

the approval of the Board of Supervision ; that the advantages of the Act relating to notification cannot be reaped without the further benefit of the other Acts, and yet that Scotland was, without explanation, excluded from their benefits. One thing is certain, and that is that those who know the real sanitary needs of Scotland have now indicated to the Scotch Secretary of State a few simple expedients by which the sanitary administration of their country could be materially benefited, and without which Scotch public health must necessarily suffer to an extent that is no longer permissible in England ; and it certainly behoves those who are in authority to see that the comparatively simple, although very important, demands made should be granted with a view to the removal of conditions tending to ensure nuisances and disease and to the prevention of those forms of sickness and death which are now proved to come within the scope of efficient sanitary administration.

DR. COLLIE AND THE ASYLUMS BOARD.

WE are glad to state that, notwithstanding an apparently organised and ungracious opposition, the Metropolitan Asylums Board have recognised the fairness of awarding a pension to Dr. Collie for the eminent services he has rendered to the profession and the public while at the Eastern Hospital and elsewhere in connexion with diseases of an epidemic nature. Dr. Collie has been granted the sum of £210 annually as a pension. It is to be hoped that the good work he has done in organising the methods of combating small-pox and of investigating the nature of virulent epidemic diseases will be only preliminary to further efforts on his part to elucidate some of the obscurity with which they are still surrounded.

THE ANALYSIS OF PEPTONES.

THE compounds obtained in the digestion of meat by acid pepsin, although similar in composition, are by no means identical in chemical properties or nutritive value. Any analytical method therefore which gives a tolerably accurate account of the composition of commercial peptone preparations must prove one of importance and value to the practitioner, seeing that peptones are largely employed as nutrients in cases of enfeebled digestion and in wasting diseases. At the last meeting of the Society of Public Analysts held at Burlington House, Messrs. C. W. Heaton and S. A. Vasey of Charing-cross Hospital contributed an interesting paper on this subject. These chemists have devoted their attention to the methods which have from time to time been proposed, and while they recognise in Denaeyer's method¹ the best that has been devised, and one by which they have been mainly guided, yet they are led to think from their own experimental observations that the process of which the following is an outline is simpler and more satisfactory. A convenient quantity of liquid peptone is gradually dropped into strong alcohol. The precipitate, consisting of albumens, gelatine (coagulable), albumose, and peptone, is dried and weighed. The filtrate, containing meat bases, creatine, &c., and uncoagulable gelatine, is decanted and reserved for further treatment. After weighing the alcoholic precipitate, it is dissolved in water, and the insoluble albumens filtered off and weighed. An aliquot portion of the filtrate, which now contains only albumose, gelatine, and peptone, is next treated with saturated ammonium sulphate solution and the precipitated albumose and gelatine weighed on a tared filter. The adherent sulphate is estimated by means of barium chloride and deducted, together with the filter, from the total weight. Another portion of the filtrate is treated with

specially prepared copper hydrate emulsion, which, with albumose, forms an insoluble compound. The precipitate is treated for nitrogen by the Kjeldahl process. Multiplied by the factor 6.33, this gives albumose. The filtrate from the copper emulsion, now free from albumose, is concentrated, and then treated with ammonium sulphate, heated and cooled. By careful manipulation the gelatine which separates may be made to adhere to the sides of the beaker, washed with ice-cold water, and weighed. Adherent sulphate is estimated and deducted as before. The quantity of gelatine and albumose being ascertained, that of peptone may obviously be gained by difference. Part of the alcohol filtrate (*vide supra*) is evaporated to dryness, taken up with water, and treated with ammonium sulphate for the separation of uncoagulable gelatine. Another portion may be evaporated to dryness and weighed, and another taken for the estimation of nitrogen. The following data are furnished by this process : albumens coagulated by alcohol, gelatine (uncoagulable and coagulable), albumose, peptone, and substances soluble in alcohol, such as creatine, urea, &c. Total nitrogen, water, organic matter, and mineral matter are estimated in the usual way. The authors give to Denaeyer the credit of first recognising in peptones a variety of gelatine soluble in alcohol, and they also add that his process was the first to provide for the estimation of gelatine, or glue-peptone. A knowledge of the presence and amount of this body is desirable, inasmuch as it is said not to present the nutritive value of either the albumens or their peptones.

DEATH OF PROFESSOR VON BRÜCKE.

IN the death of Ernst Wilhelm von Brücke, which took place from influenza at Vienna on Jan. 5th, physiology has lost one of its most illustrious followers. Professor Brücke was born in 1819, and had therefore attained his seventy-third year. He studied medicine at Heidelberg and Berlin, and in 1843 became assistant in the Museum of Comparative Anatomy at the latter University under the direction of Johannes Müller. In 1848 he succeeded Burdach as Extraordinary Professor of Physiology at Königsberg, and the following year became Professor of Physiology at the University of Vienna. There he has remained, steadily working in the sphere of science, and becoming the recipient of many honours. Professor Brücke contributed considerably to physiological literature as well as to anatomy, his works comprising two volumes of lectures on physiology, researches on the blood, on electrotonus, on the function of speech, on colour vision and other optical questions, as well as anatomical studies of the eye, and, quite recently, a handbook of artistic anatomy.

YELLOW FEVER.

YELLOW FEVER is a disease which prevails in the tropics principally between 25° north latitude and 10° south. It is always found more or less on the Guinea coast of Africa, in Brazil, Mexico, and in the southern part of the United States. Its infectious nature is supposed to be shown by the fact that it overflows these tropical limits every now and again and reaches subtropical regions. It is not known, however, in temperate climates. Certain cities like New Orleans, Rio Janeiro, and Santos are frequently scourged with this disease. Lord Salisbury has received a despatch from the British Consul at Santos depicting the state of affairs prevalent there, and pointing out that yellow fever, together with small-pox, largely prevails. It states that "the former is chiefly caused by the unhealthy state of the harbour, and the monstrous delays experienced in unloading vessels. Nearly two-thirds of the cases attacked end fatally." It is difficult to ascertain the exact etiology of

¹ See THE LANCET, May 2nd, 1891.