

wake of a ship the air must possess a physical property which he terms 'soarability' by means of which sea-birds are enabled to extract from the air in that region an upward momentum. Presumably this must mean that the air in passing over the ship is set into a state of disturbed eddying of such a general direction of rotation and of such a distribution of intensity vertically that the bird experiences a lift it would not otherwise acquire.

Prof. Wood Jones, on the other hand, regards the soaring and gliding of pelagic birds as due rather to a morphological adaptation of the bird as an adjusted plane than to any chance condition of "soarable" air. Regarded in this way, he maintains, the zoned north and south distribution of the different morphological types of sea-birds and the failure of the albatross, for example, to follow ships into the tropics, well adapted as it is for gliding, must be investigated from the point of view of bird structure correlated to the environment to which it appears to be adapted. In the case of the albatross, there appears to be a perfect mastery of aerial conditions well to the south of the equator, a lessening mastery farther north, and a positive disability, laboured flapping flight, as the journey is made towards the equator. The same facts apparently hold with regard to the northern representatives.

Prof. Wood Jones points out, moreover, that the zonal distribution of species from the equator northwards is very similar to the distribution southwards from the equator, with a similar increasing ratio of weight to wing area, culminating at both poles with the southern penguins at one end and their extraordinary parallels, the northern auks, at the other. The clue to this gradation is to be sought in the increase in atmospheric density from the equator in both directions, so that a bird adapted for flight in the denser atmosphere finds difficulty in maintaining its gliding and soaring in the rarer atmospheres of the tropics. By indicating this new line of approach, Prof. Wood Jones undoubtedly has given a new impetus to the study of bird flight.

University and Educational Intelligence.

BIRMINGHAM.—Mr. H. Munro Fox, fellow of Gonville and Caius College, Cambridge, has been appointed to the Mason chair of zoology to succeed the late Prof. F. W. Gamble. Mr. C. G. C. Chesters has been appointed assistant lecturer in botany.

The Council has recommended to the Court of Governors that the title of emeritus professor be conferred on Thomas Turner, formerly professor of metallurgy.

EDINBURGH.—At the graduation ceremony on December 17, the degree of D.Sc. was conferred on Baini Prasad, Superintendent of the Zoological Survey of India, the Indian Museum, Calcutta, for his thesis on (1) "Recent and Fossil Viviparidæ: a Study in Distribution, Evolution, and Palæogeography," and (2) "The Shell and Mantle of the Viviparidæ"; the degree of Ph.D. on R. K. S. Mitchell for his thesis on "Some β Octyl Esters of Substituted Acetic Acid"; and the degree of M.D. on Eric H. Ponder, with gold medal, for his thesis on "Studies in Hæmatology."

APPLICATIONS are invited by Yale University for two Theresa Seessel Research Fellowships for the promotion of original research in biological studies. The value of each is 1500 dollars. Preference will be given to candidates who have already obtained their doctorate, and have demonstrated by their

work fitness to carry on successfully original research of a high order. The holder must reside in New Haven during the college year, October to June. Applications, accompanied by reprints of scientific publications, letters of recommendation, and a statement of the particular problem which the candidate expects to investigate, should be made to the Dean of the Graduate School, New Haven, Conn., before March 1, 1927.

IN the course of the past year inquiries were made by the Institution of Mechanical Engineers of the colleges and schools conducting approved part-time courses as to the ages and occupations of candidates for the Ordinary and Higher National Certificates in mechanical engineering. Information has been supplied from 85 colleges and schools in Great Britain in respect of 1000 candidates for the ordinary certificate and 334 for the higher certificate. The average age of the former candidates was about 19.5 years, and of the latter about 21.5 years. No less than 801 of the 1000 candidates for the ordinary certificate were between the ages of 18 and 21 years. Classifying the candidates in respect of occupation, it was found that apprentices of all classes constitute 71.3 per cent. of the candidates for the ordinary certificate, and 32.4 per cent. of those for the higher certificate, and that the combined proportions of trade apprentices and mechanics following these courses are 42.4 per cent. for the ordinary certificate and 37.7 per cent. for the higher certificate. The proportions of successful candidates were 52.5 per cent. for the ordinary certificate and 67 per cent. for the higher certificate.

THE East Anglian Institute of Agriculture, Chelmsford, announces in its Calendar for 1926-27 that alterations during 1925-26 have enabled it to offer facilities for instruction of a more advanced character than that obtainable at any similar institute in Great Britain. The research work at present in progress includes deterioration diseases of potatoes, seeds mixtures, autumn versus spring sowings, composition of butter-fat in goat's milk, winter spraying, colonisation of salt marshes, bunt in wheat, wheat bulb fly, and Hessian fly. Agricultural economics courses include one on the history of British agriculture. Special courses on the agriculture of New Zealand, of Australia, and of Canada and South Africa, are provided. A list of appointments held by past students does not indicate that any of them have as yet gone abroad. The North of Scotland College of Agriculture has a very different record in this respect, a very large proportion of the posts held by its former students being in other countries. The Calendar of this College for 1926-27 announces, among other courses, a "Planter's Certificate Course" specially provided to meet the requirements of students intending to enter on service upon tea, coffee, rubber, sugar, and other plantations in tropical and sub-tropical countries. It extends over two complete winter sessions and one intervening summer session. No preliminary qualifying examination is prescribed. Nine students obtained the degree of B.Sc. in agriculture during the past session. The courses in forestry formerly provided by the College have been transferred to the University of Aberdeen. The Edinburgh and East of Scotland College of Agriculture has in the past, like the North of Scotland College, sent many students abroad, but the list published in its new Calendar of appointments gained by students shows a falling off in this respect. This College, like the East Anglian Institute, offers a course on the history of British agriculture based on Lord Ernle's "English Farming, Past and Present."