SCIENTIFIC EVENTS

THE ANNUAL VISITATION DAY OF GREENWICH OBSERVATORY

THE Board of Visitors of the Royal Observatory assembled at Greenwich on June 5 to make the annual visitation and receive the report of Dr. Spencer Jones, the Astronomer Royal. The members of the board are the president and six fellows chosen from each of the Royal and the Royal Astronomical Societies, the Savilian professor of astronomy at the University of Oxford, the Plumian professor of astronomy at the University of Cambridge and the hydrographer of the Admiralty, almost all of whom were present.

According to the London *Times*, the report opens with the statement that the Nautical Almanac Office has been placed under the direction of the Astronomer Royal and has been made a branch of the Royal Observatory. The Nautical Almanac was established by Nevil Maskelyne, the fifth Astronomer Royal (1765–1811), to give astronomical information necessary for navigation in a convenient form, and it seems likely that the first issue, which was for the year 1767, and those immediately following were prepared within the Royal Observatory. Though this practice was changed, the Astronomer Royal was responsible for the publication until the year 1831, and the Almanac for 1834 was signed by another as superintendent.

The *Times* points out that the present reversion to the earlier system evidently adds much to Dr. Spencer Jones's responsibility. Four pages of the report deal with matters connected with the office, one of them being the compilation of a special Air Almanac and Altitude-Azimuth Tables for the Air Ministry that is proposed. The purpose of this almanac will be to make possible the navigation of aircraft by astronomical observation.

The home of the Nautical Almanac Office remains as it has been for some years past in the Royal Naval College, below the hill on which the observatory stands, but the names of its staff are included for the first time with those of the observatory in the report. D. W. Sadler, the new superintendent, who receives special commendation, ranks as a chief assistant.

In Dr. Spencer Jones's first report, that for 1933, he spoke of two important new telescopes that he had inherited from his predecessor but which at that time were still in the workshops of their respective makers. They are now in the Christie enclosure in Greenwich Park, and about them he reports progress. As to the new reversible transit circle provided by the Admiralty to take the place eventually of the instrument erected by Airy in 1851, some final figuring of the pivots has been found necessary, the utmost precision being essential in this particular, and has been successfully performed by the makers. Various other improvements have been effected and additions made and the instrument has been used successfully since last September. The observation of stars by reflection at a mercury level surface, which has been a feature of the operations at Greenwich for the past hundred years and has been the object of much discussion, has been given up. The other new instrument is a 36-inch reflecting telescope, equatorially mounted, presented to the Royal Observatory by Johnston Yapp.

Another recent gift is a free pendulum clock of the Shortt type but with some improvements, presented by H. R. Fry, of West Stoke. The report states that a quartz crystal oscillator clock is to be supplied, with the help of Dr. E. H. Rayner, of the National Physical Laboratory, to ensure the accuracy of the distributed time-signals in the event of a long period of cloudy weather when it is impossible to make star observations.

The program of double-star observing with the 28-inch refractor has been reorganized. It has seemed desirable that the instrument should be put to a more general remeasurement of all pairs rather than to those which are peculiar on account of great magnitude difference or of small separation between their components, and the result has been a large increase in the number of observations. The 26-inch refractor has been used as heretofore for taking photographs for determining stellar parallax, and a device, due to Dr. Schlesinger, of Yale, was on view in a screened-off compartment in one of the computing rooms of the observatory to facilitate the measuring of photographs.

THE NATIONAL PARKS ASSOCIATION

AT the recent meeting of the trustees of the National Parks Association, Dr. Henry B. Ward, vice-president of the association, gave a full discussion on the subject of the proposed irrigation tunnel through Rocky Mountain National Park and presented in behalf of the legislation committee the following resolution which, being duly seconded, was passed as follows:

> The National Parks Association in its annual meeting on May 14, 1937, noting the recommendation of the Reclamation Service that an irrigation tunnel and conduit be constructed under the Rocky Mountain National Park, hereby records its opposition to the proposition for the following reasons:
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> 1. Use of this park for commercial purposes would create a precedent in defiance of the standards which have been set up by Congress during the past twenty years and lay the National Park System open to economic exploitation.
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> 2. We are convinced that construction of the proposed tunnel and conduit is bound to alter natural conditions on the surface in the vicinity and to impair or destroy the primitive values of the Park.

3. Other routes are known to be available which can be used without endangering the Park.

We call upon all agencies concerned with the protection of our unique system of National Primeval Parks to unite in firm opposition to the threat to Rocky Mountain National Park and through it to the entire system.

Dr. William S. Cooper, as chairman of the special inter-association committee on Glacier Bay, reviewed the history of the bill permitting mining within the Glacier Bay National Monument and pointed out that only a few prospectors had taken advantage of their right to prospect within this monument because of the fact that past experience had proved it to be quite barren of any large deposit. Dr. Cooper also pointed out that, in so far as defacement of the monument itself is concerned, mining rights would not seriously affect it. But he stressed the point that this bill opening Glacier Bay to mining had created a precedent for possible Congressional action in the future along the same lines with respect to other national monuments and national parks. The question of attempting to repeal the bill in this session of the Congress was not considered feasible by Mr. Cooper, and he suggested that the committee remain intact, but that for the present at least it should mark time.

MILTON AND CLARK AWARDS OF HARVARD UNIVERSITY

FORTY-NINE awards, amounting to $47,760, have been assigned to members of the Harvard teaching and research staffs under the provisions of the wills of William F. Milton, '58, and Joseph H. Clark, '57. These grants are made annually to aid in defraying the expenses of special investigations during the coming academic year. Awards have been made as follows for 1937 in the natural and exact sciences:

Lawrence W. Baker, professor of orthodontia, to continue studies regarding the masticatory apparatus as a growth center of the bones of the face and as an inductor of growth of the other bones of the skull.

Thomas Barbour, professor of zoology and director of the University Museum and of the Museum of Comparative Zoology, and Alfred S. Romer, professor of zoology and curator of vertebrate paleontology at the Museum of Comparative Zoology, to prepare skeletons of primitive reptiles collected in South America.

Paul D. Bartlett, instructor in chemistry, to "mark" atoms by the use of artificially induced radioactivity for facilitating the study of molecular structure.

Bart J. Bok, assistant professor of astronomy, to continue an investigation of the objective prism radial velocities of faint stars.

William J. Clench, curator of mollusks in the Museum of Comparative Zoology, for a zoological survey of northeastern Hispaniola, particularly as regards mollusks.

Lemuel R. Cleveland, associate professor of zoology, for a study of the protozoa of termites, with particular reference to the function of the centrioles in chromosomal movement and the production of extra-nuclear organelles.

Joseph A. Cushman, lecturer on micro-paleontology, for a study of the foraminifera found in deep sea cores from the Atlantic Ocean.

Philip J. Darlington, Jr., assistant curator of insects in the Museum of Comparative Zoology, to extend the applicant's collection of insects, especially beetles, and study their habits and distribution on certain West Indian islands.

Walter F. Dearborn, professor of education and director of the Psycho-Education Clinic, for the preparation of statistical materials bearing on the mental and physical growth of public-school children.

Merritt L. Fernald, Fisher professor of natural history and curator of the Gray Herbarium, for botanical exploration in Virginia and North Carolina to throw significant light on the history of life in North America since the uplift of the cretaceous peneplain.

Louis F. Fieser, associate professor of chemistry, for an investigation of cancer-producing hydrocarbons.

Russell Gibson, assistant professor of economic geology, for a regional study of tin and tin-silver deposits in the Eastern Andes of Bolivia.

Ralph R. Hultgren, instructor in metallurgy, to purchase a photodensitometer for the measurement of x-ray spectra dealing with crystal structure.

Frederick V. Hunt, instructor in physics and communication engineering, for an investigation of auditorium acoustics by means of steady-state transmission measurements.

Clyde E. Keller, instructor in ophthalmic research, to investigate inheritance of blood groups in rabbits.

Karl O. H. Lange, research associate at the Blue Hill Observatory, for an investigation of thunderstorm structures by small balloons equipped with radio-meteorographs.

Harry R. Mimno, assistant professor of physics and communication engineering, for an investigation of methods of improving the operating efficiency of the cyclotron.

Gregory Pincus, assistant professor of general physiology, for an investigation of the developmental physiology of mammalian eggs.

Edward K. Rand, Pope professor of Latin, to prepare for publication an edition of Servius's "Commentary" on Virgil and an edition of Ovid's "Metamorphoses."

Theodore E. Sterne, lecturer on astrophysics, for the development of improved apparatus for the radiometric photometry of celestial objects.

Henry C. Stetson, research associate in paleontology at the Museum of Comparative Zoology, for the construction of a duplicate of the coring tube redesigned by C. S. Piggot, of the Geophysical Laboratory, for taking cores of the ocean bottom.

S. Smith Stevens, instructor in psychology, for the investigation of the psycho-physiology of frequency modulation and transient phenomena in normal human beings and in animals.

Theodore J. B. Stier, assistant professor of physiology, for a study of the reactions involved in the chemosynthesis of carbohydrates, fats and proteins in living cells.