SCIENTIFIC EVENTS

THE ROYAL OBSERVATORY AT GREENWICH

THE astronomical correspondent of the London *Times* writes that on June 1, according to custom, the appointed Board of Visitors of the Royal Observatory met at Greenwich under the chairmanship of Sir Gowland Hopkins, president of the Royal Society, to make the annual inspection and receive the astronomer royal's report for the past year. With two exceptions all the 16 members of the board were present: J. H. Reynolds (president of the Royal Astronomical Society), Sir William Bragg, Professor Alfred Fowler, Sir James Jeans, Sir Joseph Petavel, Professor Sydney Chapman, Dr. H. Knox-Shaw, Sir Gerald Lenox-Conyngham, Professor Newall, Professor Stratton, Professor H. H. Plaskett, Sir Arthur Eddington and the hydrographer of H.M. Navy, Rear Admiral Edgell.

Dr. Spencer Jones, the astronomer royal, reports that with the old non-reversible transitcircle about 9,500 observations were made during the 12 months ended April 30. Included in these were 130 observations of the meridian position of the sun and 94 of the moon. The observations of the moon in 1934 continue to show a decrease in the difference in its position from that given by Brown's tables that were introduced in 1923. The correction to the longitude given by the tables, which was then seven seconds of arc, is now four seconds; and the progressive rate of the change may lead to knowledge of some further item in lunar theory.

Determination of stellar parallax, observation of double stars, and measurement of the variation of latitude, which are now staple work of the observatory, have been continued. The Yapp reflector with its spectrograph is used to take photographs to determine the temperature of stars by photometric measures of their spectrum, and has also been found specially useful during the past six months in the matter of Nova Herculis, the first photograph of which, it may be remembered, was taken with this instrument immediately after its discovery on the morning of December 13. An extensive work in hand is the measurement of the photographs of the small planet Eros, taken at various observatories in 1930–31 when near its opposition, from which it is expected a very precise value of the distance of the sun will be deduced.

As to the record of the sunspots that is kept at Greenwich, it is stated that sunspot activity has definitely increased, though somewhat irregularly from the solar minimum which happened during the latter half of 1933, but the sun's rising activity is more consistently shown by phenomena observed with the spectrohelioscope, an instrument or apparatus that has been comparatively recently added to the equipment.

Dr. Spencer Jones called attention to the long-mooted question whether Greenwich is now a suitable place for an observatory, and, in closing his report, sets down categorically some reasons to the contrary. The pollution of the air due to the surrounding industrial works and factories by the precipitation of sulphur-dioxide, soot and hard grit, is very detrimental to mirrors and other delicate parts of astronomical instruments; the condensation of moisture from hot gases ejected from near-by chimneys is a source of trouble and especially the use of mercury vapor lamps for street lighting lately introduced in the neighborhood is objectionable because the ultra-violet light they discharge affects photographic plates exposed at low altitudes.

INTRODUCTION INTO THE UNITED STATES OF DISEASE-RESISTANT PLANTS

MORE than 1,800 lots of seed from drought-resistant plants brought back from Turkestan by explorers of the U. S. Department of Agriculture are now growing in the plant reserve stations established last year by the department. Additional lots of seed have recently arrived from Manchuria and Mongolia, and still other valuable shipments are expected after the expedition now working on the edge of the Gobi Desert has had an opportunity to harvest the seeds which will ripen this fall.

An expedition headed by Professor Nicholas Roerich was sent to the areas bordering the Gobi Desert because of the great pasture areas which apparently withstand the heat of summer, the cold of winter and the scanty rainfall. Through centuries of natural selection strains of grasses and legumes which are able to cope with these conditions have developed and increased. Also, the origin of many plants has been traced to the old world centers in Asia and it is reasonable to expect that there are already in existence grasses, legumes, shrubs and trees that would be of value under similar conditions in the United States. No region in the world offers more promise of obtaining economic plants which are drought-resistant, soil-binding and otherwise peculiarly important at this time. The discovery of just one desirable plant species would repay the costs of the expeditions many-fold.

The semi-desert has the appearance of a large plain with an altitude of approximately 2,000 feet. The climate of the region is characterized by a "snowless, rigorously cold winter, a cold and rather rainless spring and autumn, and a hot dry summer, for