

Oakland ends. On the upper deck of the bridge, to be used for six lines of passenger vehicles and other high-speed traffic, the illumination will be specially bright. A new type of reflector is used with the lamps which does not oxidise, has a very hard surface and has a reflecting factor of more than eighty per cent. Six 1,000-watt single lens rotary beacons and five 400-watt flashing beacons will warn aircraft of the proximity of the bridge. A large number of navigational lights will be required and fog warnings will be given by five large bells and six fog sirens driven by ten horse-power motors.

#### Significance of Classification of Organisms

THE study of form has revealed the importance of convergence in the evolution of plants and animals, as well as the inevitable influence of laws of growth which apply to creatures whatsoever their descent. But the significance of convergence would disappear did we not assume that it is superimposed upon some more fundamental structure, and this is the fundamental structure upon which classifications revealing natural relationships are based, according to Dr. W. T. Calman in his presidential address before the Linnean Society of London (*Proc. Linn. Soc. London*, 1934-35, p. 145). To illustrate the distinctiveness and significance of the taxonomic view, Dr. Calman traced the parallel between the morphological classification of the higher Crustacea and the evolution of the group. Here is a natural classification which does violence to none of the conclusions of morphology or of palaeontology, and is consistent with an evolutionary history in which convergence may have played an important part, but never the dominant one.

#### Bibliography of Chinese Insects

THE *Journal of the Shanghai Science Institute* (Section 3, vol. 2, 1934, pp. 1-533) contains a bulky memoir by Mr. Yoshio Ôuchi entitled "Bibliographical Introduction to the Study of Chinese Insects". It takes the form of a catalogue of references of all systematic, and some other, papers dealing with the insects of China up to the year 1932. It is arranged in taxonomic fashion according to orders, followed, in most groups, by subdivision under the individual families. Facility of reference is thus assured and, it may be added, the work appears to be remarkably complete. An immense number of periodicals in many languages has been explored and the enterprise is one which deserves high commendation. A compilation of this kind will prove of the utmost value in a country far removed from the scientific centres of Western civilisation. In vol. 3, 1935 (pp. 17-88), of the same journal, the author brings this work further up to date in listing all papers of similar bearing published during the year 1933.

#### Clothes Moths and House Moths

THE British Museum (Natural History) has recently issued a second edition of a useful fifty-page pamphlet, entitled "Clothes Moths and House Moths" (British Museum (Natural History), London, S.W.7.

6d.). This pamphlet, which forms No. 14 (Economic Series) of the Museum publications, deals with the five British species of moths found in dwellings, out-buildings, etc., and the larvæ of which are destructive to clothing, blankets, upholstered articles, fur, feathers, etc. Each species is described and its habits explained, and the accounts are accompanied by very clear photographic illustrations. The control of these insects by preventive and remedial measures is fully discussed.

#### Certification of Blindness

It has been found that the results of testing for defective sight by means of test cards may vary according to the degree and standard of illumination of the cards. As the matter is of importance in connexion with certification under the Blind Persons Act, 1920, the Ministry of Health has issued a circular on the subject (Circular 1520. H.M. Stationery Office. 1d. net). This suggests that test cards should preferably be illuminated by artificial light, which should be approximately, and not less than, 10 foot-candles, and a simple means is described for effecting this.

#### Thomas Gray Memorial Trust Awards for Navigation

THROUGH the Thomas Gray Memorial Trust, the objects of which are "The advancement of the Science of Navigation and the Scientific and Educational interests of the British Mercantile Marine", the Royal Society of Arts has divided the prize of £100 offered for an invention, publication, diagram, etc., which constitutes advancement in the science or practice of navigation, between H. J. Buchanan-Wollaston, of Lowestoft, for his current meter, and Dr. F. W. Edridge-Green, of London, for his colour perception lantern, which enables tests to be made under conditions very closely allied to those found in everyday practice, while the colours chosen are those which most rapidly and definitely disclose any defect in colour perception. A prize of £100 was also offered for an essay on modern navigational appliances made possible by electricity on board, and also appliances not depending on electricity. The prize was divided as follows: £40 to Lieutenant B. E. Druce, of Salop; £40 to R. J. Finch, Jr., Second Officer, Royal Mail Lines, Ltd., of Southend-on-Sea; and £20 to Captain J. G. Bisset.

#### Solar Eclipse Expeditions

Two British expeditions to observe the total eclipse of the sun on June 19, 1936, are leaving for sites selected from which to observe the eclipse. The path of the total eclipse stretches from Greece over Siberia to the Pacific Ocean. An expedition led by Prof. F. J. M. Stratton, of the Solar Physics Observatory, Cambridge, will station itself in northern Japan. The programme of eclipse observations consists chiefly of observations of intensities of lines in the flash spectrum; despite the vigorous growth of the technique of spectrophotometry in the last decade, very few spectrophotometric observations have been made on eclipses, chiefly on account of the ill-luck through cloud which has attended recent