

skill acquired by specialists in dealing with disorders affecting special organs, and in a great number of cases the specialist is well able to complete both diagnosis and treatment by himself. On the other hand, nearly all cases in which the diagnosis is difficult require knowledge and skill outside any one particular specialty. Almost all diseases of the fundus oculi are examples of this. Dr. Lewis writes:—

“The failure on the part of scientific medicine to locate the essential origin of many serious diseases is tending to lessen public confidence in medicine as a whole, and the time has come when we as physicians must reorganise our methods of practice, or means will be taken by the public, if not on the part of the State, to direct them for us, with results that may be equally disastrous for the public and for us.”

Instances will occur to all general practitioners of patients able to pay generous medical fees in whom diagnosis was missed owing to lack of coöperation between various consultants, the real importance of the bearings of the findings of each being overlooked. Even for the poor who are able to obtain admission into hospitals coöperation between different institutions is by no means so good as it ought to be, while, as Dr. Lewis forcefully says, for the mass of the people whose resources are moderate there exist no methods, except through professional courtesy, by which complete investigations can be made of cases that are obscure. This is a strong indictment of our present methods. It was originally addressed to ophthalmologists, whose specialty is perhaps more closely bound up with all other branches of medicine and surgery than any other, but obviously it concerns all branches of the profession. Not only for diagnosis and treatment is coöperation urgently necessary. Without it very little scientific advance is to be expected. The causes of cataract and glaucoma, the nature of the changes which produce detachment of the retina, are problems of pathology which will never be solved by investigations that go no further than the orbit. The necessity for coöperation is admitted. How best to attain it is a practical problem that cries out for solution.

A NEW SCHOOL OF BOTANY.

BOTANY considered as a comprehensive branch of science has not received the attention which it deserves both as a department of biology and as a means of augmenting the supply of food and drugs. During the war, however, recognition of its importance was forced upon us, and the work which has been done by the War Committee of the Royal Society, by the Natural History Department at South Kensington, and by separate investigators, played no inconsiderable part in the scientific organisation which the great world-war necessitated. We welcome, therefore, the report of the committee which was appointed in April last by Lord Ernle, President of the Board of Agriculture, to consider what steps should be taken to improve the usefulness of the Royal Botanic Society of London. This committee consisted of Sir David Prain, F.R.S., director of the Royal Botanic Gardens, Kew (chairman); Sir W. H. Dunn; Sir A. Keogh, Imperial College of Science and Technology; Sir Malcolm Morris; Major R. C. Carr; Mr. Morton Evans, joint secretary of the Office of Woods; Mr. H. J. Greenwood, L.C.C.; and Professor F. W. Keeble, F.R.S., Board of Agriculture and Fisheries and Royal Horticultural Society; with Mr. G. C. Gough, B.Sc., secretary. Its conclusions in brief are the advisability of establishing (1) a school of

economic botany, (2) a centre of research in physiological botany, (3) a centre for horticultural teaching, (4) courses in school gardening suitable for school teachers, and the provision of material for botanical teaching and research in other institutions. The total cost of staff and attendants is estimated at from £3000 to £3500 per annum; the cost of the buildings £4000; and of equipment £500. We hope that some such scheme may be made effective with as little delay as possible, for there is every reason to believe that in the vegetable kingdom there is much to be discovered which will add considerably to the health and happiness of the human race.

ANIMAL DISEASES IN 1918.

THE annual report of the Chief Veterinary Officer for the year 1918 is in many respects highly satisfactory. There has only been one small outbreak of foot and mouth disease, which occurred in East Sussex, and was promptly and efficiently dealt with. The fact that only one outbreak has occurred during the demobilisation of men and animals from areas where the disease is nearly always indigenous must be attributed to the watchfulness of the Board's officials, to the military authorities, and perhaps also to a spread of the knowledge of hygiene and proper disinfection among the laity engaged in transport. In the case under notice infection was carried from the first recognised centre of disease to an “off farm” by a cow and calf or by their driver. The importance of the strict isolation of affected or suspected animals cannot be too strongly urged. The original source of the disease was not ascertained. This is often very difficult to determine because of the numerous and varied carriers of infection, which include birds, horses, dogs, rabbits, and rats, &c.

Good progress has been made against the outbreak of rabies. In the month ending Jan. 11th there were only 2 outbreaks in the Plymouth district and 3 in Cornwall, whereas as many as 45 cases occurred in the Plymouth district in the month ending Oct. 19th and 6 in Cornwall in the month ending Nov. 16th. The rabid dogs were for the most part attacked by the paralytic form of the disease (dumb rabies), a fortunate circumstance which checked their ability to bite and to run. Moreover, the few dogs that did run (and some of them travelled from 12 to 30 miles) pursued a westerly direction and soon came up to the sea barrier. A great scientific advance has taken place in respect to diagnosis of the disease, and it is possible now to give a definite statement in five hours instead of from 14–30 days. Of the 21 people bitten and sent for treatment not one died—a fact which adds further lustre to the brilliance of the results already recorded from the Pasteur method of treatment. The incubation period (from bite to symptoms) in the dog varied from 24 to 85 days, and in cattle from 22 to 84 days. A notable decrease in the number of cases occurred in the Plymouth district as soon as muzzling and restriction on movement were effective.

The report also deals with swine fever, glanders, anthrax, sheep scab, and parasitic mange. 10,203 suspected cases of swine fever were reported, of which 1407—only 13·8 per cent.—were confirmed. There is evidently need for the education of pig owners to recognise the real symptoms of swine fever and to differentiate them from the many other ailments to which pigs are liable. The results of the serum treatment were quite good, although