Californian societies did not engross his whole attention. He was a member of the Wilson Ornithological Club, the Biological Society of Washington and the American Society of Mammalogists, and fellow of the American Association for the Advancement of Science and the American Ornithologists' Union. He was present at meetings of the Union whenever possible, and was ever closely in touch with A. O. U. concerns. The "Ten Year Index to the Auk (1921–1930)" made its successful appearance in 1934, largely due to Mr. Swarth's painstaking editing.

In 1927 Mr. Swarth became curator of the Department of Ornithology and Mammalogy of the California Academy of Sciences, a position he held until his death. On going to the academy, he immediately gave his attention to the study of the institution's collection of Galapagos birds, and during the next few years he was occupied here and in Europe studying the problems presented by these birds. His solutions are to be found in his "Avifauna of the Galapagos Islands."

The work he had done on Galapagos material and the knowledge of the islands he acquired during a visit he paid there in 1932 on Mr. Templeton Crocker's yacht Zaca gave him an appreciation of the importance of protecting the various forms of animal and plant life found there. After some fruitless correspondence he finally got into communication with Robert T. Moore, of Los Angeles, whose knowledge of Ecuador and its people placed him in a position to bring to a successful conclusion the efforts for legislation to provide adequate protection for the fauna of the islands.

Mr. Swarth's labors in ornithology and mammalogy failed to crowd out his human interests. His knowledge of music and art and literature and his quiet humor made him a delightful conversationalist. He was slow in making new friends, but his sincerity and kindness, his fairness and dependability won him the warm regard of all who knew him.

M. E. DAVIDSON

#### RECENT DEATHS

Dr. Lafayette B. Mendel, Sterling professor of physiological chemistry at Yale University, died on

December 9 in his sixty-fourth year. Mrs. Mendel died less than a month ago.

Walter Butler Harris, professor emeritus of geodesy in the engineering faculty of Princeton University, died on November 21 at the age of seventy years.

Dr. Charles Richet, the physiologist, professor of medicine in the University of Paris, a member of the French Academy of Medicine and the Paris Academy of Sciences, died on December 3 at the age of eighty-five years. Dr. Richet was awarded in 1913 the Nobel prize in physiology and medicine.

The death is announced of Professor Etienne, of Nancy, known for his studies in neurology, with special reference to poliomyelitis.

#### **MEMORIALS**

Two stone lanterns, symbolizing the Japanese conception of "eternal light," were presented to the Thomas Alva Edison Foundation on December 2 on behalf of the Electrical Association of Japan. The presentation was made by Renzo Sawada, Japanese Consul General, at the Edison Library and Laboratory in West Orange, N. J. The lanterns are more than six feet high and weigh more than 4,300 pounds each. They will remain in the custody of the foundation and will be set up temporarily in the museum adjoining the library.

PLANS are being made at Greenock, Scotland, for the celebration in January of the bicentenary of the birth of James Watt. The Watt anniversary lecture will be delivered on January 17 by Lord Rutherford and a memorial service will be held in the Town Hall on January 19, the date of Watt's birth. The schools will present a Watt pageant, and a memorial plaque will be unveiled in the Watt School of Engineering and Navigation, which stands on the site of the house where Watt was born.

THREE streets in Paris have been recently named, respectively, after M. Grancher, late professor of pediatrics in the University of Paris; M. Dejerine, the successor of Charcot, and M. Emile Roux, the former director of the Institut Pasteur.

## SCIENTIFIC EVENTS

# SUBSTITUTION OF THE PRACTICAL ABSO-LUTE SYSTEM OF ELECTRICAL UNITS FOR THE EXISTING INTERNA-TIONAL SYSTEM<sup>1</sup>

In accordance with the authority and responsibility placed upon it by the General Conference of Weights

<sup>1</sup> Approved by the International Committee of Weights and Measures at its meeting in October, 1935, at Sèvres, France.

and Measures in 1933, the International Committee of Weights and Measures has decided that the actual substitution of the absolute system of electrical units for the international system shall take place on January 1, 1940.

In collaboration with the national physical laboratories, the committee is actively engaged in establishing the ratios between the international units and the corresponding practical absolute units. The committee directs attention to the fact that it is not at all necessary for any existing electrical standard to be altered or modified with a view to making its actual value conform with the new units. For the majority of engineering applications the old values of the international standards will be sufficiently close to the new for no change, even of a numerical nature, to be required. If for any special reason a higher precision is necessary, numerical corrections can always be applied.

Table I gives a provisional list of the ratios of the international units to the corresponding practical abso-

TABLE I

1	Ampere	internationa	1 = 0.999	9	Ampere Absolute
1	Coulomi	b "	= 0.999	9	Coulomb "
1	Ohm	"	= 1.000	5	Ohm "
1	Volt	"	= 1.000	4	Volt "
1	Henry	"	= 1.000	5	Henry "
1	Farad	"	= 0.999	5	Farad "
1	Weber	"	= 1.000	4	Weber "
1	Watt	"	=1.000	3	Watt "
1	Joule	"	= 1.000	3	Joule "

lute units, taken to the fourth decimal place. Since differences affecting the fifth decimal place exist between the standards of the international units held by the various national laboratories and also because all the laboratories which have undertaken determinations of the values of their standards in absolute measure have not yet obtained final results, the committee does not consider it desirable for the present to seek a higher precision. At the same time it hopes that it will be possible to extend the table of these ratios with a close approximation to the fifth decimal place well before the date fixed for the actual substitution of the practical absolute system for the international system.

### REORGANIZATION OF THE WASHINGTON HEADQUARTERS OF THE FOREST SERVICE

REORGANIZATION of the Washington headquarters office of the Forest Service and reassignment of a number of staff members has been announced by F. A. Silcox, chief of the service.

The reorganization involves consolidation of the functions of eight former branches into four major groups covering National Forest administration, state and private forestry cooperation, operation and information and research. Land acquisition, a Forest Service function for many years, is provided for in a separate unit, as are all activities in connection with Emergency Conservation Work.

The grouping of divisions having to do with associated functions will form a more compact organization. It is designed to handle more effectively the greatly expanded work the Forest Service has been called upon to carry out in connection with emergency conservation activities.

Under the new plan, more adequate provision has

been made for taking care of wildlife management on the national forests, recreation, personnel management and certain other functions formerly handled as part of the work of other branches. Reorganization of the ten regional offices of the Forest Service has also been effected.

Earle H. Clapp has been appointed associate chief of the service; E. A. Sherman as assistant chief and adviser to the chief, and Earl W. Loveridge assistant chief on Mr. Silcox's staff. R. F. Hammatt will serve as assistant to the chief. The Division of Fiscal Control, which is an independent audit unit, is headed by H. I. Loving.

C. M. Granger has been named assistant chief in charge of national forests. Under Mr. Granger's general direction are the Division of Fire Control and Improvements, Timber Management, Range Management, Recreation and Lands, Engineering, and a new Division of Wildlife Management. Before his present assignment Mr. Granger was regional forester at Portland, Ore., then director of the forest survey, and later was placed in charge of the Forest Service's part of the Civilian Conservation Corps program.

To head the state and private forests group, Earl W. Tinker, now regional forester in charge of the north central national forest region with headquarters at Milwaukee, is being transferred to Washington as as assistant chief of the Forest Service. This group will include the division of state forest purchase and regulation, which will handle cooperation with state agencies in the purchase and management of land for state forests contemplated under the recently enacted Fulmer bill; the division of forest code which is responsible for cooperation with industries and private timberland owners in promoting forest conservation; and the division of state cooperation, which cooperates with the states in organized fire protection and in production and distribution of trees for farm planting under the Clarke-McNary Act of 1924.

Assistant Chief Earl W. Loveridge, appointed to a staff position, has been assigned as acting head of the operation and information group, including the divisions of operation; information and publication, and personnel management.

Acting in charge of research is R. E. Marsh, with the divisions of silvics, forest economics, range research and forest products under his general supervision.

L. F. Kneipp, formerly in charge of the branch of lands, has been placed in charge of acquisition, the unit which handles land planning activities and the program for purchase of lands for national forest purposes.

Fred W. Morrell, who headed the former branch of public relations, and was, previous to that assignment,