Vernon Hospital. On laryngological examination it was seen that the mucous membrane over the arytenoids and inter-arytenoid space was swollen and that the cords did not meet properly.—Dr. W. JOBSON HORNE pointed out the probability of certain cases of aphonia supposed to be hysterical being really tuberculous.

Mr. SOMERVILLE HASTINGS: A case of Ulceration of the Left Tonsil in a man aged 56 years. The ulcer had lasted for over two months with very little alteration. It extended to the anterior pillar of the fauces, and presented a curious dead-white appearance. There was no history of syphilis, but pyorrhœa alveolaris was present. Klebs-Löffler bacilli could not be found, and the microscopical appearances of a piece removed did not favour malignancy. No glands could be felt.—Dr. W. H. KELSON pointed out how much the dead-white appearance resembled that seen in certain malignant growths of the larynx.

Mr. NORMAN PATTERSON: 1. Primary Sore in the Vestibule of the Nose in a female patient aged 38 years. The lesion was an indurated area which gradually increased in size, and was accompanied by some enlargement of the glands in the submaxillary region. There had been a great deal of pain, extending on to the face. Spirochætæ had been found and a positive Wassermann reaction obtained. 2. Epithelioma of the Epiglottis in a man aged 40 years. The patient had noticed pain on swallowing for the last two months, and shooting from the tip of the great cornu of the hyoid bone on the left side towards the back of the ear. He complained of a great tendency for the saliva to accumulate in the throat. Some glands were felt, especially on the left side, which might perhaps be accounted for by the septic condition of the teeth.

The PRESIDENT: A man suffering from Stricture of the Œsophagus situated 11½ inches from the incisor teeth. It was considered to be malignant, and was shown to elicit views as to the suitability of treatment by radium or otherwise.

Dr. H. W. FITZGERALD POWELL: A man, aged 48 years, with history of difficulty in breathing of six months' duration. Examination showed a large mass of growth involving the left side of the larynx, filling up the cavity of that organ, involving the tongue and aryepiglottic folds. There was a history of syphilis, but the Wassermann reaction was negative.

Dr. H. J. DAVIS: A man, aged 71 years, whose upper jaw had been excised for Malignant Disease of the Antrum, following polypi and antral empyema. Some œdema of the lower eyelid still remained.

Dr. HILL: Tuberculous Disease of the Nose in a child. There had also been disease in the superior maxillary bone on the left side.

OPHTHALMOLOGICAL SOCIETY.

Histo-pathology of Papillœdema.—Exhibition of Cases.

A MEETING of this society was held on Feb. 9th, Mr. GUSTAVUS HARTRIDGE, Vice-President, being in the chair.

Mr. LESLIE J. PATON and Dr. GORDON M. HOLMES communicated a paper on Histo-pathology of Papillœdema. It was a preliminary account of their investigations into the pathology of papillœdema. Their work was based on the histological examination of 60 eyes, all from cases in the National Hospital for the Paralysed and Epileptic, Queen-square, Bloomsbury. The conclusions they formed from these cases were that the so-called "optic neuritis" was a simple congestive œdema of the disc, and was not in any way an inflammatory phenomenon. Inflammation when it did occur was slight in amount, limited in its distribution and secondary in its nature. The hæmorrhages that occurred were in the main congestive, but partly due to stretching and rupture of small vessels by the swelling disc. The larger white patches that occurred on or near the disc were due to degeneration of the nerve fibres. This degeneration showed itself first by varicosities appearing on the nerve fibres, which later swelled up into elliptical or globular bodies known as "cytoid bodies." These might lose their connexion with the nerve fibre from which they developed, and consequently undergo fatty degeneration. The smaller bright-white spots arranged in fan-shaped fashion between the disc and macula were due to œdema raising the membrana limitans interna into vesicles. The changes produced as the disc became atrophic were, (*a*) occlusion of the smaller vessels by endothelial proliferation and adventitial thickening in the walls of the larger vessels; (*b*) a glial proliferation which varied in intensity with the degree of atrophy; and (*c*) proliferation in the mesoblastic tissues round the blood-vessels and without, forming the lamina cribrosa. Mr. Paton and Dr. Holmes considered that the hypothesis which best explained all the known facts of tumour papillœdema was that, owing to the rise of intracranial pressure, there was a communicated rise of pressure in the nerve sheath. The portion of the central vein lying in the nerve sheath behaved, in response to this raised pressure, like a cerebral vein, and the blood pressure in it was consequently raised to the same extent. This produced a congestion of all the connexions of the central vein distal from that point. In addition to causing venous congestion the raised intra-vaginal tension obstructed the normal drainage of lymph from the disc and nerve and caused a lymph stasis, so that there was both an increased output and a diminished drainage. The tissue tension in the nerve itself was raised, so there was no marked difference between intravenous pressure and tissue pressure until the lamina cribrosa was reached within the range of the relatively lower, though normal, intra-ocular tension. The paper was illustrated by a number of lantern slides.—Mr. S. JOHNSON TAYLOR asked whether Mr. Paton and Dr. Holmes had seen any case early enough to confirm what was clinically found—viz., that the earliest evidence of optic neuritis was in the upper and inner part of the disc. He had under his care at present a case which confirmed that.—Dr. JAMES TAYLOR spoke appreciatively of the extensive nature of the research. It occurred to him that it might lead to a revival of the old method of tapping the optic nerve from the front with the view of relieving the œdema. If so, that would cause one to view more hopefully cases of extreme papillœdema.—Dr. HOLMES, in reply to Dr. Taylor, said the method mentioned would only be feasible if a fistula were left in the sheath to allow the cerebro-spinal fluid to drain away.—Mr. PATON replied that the papillœdema nearly always commenced at the upper border first and later in the lower. But when only the upper border showed œdema there was shrinkage of the tissue. The disc looked normal, but there was evidence of slight œdema commencing at its upper edge.

Mr. E. W. BREWERTON showed a case of Symmetrical Marginal Corneal Degeneration.

Mr. H. B. GRIMSDALE showed a patient with Irideremia and Deformity of Lens.

Mr. C. HIGGENS showed a patient on whom he performed his operation of Dacryocysto-rhinostomy, and described the procedure.

Mr. E. TREACHER COLLINS exhibited a case of Widespread Exudation internal to the choroid and beneath the retinal vessels, giving rise to a white reflex.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

The Sanitary Service of the Territorial Force.

A MEETING of this society was held on Feb. 10th, Dr. W. G. WILLOUGHBY, the President, being in the chair.

Lieutenant-Colonel C. H. MELVILLE, R.A.M.C., professor of hygiene, Royal Army Medical College, London, introduced a discussion on the Sanitary Service of the Territorial Force. He dealt mainly with the duties of those officers of the Territorial sanitary service whose services would be available on mobilisation, or as they are sometimes termed, officers on the *à la suite* list, of whom 106 had been gazetted. He touched briefly, however, on some of the duties of the divisional sanitary officer, which were very extensive and brought him into connexion with the life of the soldier at all points, except those connected with actual fighting. Thus he had to exercise a general supervision over the sanitary condition of all places occupied by the troops of the command to which he was attached, watch the health conditions of all camps, &c., and investigate the cause of any undue prevalence of disease among the troops or the inhabitants. He had to advise on the selection from a sanitary point of view of sites for camps

and bivouacs, and on questions relating to the sanitary conditions of towns, villages, or buildings about to be occupied. He must advise regarding the purification and distribution of water for drinking purposes, with respect to latrines and urinals, the disposal of refuse, the burial of the dead, and the disposal of the carcasses of animals. The duties of *à la suite* officers referred to the habitations of troops whether in camps or in buildings, to water-supplies, to roads, to the prevalence of infectious diseases in various localities, and such-like matters. The quartermaster-general's department would require advice as to the suitability from a sanitary point of view of buildings to be used as temporary barracks and of camping grounds. The information required of the sanitary officers was given in some detail by Colonel Melville, who then referred to the necessity for describing the water-supply of a district as a whole. For this purpose each stream or river should be traced from its source, till it passed into some other district. The presence of any dangerous source of pollution should be noted, with its exact position and distance from the water. This collection of information would fill a very serious gap in our knowledge, and any officer on the *à la suite* list who should set about collecting it as regards his own district, and more especially along the main lines of communication, would be doing a useful piece of work and rendering the State good service. Other duties of the sanitary officers would include the cleaning up of camping grounds after they had been utilised by troops passing hurriedly through a district, and maybe the cleaning up of a battle-field. Colonel Melville emphasised the necessity of every sanitary officer at once making himself familiar with his duties and at once setting about the collection of information which would be available when the emergency arose. Every officer, he said, who promised that his services would be available on mobilisation was bound by every rule to see that his services were worth having on mobilisation.

In the course of the discussion the PRESIDENT pointed out that Colonel Melville's paper was not by any means confined in interest to the officers in the *à la suite* service, but that it concerned all medical officers of health.

Mr. F. E. FREMANTLE considered that the scheme of duties presented was not at all complete. In the event of a war in this country the Territorial Forces would have to depend, so far as sanitation was concerned, upon the civil sanitary administration, and this should be brought into closer touch with the military sanitary service.

Mr. E. SERGEANT and Dr. J. R. KAYE emphasised the importance of a foreknowledge of suitable camping grounds and of water-supplies. Dr. Kaye also pointed out that the art of hygiene was as important in warfare as the art of strategy, and that disease was the master in every campaign.

Dr. P. CALDWELL SMITH referred to the desirability of the members of the *à la suite* service obtaining a knowledge of camp life and of military sanitation.

Mr. H. BEALE COLLINS and Mr. HERBERT JONES considered that the whole country should be mapped out into areas which should be allotted to particular members of the service.

Professor W. R. SMITH agreed that it was of the greatest importance for the *à la suite* officers to become familiar with military life, and that they look at their work through military spectacles.

Dr. W. BUTLER, Dr. H. COOPER PATTIN, and Mr. J. TUBB-THOMAS also took part in the discussion.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Acute Anterior Poliomyelitis.—The Medical Examination of Employees.—Exhibition of Cases.

A MEETING of this society was held on Feb. 1st, Dr. BYROM BRAMWELL, the President, being in the chair.

Dr. EDWIN BRAMWELL and Dr. D. W. CURRIE read a paper on Acute Anterior Poliomyelitis. No disease had occupied such a prominent place in neurological literature during the past year or two. Epidemics had occurred in many parts of Europe and America during the last hemi-decade. A localised epidemic was described. The character of the symptoms was instructive. The epidemic consisted of five cases. Five of 12 children living in a farmstead which consisted of four dwelling-houses were affected. Three of four children in one house suffered and both children in the adjacent house. Fever, headache, pain at the back of the neck, neck rigidity, and head retraction were conspicuous features. Vomiting occurred in two cases. In one of the first cases pain in the lower limbs was so severe as to suggest acute rheumatism. All the patients recovered. Two presented paralysis of the limbs with abolition of the tendon jerks and other features characteristic of typical poliomyelitis. In one case a temporary facial paralysis and in another a strabismus were the only paralytic symptoms. The fifth patient recovered without manifesting definite paralysis at any period. The circumstance that the five patients were taken ill within a few days of one another (Sept. 12th to 24th), together with the similar symptoms of onset, makes it certain that all the cases were due to the same causal agent. Three of the cases might well have escaped recognition had they been met with singly. The number of cases with cerebral palsies and in which complete recovery had taken place had been a generally recognised feature in recent epidemics. This epidemic was extremely instructive in relation to the incubation period of the disease. The farmstead in which the patients lived occupied a somewhat isolated situation, and the individual cases developed one after the other. The two families might be conveniently designated A and B and the children Aa, Ab, Ba, Bb, Bc, and Bd. Ba, Bb, and Bc slept in the same bed, while Bd slept in a cradle in another room together with Mr. and Mrs. B. Bb first manifested symptoms on Sept. 12th, Ba on Sept. 16th, and Bd on Sept. 18th, while Bc escaped. Ba was no doubt infected by Bb. Bd might have been infected either by Bb or Ba, or the infection might conceivably have been carried by Mrs. or Mr. B. In this connexion it was interesting to note that on and after Sept. 14th Bb slept in the same room as Bd. Ab was taken ill on Sept. 20th, Aa on Sept. 24th. Aa was no doubt infected by Ab, for they slept in the same bed. It would seem almost certain that Ab must have been infected by one of the B's. Both Mrs. A and Mrs. B positively stated that the A children had not been in the B's house, or the B's in the A's house after Bb was taken ill. On Sept. 16th, and again on the 18th and 19th, Mrs. A visited the B's, and on each of the two dates last mentioned she remained in the house for several hours helping to nurse Bd. These data would seem to indicate that the incubation period in this particular epidemic was four days, or not longer than four days, while they suggest that the infection might be carried by a third person. The comparative frequency of poliomyelitis during the past autumn was next referred to. Statistics for several years from the Edinburgh Royal Hospital for Sick Children and other hospitals were presented, and numerous opinions quoted from different centres in England and Scotland in order to demonstrate the truth of this assertion. It was further mentioned that two or three local epidemics had occurred recently in various parts of England. So far as Dr. Bramwell and Dr. Currie could ascertain no abnormal increase in frequency of the disease, curiously enough, had been observed in London. Finally, the possibility of some sort of relationship between poliomyelitis and epidemic cerebro-spinal meningitis was referred to. Dr. Bramwell and Dr. Currie would have it clearly understood that they fully realised the existence of certain pronounced points of difference, yet they were of opinion that the possibility of some association between the two diseases was worthy of consideration. Both diseases occurred in a sporadic and epidemic form, both affected children more especially, in both the degree of contagion appeared to be much the same, and in both the initial symptoms were very similar. The most striking point, however, was the circumstance that a few years ago epidemics of cerebro-spinal meningitis, previously of great rarity, were met with in many localities throughout Europe and America, while two or three years later epidemics of poliomyelitis, practically unknown hitherto, were of widespread occurrence.

—Dr. G. H. MELVILLE DUNLOP said that he fully endorsed the fact that recently there had been a severe and widespread epidemic of poliomyelitis in the country, and his own experience had borne this out. Within the last six months over 40 cases had been under treatment in the Royal Hospital for Sick Children. The average usual number in his own