The election of the following officers for 1937 was announced: *President,* G. A. Elliott, Department of Agriculture, Ottawa, Canada; *Vice-president,* Miss Emma Sirrine, Bureau of Plant Industry, U. S. Department of Agriculture, Washington, D. C.; *Secretary-Treasurer,* W. A. Davidson, Bureau of Plant Industry, U. S. Department of Agriculture, Washington, D. C.

SCIENTIFIC EVENTS

HABITAT GROUP OF EMPEROR PENGUINS AT THE FIELD MUSEUM

A HABITAT group of rare emperor penguins, composed of specimens collected by Admiral Richard E. Byrd on his last expedition to the Antarctic (1935), was opened to public view at the Field Museum of Natural History on July 7.

The specimens are a gift to the museum from the Chicago Zoological Society, which obtained them from Admiral Byrd. They were taken to Chicago alive and were for some time resident at the society's zoological gardens at Brookfield. However, they subsequently died of a respiratory disease. As the best means of preserving them in the semblance of life, the Zoological Society presented them to the museum, where they now appear, mounted in lifelike attitudes amid a reconstruction of their natural environment in "Little America."

The group was planned and prepared under the direction of Rudyerd Boulton, assistant curator of birds. John W. Moyer, staff taxidermist, mounted the birds, and the scenic background is the work of Charles A. Corwin, staff artist, and Arthur G. Rueckert.

The emperor penguins are the largest and rarest of all penguins, according to Mr. Boulton, who writes:

> They are found only at the earth's southern extremity. They stand from three and one half to four feet tall, and weigh on the average about 73 pounds, but large specimens have been known to reach as much as 94 pounds. The average temperature of the region they inhabit is 50 degrees below zero. The birds are flightless, using their small highly specialized wings principally to aid them in swimming. Usually they walk in an upright position, but when in a hurry they glide over the ice and snow on their stomachs, using both feet and wings to assist them in locomotion. Their average life span is about 34 years. They have few enemies, although they are preyed upon to some extent by whales and seals. Because of the rarity of their contacts with men, they display no fear, and have been found by explorers to be remarkably tame.
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> One of the most interesting things about the emperor penguins is their unique method of incubating their young. The eggs are laid during the long Antarctic night, only one to a female. After an egg is laid, it is rolled on top of the bird's foot, and a flap of loose skin folds over it to protect it and incubate it. When the bird is tired of carrying the egg thus, it rolls it off the foot, and immediately a number of others rush up to roll it on theirs. Both males and females participate in this transference of eggs, and when finally hatching occurs it is as likely to be while the egg is in custody of a male as a female. In the great majority of cases the egg is probably completely lost to its own parents, and the chick, when hatched, likewise probably seldom comes into the care of its own progenitors. The chicks, in their earliest stages, are, like the eggs, cared for by being folded in the skin flaps above the adults' feet. Because of the frequent transfers of both eggs and chicks from one adult to another a great many of the eggs are broken, and many of the chicks killed. The mortality among the young is estimated at 77 per cent.

THE DUST BOWL AREA

ONLY about half the land in the Southern Plains region—the area called the "Dust Bowl" because of recent spectacular wind erosion—has been seriously eroded, according to a survey by the Soil Conservation Service covering 25,000 square miles in twenty counties of Texas, Kansas, Colorado and Oklahoma.

A preliminary report, covering 15,810,885 acres, shows that approximately 7,091,000 acres, or about 43 per cent. of the surveyed area, is suffering only slightly from wind erosion, with a considerable area completely unaffected. Approximately 8,710,000 acres are affected to an extent regarded as serious. Included in the survey were 16,805 farms valued at $189,876,291.

In announcing the preliminary results of the survey, H. H. Bennett, chief of the service, pointed out that in the Southern Plains country, as elsewhere, there are certain areas unfitted by nature for cultivation. Also in this region, as in all other regions, unwise land use and ill-advised farming practices have contributed to the impoverishment of other areas of good crop land. The results of this survey indicate clearly, however, that the Southern Plains is not yet a desert by any means and that the opportunity for agriculture there is far from ended. Nevertheless, the Southern Plains farmer must quickly adapt himself to natural conditions, if wind erosion is not to spread throughout most of the region. Conservation farming, involving precautionary crop planning, contour tillage and other measures of soil and moisture conservation must be adopted.

Prior to the survey just completed, the actual extent of erosion damage in the area was not known, although in the summer of 1934 the service conducted a nation-wide erosion reconnaissance survey, which included in its broad appraisal of erosion damage the territory

comprising the Southern Plains wind erosion area. This original survey, however, was conducted in state and county units and did not single out the wind erosion sector for special attention.

The new survey covered Bent, Prowers and Baca Counties in Colorado; Hamilton, Stanton, Grant, Morton, Stevens and Seward Counties in Kansas; Cimarron, Texas and Beaver Counties in Oklahoma, and Dallam, Sherman, Hansford, Ochiltree, Hartley, Moore, Oldham and Deaf Smith Counties in Texas.

AWARDS BY ACADEMIES OF SOUTH-EASTERN STATES

THERE has recently been established a new and rather different sort of competition, a competition among the state academies of science of the southeastern states.

A broad-visioned and scientifically-minded donor has arranged to provide a gold medal each year to each of the academies of science of Georgia, North Carolina, South Carolina and Virginia. (It is anticipated that the recently organized Florida Academy of Science will participate next year.) Each academy awards its gold medal to the author of an especially meritorious paper read at its annual meeting. The papers that thus win gold medals are then brought together and compete with each other for three cash prizes, one of $100 and two of $25 each.

The plan went into operation this spring, but only three academies actually awarded their medals. These three gold medal papers have now been evaluated by a thoroughly competent person not resident in any of the states involved and the cash prizes have been sent to the winners as follows:

One hundred dollars to Dr. Alfred Chanutin, of the Virginia Academy of Science and the University of Virginia, for a paper entitled "The Effect of Whole Dried Meat Diets on Renal Insufficiency Produced by Partial Nephrectomy."

Twenty-five dollars to Dr. F. Gregory Hall, of the North Carolina Academy of Science and Duke University, for two papers entitled "Comparative Physiology in High Altitudes" and "The Effect of Altitude on the Affinity of Hemoglobin for Oxygen."

Twenty-five dollars to Dr. Frederick M. Kinard, of the South Carolina Academy of Science and the School of Medicine of the Medical College of the State of South Carolina, for a paper entitled "A Study of Blood Histamine in Normal and in Burned Dogs."

It is hoped that five state academies will participate next year, though this may not mean that five medals will be awarded, as it is strongly desired that these medals be awarded only for really meritorious papers.

E. C. L. MILLER,
Secretary

VIRGINIA ACADEMY OF SCIENCE

INTERNATIONAL CONFERENCE ON LETTER SYMBOLS FOR HEAT AND THERMODYNAMICS

AN attempt will be made to relieve the present chaotic situation with regard to symbols for equations in thermodynamics at an international conference which has been called by the American Society of Mechanical Engineers, to be held in the Engineering Societies Building, New York City, on September 14 and 15. The conference has been scheduled at this time so that some of the delegates to the World Power Conference to be held the week previous in Washington, D. C., may also act as representatives at the Symbols Conference.

American usage in regard to such symbols has become fairly well standardized since the publication of the list prepared by the Subcommittee on Symbols for Heat and Thermodynamics of the American Standards Association. This is now generally adhered to in America, but other lists have been issued by various European bodies. The conference will endeavor to compromise the differences in the several lists. While it is understood that no international body has authority to standardize any list of symbols, it is hoped nevertheless that the list finally selected by the conference will be accepted by the various bodies represented as the best possible compromise and in this way automatically become an international standard.

Participation in the conference has already been promised by Comité Electrotechnique Suisse, the British Standards Institution, the Association française de Normalisation, Ausschusz für Einhaten und Formelgroszen (Germany), Verein Deutscher Ingenieure, Institution of Gas Engineers (England), Comité Electrotechnique français, and negotiations are in progress with the International Congress of Refrigeration, the Physical Society (England), the National Research Council of Canada, the Institution of Heating and Ventilating Engineers (England), the Institution of Mechanical Engineers (England) and the Chemical Society (England). The American interests will be represented by the Subcommittee on Symbols for Heat and Thermodynamics of the American Standards Association.

RECENT DEATHS AND MEMORIALS

SIR HENRY SOLOMON WELLCOME, London, founder of the Wellcome Research Institution, the Wellcome Historical Medical Museum and the Wellcome Bureau of Scientific Research, who was born near Milwaukee in 1854, died on July 25. Sir Henry was the head of Burroughs, Wellcome and Company of London, manufacturers of chemicals, with establishments in the United States, Italy, Canada, Australia, India, China and other countries.

DR. CHARLES HARRISON FRAZIER, John Rhea Barton professor of surgery and head of the department of