

are the effect of restricted rooting upon early fruiting of the tomato, the use of electric light to hasten growth of cucumber seedlings, the use of soil heating for several crops, and the use of a surface rooting medium for tomatoes. Entomological investigations have included studies of rose thrips and onion thrips, and the use of a species of *Scolothrips* as a predatory control of red spider mite. Extensive mycological researches include the record, for the first time in Great Britain, of a leaf-spot of marguerite caused by the fungus *Ramularia bellunensis*. Physiological estimations of tomato seedlings have also been accomplished, and more general problems of soil nutrition have been studied.

#### Lighting and Speed of Seeing

A RECENT article (*Brit. Eng. Export J.*, September) describes practical advances that have recently taken place in lighting. An interesting experiment is described which shows a relation between illumination and the speed of vision. The apparatus used was a heavy pendulum on which a test object was exposed to view when swinging between two screens. The speed of movement of the object was directly proportional to its distance from the pivot. At high illuminations, the test object could be seen when it was placed at the lowest point of the pendulum. At intensities not exceeding two foot candles, it was only visible when it was placed at a distance not exceeding a quarter of the way down, when its speed is only a quarter of what it is at the lowest point. After an increase to five foot candles the speed of seeing was increased by about 60 per cent.

#### Model Chinese Junks

A COLLECTION of large-scale models of Chinese junks, which is said to be unique, has been presented to the nation by Sir Frederick Maze, inspector-general of Chinese customs, for exhibition in the Science Museum, South Kensington. The models, ten in number, were built in Hong-Kong or Shanghai by Chinese craftsmen, and are accurate replicas of these sailing craft in every detail, down to the shrines and household gods. They include examples with the magical eye on the prow. These boats, which are now giving place to steam in Chinese waters, and have also suffered many casualties during the present warfare, are of two main types, a northern and a southern. Except for details of rigging, they have not altered in principle over a prolonged period—at least a thousand years, and some authorities would hold for perhaps twice as long before that. Of these types, one has bluff bows and a flat bottom adapted for sailing in shallow waters. The other type has a sharp bow, with sheer lines and a deeper draught. Details of construction and rig in use among Chinese sailors at an early date are shown in these models, which did not appear in Western ships until a very much later period. Such, for example, are the water-tight compartment, the battened sail used in yacht racing, lee boards of the keel and rudder types, and multiple sheets for independent handling of the upper and lower parts of the sails.

#### Sternberg Astronomical Institute

ACCORDING to "Russia Today" Press Service, buildings for the Sternberg Astronomical Institute of Moscow will be commenced early next year in the vicinity of Butovo Station, one of the highest points on the outskirts of Moscow. The observatory, laboratory, mechanical workshops and blocks of flats to house the staff of the Institute will occupy a site of 14½ acres. The main part of the Institute's building will contain accommodation for research workers, lecture rooms, a library for 100,000 volumes and a storehouse for the 60,000 photographic negatives taken by the Observatory and by the Southern Astronomical Station in Tajikistan. Underground in the same block will be situated the time service with its astronomical clocks, and a gravimetric laboratory. A tower, to be erected over the main body of the building, is to be used for solar work. The removal of the Institute from Moscow is necessitated by the increasing vibration caused by traffic and the reflection of the city's electric lights in the sky, which interfere with astronomical observations.

#### Centenary of the Greek Archæological Society

CELEBRATION of the centenary of the Greek Archæological Society began at Athens on October 23. The proceedings were opened in the Parthenon by the King of Greece, president of the Society, who delivered an address of welcome to the delegates and representatives of Greek and foreign universities and learned societies. Great Britain was represented by Mr. William Miller, of the British Academy, Mr. R. D. Barnett, of the Society for Hellenic Studies, and Mr. Gerald Mackworth Young, who was present on behalf of the Society of Antiquaries of London and the British School of Archaeology at Athens. The programme of the celebration, it is reported in *The Times* of October 24, includes excursions to Delphi, Eleusis and Epidaurus, the conferring of academic honours on distinguished archæologists, the laying of wreaths on the Cenotaph and the statue of the late King Constantine, a former president of the Society, the performance of the *Electra* of Sophocles and *King Lear*, an official banquet given by the Government, and a number of receptions.

#### The Night Sky in November

THE moon is full on November 7 at 22·4<sup>h</sup> and new on November 22 at 0·1<sup>h</sup> U.T. On November 7, there will occur a total eclipse of the moon under favourable conditions—given fine weather—for observation in Great Britain. Contact of the umbra with the moon's limb at position angle 94° from the north point, measured towards the east, occurs at 20<sup>h</sup> 41<sup>m</sup>; total eclipse begins at 21<sup>h</sup> 45<sup>m</sup> and ends at 23<sup>h</sup> 8<sup>m</sup>; the moon leaves the umbra at 0<sup>h</sup> 12<sup>m</sup> November 8, the position angle of the last contact being 243°. Lunar conjunctions with the planets occur on November 1<sup>d</sup> 19<sup>h</sup> (Jupiter): 5<sup>d</sup> 18<sup>h</sup> (Saturn) 18<sup>d</sup> 18<sup>h</sup> (Mars): 23<sup>d</sup> 21<sup>h</sup> (Mercury) and 29<sup>d</sup> 8<sup>h</sup> (Jupiter). There is a conjunction of Mercury and Venus on November 8, but both planets set very shortly after the sun. As the sky darkens, Jupiter is

seen as a very bright object rather low near the meridian. Saturn south shortly after 21<sup>h</sup> in mid-November. Mars is a morning star rising at 3½<sup>h</sup>; on November 28, the planet passes 3° north of Spica. Uranus, in the constellation Aries, is in opposition on November 8, its distance from the earth being nearly 1,736 millions of miles. The Leonid meteors should be looked for on November 15–16: the  $\alpha$  Taurids on November 14–16 and the Andromedids from November 17 to 23. The light change of the variable star, Algol, should be seen about one and a half hours before and after the following times of primary minima: November 9<sup>d</sup> 6.0<sup>h</sup>: 12<sup>d</sup> 2.8<sup>h</sup>: 14<sup>d</sup> 23.6<sup>h</sup>: 17<sup>d</sup> 20.4<sup>h</sup>: 20<sup>d</sup> 17.2<sup>h</sup> and 29<sup>d</sup> 07.7<sup>h</sup>.

#### Announcements

At the annual statutory meeting of the Royal Society of Edinburgh held on October 24, the following Council was elected: *President*: Sir D'Arcy Thompson; *Vice-Presidents*: Prof. F. A. E. Crew; Lieut.-Col. A. G. M'Kendrick; Principal J. C. Smail; Prof. J. Walton; Dr. James Watt; Prof. E. T. Whittaker; *General Secretary*: Prof. James P. Kendall; *Secretaries to Ordinary Meetings*: Dr. A. C. Aitken and Dr. C. H. O'Donoghue; *Treasurer*: Dr. E. M. Wedderburn; *Curator of Library and Museum*: Dr. Leonard Dobbin; *Councillors*: Dr. J. E. Mackenzie; Prof. Sydney Smith; Prof. R. Stockman; Prof. Lancelot Hogben; Prof. James Ritchie; Dr. G. W. Tyrrell; Prof. C. T. R. Wilson; Prof. R. C. Garry; Prof. R. J. D. Graham; Prof. D. Murray Lyon; Dr. J. E. Riehey and the Hon. Lord Robertson.

JUNIOR research fellowships in tropical medicine have recently been awarded by the Medical Research Council to the following: Dr. S. G. Cowper, A. J. Haddow, and W. H. R. Lumsden. The fellowships are tenable for three years, during the first two of which the holders will undergo training in Great Britain in tropical medicine and in the use of research methods.

AN inscribed stone has been fixed at No. 32, Soho Square, W.1, recording the fact that Sir Joseph Banks, president of the Royal Society, and Robert Brown and David Don, botanists, lived at the house which formerly stood on the site, and that the Linnean Society met there from 1821 until 1857 (see also NATURE, 139, 280; 1937).

AN earthquake of moderately large proportions was recorded on seismographs in England on October 19d. 4h. 22m. 54s. G.C.T. Mr. J. J. Shaw's record was uncertain owing to interference by the wind. The Kew record indicates an epicentral distance of approximately 53.3°, but the azimuth is uncertain. No damage has been reported.

ON October 22, Lieut.-Colonel Mario Pezzi regained for Italy the height record for aeroplanes by flying to a height of 17,074 metres. The previous record, held by England, was that of 16,440 metres, attained by the late Squadron Leader M. J. Adam.

The Italian flight was made in a Caproni machine fitted with a specially constructed Piaggio engine, details of which are not disclosed.

PROF. F. F. NORD, of the University of Berlin, known for his contributions to the chemistry of enzymes, heterogeneous catalysis and cryolysis of colloids, has accepted the chair of organic chemistry in Fordham University, New York, N.Y. Prof. Nord will continue to be editor of *Ergebnisse der Enzymforschung*.

THE following have recently been elected members of the Imperial Leopold Caroline German Academy at Halle: Dr. Philipp Stöhr, professor of anatomy at Bonn; Dr. Richard Siebeck, professor of internal medicine at Berlin; Dr. Paul Wels, professor of pharmacology at Greifswald; Dr. Georg Stetter, professor of physics at Vienna; Dr. Abraham Esau, professor of technical physics at Jena; Dr. Fritz Kohlrausch, professor of physics at Graz; and Prof. Walter Schoeller of Berlin.

AN industrial fellowship has been established by the Elgin National Watch Company, Elgin, Illinois, at the Mellon Institute, Pittsburgh, Pa. The research programme will cover broadly the chemical aspects of technical problems in the watch industry. One of the first subjects of investigation will be watch lubrication. Dr. George E. Barker, of the Massachusetts Institute of Technology, has been appointed to the fellowship. Before joining the Institute's research staff, Dr. Barker spent several years in the synthetic organic chemical industry.

THE foundation stone of an institute of hygiene, social medicine and industrial pathology has recently been laid at Brussels.

ACCORDING to the National Safety Council of the United States, in the first four months of 1938 there were 2,060 fewer traffic deaths than in the corresponding months of 1937, or a reduction of 19 per cent.

OWING to the recent crisis, the second International Congress of Radio-Æsthesia which was to have been held in Paris on October 17–19 has been postponed to November 7–9. Further information can be obtained from the Secretariat, 9 rue Etex, Paris 18°.

THE third Italian Congress of Medicine and Sport will be held at Genoa on November 12–14, when discussions will be held on the reduction of professional capacity from internal lesions following sport and reduction of working capacity from injury to the locomotor system.

THE Congress of Rheumatism organized by the French League against Rheumatism, which was to have been held on October 8, has been postponed until December 3. Further information can be obtained from the Secrétariat de la Ligne française Centre le Rhumatisme, 23 rue Cherche Midi, Paris, 6°.