

dimmer than the object when seen by the naked eye. Piper<sup>1</sup> has pointed out that in dark-adapted eyes the light sensibility is about twice as great with both eyes as with one, though in light-adapted eyes no such binocular summation takes place.

#### THE BRITISH SCIENTIFIC PRODUCTS EXHIBITION.

UNDER the auspices of the British Science Guild a very interesting exhibition of British scientific productions was opened by Lord Crewe at the Central Hall, Westminster, on Thursday, July 3rd. Encouraged by the success which attended a similar exhibition held last year at King's College, the authorities were amply justified in promoting another exhibition this year, the objects of which are to illustrate recent progress in British science and invention, and to help the establishment and development of new British industries. The demonstration is most instructive, and evidences in many directions the capacity and skill of the British manufacturer in acquiring new industries and in restoring old ones on a scientific basis. There is, indeed, a wealth of products shown, illustrating in the most satisfactory way a determination to press science into industrial service and to remove the long-standing reproach of our dependence on other nations for the supply of many valuable and important commodities. And there is a noble record presented of the work done in the research laboratories of the universities and schools of England. All is an eloquent story of the successes gained by the men trained in the scientific and technical laboratories. Mechanical science, physics, textiles, electrical appliances, medicine and surgery, paper and illustration, agriculture, chemistry, aircraft, fuels, and metallurgy form most interesting sections, in which examples are numerous enough of the talent, skill, and energy not yet lost to our race. Synthetics and dyes are conspicuous illustrations of recent commercial successes resting on scientific foundations, and the exhibition of optical glass and laboratory glass ware demonstrates a brilliant dual triumph of scientist and manufacturer. The great drug houses are well represented, showing what an essential equipment to the success of their business is the research laboratory. This opportunity of witnessing the remarkable developments arising out of the events of the war which have taken place in so many departments of our great industries should not be lost. The bearing of science upon industrial success and national prosperity is well brought out. The exhibition continues until August 5th.

#### THE MEDICAL AND DENTAL REGISTERS.

THE official Register of the General Medical Council, which has just been issued, contains the names of 43,926 persons, of whom 54 per cent. are on the local Register for England, 32 per cent. on that for Scotland, and 14 for Ireland. 1077 names were registered in 1918, being the smallest number recorded for a quarter of a century except at the low tide of 1910-11. On the other hand, the net increase of 107 registered names at the end of 1918 as compared with 1917 is quite without precedent in its smallness. The previously leanest years had some compensation, lacking in 1918, in names restored to the Register and short death rolls. The additional names registered during 1918 included 148 colonial and 16 foreign

diplomas, for the most part Belgian. 995 names have been removed from the Register during the year, 946 on evidence of death. Only one medical man has formally removed his name from the list as having ceased to practise.

The official Dentists Register for 1919 contains the names of 5567 dentists, of whom 13 are on the colonial and 19 on the foreign list. Of the 5535 United Kingdom dentists, 4290 hold degrees or licences in dental surgery, and 1245 are registered on their own declaration of being in bona-fide practice of dentistry. Of the former, 461 have additional surgical or medical qualifications, of the latter 7. The number added by registration during the year 1918 was 131, being one in excess of the figure for 1917 and barely one-half of the 1915 record. 102 names were removed on evidence of death, none on ceasing to practise.

#### EPIDEMIC ENCEPHALITIS (NONA).

A USEFUL contribution<sup>1</sup> to the subject of epidemic encephalitis, from the pen of Dr. Peter Bassoe, associate professor of medicine, Rush Medical College, Chicago, shows that the disease has made its appearance in America, with similar clinical and pathological features to those frequently described in this country and on the continent. Sainton has attempted to give a definition of the disease in the following terms: "A toxic, infective, epidemic syndrome, characterised clinically by the triad lethargy, ocular palsies, and a febrile state, and anatomically by a more or less diffuse encephalitis, most marked in the grey matter of the midbrain." It may be questioned, however, whether any useful purpose is served at present by condensed definitions; Sainton's is not sufficiently explicit to be distinctive. The association of epidemic encephalitis with influenza appears to be more than a mere coincidence, since it has been noted on a number of occasions. Dr. Bassoe quotes from a French source that Camerarius, who described an influenza epidemic in Tübingen in 1718, mentioned a "sleeping sickness" in connexion with it. In 1768, Lepeq de la Cloture recorded a "coma somnolentum" after influenza, and Ozanann (1835) mentioned epidemics of "catarrhal fever" with "soporosité" as having occurred in Germany in 1745, in Lyons in 1800, and in Milan in 1802. No doubt much of this is vague and indeterminate; influenzal meningitis is a different affection altogether, and what (much or little) of these epidemic conditions should be classed as encephalitis lethargica is a matter depending really on the interpretative proclivities of the reader. Dr. Bassoe describes 11 cases in his paper, and notes that in no one had there been definite preceding influenza, but suggests that the encephalitis "may be caused by a separate virus, which in order to become active must have been in contact at one time or another with that of influenza." Be this as it may, the bacteriological aspect of the question has been less completely investigated than the clinical and pathological, and has scarcely passed the stage of conjecture. It is an interesting observation that the brain-stem and basal ganglia are particularly liable to be affected by poisons, endogenous or exogenous, though why this should be so is not at present clear. Dr. Bassoe has had the opportunity of making a complete pathological examination in two cases, and has found the changes with which previous writers

<sup>1</sup> Ztsch. f. Psychol. u. Physiol. d. Sinnesorg., xxxii., 98., 1904.

<sup>1</sup> Journal of the American Med. Assoc., April 5th, 1919, p. 971.

have made us familiar—œdema, congestion and minute hæmorrhages, these most numerous in brain-stem, basal ganglia, and centrum ovale, dense accumulations of small cells round the vessels, and comparatively little evidence of necrosis or tissue destruction. In his cases there was but little sign of inflammation in cortex or meninges. He makes the interesting remark that there is not so much real sleep as is indicated by the sleepy expression of the patient; in fact, some actually suffer from insomnia, "lethargy" bearing the same relation to sleep as the compulsive laughter of the patient with pseudo-bulbar paralysis does to a normal laugh. Among other clinical features also observed in various English cases may be specified coarse choreiform jerkings, which sometimes have become very troublesome, and which Dr. Bassoe has been able to control temporarily with scopolamine. There is much more evidence than the casual observer would suspect to support the contention that the lethargy of these patients is a local and not a general symptom. The laboratory tests of the spinal fluid in Dr. Bassoe's 11 cases show that the cell content was less than 10 in the majority, with a maximum of 26; the fluid was always clear, and usually gave a slight increase of globulin. Results of cultures of blood and spinal fluid, both during life and after death, were negative. No bacteria were seen in section of the brain.

#### SIR CLIFFORD ALLBUTT'S PORTRAIT.

THE fund for presenting the President of the British Medical Association with his portrait remains open by request during the present month. Subscriptions have recently been received from India and America. The treasurer, Dr. G. E. Haslip, in a letter which appears in our correspondence columns, invites all those who wish to take part in the presentation, but who have not yet notified their intention, to do so without delay. After the portrait in oils has been painted it is intended to commission a mezzotint engraving from it, which subscribers to the fund will be able to purchase for their own collections.

#### RABID IGNORANCE.

THE worst kind of ignorance is that which springs from an instinctive refusal to acknowledge the truth. The Arabs long ago recognised how obstinate and intractable is this affliction when they said: "He that knows not, and knows not that he knows not, is stupid. Shun him." To argue with such people is clearly waste of time, for no amount of reason can prevail against a well-established complex. But to ignore the victims entirely would be as foolish as merely to avoid the company of a dangerous criminal. Indeed, if the definition of crime be a fairly broad one, such people are dangerous criminals, for, as Dr. Johnson says: "He that voluntarily continues ignorant is guilty of all the crimes that ignorance produces." The stamping out of rabies in this country 30 years ago was carried through in the face of violent and prejudiced opposition. It could hardly be expected that the arguments then used against the Muzzling Order of 1885 should be brought forward again to-day. Yet such does actually appear to be the case. At a recent meeting of the Animal Defence and Antivivisection Society (in the words of its secretary) strong feeling was expressed at the unscrupulous way in which the present scare is being worked

up. "To prevent rabies in dogs," he writes "it is essential that they should be well and carefully fed, given plenty of water, enough exercise, and not kept in the sun." By such well-meaning people the currency of truth is debased and it becomes important that the real nature of rabies and hydrophobia should be placed before the public by competent authorities in order that such misleading statements as that quoted above may be recognised at their true value. The Society for the Prevention of Hydrophobia, founded in 1886, is still, we are glad to say, in existence, and their first secretary, Mr. Frank Karslake, has rendered a valuable service in reissuing his pamphlet first published in 1889.<sup>1</sup> The arguments used in it remain as true to-day as they were at that time, and various additions have been made which bring them into more intimate contact with the world of to-day. May it have a wide circulation amongst the open-minded public, for it is a valuable prophylactic against the views of those who know not that they know not and are still at large. More than 200 cases of rabies have now been confirmed, and recent reports show that the disease is by no means arrested, a new outbreak having occurred this week. Dr. Addison, speaking last week on a vote to liquidate the Local Government Board, stated that 54 notifications had been received of persons bitten by rabid dogs, and of these 19 were sent to Paris for antirabic treatment; 24 were treated in England with vaccine obtained from the Pasteur Institute in Paris, and 11 others with vaccine prepared in the Board's own laboratory. In no case had hydrophobia resulted, and this admirable achievement of preventive medicine has been used by unscrupulous persons to suggest that no need for any treatment exists. Those who have been saved from the risk of a painful and horrible death will think otherwise, and the public meeting held last week in London under the auspices of the Kennel Club was unanimous in recommending the common-sense measure of a general Muzzling Order throughout the country. The Board of Agriculture may be assured of the support of well-informed public opinion in enforcing whatever regulations may be found to be necessary once again to deliver from this curse both man and his most faithful beast.

#### THE PATHOGENESIS OF DEFICIENCY DISEASE.

A VERY interesting contribution to the literature of this subject has recently been made by Lieutenant-Colonel R. McCarrison, I.M.S., of the Pasteur Institute of Southern India, in the *Indian Journal of Medical Research* (vol. vi., No. 3), in which he discusses the origin of diseases attributed to a deficiency of certain accessory food factors. He draws attention to the scantiness of our knowledge respecting the influence of "vitaminic" deficiency on the adrenal glands, pancreas, liver, spleen, thyroid, pituitary gland, and the reproductive organs, and he endeavours to fill up some of these gaps in our knowledge. Taking beri-beri as the typical deficiency disease, he expresses the opinion that "vitaminic" deficiency is the essential ætiological factor in the genesis of that malady, but that such deficiency is rarely so complete as to be the sole agency responsible for it. Bacterial organisms of whatever kind that may be isolated from the blood in human beri-beri may invade the blood and tissues under conditions of dietetic

<sup>1</sup> Rabies and Hydrophobia: their Cause and Prevention, by Frank Karslake. London: W. and G. Foyle, 1917. Price 1s.