

of the Zoological Club of the Linnean Society, or of limitation of the members of the new society to fellows of the Linnean Society. But there was overlapping of interest, and Mr. Vigors, who was the first secretary and last chairman of the Zoological Club, was the first secretary of the Zoological Society. The club was dissolved, apparently, in 1829, by which time most of its members had joined the new society.

A house was obtained in Bruton-street for the new society, where meetings were held, a museum established, and a certain number of living birds and mammals kept. In the course of 1826 negotiations with the Crown were successfully conducted for the use of part of Regent's Park, and the latter part of 1826 and 1827 were occupied with the laying-out of the new Zoological Gardens. Early in 1828 there were a few pinioned wild duck on a lake, an emu, an otter, some silver-haired rabbits and several birds of prey. It is reported that on February 25, 1828, there were four visitors to the gardens, but under what conditions they were admitted is not known. On April 27, 1828, a superintendent was appointed, and it was decided that visitors should be admitted on the presentation of a voucher from a fellow and the payment of 1s. Considerable progress was made during the remainder of 1828 in stocking and laying out the gardens. The first report of the council appeared in 1829, when the society received its Royal Charter, and the oldest voucher for admittance that has been traced was signed by a fellow who did not join the society until 1829.

EXHIBIT OF OPTICAL INSTRUMENTS AND PRODUCTS

UNDER the joint auspices of the Optical Society of America and the Bureau of Standards there will be an exhibit of optical instruments and optical products in the buildings of the bureau at Washington, D. C. This exhibition will be open from 9:00 to 4:30, October 31, November 1, 2 and 3 and for one evening session to be designated later by the Optical Society.

It is the desire of the committee to include in this exhibit all the newer instruments which have been developed by scientific investigators and our commercial firms. Research workers are particularly invited to contribute exhibits designed to illustrate the progress of their work and their attention is called to the fact that such an exhibit is often more useful than the presentation of a formal paper for emphasizing the significance and importance of an investigation. All American made instruments or products in which the application of optical principles is an important part in design, construction or use are eligible for exhibition. The following lists will serve to partially indicate the contemplated scope of the exhibit: optical and colored glasses, fused silica, optical components, spectacle lenses, ophthalmic instruments, binoculars, microscopes, photographic apparatus, colored photographic processes, motion-picture apparatus, astro-

nomical instruments, interferometers, spectral apparatus, metrological instruments, surveying and nautical instruments, search lights, telescopic gunsights, photometric apparatus, optical pyrometers, colorimetric instruments, vacuum discharge tubes, special systems of illumination, etc.

I. C. GARDNER, *Chairman,*

Committee on Optical Instruments Exhibit

BUREAU OF STANDARDS

THE PLACE OF SCIENCE IN EDUCATION

THERE has just been published a report of the committee of the American Association for the Advancement of Science on "The Place of Science in Education."

This report is organized under seven headings as follows and the summarizing sentence is given for some of them:

I. The Committee's Understanding of its Functions.

II. The Search for Enduring Facts and the Growth of Confidence in the Guidance of Scientific Truth. Science instruction both in school and out needs better organization, more effective cooperation to make even the health knowledge now available function more completely in the lives of people generally.

III. Obligations of Science Knowledge. Science, not to be discredited, must devise effective ways and means of developing, in its devotees first and in the whole people ultimately, a sense of moral obligation that will prevent the newly acquired knowledge and method of science serving base ends.

IV. The Science Subjects in Educational Programs. The hopeful element is that the stereotyped science courses of the college are being replaced in the earlier years at least by new types, tentative at present but frankly experimental, looking toward a more satisfactory college science sequence. The whole problem needs careful study.

V. Summaries of Types of Specific Studies Relating to the Educational Uses of Science. The above represent but a beginning in the application of the objective scientific method to the problems of science teaching. Such investigations must be multiplied and verified by those truly interested in the scientific solution of such questions.

VI. Those who Teach Science. A more thorough-going preparation in the fundamentals of science is needed by all who aspire to teach it.

VII. Those who have Developed Science. Science as method is quite as important as science subject-matter and should receive much attention in science instruction.

The committee offers the following recommendations:

(a) That some organization of national scope such as the United States Bureau of Education, or the Research Division of the National Education Association, be asked by this committee to undertake a comprehen-

sive and intensive study of the situations, tendencies and needs of science instruction in educational systems.

(b) That the services of a field secretary be secured, to work with existing agencies, to distribute information on research in science education, to stimulate further research, to operate as a sort of clearing-house agent and to continue the organizing of new groups of science teachers, writers for popularization of science, etc. This field secretary should work under the guidance of the Committee on the Place of Science in Education, or under the guidance of a national council of science teachers as soon as such a council is formed.

(c) That a national council of science teachers be organized to advance science teaching, to increase public appreciation of science and to secure for science teachers increased facilities and a wider usefulness. The services of a field secretary would be very useful in the organization of such a council.

A copy of the full report will be mailed on request sent to Elliott R. Downing, School of Education, University of Chicago, Chicago, Illinois.

SCIENTIFIC NOTES AND NEWS

DR. WILLIAM WALLACE CAMPBELL, director of the Lick Observatory and president of the University of California, received the honorary degree of doctor of science from Columbia University on June 5.

AMONG the honors listed on the occasion of the birthday of the King of England is a knighthood conferred on Captain George Hubert Wilkins, who with Lieutenant Carl B. Eielson recently flew from Alaska to Spitzbergen.

DR. G. H. HARDY, professor of geometry in the University of Oxford, and Dr. F. G. Hopkins, professor of biochemistry in the University of Cambridge, have been made foreign members of the Society of Sciences of Göttingen.

THE first award of the Dalby memorial prize, for the best original work in otology during the previous five years, has been made to Dr. Otto Mayer, of Vienna. The award is in the hands of the council of the Royal Society of Medicine, acting on the recommendation of the president and vice-president of the section of otology.

PROFESSOR LIONEL WILLIAM LYDE, professor of geography in the University of London, has been appointed a foreign member of the Hungarian Academy of Science.

DR. MAX PLANCK, professor of physics in the University of Berlin, celebrated his seventieth birthday on April 23. To commemorate this occasion his friends and colleagues have founded a gold medal to be awarded for distinguished work in theoretical physics.

PROFESSOR KARL VON NORDEN, professor of medicine at the University of Frankfurt, and Professor Friedrich Müller, professor of medicine at the University of Munich, will celebrate their seventieth anniversaries in September.

EMILE PICARD, professor of mathematics in the University of Paris, celebrated in May the fiftieth anniversary of his scientific career.

PROFESSOR HERMANN T. VULTÉ, who retires in June as professor of household chemistry in Teachers College, Columbia University, was tendered a farewell luncheon by his colleagues at the Columbia faculty house, on which occasion a gold-banded ebony cane, suitably inscribed, was presented to him. By action of the trustees Professor Vulté will continue to occupy his research laboratory.

PROFESSOR EVAN THOMAS, one of the oldest professors at the University of Vermont, retires this June under the provisions of a Carnegie pension, having completed over a quarter of a century of service at the university.

At the annual meeting of the American Society for Clinical Investigation, held in Washington, D. C., on April 30, Dr. Jonathan C. Meakins, Montreal, was elected *president*; Dr. James L. Gamble, Boston, *vice-president*; Dr. George A. Harrop, Jr., Baltimore, *treasurer*, and Dr. Joseph T. Wearn, Boston, *reelected secretary*.

At the anniversary meeting of the Linnean Society of London on May 24 the following were elected officers for 1928-29: *President*, Sir Sidney Harmer; *vice-presidents*, Dr. W. T. Calman, H. N. Dixon, H. W. Monckton and Dr. E. J. Salisbury; *treasurer*, H. W. Monckton; *secretaries*, Dr. G. P. Bidder (zoology) and J. Ramsbottom (botany).

PROFESSOR LEO EDWARD MELCHERS, head of the department of botany and plant pathology, Kansas State Agricultural College, who is on leave in Egypt, was recently made chief mycologist in charge of the section of mycology in the Ministry of Agriculture. During his stay in Egypt he is undertaking the reorganization of the mycological work for the Egyptian government. He was recently made chairman of a committee on plant quarantine and inspection work in Egypt, the plan being to improve the present service and facilities for conducting the work.

DR. B. T. DICKSON, until recently professor of plant pathology of McGill University, Canada, has been appointed chief of the division of economic botany of the Commonwealth Council for Scientific and Industrial Research of Australia, which division he is now in process of organizing. Dr. Dickson originally went to Australia to take charge of the plant patho-