

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

expeditions. The second British expedition will be led by Prof. J. A. Carroll of the University of Aberdeen, and will proceed to a site in the U.S.S.R. where the eclipse will take place near midday. It is to be hoped that good weather will reward the efforts expended in organising both these expeditions.

Announcements

THE Bessemer Gold Medal for 1936 of the Iron and Steel Institute has been awarded to Mr. Fred Clements, director of the Park Gate Iron and Steel Co., Rotherham, in recognition of his distinguished services in improving the technology of the iron and steel industries and, in particular, blast-furnace practice. The presentation of the medal will be made by the president of the Iron and Steel Institute, Sir Harold Carpenter, at the opening session of the annual general meeting of the Institute on May 7.

THE following appointments have recently been made by the Secretary of State for the Colonies: R. E. Dean, to be curator, Royal Botanic Gardens, Trinidad; W. Richards, to be probationer, Meteorological Branch, Survey Department, Malaya; A. B. Killick (senior agricultural officer, Uganda), to be assistant director of agriculture, Trinidad; G. B. Gregory (agricultural assistant, St. Kitts-Nevis), to be agricultural assistant, St. Lucia; D. P. McGregor (geologist, Gold Coast), to be geologist, Nyasaland.

At the annual general meeting of the Geological Society of London, the following officers were elected for 1936-37: *President*, Prof. O. T. Jones; *Vice-Presidents*, J. F. N. Green, Prof. H. L. Hawkins, Prof. W. J. Pugh, Prof. H. H. Swinnerton; *Secretaries*, Prof. W. T. Gordon, Dr. L. Hawkes; *Foreign Secretary*, Sir Arthur Smith Woodward; *Treasurer*, F. N. Ashcroft.

At the recent annual general meeting of the Institute of Metals, the following officers were elected: *President*, W. R. Barclay; *Vice-Presidents*, Dr. H. W. Brownsdon, Prof. D. Hanson and E. L. Morcom; *Members of Council*, Dr. S. F. Dorey, Kenneth Gray, Lieut.-Colonel J. H. M. Greenly, D. J. MacNaughtan, Dr. C. J. Smithells and F. Tomlinson.

A MEETING is being held on Saturday, March 14, at 11.0 a.m., in the rooms of the Royal Entomological Society of London, at 41 Queen's Gate, South Kensington, S.W.7, to discuss the formation of a society for the study of the bibliography of natural history. Communications on the subject should be addressed to Mr. Francis J. Griffin, at 41 Queen's Gate, London, S.W.7.

THE Association of Special Libraries and Information Bureaux (ASLIB) is to hold its thirteenth annual conference at Balliol College, Oxford, during the week-end beginning Friday, September 18. Particulars may be obtained from the Secretary of the Association, 16 Russell Square, London, W.C.1. Dr. Cyril Norwood has agreed to accept nomination as president of the Association for 1936-37.

By the courtesy of the Science Museum, South Kensington, several sets of photographs which the Museum exhibited recently, as illustrating developments in science and industry during the past quarter of a century, have been lent to the North East Coast Institution of Engineers and Shipbuilders, and are being exhibited in the Library of the Institution. The sets selected for exhibition are on the following subjects:—(1) Aeronautics and Structure of Matter; (2) Ships and Marine Engineering; (3) Land Transport and Power Production and Transmission; (4) Pumps and Fire Protection and Machine Tools; and (5) Electric Power and Communication.

THE fifteenth International Congress of Medical Hydrology, Climatology and Geology will be held at Belgrade in October. Further information can be obtained from Prof. Milontine Neskovitch, 3 rue Takowska, Belgrade.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:

A technical assistant (male) in a War Department Establishment at Biggin Hill, Kent—The Superintendent, Air Defence Experimental Establishment, Biggin Hill, Kent (March 18).

Technical assistants (male) for a War Department Establishment at Woolwich (physics or engineering)—The Superintendent, Signals Experimental Establishment, Woolwich Common, S.E.18 (March 18).

A Director of Experiments, Chemical Defence Experimental Station, Porton, Wiltshire—The Under-Secretary of State (C. 5), The War Office, S.W.1 (March 20).

Two inspectors in connexion with agricultural and horticultural research—The Secretary, Ministry of Agriculture and Fisheries, 10 Whitehall Place, London, S.W.1 (March 23).

A biochemist to the Animal Diseases Research Association—The Secretary, Moredun Institute, Gilmerton, Midlothian (March 27).

A professor of engineering in the University of Sheffield—The Registrar (March 28).

A civilian technical officer in the Admiralty Technical Pool—The Secretary of the Admiralty (C.E. Branch), Whitehall, London, S.W.1 (March 28).

An assistant lecturer in statistics in the London School of Economics and Political Science, Houghton Street, Aldwych, W.C.2—The Secretary (April 11).

Assistant keepers of zoology, entomology, mineralogy and botany in the British Museum (Natural History)—The Secretary, British Museum (Natural History), London, S.W.7 (May 31).

Civil engineering assistants in the drawing offices of the Admiralty and H.M. Dockyards—The Civil Engineer-in-Chief, Admiralty, S.W.1.

A professor of physics in Raffles College, Singapore—The Secretary, Universities Bureau, 88A, Gower Street, W.C.1.

An electrical engineer to the Government of Palestine for the Public Works Department—The Crown Agents for the Colonies, 4 Millbank, S.W.1.