

of bronze knives, spear-heads and bracelets, gold ornaments and pottery acquired by Sir Leonard Woolley in his excavations at Atchana in Syria, including pottery imported from Cyprus and Mycenæ, as well as local ware of about 1650-1450 B.C. in imitation of Cretan pottery of Minoan type. The National Art Collections Fund has given a slab from the stone balustrade of a staircase of the palace at Persepolis, dating from the reign of Darius the Great or Xerxes, somewhere between 520 and 460 B.C. It is carved in relief with the figure of a human-headed lion, winged and wearing a horned headdress. The Christy Trustees have presented a fine and important group of Peruvian pottery from the southern coastal area of Peru in the neighbourhood of Nasca. This Nasca ware, now thought to date from about 200 B.C. to A.D. 200 is an early, though not the earliest, form of Peruvian prehistoric pottery, and is distinguished by the variety of colouring and the fineness of line of its painted decoration.

#### Television Receivers

IN the General Electric Co.'s (G.E.C.) *Journal of May and August* a description is given by D. C. Espley and G. W. Edwards of television receivers made by the G.E.C. and how they have withstood the tests to which they have been subjected. Since the Commission, formed in May 1934, considered the position of television as a public service, it has come very much to the front. The Commission decided that the standard picture should not be less than 240 lines, with 25 frames per second as the repetition frequency. They further recommended that work should be started on an experimental transmitting station with a 450 line 50 frame per second. The G.E.C. Research Laboratories concentrated, therefore, on the forthcoming transmissions from the Alexandra Palace. It was originally expected that this transmitter would provide good signals within a circular area of 25 miles radius. Results with the receivers have exceeded expectations. At Reading (39 miles), Tunbridge Wells (38 miles), Maidstone (38 miles), Farnham (42 miles) and Brighton (56 miles) the results are entirely satisfactory. Using a modified set, it was found possible to obtain a well-synchronized picture at the G.E.C. Radio Works at Coventry (80 miles), although at this distance the appreciable 'background' noise must produce visible effects on the picture. Apart from the effects of local irregularities, it is now stated that the field strength round the transmitter has an almost circular distribution. The small irregularities are generally due to shadows produced by the proximity of buildings and the contour of the hills. In a few cases it was found necessary to erect aerials with directional properties either for raising low field strength or to avoid local interference when it is excessive.

#### Agricultural Advice

THE Harper Adams Agricultural College, Newport, Shropshire, has issued a review of its advisory work in the West Midland province during 1936-37 (Adv. Rept. No. 12, pp. 23, May 1937). This is contributed

by the advisory staff of the College, and bears the title of "Harper Adams Adviser". Topics of special interest are described, and the most significant tendencies are shown, but no attempt is made to condense the whole advisory activity into this small volume. Mr. F. S. Dennis shows, among other things, the high cost of milk production in Warwickshire, and indicates the lines of heavy expenditure. The correction of heart-rot in sugar beet, and 'Raan' in swedes, by the application of borax, is one interesting feature of Mr. W. Morley Davies's contribution, and the yield of milk deficient in butter-fat and total solids during spring and early summer also receives attention. This is a question vital to dairy farmers, for many cows do not provide milk which reaches the necessary legal standards at this period. "Some Causes of Winter Wheat Failure" is the main topic of Mr. H. C. F. Newton, the advisory entomologist, whilst Mr. N. C. Preston discusses the fungus disease of the same crop, known by the laconic name 'take-all'. Dr. A. Lloyd Provan compares the simple methylene blue test for the number of bacteria in milk, with the more accurate, but cumbersome, plating method. Veterinary investigational work is described by Mr. K. D. Downham.

#### Australian Science Abstracts

THE Australian National Research Council performs a useful service to its territorial men of science, and to a larger body of workers, by the publication of *Australian Science Abstracts*. This appears quarterly. (Subscription 4s. per annum, post paid, from the Editor-in-Chief, Australian Museum, College Street, Sydney.) Sections are devoted to agriculture, anthropology, botany and forestry, chemistry, economics and statistics, engineering, geography, geology, physics, physiology, veterinary science, and zoology. Papers on research findings or communications of general scientific significance are cited, and a short abstract follows most of the titles. Mr. T. Hodge-Smith is the editor-in-chief, and has the assistance of ten honorary abstractors. It is often difficult for the worker in Great Britain to follow research at the Antipodes, but this publication should make such contact possible.

#### The Reinmuth Earth-grazing Planet, 1937 UB

THIS object was discovered by Herr K. Reinmuth at Königstuhl on Oct. 28<sup>d</sup> 22<sup>h</sup> 27.6<sup>m</sup> U.T., near  $\alpha$  Piscium. Its magnitude was estimated to be 10, but 24 hours later the magnitude was 8, an indication of rapid approach to the earth. As it moved nearly one hour in R.A. in this time, it was obviously fairly close to the earth. Herr Schewick at Sonneberg found images of it on four plates, from October 26 to 29, and orbits were computed from the results. Unfortunately, the short interval rendered the determination of the period very uncertain, and this was found to range between 1.1 and about 4 years. The other elements were computed with as close agreement as could be expected from the data, and the various orbits indicated a small inclination to the