follows: red corpuscles, 3,890,000 per cubic millimetre; white corpuscles, 13,000 per cubic millimetre; polymorphous fine granular cells, 52 per cent.; polymorphous coarse granular cells, 18 per cent. (eosinophile); mononuclear cells, large 14 per cent., small 16 per cent.; and hæmoglobin, 36 per cent. A regular examination was made of the fæces and on the 21st a few ova were found. A second administration of thymol (60 grains) was carried out in the same manner as previously and again without unpleasant symptoms. Neither ova nor adult worms could again be discovered in the fæces in spite of frequent search. The improvement in the patient's general condition continued without interruption and the motions became normal in character at the beginning of September. On August 29th the blood examination gave the following results: red corpuscles, 4,660,000 per cubic millimetre; white corpuscles, 12,000 per cubic millimetre; polymorphous fine granular cells, 67 per cent.; polymorphous coarse granular cells, 9 per cent. (eosinophile); mononuclear cells, large 10 per cent., small 14 per cent.; and hæmoglobin, 50 per cent. On Sept. 16th the patient was discharged to a convalescent home.

Remarks by Dr. GOSSAGE.—Medical practice in the tropics and elsewhere yields plenty of cases of ankylostomiasis but the disease is of extreme rarity in ordinary hospital practice in London; indeed, the present is the first case met with at the Westminster Hospital. All the ordinary symptoms of the complaint were exhibited—viz., mental depression, weakness, some bowel disturbance, and a gradually increasing anæmia of the chlorotic type with increase of the coarsely granular eosinophile cells. The case responded very satisfactorily to treatment. The early complication with dysentery is interesting and doubtless made the diagnosis more obscure in the early stages.

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

Subtotal Hysterectomy.—The Diminution of the Alkalinity of the Blood in Eclampsia.—Exhibition of Specimens.

A MEETING of this society was held on Nov. 1st, Mr. A. C. BUTLER-SMYTHE being in the chair.

Mr. ALBAN H. G. DORAN read a paper on Subtotal Hysterectomy for Fibroids which was published in full in THE LANCET of Nov. 4th, p. 1310.—Mrs. FLORENCE N. BOYD, M.D. Brux., suggested that in appraising the effect of operation in the production of menopausal symptoms it was important to bear in mind how varying were the symptoms accompanying the natural menopause in different individuals. In 22 cases of supravaginal amputation with retention of one or both ovaries operated on up to the spring of 1904 she had investigated the after-results. In all but three the results were excellent and in some cases striking as to the general health, and the three exceptions were in poor health before operation. In none were there really severe menopausal symptoms and in only one did a periodic sanguineous discharge persist. In that one she was not