

avoided teaching for more lucrative careers. He therefore strongly advocated, as soon as the War of 1914-18 ended, a distribution of £2,000,000 to endow and increase salaries of American university staff. This was the scheme under which the Rockefellers added a dollar to every dollar raised for that purpose by any well-established university or college. In the end 170 of them participated.

At this period the Foundation, under Vincent's leadership, was making large benefactions to medical education. It was particularly interested in China. Vincent, after leaving Yale, had travelled in the Orient, and his advice in respect of the support of Peiping Union Medical College was invaluable. Again, a signal gift under his regime was £500,000 for the London School of Hygiene and Tropical Medicine.

Vincent's final activities up to his retirement in 1929 included organizing for the Rockefellers the division of social sciences, in which he was a specialist, and the divisions of natural sciences and international health.

WILLARD CONNELLY.

Prof. B. P. Haigh, M.B.E.

BERNARD PARKER HAIGH, professor of applied mechanics in the Royal Naval College, Greenwich, who died on January 18, was born in 1884. Educated at Allan Glen's School, Glasgow, and afterwards at the University, he was apprenticed to Bruce Peeples, electrical engineers in Edinburgh, where he worked under J. L. la Cour, the inventor of the rotary converter which bears his name. This association took Haigh to Germany and to Sweden, where he obtained much valuable experience. From 1909 he was engaged for two years on the design of steering gears at the Edinburgh firm of Brown Bros., and then became assistant to Prof. Archibald Barr at the University of Glasgow. It was in 1913 that Haigh took the step which was to determine his career, when he became lecturer in applied mechanics at the Royal Naval College, where he succeeded in 1920 to the chair left vacant when Sir James Henderson retired in order to give his whole time to gunnery problems.

At Greenwich, Haigh found himself immediately confronted with a variety of new problems connected with the Royal Navy. He became a scientific adviser to the Paravane Department of the Admiralty. Of his successful work in this connexion, the solution of the problem of lengthening the life of the steel ropes which towed the paravanes in their duty of cutting the moorings of mines may be mentioned. Haigh considered that the very short life of these ropes was due to fatigue caused by resonance brought about by synchronization between the natural periods of vibration of the rope under tension and the eddies thrown off by the rope as it passed through the water. He deduced a formula and was able to increase considerably the life of the ropes. During this investigation Haigh realized, about 1917, that fatigue was greatly accelerated in steels when it takes place in the presence of a chemical reagent. He likewise established that corrosion prior to fatigue has but little effect on the fatigue limit. These were new discoveries of fundamental importance. The

phenomena were rediscovered some ten years later by McAdam and are now popularly known as 'corrosion fatigue', a terminology of which Haigh strongly disapproved on account of the second fact mentioned above. These discoveries accentuated the interest which Haigh had taken, from his student days, in fatigue of metals, and on this matter he became a recognized authority both here and abroad. A large part of Haigh's published work is directly inspired by ideas connected with fatigue, although he wrote many papers on plasticity, welding, fracture and allied topics. He was also the inventor of the Haigh fatigue testing machines which are internationally used in experimental laboratories. Much of his work was of a confidential nature, and he was always busy with some Admiralty problem.

Apart from this Haigh was a very active participant in general scientific affairs. He attended the International Congresses for Applied Mechanics and was present at the recent World Power Congress in America. He was also a member of the British Association Committee on Stress Distribution in Engineering Materials and read several papers before the Association.

At the beginning of the present War, Haigh was selected as scientific adviser to the Engineering Research Laboratory of the Admiralty. At the funeral service in the Chapel of the Royal Naval College, the Chaplain of the Fleet in his encomium stated that Haigh had suggested and helped to perfect the method of overcoming the magnetic mine.

To appreciate Haigh's enormous energy it must be remembered that these activities were in addition to his teaching duties. In teaching as elsewhere Haigh was eminently successful, for he had an unrivalled gift of communicating his own enthusiasm for his subject and a quite uncommon knack of choosing happy and apt phraseology. His loss will therefore be felt by the many Naval officers who have been instructed by him, as well as by his colleagues at the Royal Naval College, who found in him loyalty and friendship.

Haigh married, in 1915, Mildred Cole. They have one son, Ian, who is now on the staff of Sir Alexander Gibb.

L. M. MILNE-THOMSON.

Mr. H. W. Macrosty, O.B.E.

MR. H. W. MACROSTY, president of the Royal Statistical Society, died at his home at Woking on January 19. Mr. Macrosty had been an honorary secretary of the Society for twelve years prior to his election as president in June last. His interest in statistics was derived from his official duties in the Board of Trade, where he was prominently associated with the work on the national census of production from its inception in 1907. His work was essentially that of providing data for economists and statisticians and in providing critical comment on those data. This did not bring him into the limelight which is shed upon those who announce policies or enunciate economic propositions, but as a contribution to national service such work is in no way less important

than that of those who come more prominently to public attention. Only those statisticians with practical contact with industry and trade can properly appreciate the true value of the work of those who produce statistical data.

It was the great merit of Macrosty and his co-workers at the Board of Trade that they concentrated upon accuracy and reliability in the statistical material they collected and which was the basis for the measurement of the industrial production of Great Britain. To the uninitiated a statistical table looks much the same whether drawn up from slipshod material or from data thoroughly sifted and scrutinized. The scrutiny and criticism by the Census of Production Office of the virgin material has been of the greatest importance. As a consequence, it can be truly said that although the volume of official statistical output relating to industry in Great Britain has lagged behind that of a number of others, its quality is such as to afford confidence to those who turn to the various reports for guidance and instruction, and Macrosty played a great part in establishing the confidence felt in the reliability of British official data relating to trade and industry.

To the Royal Statistical Society Macrosty gave unsparingly, both in the capacity of senior honorary secretary for many years and by practical contributions to its *Journal*, while he was the compiler of the attractive volume recording the history of the Society through a hundred years and published at the celebration of its centenary in 1934.

Mr. Eliot Howard

WITH the death of Eliot Howard on December 26 a distinguished ornithologist has passed away.

Howard was one of the notable amateurs for which British science, and especially perhaps British natural history, has always been distinguished. His professional work was with the firm of Stewart and Lloyd, of which he was a director for a number of years. In spite of this, he kept up his interest in field ornithology and published several important books on the subject. His most extensive work was a monograph on the British warblers (1907-1914), which embodied a great number of new observations made by himself on their habits. These observations, together with others on other types of birds, were generalized in his "Territory in Bird Life" (1920).

Though Howard was not actually the originator of the idea of territory and its importance in the life of birds, it was through his work that its importance became generally realized. He published three later studies, including "An Introduction to the Study of Bird Behaviour" (1929) and "The Nature of a Bird's World" (1935), in which his increasing preoccupation with the philosophical bearing of his observations became evident. Many of his friends perhaps regretted this preoccupation, as in their view it interfered with his publishing the vast body of original observations which he had accumulated on many species of birds. However, ornithologists will be glad to learn that his notes have been left by his widow

to the Edward Grey Institute of Field Ornithology at Oxford, where they will be available for students. The Institute now possesses the field notes of all the major British field ornithologists of the last generation—Selous, Coward, Jourdain and Howard.

Howard was an outstanding example of how an amateur worker could achieve results of first-class scientific importance through patience and immense attention to accuracy and personal observation. His death is a great loss to ornithology.

Dr. W. C. Bosanquet

DR. WILLIAM CECIL BOSANQUET, a distinguished London physician and classical scholar, died on January 24 at the age of seventy-four. He was educated at Eton where he was a King's scholar, at Oxford where he gained a first class in Classical Moderations and Lit.Hum. and was elected a fellow of New College, and at Charing Cross Hospital. He qualified B.M. and D.M.(Oxon.) in 1897, and seven years later was elected a fellow of the Royal College of Physicians, before which he delivered the Goulstonian Lecture in 1905, his subject being "The Nature and Treatment of Diabetes Mellitus". He was physician to Charing Cross Hospital, the Brompton Hospital for Consumption, the Victoria Hospital for Children, and the Lock Hospital. During the War of 1914-18, in which he was Captain and Major in the R.A.M.C., he served as consulting physician in the North Western Frontier Force, India. His literary activity, both as editor and author, was considerable. Besides being editor of the *Practitioner* for some years, he was assistant editor of the third edition of "Quain's Dictionary of Medicine" (1902) and editor of the eleventh (1911) to thirteenth (1923) editions of Green's "Manual of Pathology and Morbid Anatomy". In addition to numerous articles in the *Lancet* and *British Medical Journal*, he was the author of "Serums, Vaccines and Toxins" (1904), in the second and third editions of which Dr. J. W. H. Eyre was his collaborator, "The Stomach, Intestines and Pancreas" with Mr. H. S. Clogg, his surgical colleague at Charing Cross Hospital (1909), and "Spirochaetes: A Review of Recent Work with Some Original Observations" (1911). In his last work, written in retirement three years before his death, entitled "Meditatio Medici: a Doctor's Philosophy of Life", he discussed the ancient and modern views of the material universe, the development of man, the physical aspects of consciousness or mind and the principles of voluntary action or conduct.

J. D. ROLLESTON.

WE regret to announce the following deaths:

Eugen Dubois, discoverer of *Pithecanthropus erectus*, on December 16.

Prof. G. Dawes Hicks, F.B.A., emeritus professor of philosophy in University College, London, on February 16, aged seventy-eight.

Dr. A. T. Masterman, F.R.S., formerly superintendent inspector, H.M. Board of Agriculture and Fisheries, on February 10.