

of the Advisory Council on Scientific Policy, 1950-51 (Cmd. 8299; H.M.S.O.). This report states "that the risk to life and health due to the presence of toxic substances in consumer goods is probably small, but the rapid growth of chemical industry, and the needs of the food-processing industries for substances to replace scarce materials or for chemical substances which have a claim to use on their own merits as improvers of appearance, palatability or texture of manufactured foods, are accelerating the pace at which new chemical substances are being introduced into consumer products, and the machinery which exists for testing the possible harmful effects of these substances is inadequate". Sir Frank suggested that the food industries should searchingly examine their own attitude with the view of the formulation of a policy "constructively, not merely defensively". It is completely indefensible, he said, to attempt to offset the seriousness of the problem by comparisons with other hazards to health, such as those arising from atmospheric pollution and other causes; but the time is opportune for the preparation by industry of a reasoned case demonstrating the necessity of various methods of food preservation for different purposes, to make full use of seasonal crops, to allow for necessary delays in manufacturing processes and to ensure the distribution of world or national food supplies over wide areas. Such a statement might constitute a valuable contribution to public understanding and would help the industries to make sure that they are fully meeting their responsibilities by thoroughly probing all the complex issues. It is essential, Sir Frank continued, that all food firms should make full use of the whole of existing knowledge and take a scientific attitude to it; the British Food Manufacturing Industries Research Association can play a very important part and warrants the support of all firms in the industries concerned.

#### Legal Protection of Laboratory Animals Overseas

SOME time ago, two scientists working in another country asked the Universities Federation for Animal Welfare (Great Britain) to suggest a form of legislation for the protection of laboratory animals which they might urge their own Government to adopt. In order to clarify the legal requirements, the Federation has drafted a summary of the Cruelty to Animals Act, 1876, and of the practices which have gradually come to be based upon it.

In Britain, the preparation of biological therapeutic substances for medical and veterinary use is controlled by statutes other than the 1876 Act; the animals involved are subject to inspection, and the Universities Federation for Animal Welfare considers this legal control and inspection important. The relevant British statutes are the Therapeutic Substances Act, 1925, and subsequent rules and orders, administered by the Ministry of Health, and the Diseases of Animals Act, 1950, and Diseases of Animals (Therapeutic Substances) Order, 1952, administered by the Ministry of Agriculture. The protection of all other laboratory animals is in the hands of the Home Office, which is equivalent to the Ministry of the Interior in most countries. The Federation considers that this is a good arrangement, since the Home Office is in a position to give an unbiased opinion when the claims of science have to be weighed against the welfare of laboratory animals. The Federation also considers that special breeding of all laboratory animals is desirable. In Britain many institutions breed their own animals, and a list of accredited

breeders has been compiled by the Laboratory Animals Bureau, Medical Research Council, Holly Hill, Hampstead, London, N.W.3.

#### Ten-Tola Primary Standard Weight for Karachi Mint, Pakistan

L. OERTLING, LTD., have completed the manufacture for the Karachi Mint, Pakistan, of what is believed to be the first primary standard weight manufactured commercially in Britain since before the War. The weight is of iridium-platinum alloy and is a cylinder having a diameter equal to its height with a mass of 10 tolas (1,800 grains or about 117 gm.). The billet from which the weight was manufactured was forged by Johnson Matthey and Co., Ltd., Hatton Garden, London, E.C.1, and the production of such a billet to very close specific gravity limits reflects great credit upon their skill. The certification of the specific gravity and the accuracy of adjustment was carried out by the National Physical Laboratory, Teddington. A special pair of forceps, container and carrying case are provided. The manufacture and adjustment of a weight in the form of a solid cylinder to an accuracy of two parts in one million represents a skill of a very high order. Since it is impossible to make any adjustment to the weight should it become too light, the weighing and counter-weighing of the mass becomes extremely critical as the limits of adjustment are approached; this work was carried out in the Weight Department of Messrs. Oertling.

#### The British Civil Service, 1854-1954

AT the suggestion of the Civil Service National Whitley Council, Mr. Wyn Griffith has written an excellent concise account of "The British Civil Service, 1854-1954" (pp. 32+4 plates. London: H.M.S.O., 1954; 1s. net) which has been published "at the direction of H.M. Treasury" on the occasion of the centenary of the publication of the Northcote-Trevelyan Report. In the broad perspective of this commemorative booklet, though the change in character and responsibilities of the Service are noted, the treatment of these aspects of special interest to the professional man, and particularly the scientific worker or technologist, is slight; nevertheless, the growth of the Scientific Civil Service is described as the outstanding development of recent years. Read with intelligence and reflexion, the booklet gives a clear enough guide to the real problems of the Civil Service to-day and the factors which determine its strength and weakness (see also p. 281 of this issue).

#### New Technical Bulletins on Rubber Research

THE first of a series of technical bulletins to give information on new materials and processes resulting from the research and development work of the British Rubber Producers Research Association has just been issued by the British Rubber Development Board (Market Buildings, Mark Lane, London, E.C.3). The object of the bulletins is to provide factual information, particularly for the industrial technologist, on subjects which have reached a stage of more practical interest. They will therefore supplement to some extent publication of the Association's work in technical and scientific journals. "B.R.P.R.A. Technical Bulletin No. 1: Heveaplus M" is a well-produced, illustrated booklet (pp. 20; 1954) which describes various products obtained by treatment of hevea rubber latex with methyl methacrylate. These products are of much interest since they represent successful attempts to improve natural rubber and to