

an ophthalmological examination as much a routine as an examination with the stethoscope, and he justly emphasizes the point that, if this were done, physicians and surgeons would very soon realize that it is as a rule altogether unnecessary to dilate the pupil before using the ophthalmoscope. The opinion that it is useless to attempt to examine the fundus oculi without dilating the pupil seems to be commonly held, whereas the real fact is that any one who will gain a little experience in the method will find that it is quite possible in the great majority of cases to ascertain what he wants to know without using a mydriatic. It should only be in those cases in which the pupil is unusually small or when it is desired to see the macula very specially that dilatation should be necessary. The physician is apt to think, for instance, that in certain forms of kidney disease the retina is affected only in the late stages, whereas the ophthalmologist is apt to think kidney disease is usually to be recognized by changes in the retina. Both these ideas carried to this extreme are wrong. The fact really is that the physician should never omit to examine the eyes in all cases in which renal disease is suspected. Ocular palsy and hemianopsia are just as much examples of nervous disease as cases of wrist-drop or hemianaesthesia. For the ophthalmologist to treat ocular palsy with potassium iodide, or merely to diagnose which muscle is involved, is neither rational therapeutics nor scientific investigation. All such cases fall within the domain of the physician, who should train himself adequately to investigate them. To be fully familiar with the conditions revealed by the ophthalmoscope should be the aim, as it is the bounden duty, of the physician, and the ophthalmic surgeon should also recognize that many of the patients who come to him with eye symptoms really require full investigation by the physician.

THE STANDARDIZATION OF TETANUS ANTITOXIN.

The employment of antitoxin for the prevention and for the cure of tetanus cannot be followed by the best results unless the optimum doses are given. In the case of antitoxins the comparable doses must be expressed in terms of units, which correspond to the amount of serum required to neutralize a given amount of standard toxin. The Ehrlich method of standardization of diphtheria antitoxin, which on the whole works satisfactorily, cannot be utilized for tetanus antitoxin. In October, 1907, the United States Government issued a circular defining the unit to be applied to tetanus antitoxin. Dr. A. MacConkey,¹ who has investigated the reliability of the American method, reports favourably on it. The definition of the unit is "ten times the least quantity of antitetanic serum necessary to save the life of a 350 gram guinea-pig for ninety-six hours against the official test dose of a standard toxin furnished by the Hygienic Laboratory of the Public Health and Marine Hospital Service." Dr. MacConkey gives an account of the technique prescribed for the standardizing tests, and as the result of his experiments concludes that, provided the method be employed with care and the tests repeated from time to time, it may be regarded as simple, accurate, and reliable. It is to be hoped that it will be accepted in all countries for general use. The value of antitoxin as a curative agent can only be ascertained if the records of cases contain a statement of the number of units injected. If the unit varies according to the method of standardization no comparison can be made. It is obvious that records giving the number of cubic centimetres injected have no value unless a statement be made of the unit strength of the sample used. When a uniform unit has been adopted and all records give the dosage in terms of the unit, we may expect that the optimum dose may be established.

¹ *Journal of Hygiene*, vol. xiii, No. 4, January 16th, 1914.

THE WASSERMANN REACTION.

THE *Berliner klinische Wochenschrift*, in its number issued in honour of the sixtieth anniversary of Ehrlich's birth, published an article by Professors v. Wassermann and Lange on the nature of the Wassermann reaction. It is notorious that authoritative opinions on this complex problem are at variance, and disputes on the question of its specificity for syphilis still arise from time to time. In attempts to solve the difficulty blood serum only has hitherto almost exclusively been tested, and, as Wassermann points out, blood serum cannot, owing to its high content of albumin, be entirely freed from substances which are responsible for the phenomenon of auto-inhibition (*Eigenhemmung*). He has therefore utilized the cerebro-spinal fluid of patients with general paralysis, and by centrifugalization has reduced the essentials into two component parts—the fluid and the lymphocytes. The latter were kept at 56° C. to encourage autolysis, and it was found that at this temperature the substances specific for the reaction were set free. Control experiments with lumbar fluid from patients with other diseases, and also containing a pathological excess of cells which were similarly allowed to autolyse, were consistently negative. The authors therefore conclude that the reaction is specific, and that the substance or substances responsible for it are contained in the lymphocytic elements of the cerebro-spinal fluid.

TENURE OF MEDICAL OFFICERS OF HEALTH.

The deputation arranged by the British Medical Association and the Society of Medical Officers of Health, to press for security of tenure for medical officers of health and for superannuation, will be received by the President of the Local Government Board (Mr. Herbert Samuel), the Chancellor of the Exchequer, and the Minister for Education (Mr. Pease), in the Chancellor's room in the House of Commons on Tuesday, March 31st, at 5 o'clock. The deputation will be introduced by Dr. Addison and Sir Philip Magnus.

Medical Notes in Parliament.

[FROM OUR LOBBY CORRESPONDENT.]

Smoke Abatement.—In the House of Lords on Tuesday Lord Newton moved the second reading of the Smoke Abatement Bill, which he said had the support of various smoke abatement societies and municipalities. As he saw no hope of the bill becoming law this year he asked the Government to institute an inquiry. Lord Curzon said that in Calcutta legislation had reduced the amount of black smoke by 80 per cent., and that similar legislation was urgently needed in this country, where over 200,000 tons of sulphur were poured out of the chimneys, and 76 tons of soot descended from the sky.—Lord Allendale said that the President of the Local Government Board proposed to appoint a strong Departmental Committee to examine into the present state of the law, and to make proposals for the consideration of Parliament. He hoped that all interests concerned would take part in the inquiry.

Experiments upon Living Animals.—Mr. Chancellor asked the Secretary of State for the Home Department whether he was aware that the annual return of vivisectional experiments had for the past two years been published too late to allow of prosecution for breaches of the law by vivisectors; and whether he would arrange for its publication this year not later than the month of May.—Mr. McKenna, in answer, referred to the replies he had given to similar questions on July 21st, 1913, and July 8th, 1912. Much labour was involved in the preparation of the return, and he could not promise more than that it should be published.

as early as possible. The date of the publication of the report did not in any way affect the power to institute proceedings for contraventions of the Act, so far as the Home Office was concerned, as they were reported to the Secretary of State as soon as they were discovered. Mr. Chancellor asked whether the Chancellor of the Exchequer had received the resolution passed at a public meeting held in Hampstead Town Hall on March 10th, presided over by Mr. Cathcart Wason, which protested against the use of the Mount Vernon Hospital for the vivisection of animals.—Mr. Benn said that the resolution had not been received and that the Chairman of the Joint Committee had not yet received from the committee their scheme of research work to be undertaken at the place mentioned, so that he was not yet in a position to consider any matters that might be included in such a scheme. Mr. Cathcart Wason asked whether the Medical Research Committee under the National Insurance Act had acquired Mount Vernon Hospital, Hampstead; and, if so, whether this hospital was to be used solely for the reception and treatment of tuberculosis patients, or was also to be used for purposes of experimental research, including experiments on living animals.—Mr. Benn replied to the first paragraph in the affirmative, but he could not yet add anything to the reply he had just given on the same point.

Cocaine Traffic (India).—In reply to Sir Herbert Roberts, the Under Secretary of State for India (Mr. C. Roberts) said that the Secretary of State was aware of the growth of the cocaine traffic in India, and knew that considerable quantities of the drug were imported from Germany. He was afraid that any international arrangements for the suppression of the illicit traffic in cocaine must await the ratification and coming into force of the Hague Opium Convention. His Majesty's Government was doing all it could to secure the general and early adoption of the Convention. In further reply, Mr. C. Roberts said that he expected that the Convention would be ratified at an early date, and that legislation was being considered and framed with a view to carrying out its provisions.

Opium Imports and Exports.—In reply to Mr. Robinson, Mr. Burns said in the last five years the annual imports of opium had averaged 528,000 lb., and the exports (including a small quantity dried and powdered in the United Kingdom) 235,000 lb., leaving a net quantity of 293,000 lb. A large proportion of this was used in the manufacture of morphine and morphine salts for export, but there were no available statistics as to the quantity actually retained for consumption in the United Kingdom, nor as to the purposes for which, or to the persons to whom, it was distributed.

Sight Tests.—Mr. Lynch asked the President of the Board of Trade how many men had failed in the colour vision test since the adoption of the lantern, and how the results compared with those formerly obtained, and what was the percentage of men who had failed with the lantern test and passed the wool test.—Mr. Burns said that a return would be presented to Parliament shortly which would give full statistics as to the sight tests during the period from April 1st, 1913, when the new colour vision tests came into force, until December 31st, 1913.

School Dental Treatment.—In reply to Mr. C. Bathurst, Mr. Trevelyan stated that the number of local education authorities which had established school clinics limited to treatment of dental defects was seventeen. The number of these clinics was twenty-nine. There were about 200 school clinics of all kinds.

Medical Service, St. Kilda.—In reply to Mr. James Hogge, the Secretary for Scotland (Mr. McKinnon Wood) said that the Highlands and Islands (Medical Service) Board had decided, as a temporary and experimental measure, to send a fully qualified nurse to St. Kilda as soon as arrangements could be made for her to reside there.

Overcrowded Houses.—Mr. Astor asked the number of houses in England and Wales which were overcrowded on the basis of more than two persons to a room.—Mr. Herbert Samuel said that the number of separate houses overcrowded had not been ascertained, tenements being the correct basis for an inquiry of this kind. The census figures of 1911 showed the numbers of separate families and the population overcrowded, on the basis of more than two persons to a room, as follows:

Rooms in Tenement.	Number of Families.	Population.
1	57,835	211,770
2	135,092	804,071
3	130,272	1,023,925
4	81,811	792,716
5	22,484	260,246
6	3,097	41,770
7	294	4,503
8	16	288
9	9	183
Total 1-9 rooms	430,910	3,139,472

Milk Supply (Analysis).—Mr. Astor asked the President of the Local Government Board whether his attention had been called to the results recently obtained by experiments carried out at the Lister Institute in an analysis of samples of milk supplied by high-class milk shops in the West End of London; whether the milk sold for 6d. a quart as nursery milk had been found to contain as many as 6,500,000 bacteria per c.c.m.; and whether such milk was considered by the Local Government Board to be suitable for consumption by infants.—Mr. Herbert Samuel replied that he was aware of the statements recently made in the press respecting the examination of certain samples of milk. As he had already indicated, the whole question of milk supply was receiving close attention. In reply to a further question by Mr. Astor, Mr. Samuel said that in the year 1912, the latest year for which complete information was at present available, samples of milk were taken for analysis by every local authority under the Sale of Food and Drugs Acts. The number of samples of milk and cream taken during the year was 52,501.

Vaccination.—Mr. Albert Smith asked why it was found necessary to perform 4,806 primary vaccinations on the children of soldiers in 1912, seeing that only 2,747 such operations were carried out in 1911.—Mr. Baker said that the figures given in the report on the health of the army for 1912 included the army abroad as well as at home. Previously only those for the United Kingdom were given. The figure for 1912, corresponding to that for 1911, as stated in the question, was 2,826. In reply to Mr. J. P. Farrell, Mr. Herbert Samuel said that lymph prepared in the Government lymph establishment was not exported to any of the British possessions for general use, but it was sent from time to time for use by the army and navy. Among the places to which it had been sent were Bermuda, Gibraltar, Jamaica, Malta, Cape Town, and Sierra Leone.

Suffragists (Prison Treatment).—Mr. Astor asked the Home Secretary whether Miss Brady was given bromide or any other hypnotic drug whilst in Holloway.—Mr. McKenna replied that neither bromide nor any other hypnotic drug was given to Miss Brady while she was in Holloway.

Petrol Tax.—Sir J. D. Rees asked why commercial travellers, using motor cars for the purpose of carrying out the duties of their business, were not allowed the same abatement on their petrol as was granted to medical men in the like circumstances.—Mr. Lloyd George replied that all users of trade motors were entitled to a rebate of half the duty on their petrol under the conditions specified in the 5th Schedule to the Finance (1909-10) Act, 1910, and commercial travellers, in common with other traders, were eligible for this rebate.