

As an educationist Cavenagh had a wide range of interest. His philosophic outlook was early evidenced by his study of "The Ethical End of Plato's Theory of Ideas" which was published in 1909. His educational views were based on carefully thought-out principles; but he was no mere theorist. He was particularly interested in adult education, a member of the council of the British Institute of Adult Education and editor of its journal. He kept closely in touch with current educational developments and problems, and his criticism was always both wise and constructive. His contributions to the "Year Book of Education" and to the *Journal of Education*, as well as to other educational periodicals, were scholarly, judicious and authoritative. He had, perhaps, a particular interest in nineteenth-century English education, and this is evidenced by his admirable editions of the educational writings of James and John Stuart Mill, and of Herbert Spencer. Large-hearted, understanding, sincere, he leaves a

place among his colleagues and friends that will be hard to fill.
H. C. BARNARD.

WE regret to announce the following deaths:

Mr. E. G. Boulenger, formerly director of the Aquarium of the Zoological Society of London, on April 30, aged fifty-seven.

Dr. S. Flexner, For.Mem.R.S., emeritus director of the Rockefeller Institute for Medical Research, New York, on May 2, aged eighty-three.

Count Hermann Keyserling, author of "The Travel Diary of a Philosopher" and works on the psychology of nations, on April 26, aged sixty-five.

General Georges Perrier, member of the Section of Geography and Navigation of the Paris Academy of Sciences, formerly general secretary of the International Union of Geodesy and Geophysics, aged seventy-three.

NEWS and VIEWS

Retirement of Dr. F. H. A. Marshall, C.B.E., F.R.S.

IN 1943 Dr. F. H. A. Marshall officially retired from the readership in agricultural physiology in the University of Cambridge on account of age, but he consented to carry on with the duties during the war period. These duties he relinquished at the beginning of 1946. By the production of his book on "The Physiology of Reproduction" in 1910, and the subsequent edition in 1922, Marshall laid the foundations for much scientific work on this subject both in Great Britain and in the United States: the discovery of the hormones of the anterior pituitary and much of the modern science of endocrinology was stimulated by the publication of his book. In addition, as reader in agricultural physiology at the School of Agriculture, Cambridge, he initiated the application of the science of physiology to the problems of animal production and has stimulated and encouraged many generations of agricultural students to study the animal and the way it works, to the great advantage of the animal-breeding industry. His work has been recognized by a number of academic distinctions and by the award of the Royal Medal of the Royal Society in 1940. It is felt, however, by many of his friends, that some more personal tribute should be paid to him on this occasion, and a fund is, therefore, being set up at the School of Agriculture, Cambridge, in order to make him a presentation, a part of which it is hoped to use for a portrait.

Physical Society and the Société Française de Physique: Holweck Prize and Medal

EARLY in 1945 Prof. E. N. da C. Andrade, then president and now foreign secretary of the Physical Society, on behalf of the Council issued to fellows and friends of the Society an appeal for contributions for the foundation of a prize as a mark of their admiration for, and sympathy with, their French colleagues who had worked strenuously under great difficulties during the German occupation, and as a memorial to Dr. Fernand Holweck, the distinguished director of research at the Institut du Radium in Paris, who had died at the hands of the Gestapo, and to other French physicists who met

their deaths or suffered privation. The sum collected has enabled the Physical Society to establish a Holweck Prize, to be awarded annually for ten years alternately to a French and British physicist for distinguished work in experimental physics, the presentation to the French winners to be made in London and those to the British winners in Paris. The scheme evoked lively interest and profound gratitude in French circles, and the Société Française de Physique, with which intimate co-operation in the selection for the Prize has been sought, has founded a Holweck Medal which is to be presented to each recipient of the Holweck Prize.

The first award of the Holweck Prize has been made to Prof. Charles Sadron, of the Institute of Physics, University of Strasbourg, in recognition of his many researches, notably those on the mechanical properties of liquids. He is, fortunately, one of the survivors of the horrors of the ill-famed Buchenwald concentration camp. The presentation will take place at a meeting of the Physical Society at the Royal Institution on May 16, in the presence of His Excellency the French Ambassador, and the president and other distinguished representatives of the Société Française de Physique; it will be followed by a discourse by Prof. Sadron on "Some Physical Properties of Long-chain Molecules".

University Entries for 1946-47

IN a statement made in the House of Commons on April 30, Mr. G. A. Isaacs, Minister of Labour and National Service, announced the conditions which are to govern entry of students to universities in Britain for the year beginning October 1946. They fall into three sections: preference will be given to those who have served in the Armed Forces or in civilian work of national importance; places in all subjects are to be filled; and those granted deferment from military service will be called up on the completion of their university courses. Universities can apply for release from the Forces of scholars and highly promising students in release groups 1-55, and they may also admit students who have completed three years of national service; the latter will be granted continued deferment to enable them

to complete their studies. Not more than 10 per cent of the places available may be filled by those of age 18-19 recommended for deferment by joint recruiting boards, and other suitable students of that age-group. Medical, dental and veterinary students will in future be dealt with in the same way as other students. Women's colleges are being asked to give preference to those who have been on war service. It is hoped that universities generally will not accept boys younger than eighteen. Mr. Isaacs added that these proposals have been accepted by the vice-chancellors of the universities.

For many months past, this announcement has been anxiously awaited by those responsible for university development in Britain. Since Mr. Isaacs stated that the vice-chancellors of the universities generally approve the scheme, it would seem that university needs have, in the main, been met. It is clearly right that those whose courses have been interrupted, and those who would have entered the universities had the War not intervened and diverted them to some form of national service, should have preference in the competition for places. But without studying the data on the possible number of entries, it is not possible to assess the wisdom of fixing on the figure of 10 per cent for the maximum number of places available for schools. It is probably all to the good, however, that the entry of youths of less than eighteen should be discouraged; they will thus be able to enter the universities at a more mature age and with a period of service intervening between their school and university studies. The proposal to open up all subjects again will be widely welcomed; there has been a serious break in the output of students of the humanities which is likely to show its effect in the teaching profession for some years to come, and indirectly it has militated against that broad cultural education which should characterize university training.

Series of Polynomials

IN many problems of pure and applied mathematics it is required to express a given function in terms of certain polynomials, such as those associated with the names of Legendre and Hermite. The general theory of all polynomials that can be used in this way engaged the attention of several mathematicians, including Prof. J. M. Whittaker of Liverpool. In the dark days of 1942-43 Major Whittaker, as he was then, found himself stationed in the vicinity of the University of Cairo. Stimulated by contact with the active mathematicians of that University, he started to deliver a course of lectures on the subject of his peace-time research. The course was cut short when he was transferred to another theatre of war. The lectures delivered were edited by Prof. Mursi, of the Fouad I University, Cairo, and published in pamphlet form by the Faculty of Science of that University. They deal with simple and other basic series, Cannon series, series effective on a circle, representation near a point, algebraic theory (using matrices), uniqueness, convergence, integral functions, and successive derivatives.

Resistance Welders and the Electricity Supply Industry

IN a recently published paper on this subject (*J. Inst. Elec. Eng.*, 92, Part 2, No. 30; Dec. 1945) the author, R. B. Giles, is primarily concerned with the effect of the a.c. resistance welder upon the networks

of public supply authorities and the problem of securing an equitable revenue for the service rendered to the user. To that end, the electrical characteristics of the welding machine are detailed, together with some particulars of experience and consumption of energy in the metal trades, both of Great Britain and of the United States. There is a brief reference to the D.C. capacitance-storage welder, which is of comparatively recent development, and some details of the energy used by this type of machine are given. Proposals are made for a standard specification for the use of welder manufacturers and for the more satisfactory guidance of the supply authority and the user. The possibilities of a special tariff for welder consumers are also discussed.

Society for Endocrinology

CONTRIBUTORS to the *Journal of Endocrinology* have recently taken the initiative in the formation of a Society for Endocrinology, the object of which is to promote the advance of endocrinology by observational, experimental and clinical studies. The Society was founded at an inaugural meeting held at Guy's Hospital, London, on April 26, when the following elections were made: *Hon. Secretary*, Dr. S. J. Folley; *Hon. Treasurer*, Dr. C. W. Emmens; *Hon. Editor of the Society's Proceedings*, Prof. S. Zuckerman; *Members of Committee*, Dr. P. M. F. Bishop, Dr. A. S. Parkes, Mr. P. C. Williams, Prof. F. G. Young. In addition to ordinary meetings at which original scientific communications will be presented, the Society hopes to organise from time to time symposia on selected topics in the field of endocrinology. The address of the Hon. Secretary is: c/o The National Institute for Research in Dairy-
ing, Shinfield, near Reading.

Society for the Study of Evolution

A Society for the Study of Evolution was formed on March 30, 1946, on the occasion of the meeting of the American Association for the Advancement of Science at St. Louis. The object of the Society is the promotion of the study of organic evolution and the integration of the various fields of biology, such as taxonomy, palæontology, genetics, that are interested in evolution. The elected officers are: *President*: Dr. George G. Simpson; *Vice-Presidents*: Prof. Ernest B. Babcock, Prof. A. E. Emerson, and Prof. J. T. Patterson; *Secretary*: Dr. Ernst Mayr; *Treasurer*: Mr. K. P. Schmidt; *Council*: Prof. R. Chaney, Prof. Th. Dobzhansky, Prof. E. R. Dunn, Prof. G. Jepsen, Prof. H. J. Muller, and Prof. Sewall Wright. Communications should be addressed to the secretary, Dr. Ernst Mayr, American Museum of Natural History, Central Park West at 79th Street, New York 24, New York.

Society of Glass Technology

ACCORDING to the report for 1945 of the Council of the Society of Glass Technology, presented at the annual general meeting held at Sheffield on April 25, there are now an Indian Section and five local sections, in addition to the parent body. The total membership exceeds one thousand, distributed through thirty-five countries. Prof. H. Moore retired from the presidency, after holding office for two years, and was succeeded by Mr. Geoffrey I. C. Marchand, director of the Glass Manufacturers' Federation. Prof. W. E. S. Turner, honorary general secretary, will retire on May 31, and Dr. J. H. Partridge, of the Research Laboratories