

Council has also been concerned with the completion of the application of the recommendations of the Carpenter report to scientific establishments, and in his presidential address at the annual meeting on April 29, Sir Richard Redmayne emphasized the necessity for the upgrading of the highest professional and scientific posts in the Civil Service, which, so far as remuneration is concerned, compare most unfavourably with posts carrying a similar responsibility outside the Service. A sub-committee is considering appropriate salaries for those professional posts outside the scope of arbitration with the view of making representations to the authorities. The Association is also dealing with the salaries of architects, engineers and surveyors in the Civil Service. Sir Richard criticized the Treasury for refusing to allow the reference to arbitration of the Institution's claim that women scientific officers should receive the same scales of pay as their male colleagues in the same grade, and stated that the Chancellor of the Exchequer had been asked to receive a deputation on this question.

#### Fruit Supplies in 1936

THE Intelligence Branch of the Imperial Economic Committee has issued a volume dealing with fruit supplies during 1936 (H.M. Stationery Office, pp. 106. 2s. 6d. net or 2s. 9d. post free). 55 per cent of the total import of fruit was of Empire origin. So high a proportion has never before been reached. There are, however, some very potent lessons for the home producer. The present report gives the convincing information that each apple tree yielded an average of 12·7 lb. of fruit in 1935, and 68·3 lb. in 1936. The "untimely and unusually severe frost" in May of 1935 is mentioned as the main cause of that season's low yield. It cannot be emphasized too strongly that the effects of frost are now largely within the control of the grower. The pioneer work of Mr. George Harrington, the investigations into general principles by various scientific workers, and the practical experiments by the technical staff of Messrs. Geo. Monro, Ltd., have made the practice of orchard heating a practical proposition without heavy finance. Total imports of raw fruit into the United Kingdom remain fairly steady around an average of nearly 28,000,000 cwt., and apple imports are not very variable around a mean of about 6,500,000 cwt. Imports of grapes, peaches, lemons, pineapples and plums from Empire sources were higher in 1936 than ever before, and more bananas were imported by Great Britain than in any previous year. Supplies of fruit from South Africa reached a new record. Totals for most fruit imports were, however, lighter than in 1935.

#### The Ross Institute

A MEETING of the Industrial Advisory Committee of the Ross Institute, which is now incorporated with the London School of Hygiene and Tropical Medicine, was held on May 28, at which the activities of the Institute were surveyed. Useful discussions also ensued upon the housing of African labour, the

risk of malaria when replanting rubber, the Indore process of disposal of night soil and town refuse and courses of instruction for laymen proceeding to the tropics. Information was also given of an investigation by Dr. Crowden at the School of Hygiene of experiments on air-conditioned cubicles for use in the tropics.

#### Fast Atlantic Crossing by Air

THE Empire flying-boat *Cambria* crossed the Atlantic on September 28 in the fastest time ever recorded. The distance of 2,000 miles from Newfoundland to Foynes, near Limerick, was covered in 10 hr. 36 min., giving an average speed of 190 miles an hour. According to the account in *The Times* of September 29, Captain G. J. Powell made tests of speed at various altitudes. During the first part of the flight he remained at 4,000–5,000 ft. and made speeds of 172·6–185 m.p.h. Later he climbed to 7,000 ft. and attained a speed of 195 m.p.h. Bad weather then forced him to 13,000 ft. when his speed fell to 167 m.p.h. Eventually, he reduced the height to 10,000 ft., where the most favourable wind for the easterly part of the journey was found.

#### The Night Sky in October

SUMMER Time ends on October 3 at 2<sup>h</sup> U.T. The moon is new on October 4 at 12·0<sup>h</sup> and full (the Hunter's Moon) on October 19 at 21·8<sup>h</sup>. Conjunctions between the moon and the planets occur as follows: Venus on October 2 at 4<sup>h</sup>; Mercury on October 3 at 6<sup>h</sup>; Mars on October 11 at 18<sup>h</sup>; Jupiter on October 12 at 17<sup>h</sup> and Saturn on October 18 at 8<sup>h</sup>. On October 29 at 17<sup>h</sup>, Mars and Jupiter are in conjunction; the two planets passing within 1½° of one another (heliocentric positions). On October 11 at 6<sup>h</sup>, Venus is in conjunction with Neptune. On October 15, Uranus is near the sixth magnitude star  $\alpha$  Arietis; the diameter of the planet is 3½". The satellites of Jupiter, which always offer an attractive field for observation, present a few special features this month. On October 5 at 2<sup>h</sup> 24<sup>m</sup>–27<sup>m</sup> Satellite II will be partly eclipsed by Satellite I. On October 7 a similar eclipse of these two satellites takes place at 22<sup>h</sup> 07<sup>m</sup>–24<sup>m</sup>, the magnitude of the eclipse being 0·4. On October 17, I is partially eclipsed by III at 3<sup>h</sup> 27<sup>m</sup>–36<sup>m</sup>. Appulses between II and I occur on October 12<sup>d</sup> 01·9<sup>h</sup> and October 22<sup>d</sup> 1·0<sup>h</sup>, whilst a complete occultation of II by I will take place on October 25<sup>d</sup> 17·9<sup>m</sup>. On October 13, Jupiter will occult the seventh magnitude star *B.D.* –22° 5100 = *C.D.* 13939, the emersion being visible in Great Britain at 18<sup>h</sup> 34<sup>m</sup> at position angle 276° from the north point of the planet's image ("B.A.A. Handbook, 1937", p. 19). The light variation of Algol ( $\beta$  Persei) may be observed about 1½ hours before and after the following times: October 3<sup>d</sup> 19·6<sup>h</sup>; 18<sup>d</sup> 03·7<sup>h</sup>; 21<sup>d</sup> 00·5<sup>h</sup> and 23<sup>d</sup> 21·3<sup>h</sup>. The periodic comet, Eneke, which was re-discovered by Jeffers on September 3 at the Lick Observatory, passes from Triangulum to Andromeda during the month. The comet, which was of magnitude 18 at the time of discovery, is still very