

of Animals Harmful or Useful to Agriculture, for the initiation of a study of the fauna, of means of controlling indigenous pests and nematode phytoparasites, as well as of biological control of agricultural pests. The Colonial Centre for Documentation and Co-ordination of Chemical Research received 844,400 francs for research in medicinal plants and insecticides in the Belgian Congo, while the Belgian Society of Optics and Precision Instruments received 800,000 francs for scientific and technical research on the improvement of optical surfaces, the study of optical systems corresponding with a new range of instruments and on the introduction of rational methods of manufacture into optics. Smaller grants, including 263,000 francs to the Centre for Ecological and Phytosociological Research and 162,500 francs for research on penicillin, brought the grand total to 20,801,300 francs.

Pulse-Counting Photometer

THE January issue of *Sky and Telescope* describes a new photo-electric photometer which counts the number of light pulses coming in from a star. The apparatus, known as the RCA 1P21 photo-multiplier tube, furnishes a strong pulse which can be amplified to operate special counters supplied by the Radio Corporation of America. In the 1P21 tube, each electron emitted when photons strike the light-sensitive surface in turn releases two to five secondary electrons from the first dynode, and repetition of this process through nine stages means that a single photon can be responsible for the emission of a million or more electrons from the last dynode. The addition of an RCA precision time-interval counter makes the work automatic; the observer merely sets a time-interval into a predeterminer, and the electronic devices then expose the counter to the output of the photomultiplier for a predetermined time. The number of pulses received in the interval is proportional to the light intensity of the star. Stars as faint as mag. 11.5 have been measured with the new apparatus attached to the 18-in. refractor of the Flower Observatory, and improvements now in progress may extend this by two magnitudes.

Head Wounds: Treatment and Rehabilitation

"WAR SURGERY SUPPLEMENT No. 1" of the *British Journal of Surgery*, with the subtitle "Wounds of the Head" (Bristol: John Wright and Sons, 1947. 30s. net), is not only a good record of surgical skill and achievement but also a fine example of British printing and publishing. Liberally illustrated by drawings and photographs, it should be a valuable work of surgical reference. There are twenty-two articles on various aspects of war wounds of the head. The first is by Geoffrey Jefferson, on "Head Wounds and Infections in Two Wars", the second by Sir Hugh Cairns on "Neuro Surgery in the British Army, 1939-45", and the third a remarkable "Atlas of Head Wounds", illustrating in colour standard operative techniques for their treatment. The remaining articles deal with other aspects of this important field of work and there are also notes on rare or obscure cases and a valuable bibliography of "Gunshot Wounds of the Head". Surgeons especially, but also bacteriologists, neurologists and others who are interested in the treatment and in rehabilitation of the patient after severe head injuries will certainly find the experience collected in this volume of very great value. They will look forward with great

interest to the appearance of the three other war supplements which are being prepared. No. 2 of these will deal with Abdomino-thoracic Wounds, No. 3 with Wounds of the Extremities, and No. 4 with Plastic Surgery, including Facio-Maxillary Injuries.

Textile Institute

ACCORDING to the annual report of the Textile Institute, presented at the annual general meeting on April 21, membership increased during 1947 by more than 20 per cent, to 3,728; this is more than twice the 1943 total. Correspondingly, there has been a big increase in activity. Further new branches of the Lancashire Section were formed at Oldham and Burnley; sections and branches held more than a hundred meetings. Besides the very successful annual conference held at Portrush, two one-day conferences were held to consider "Modern Methods of Single Fibre Testing" and "End Breakages in Cotton Ring Spinning". Two scholarships were awarded, to Mr. G. H. Ewins and Mr. J. E. Booth, both of Bolton, who have now commenced degree courses in textiles at the Manchester College of Technology. The decision to award a new scholarship of a maximum value of £1,000, to be available to students in all branches of textiles, was also announced. It is hoped that the Institute will be able to ensure "the general recognition and application of technical skill and scientific knowledge within the textile industry on a scale adequate to enable the industry to maintain its place in the increasingly complex economy of a rapidly developing world. The Textile Institute must achieve the status and capacity which is required if textile technology, of which the Institute is the guardian, is adequately to meet the needs of modern times."

Health Education in Guildford

AN earnest attempt to combat infection of food and drink has recently been begun by the Guildford Health Committee and food traders of the town (*Health Educ J.*, 6, No. 1; January 1948). A preliminary survey of 317 food premises carried out in November 1946 by health officials showed that many premises were faulty in structure and had inadequate washing and cleaning facilities and were staffed by men and women who were daily committing unhygienic practices. Instead of using legislative powers to tackle the problem it was decided to gain the willing co-operation of the manufacturers and food handlers. A Guildford Hygienic Food Traders Guild was set up to improve the sanitary arrangements in food-handling premises and to ensure that the statutory standards of food hygiene are observed, as well as to establish codes of practice for different trades which would be voluntarily accepted and applied by member firms of the food traders guild. Time was given for the necessary alterations and improvements to premises to be made, and the scheme took effect from March 1. The support and co-operation of the housewife has been sought by educational propaganda.

Plant Collecting in the Far East

DR. GEORGE TAYLOR joined Frank Ludlow and George Sherriff in 1938 for an expedition to south-eastern Tibet, and an account of the journey has recently appeared (*J. Roy. Hort. Soc.*, 72, Pts. 4 and 5, April and May 1947), with illustrations (several in