

periodicals which adopted reduced page-sizes as a war-time measure will as soon as possible revert to full size, but they direct attention to the opportunity for standardization that will occur when paper supplies permit this change. Out of 638 trade and technical periodicals examined by the Committee, the maximum number with any one type-area was 47; there were 242 different sizes, 144 of which were unique, and the type-areas also vary in shape. Standardization is pressed in this report from the point of view of the advertiser, who wishes to submit sketches, layouts and copy in as few sizes as possible; but the strong recommendation of the report in favour of the adoption of a single size, namely, 10 in. by 7 in., will be welcomed by librarians and others who have been seriously embarrassed at times by the apparent irrational changes in size of periodicals as well as by the extreme diversity. The Committee recommends adoption of this size as the one indicated by its analysis as the most generally suitable and that to which journals making a change are likely to conform. It is also to a much greater extent than any other the most approved size for American, Canadian and other periodicals published overseas. Two other sizes are also suggested for consideration: 11½ in. by 8 in. and 9 in. by 6½ in. The proposals of the report are now commended by the Institute for detailed consideration by all concerned.

Vibration Problems

In a paper read before the Institution of Electrical Engineers in London recently, Dr. A. J. King considers the various ways in which vibration manifests itself, namely, noise, vibration, stress and rotational oscillation. The available methods of measuring vibration are described and their relative merits and limitations discussed. Methods of calibrating measuring apparatus are given, with an indication of their limits. The suppression of vibration is considered from the points of view of what is desirable, how much can be obtained at the source and how much by resilient mountings, attention being given to the effect of ground and source impedance. Practical examples are given of the reductions in vibration which have been achieved in certain cases by improvements in the source and by resilient mountings. The second part of the paper is concerned with the determination of elastic design data on resilient materials and mountings for use as described earlier for reducing vibration transmission. The limitations of a previous moving-iron-drive resonance-type method are discussed, and the advantages of a moving-coil-drive co-ordinate-potentiometer method are pointed out. The apparatus is described in detail, and results of tests on typical materials and mountings are given and discussed.

Mites as Carriers of Typhus

THE British Museum (Natural History) has issued a useful pamphlet, in its Economic Series (No. 16), by Dr. Susan Finnegan entitled "Acari as Agents Transmitting Typhus in India, Australasia and the Far East" (from the Museum, 1s. 6d.). The typhus fever group of diseases, it may be added, includes a number of affections occurring under diverse climatic and biological conditions throughout the world. They are all due to the activities of minute, non-filterable, rod-like bodies of the genus *Rickettsia*. Excluding epidemic louse-borne typhus, these diseases are known, or suspected, to be carried by larval mites of the family Trombididae or by ticks of the family

Ixodidae. The most important infections spread by Acari are 'rural' typhus, tsutsugamushi or 'scrub' typhus; tick typhus or 'Kumaon fever' of India; the so-called 'Q' fever of Queensland; Rocky Mountain spotted fever of North America and others. The carriers are definitely known in but few cases, though the available evidence points to Acari as being the main vectors. This naturally has led to the great importance of correct identification of any species suspected in this connexion. Dr. Finnegan in this pamphlet has provided an admirably clear and well-illustrated guide to the subject which can scarcely fail to be of real use to medical officers and others in lands where typhus occurs.

Varieties of Red and White Clover

WATKIN WILLIAMS (*Bull. Welsh Plant Breed. Stat.*, No. 16, 1945) has outlined the results of the recent work on clovers which has been carried out at the Welsh Plant Breeding Station, largely under the guidance of the late R. D. Williams. This painstaking work emphasizes the necessity of an analysis of the characteristics of the existing types, judicious selection of the characters desired and the practical production of suitable methods for the isolation of commercially desired forms. Both in red clover and in white clover, the Welsh Plant Breeding Station has been able to produce improved strains which are outstanding for commercial purposes.

University of London Appointments

The title of reader in civil engineering in the University has been conferred on Dr. L. A. Beaufoy in respect of the post held by him at King's College. The title of reader in chemistry in the University has been conferred on Dr. D. J. G. Ives, in respect of the post held by him at Birkbeck College. The title of reader in history and philosophy of science in the University has been conferred on Dr. Douglas McKie, in respect of the post held by him at University College. The title of professor of morbid anatomy and histology in the University has been conferred on Dr. R. W. Scarff, in respect of the post held by him at the Middlesex Hospital Medical School.

The title of professor emeritus of civil and mechanical engineering in the University has been conferred on Prof. E. H. Lamb, who held the chair of civil and mechanical engineering at East London College (now Queen Mary College) from 1913 until his retirement at the end of the session 1944-45 (see *Nature*, 156, 137; 1945). The title of professor emeritus of helminthology in the University has been conferred on Prof. R. T. Leiper, who retires in September 1946 from the William Julien Courtauld chair of helminthology at the London School of Hygiene and Tropical Medicine, which he has held since 1917. The title of professor emeritus of experimental pathology in the University has been conferred on Prof. E. L. Kennaway, who retires in September 1946 from the chair of experimental pathology at the Chester Beatty Research Institute of the Royal Cancer Hospital, which he has held since 1931 (see *Nature*, 158, 51; 1946).

ERRATUM. In the communication "Nutritional Value of High-Extraction Wheat Meals" by A. R. P. Walker, Prof. J. T. Irving and Dr. F. W. Fox in *Nature* of June 8, p. 769, the percentage of calcium absorbed during week 2 on usual diet (see table) should be 26, and not 36 as printed.