factory results, the D.C. track circuits were not entirely immune from interference by stray current from the traction system; as a result, practically the whole of these track circuits have been replaced by A.C. equipment. At the same time, many additional safeguards were added to the system. Alternating current is now employed throughout for all signalling circuits as well as for the track circuits themselves.

## Recent Earthquakes

During the period February 4-April 5, fifteen strong earthquakes were registered by the seismographs at Kew Observatory. The greatest of these were on February 29 and March 9. The shock of February 29 began recording compressionally at 16h. 40m. 22s. G.M.T. from an epicentral distance of 8,900 km., and after a full suite of pulses beginning with iP attained a ground amplitude at Kew of 110 µ at 17h. 18m. 53s. G.M.T. On March 9 the shock began recording impulsively at 22h. 13m. 06s. G.M.T. and attained a maximum ground amplitude at Kew of 420 μ at 22h. 43m. 49s. G.M.T. At Toledo (Spain) during February, twenty-four earthquakes were registered by the instruments. The greatest of these was on February 1 at 03h. 28m. 26s. from an epicentral distance of 3,700 km. (Turkey). This shock attained a maximum ground amplitude of 1150 µ at Toledo at 03h. 40m. 44s. Many after-shocks of this earthquake were recorded at Toledo during the month. Earthquakes which registered both at Toledo and Kew occurred on February 1, 4, 5, 15, 20 and two on February 29, the last of these having been mentioned above.

The first shock on February 29 occurred at 3h. 42.0m. g.m.t. Its epicentre has been found by the United States Coast and Geodetic Survey. in co-operation with Science Service and the Jesuit Seismological Association, to have been near lat. 13.7° S., long. 70.6° W., which is in southern Peru. The depth of focus was probably slightly less than 200 km. It was recorded at Kew on the vertical component seismograph with iP (dilatation) at 03h. 54m. 33s. G.M.T. and attained a maximum ground amplitude of  $22\,\mu$  at Kew at 04h. 34m. 38s. G.M.T. At Toledo it was recorded at 3h. 54m. 00s., and attained maximum ground amplitude of 80 μ. The earthquake was recorded at Boulder City, Buffalo, Burlington, Chicago, Fordham, Georgetown, Huancayo, Pasadena, Philadelphia, St. Louis, San Juan, Sitka, Spring Hill and Tueson on the seismographs.

## The Night Sky in June

Full moon occurs on June 6d. 18h. 58m. U.T., and new moon on June 20d. 17h. 00m. The following conjunctions with the moon take place: June 19d. 13h., Mercury 3° N.; June 24d. 17h., Mars 1° S.; June 25d. 02h., Jupiter 1° S. On June 24d. 17h. 38 3m. Mars is occulted by the moon, reappearance taking place at 18h. 54.2m. (for the latitude of Greenwich). Occultation of 308 B Leon. occurs on June 26d. 22h. 27.7m. (D), but there are no other occultations of stars brighter than mag. 6 during the month. Mercury rises at 3h. 11m. at the beginning of June and at 3h. 38m. at the end of the month. Venus is in superior conjunction on June 27, but is too close to the sun throughout the month to be well observed. Mars, in the constellation of Cancer, sets at 23h. 46m. and 22h. 33m. at the beginning and end of the month respectively. Jupiter, in the constellation of Leo, sets at 0h. 15m. and 22h. 30m. at the beginning and

end of June respectively. Saturn is drawing close to the sun and is becoming difficult to observe. It sets at 21h. 17m. at the beginning of June—a little more than an hour after sunset. Summer Solstice commences on June 21d. 13h.

## Announcements

Dr. W. J. Hall has been appointed assistant director of the Imperial Institute of Entomology as from June 1. Dr. Hall was a senior entomologist in the Ministry of Agriculture, Cairo, during 1920–26, and afterwards entomologist and director of the Mazoë Citrus Experimental Station and superintendent of the British South Africa Company's Citrus Estate at Mazoë.

Mr. Henry Clay, economic adviser to the Bank of England since 1933, has been appointed warden of Nuffield College, Oxford, in succession to Mr. Harold Butler.

The Association of Scientific Workers has signed an agreement with the Engineering and Allied Employers National Federation, whereby the latter recognizes the Association as representing scientific and technical staff in the industry.

Two scholarships have been given to the Mining Department of the University of Leeds. The first, to be known as Dr. Walter Hargreaves Scholarship, has been founded with a fund of £1,250, collected by the shareholders of the Briggs Collieries, Ltd., as a testimonial to Dr. Walter Hargreaves on his retirement from the chairmanship of the Company. Dr. Hargreaves has been a member of the Mining Advisory Committee of the University for many years and its chairman for the last twenty years. The second has been founded by the Anglo-Saxon Petroleum Company, which has provided a scholarship of £60 a year, plus fees, tenable in the Mining Department.

The Progressive League has arranged a series of five lectures on "Psychology and Problems of Society", to be delivered on Wednesdays at 7.30 p.m. beginning on June 7, in the Conway Hall, Red Lion Square, London, W.C.1. The speakers and their subjects are: Prof. F. C. Flugel, "The Psychological Basis of Permanent Peace"; Dr. May Smith, "Some Psychological Problems of Industry"; Dr. E. Glover, "Reactionary Aspects of Present Day Psychology"; Barbara Low, "The Psychology of Propaganda"; Major Emanuel Miller, "Psychiatry in a Planned Society". Tickets are 5s. for the course, 1s. 6d. for single lectures, and can be obtained at the door or from the Secretary of the League, 20 Buckingham Street, London, W.C.2.

The British Council has been permitted to print a small edition of the British Medical Bulletin for sale in the United Kingdom. The primary purpose of the Bulletin is to interpret British medicine to the overseas reader who would not normally consult the medical journals published in Great Britain. It contains reviews, abstracts, book notes and a list of the contents of current British medical and cognate journals. Applications for annual subscriptions (21s.) or for single parts should be addressed to the British Medical Bulletin, 3 Hanover Street, London, W.1.

ERRATUM. In the communication entitled "Gamones from the Sperm of Sea Urchin and Salmon", NATURE, March 4, 1944, on p. 286, col. 1, line 18, for "pH less than 4.0" read "pH greater than 4.0".