

The development of the practice of farming in its technical and regional aspects is another. The history of plant and animal breeding, diseases and their control, and all branches of agricultural science will be included; for example, agricultural chemistry, soil science, entomology, mycology, engineering, building, land drainage, etc. If sufficient support is forthcoming, a periodical containing research papers on all these subjects will be published, annually or more frequently, according to the funds that become available. For the present, Mr. J. W. Y. Higgs, Museum of English Rural Life, Shinfield Road, Reading, is acting as honorary secretary, and inquiries may be addressed to him. All interested will be welcome at the meeting at the Science Museum.

#### "The Times Survey of British Aviation"

NOWADAYS there are great expectations for those who look forward to the annual display and exhibition which is organized at Farnborough by the Society of British Aircraft Constructors. The aeroplanes which have made news in the previous year, month or even week, are then on show and now, for the first time, there is *The Times* survey of the whole field published for the occasion (September 1. 1s.). This is a deserved honour since, at least qualitatively, aviation is now an important part of our national enterprise. The contributors number some of the most eminent men in the field; and alas, one of them, Mr. John Derry, who wrote an article on test-flying, lost his life through the break-up of a *DH 110* during the display at Farnborough. Some of the photographs of new aeroplanes are spectacular and most are excellent. The survey catches something of the family spirit which is a part of the equipment of all those engaged in British aeronautics—from the industrial apprentice to the research scientific worker. From the general reader's point of view, it may be a pity that this spirit has here pushed critical analysis into a somewhat secondary position so that this issue tends to be a survey only. The problem of the supply of technical man-power, especially at high level, is scarcely considered. Incidentally, there is no mention of the rejuvenating effect of the departments of aeronautics in some of the university engineering schools in Britain. Despite the spectacular progress which has been so strikingly demonstrated, there is as yet insufficient application of scientific technology to some vital problems of design. Can the present organization of the aeronautical industry adapt itself to life in a peace-time economy?

#### Cacao Collecting Expedition in Colombia

A CACAO-COLLECTING expedition to Colombia has been organized by the Imperial College of Tropical Agriculture, Trinidad, and the Government of Colombia, and the advance party, consisting of F. W. Cope (plant breeder and expedition leader), R. E. D. Baker (plant pathologist) and D. J. Taylor (entomologist), has already commenced work in the forests. Further members are being sent out so that no worker will spend more than three months in the forest without a break. In addition to the British personnel, Colombian scientific workers will be participating in the expedition, and also Dr. R. E. Schultes, who has had much experience in the area collecting *Hevea* species for the United States Department of Agriculture. This expedition has been financed by the British West Indian and the British West African Cacao Research Scheme with the full co-operation of the Government of Colombia, and is expected to

last for some twelve to fifteen months. The first area to be investigated is the River Apoporis, one of the upper tributaries of the Amazon; and subsequent trips are planned to the Rivers Cuaviare, Inirida, Vaupes, Gaqueta and to the vicinity of the Casiquiare Bifurcation, the waterway linking the Amazon with the Orinoco. If time permits, short visits will also be made to cacao-growing areas of northern and western Colombia. The expedition plans to follow the main rivers, using aluminium canoes fitted with outboard motors, which can be transported from Bogota, the main base of operations, and from river to river, by Catalina aircraft. It is expected that, in addition to the rivers, it will be possible to use the trails made by the rubber-collectors, and that wild trees of *Theobroma cacao* and of other *Theobroma* and *Herrania* (a genus closely related to *Theobroma*) species will be found scattered or in small groups, but scarcely ever cultivated, throughout the area. The object is to explore the area, which is thought to be one of the homes of Criollo, or high-quality cacao, and thereby to obtain specimens which will widen the existing range of breeding material. Seed and budwood of cacao and of the related wild species will be sent by air to Trinidad and to the Colombian research station at Palmyra.

#### Progress in French Electronic Instrumentation

ISSUE No. 3, last year, of *Laboratoires*, the quarterly review, in French and English, of French technology, is devoted mainly to electronics and electronic instruments. The opening article is by Prof. P. Grivet who briefly reviews some of the modern applications of electronics. This is followed by a most interesting application of an electron probe and a new method of metallographic spot analysis which has been developed in the laboratories of the Office National d'Études et de Recherches Aéronautiques. If a substance is bombarded by a beam of electrons, X-ray emission is produced and the spectrum of the radiation contains lines which are characteristic of the chemical elements in the bombarded region. By use of electron lenses the beam can be focused and concentrated so that the bombarded region is of very small dimensions, of the order of one micron. An electron microscope has been modified so as to produce the probe, and some of the possibilities of the method and results of experimental tests performed with the apparatus are described. It would appear that the method is rapid and is capable of considerable accuracy. Other articles in the issue are on the mathematical basis of cybernetics, by R. Vallée, vice-president of the French Association of Electronic Engineers, and on the action of short-wave electromagnetic radiations on the maturing of wines, by Prof. M. Lafargue. Finally, there are two articles dealing with medical research: the first deals with electronics in cardiology and describes the various means and apparatus used for observation, analysis, treatment and control; and the second, by Prof. Ch. Oberling, director of the Institut de Recherches sur le Cancer, Villejuif, describes scientific cancer research, its method and tools, with illustrations and details of the particular work carried out at the Institute.

#### Fluorescent Lighting in Museums

An article by M. J. Genard, of the University of Liège, originally published in *Museum* (5, No. 1, March 1952) was reprinted, with some additional material introducing the results of more recent