

Ltd., and produced by Mr. Harold Lowenstein with the co-operation of Sir Arthur Hill and his staff, gives a 'cross-section' of the activities of Kew as a public garden and as the centre of economic botany and horticulture in the Empire. The opening views give a picture of the Gardens as seen by the ordinary visitor, followed by sequences showing some of the work that goes on behind the scenes, both out of doors and under glass, in order to keep the Gardens in good condition and to provide a constant succession of bloom throughout the year. The most interesting section of the film from the scientific point of view is that illustrating the work that is carried out in the Herbarium, Jodrell Laboratory and Museums. The process of drying, pressing, mounting and storing botanical specimens is shown in the film in detail, and the method of examining and describing new species is also dealt with. The work of the Jodrell Laboratory consists largely of identifying fragments of plants (roots, stems, leaves, etc.) by microscopical examination, and one of the best sequences in the film illustrates the technique of examining a portion of stalk found in the stomach of a poisoned cow. The film ends with an impressionistic treatment of the part that Kew has played in the foundation and improvement of many of the important agricultural enterprises throughout the Empire. The introduction of Para rubber and cinchona (quinine) from South America via Kew to the East in the middle of last century is illustrated, and more recent instances show that this type of work is still being undertaken. This film will undoubtedly be of value in spreading a knowledge of the great importance of the Royal Botanic Gardens in the botanical and horticultural work of the Empire, and it is hoped that it will obtain a wide circulation, especially among schools and other educational institutions.

#### Palestine Folk Museum

AN appeal for financial assistance towards the needs of the Palestine Folk Museum, appearing in *The Times* of April 19, should meet with a sympathetic reception from the widespread public in Great Britain and America, which is interested in the history and culture of Bible lands. The museum, which is situated in Jerusalem, was opened in 1936 under a committee formed in the preceding year and composed of representatives of the resident English, Arab and Jewish communities. Unfortunately it has no funds, and its work is carried on by voluntary helpers—no inconsiderable burden, even with a tolerant standard of efficiency. No Government grant has been made towards the expenses of the Museum, nor is it eligible to receive assistance from the funds provided by the Carnegie Corporation to aid the museums of the Empire through the Museums Association, Palestine being a mandated territory. Until something in the nature of an assured income is provided, it will not be possible to appoint a curator, an obvious necessity, or to carry on research. Folk museums now have a recognized and an increasingly important part to play in the record and study of cultural history; but the value to the student,

whether archæologist or historian, of a folk museum in a country in the near East, such as Palestine, is exceptional. A prolonged period of little cultural change has preserved peasant arts and industries, with their characteristic implements and appliances, domestic and other, virtually unchanged for many centuries, so that objects can be seen in daily use in the villages, which are identical in form and purpose with finds from Palestinian sites of the Bronze and Iron Ages. This period of comparative immobility is rapidly drawing to a close under the impact of an expansion of population and industry under Western influence.

#### Science and the Conservation of Food

IN his Friday evening discourse at the Royal Institution on April 16, Mr. T. Macara described some special problems of "Science and the Conservation of Food". While the term 'conservation of food' may be applied to many aspects of the production and handling of foods, he confined himself to problems connected with some common types of manufactured food. The first problems discussed were mould growth and fermentation, crystallization, and absence of jelly property in jam. As regards mould growth and fermentation, Mr. Macara put forward the theory that their prevention depends on the production of a jam having a higher osmotic pressure than that of mould spores or yeast cells, and he showed how this result could be achieved. The jelly property of jams is due to the fruit pectin, and it was shown how the jellifying property of this pectin may be lost or destroyed through lack of knowledge of its properties. Problems connected with the preservation of fruits, vegetables and meat products were then discussed. The British Food Manufacturers' Research Association has found certain bacteria the spores of which show an extraordinary high resistance to heat. Boiling for 8 hours or heating to 230° F. for an hour fails to destroy them. It was pointed out that these times apply to small quantities of materials, and that when larger quantities have to be sterilized it is necessary to know the rate at which heat penetrates the product. The question of food storage in cans is surrounded with difficulties on account of defects in the coating of tin on the cans. A number of cases have been met with where the cans became perforated after three or four months' storage.

#### Joint Committee on Materials and their Testing

A COMMITTEE having the above title has now been set up by leading technical institutions and societies in Great Britain to act as the British national organization in matters relating to materials and their testing. The need in Great Britain of some means to provide for more adequate co-ordination of the study of materials and their testing has, during the past year, received the earnest consideration of the principal technical institutions and societies which are concerned directly and indirectly with these important subjects. Twenty-two institutions and societies are represented on the Joint