A memorial resolution to the late Dr. Marshall A. Howe, director, was adopted by the board before the close of the meeting, as well as a resolution honoring Dr. Lewis Rutherfurd Morris, a member of the board who died toward the end of the year.

Henry W. De Forest, who has been president of the garden since 1928, was reelected, and Henry De Forest Baldwin was reelected vice-president.

ANNUAL REPORT OF THE SECRETARY OF THE SMITHSONIAN INSTITUTION

IN the annual report for 1936 of Dr. Charles G. Abbot, secretary of the Smithsonian Institution, which has now appeared, he points out that results have been especially encouraging in two fields—the correlation of solar radiation with the weather and the study of the effects of light on plant growth. One was the apparent proof that short-interval changes of the heat output of the sun, such as run their courses in a few days, are of major influence on the weather for the ensuing two weeks or more. Investigators of the U. S. Weather Bureau have agreed with him, Dr. Abbot reported, that investigation of this effect offers reasonable promise of a method of forecasting some features of the weather for two weeks or more in advance. Progress also was reported by Dr. Abbot in the development of his 23-year-cycle weather hypothesis. While much more work must be done in working out the details, he states that certain large and prolonged features, like the great drought in the Northwest, seem to be clearly predictable. Another development has been the working out of a sensitive and quick-acting spectroscopic method for measuring carbon dioxide in the air. By this method the respiration and carbon dioxide assimilation of a single grain of wheat in its germination is readily observed.

Nearly half a million specimens were added to the collections of the National Museum, mostly as gifts or from Smithsonian expeditions. One of these was the Richard K. Peck collection of ethnological material from the Negritos and Papuans of Dutch New Guinea, the Dyaks of Borneo and the Jivaro of Ecuador. In biology there was an accession of 465 mammals from Asia, Africa and South America, obtained by exchange with the Field Museum of Natural History. In geology a collection of Chilean minerals, including six new varieties, was obtained. The airplane *Winnie Mae,* flown by Post and Gatty around the world, was added to the arts and industries collection.

The Bureau of American Ethnology continued its researches at the recently discovered site of Folsom man in Colorado, the earliest known human settlement in North America. Archeological discoveries were made in Honduras by a joint Smithsonian-Peabody Museum expedition. A culture level was found that is apparently ancestral to that of the Maya. Among ethnological investigations were studies of the Timucua and the Indians of Hudson's Bay, Canada, the Mission Indians of California, the Shoshone, Bannock and Gosiute of Utah, Nevada and Idaho and the Iroquois of Canada.

The Smithsonian's International Exchange Service acts as the official United States agency for the exchange of scientific publications with foreign countries. During the past year this exchange involved the handling of over half a million packages.

At the National Zoological Park the outstanding event of the year was the beginning of construction of three new buildings under a grant from the Public Works Administration. These are a building for small mammals and great apes; one for elephants, rhinoceroses and hippopotamuses, and a new wing for the bird house. Over two million visitors went to the park during the year, including groups from 579 schools.

The Smithsonian Astrophysical Observatory continued to record the variations in the sun's heat at its three mountain stations, in California, Chile and Egypt. A new method of distinguishing unfavorable sky conditions was developed during the year, which will lead to even greater accuracy in measuring the sun's variability.

Besides the usual scientific publications, a weekly radio broadcast on the activities of the institution has been put on the air by the Office of Education in cooperation with the National Broadcasting Company.

THE CHARLES HAYDEN FOUNDATION

THE late Charles Hayden, of New York City, left his entire estate, estimated at about $50,000,000, with the exception of several specific bequests, to establish The Charles Hayden Foundation for the education of boys and young men and the advancement of their "moral, mental and physical well-being," and for other purposes.

A gift of $1,000,000 is made to his alma mater, the Massachusetts Institute of Technology, and outright bequests amounting to $647,000 to various friends. A trust fund of two million dollars is left to his brother, Josiah Willard Hayden, of Boston; a $500,000 trust fund to a friend, and three other small trusts for friends and employees are established. In each case the principal of these trusts reverts eventually to the foundation.

The objects of the foundation are given as follows:

1.—To assist needy boys and young men.

2.—To assist in charitable and public educational purposes for the moral, mental, physical and intellectual well-being, uplifting and upbuilding of boys and young men of this country.