to raise a fund for the establishment of a memorial to the late Dr. Marion Newbigin, who for thirty years edited the Scottish Geographical Society's magazine. Subscriptions are invited from friends who wish to take some part in commemorating her services to geography. These should be sent to the Treasurer, Royal Scottish Geographical Society, Synod Hall, Castle Terrace, Edinburgh.

# SCIENTIFIC EVENTS

## REPORT OF THE BRITISH ASTRONOMER ROYAL

AS is customary on the first Saturday in June, the Board of Visitors of the Royal Observatory assembled at Greenwich to make their annual visitation and to hear the Astronomer Royal's report. The members of the board are the presidents and six fellows each of the Royal and the Royal Astronomical Societies, the Savilian professor of astronomy at Oxford, the Plumian professor of astronomy at Cambridge and the hydrographer of the Admiralty.

The London *Times* states that in beginning his report, which referred to the year ended April 30 last, Dr. Spencer Jones, Astronomer Royal, described the counterpoise system adopted for the new reversible transit circle, the erection of which was practically completed at the end of March, in order to relieve the weight on the bearings.

In a free-pendulum clock now nearing completion, which is being presented by H. R. Fry, time will be taken directly off the free pendulum by a photo-electric method.

The sun, moon, major and minor planets and fundamental stars were regularly observed with the transit circle. The observations of the moon continued to show a decrease in the correction to the longitude given by Brown's tables, which were introduced into the *Nautical Almanac* in 1923. The correction, which was then 9 sec. of arc, fell last year to little more than 3 sec.

Regular observation of the brighter minor planets has been resumed in view of the attention recently given to the possibility of using them for fixing equinox and equator point. Further progress was made with the measurement of the photographs taken of the planet Eros at various observatories in 1930–31.

Among meteorological observations the amount of solid matter polluting the air was regularly measured by an Owens automatic filter and was found on the whole to be substantially less in the winter of 1935–36 than in the previous winter, probably because of the much smaller proportion of wind coming from a northerly direction. Gaseous pollution of the atmosphere by sulfur dioxide appeared to vary greatly from day to day.

In the worst days of January and February, in both 1935 and 1936, this pollution approached and occasionally exceeded 0.2 parts by volume in a million, but on good days less than one tenth of this amount was present. Pollution is found to be greatest on days of calm air, drifting from a northerly direction, generally accompanied by fog. It is reduced to a minimum by a strong southerly wind.

The mean temperature of the year was 50.2 deg. F., or 0.7 deg. higher than the average of the 75 years 1841–1915. The total rainfall was 26.11 in., or 1.87 in. more than the average for the 75 years 1841–1915. The wettest month was November, with 3.59 in., and the driest July, with 0.56 in.

## FLOOD CONTROL

SECRETARY OF AGRICULTURE HENRY A. WALLACE has announced that problems of "up-stream" engineering in relation to flood control and land conservation will be discussed at a conference of experts from the United States and foreign countries in Washington, on September 22 and 23.

The conference will be called by a special committee appointed by President Roosevelt. Members of the committee are H. H. Bennett, chief of the Soil Conservation Service; Morris L. Cooke, administrator of the Rural Electrification Administration, and F. A. Silcox, chief of the Forest Service.

In announcing the conference, Mr. Wallace made public a letter from President Roosevelt pointing out the need for coordinating land-use principles with existing knowledge of down-stream engineering methods in federal planning for flood control and land conservation. The President's letter follows:

> Up-stream engineering will have a major part in efforts to save the land and control floods, and for that reason it offers a broad field of opportunity for the engineering profession. I am therefore in hearty accord with your suggestion that there be held an open conference on the subject in the early fall. The date might well be in proximity to that of the Third World Power Conference in September, in the hope that some of the distinguished foreign engineers attending the latter may be interested also in contributing to the proposed conference.
>
> There are indications that a substantial body of technical information on the control of little waters is now available in the scattered records of American experience —federal, state and professional. The urgent problem is to bring these data together into a coordinated body of engineering knowledge so that public officials and engi-

neers may have a more definite picture of up-stream engineering as an important field of public and professional activity.

There is a wealth of experience and data as to down-stream engineering and works required for navigation, power development and flood control—levees, large dams, great reservoirs and channel improvements on major streams. But necessary as these are for the safeguarding of those who live in areas subject to destructive floods and of property located therein, it must be remembered that down-stream waters originate largely in up-stream areas. The objects of up-stream engineering are through forestry and land management to keep water out of our streams, to control its action once in the stream and generally to retard the journey of the raindrop to the sea. Thus the crests of down-stream floods are lowered.

In accordance wth your further suggestion I am appointing as a committee to organize and promote such a conference or institute: Hugh H. Bennett, chief of the Soil Conservation Service, Department of Agriculture; Morris L. Cooke, administrator of Rural Electrification Administration, and F. A. Silcox, chief of the Forest Service, Department of Agriculture.

## THE MONTREAL BOTANICAL GARDEN

WORK on the construction of the Montreal Botanical Garden, which had been in prospect for several years, has been commenced this spring. The garden is administered by a commission of five, which includes the directors of the botanical departments of both the University of Montreal and McGill University.

Frère Marie-Victorin, director of the Institute of Botany at the University of Montreal and author of "Flore Laurentienne," has been named director of the garden. Henry Teuscher, formerly director of the Boyce Thompson Arboretum and later dendrologist of the New York Botanical Garden, has been engaged as superintendent and chief horticulturist to design and to lay out the garden and to take charge of its horticultural activities.

An administration building, two greenhouses and a modern heating plant, all of which were built three years ago, are now in operation. A nursery has been prepared and, as a first display unit, an economic garden has been laid out, which is to serve for the instruction of school children and which will exhibit this year 124 varieties of fodder-plants, grain-crops, vegetables, oil-plants, etc.

The first section of the garden, comprising about 150 acres, is expected to be ready for inauguration by 1942 for the tricentennial celebration of the founding of Montreal. Eventually the garden is to cover almost 600 acres of ground.

This fall the Montreal Botanical Garden expects to contribute for the first time to the international seed exchange, which is maintained between the botanical gardens of the world, by offering seeds of various interesting and little known Canadian plants.

## THE NATIONAL ASSOCIATION OF SCIENCE WRITERS

THE election of Howard W. Blakeslee, science editor of the Associated Press, as president of the National Association of Science Writers has been announced recently. Mr. Blakeslee succeeds David Dietz, science editor of the Scripps-Howard Newspapers, who had held the office of president since the organization of the association in September, 1934.

Other officers elected for the ensuing year include: William L. Laurence, science news editor of *The New York Times, vice-president;* John J. O'Neill, science editor of *The New York Herald-Tribune, treasurer;* Thomas R. Henry, of the *Washington Star, secretary.*

Active members of the association, in addition to those already named, include Watson Davis, director of Science Service; Victor Henderson, of the *Philadelphia Inquirer;* Waldemar Kaempffert, science editor of *The New York Times;* Gobind Behari Lal, science editor of the Hearst newspapers; Herbert B. Nichols, physical science editor of *The Christian Science Monitor;* Frank Thone, biology; Robert D. Potter, physics and chemistry; Jane Stafford, medicine, and Marjorie Van De Water, psychology, staff members of Science Service; Steve McDonough, of the Associated Press, and Allen Shoenfield, of the *Detroit News.*

F. B. Colton, of the National Geographic Society, is an associate member. Austin H. Clark, of the Smithsonian Institution, and Dr. J. McKeen Cattell, editor of SCIENCE, are honorary members.

The association was formed "to foster the dissemination of accurate scientific knowledge by the press of the nation in cooperation with scientific organizations and individual scientists." Active membership is limited to staff members of newspapers and press associations, who devote their major efforts to the field of science writing.

## THE PITTSBURGH MEETING OF THE AMERICAN CHEMICAL SOCIETY

CELEBRATING the sixtieth anniversary of its founding, the American Chemical Society will hold a five-day meeting in Pittsburgh, beginning on September 7. Dr. Edward Ray Weidlein, director of the Mellon Institute of Industrial Research, Pittsburgh, president-elect of the society, has been named honorary chairman of the meeting, which it is expected will be attended by more than 3,000 chemists, industrialists, educators, government workers and scientific men representing allied fields. Chester G. Fisher, president of the Fisher Scientific Company, is chairman of a local committee of one hundred and five members who will arrange a local program with the cooperation of the industries, the U. S. Bureau of Mines and the educational institutions of the district.