SCIENTIFIC EVENTS THE HERSCHEL CENTENARY

WILLIAM HERSCHEL died 1822 August 25. A hundred years later a party of Herschels of the third, fourth and fifth generations, astronomers and members of the Slough Urban Council made a pious pilgrimage to Upton Church, Slough, where he lies buried; and, after lunching together at the Crown Hotel, which once formed part of William Herschel's property, proceeded to Observatory Housein which two of his granddaughters still live,where they saw many manuscripts and the other relics of the great astronomer. They saw, for instance, the copy of Locke "On the Human Understanding," the first English book he purchased in order to study our language; and they saw also Caroline Herschel's "Bills and Receipts of My Comets," which was her manner of labeling papers relating to her cometary discoveries; they saw a piece of the old 40-foot tube, and one of the 4-foot mirrors made for it, and discussed with Miss Herschel the possible whereabouts of the other mirror, which may be buried in the garden, and still to be excavated. It is wonderful to think how Herschel's work, old though it is, touches our modern work almost at every point. If we take the half-dozen great advances mentioned by Professor Eddington in his centenary address to the Royal, we are reminded by the measurements of stellar parallax how Herschel's attempts in this direction led to the recognition of binary stars; the discovery of Neptune depended essentially on Herschel's previous discovery of Uranus; one of the early uses made of the spectroscope was to confirm Herschel's view of the gaseous nature of nebulæ; in photography the first glass negative was taken by his own son, and the subject was the scaffolding of his great 40-foot, and even in our modern advances the two-stream hypothesis is only a development of Herschel's investigation of the sun's movement among the stars; and the measurement of the disc of Betelgeuse reminds us not only of his careful scrutiny of objects for any signs of a disc, but of his investigations in optics and his splendid engineering work in the making of great telescopes. How he would have enjoyed himself in the great factory at Mt. Wilson, or discussing problems of cosmogony with the mathematicians of today! Undoubtedly he was a great man, and it was fitting that his memory should be thus honored, so soon after the centenary of the society which had the honor of having him for its first president.—From an Oxford Note-Book in *The Observatory*.

AMERICAN ORNITHOLOGISTS' UNION

THE fortieth stated meeting of the American Ornithologists' Union will convene in Chicago, from October 24 to 26. The public meetings will be held in the lecture halls of the Field Museum of Natural History, from 10 A.M. until 4:30 P.M. each day.

The reading of papers will form a prominent feature of the meetings. All classes of members are earnestly requested to contribute, and to notify the secretary before October 15, as to the titles of their communications, and the length of time required for their presentation, so that a program for each day may be prepared in advance.

Business sessions will be held at the University Club of Chicago. Public sessions will be held in the Field Museum of Natural History, Roosevelt Road and Lake Michigan. Hotel headquarters will be at the Auditorium Hotel. According to custom, a dinner will be held on Wednesday evening, October 25, for fellows, members, associates and guests. Luncheon will be served daily at 1 P.M. in the museum, October 25, 26, 27. On Friday, October 28, an excursion will be conducted to the Indiana Sand Dunes, fifty miles southeast of Chicago. Particulars in regard to these features will be found at the registration desk on the opening day.

An exhibition of bird paintings and photographs will be held in connection with the meeting, to which every one is invited to contribute. Original paintings, drawings and sketches in color or black and white are desired, not only from the artists, themselves, but from owners who may be willing to loan them.

PUBLIC LECTURES AT THE CALIFORNIA ACADEMY OF SCIENCES

THE California Academy of Sciences announces a course of six free public lectures on the general subject of "Science and Health," to be given at three o'clock on Sunday afternoons, in the auditorium of the Academy's Museum in Golden Gate Park, San Francisco, as follows:

October 1. The Experimental Method in Animal Psychology: Dr. Samuel J. Holmes, professor of zoology, University of California.

October 8. Equilibration of Animals and Aviators: Dr. Samuel S. Maxwell, professor of physiology, University of California.

October 15. The Use of Animals in the Diagmosis and Prevention of Disease: Dr. Carl A. L. Schmidt, associate professor of biochemistry, University of California.

October 22. Animal Experimentation: Dr. T. D. Beckwith, professor of bacteriology, University of California.

October 29. Animal Foes of the Human Body and How to Centrol Them: Dr. Charles A. Kofoid, professor of zoology, University of California.

November 5. What Animal Experimentation Has Done for Childhood: Dr. E. C. Fleischner, clinical professor of pediatrics, University of California.

These lectures are all masters in their respective subjects. What they have to say will not only be authoritative and up to date, but will be presented in a popular and convincing manner. These lectures, which will be illustrated, are offered by the California Academy of Sciences, free to the public, as one of the several educational activities in which it is engaged.

THE SILLIMAN LECTURES OF YALE UNIVERSITY

THIS year's Silliman Memorial Lectures at Yale University will be delivered by Dr. August Krogh, professor of zoophysiology in Copenhagen University. Professor Krogh has taken for his general topic "The Anatomy and Physiology of Capillaries," and will speak on the following subjects on the dates given:

October 5: "The Distribution and Number of Capillaries in Selected Tissues. The Evidence of Their Independent Contractility.

October 6: "The Histological Structure and Innervation of the Capillary Wall."

October 9: "The Reactions of Capillaries to Stimuli. The Hormonel Control of Capillary Circulation."

October 10: "The Mechanism of Some Capil-

lary Reactions, especially in the Human Skin." October 11: "The Exchange of Substances through the Capillary Wall."

October 12: "Some Problems of Capillary Physiology and Pathology."

Professor Krogh has a large amount of entirely new material to present which should prove of importance to all those branches of science which concern the circulation of the blood. At the time of the award of the Nobel Prize to Dr. Krogh in 1920 his work on capillaries was regarded as only beginning, and since that time his researches in this field have been pushed ahead with rapidity and success. The results of these researches will be made public for the first time in the Silliman lectures.

In a recent article in *The Scientific Monthly*, Dr. W. R. Miles, of the Nutrition Laboratory of the Carnegie Institution of Washington, gave the following résumé of Dr. Krogh's career to date:

Dr. Krogh is scarcely forty-five years old. He received his educational and scientific training in Denmark and is a son of whom that country can well be proud. For a number of years after receiving his degree and serving as laboratory assistant to Professor Christian Bohr no suitable teaching or research position opened to him in Denmark. However, he refused to accept such a position in any other country. He made two expeditions to Greenland, the first to study the tension of carbon-dioxide in ocean water and the second to investigate the respiratory metabolism of the Eskimos. Thus, without any laboratory facilities, he literally plunged into research. A study on the expiration of free nitrogen from the body was recognized as so important as to receive the Seegen Prize of the Imperial Academy of Sciences in Vienna. He was appointed a lecturer in physiology under the science faculty of the Copenhagen University in 1908 and was provided with a small laboratory in the fall of 1910. It is in this laboratory that most of his scientific work has been done. A visitor will gain the impression that his laboratory facilities are rather meager as regards both room and equipment and that he does not have adequate assistance. Certainly it would be a most worth while investment to provide such a man with all the assistance he can comfortably direct. His researches have covered a wide range and have been singularly concise and complete. He is a master technician, a