

LOCAL PRODUCTION.

Forty-four (44) of the Emergency Standards relate directly to local production, the purpose of which is to conserve materials and man-power and maximize essential production within the limits imposed by war emergency exigencies. Emergency Standards are also a valuable means of securing the general use of substitute materials where materials normally used are in short supply or are no longer available. Moreover, they effectively eliminate unnecessary varieties in types, patterns, and dimensions, which otherwise would make heavy demands upon man-power and materials and considerably restrict production. Indeed, such Standards are the only effective means of ensuring that productive effort is concentrated upon commodities which will secure the most economic use of the materials and labour employed. This is well exemplified by Henry Ford's definition of a standard, as follows: "Standardization in its true sense is the union of all the best points of commodities with all the best points of production, to the end that the best commodity may be produced in sufficient quantity and at the least cost to the consumer."

The following two examples taken at random soundly evidence the importance and value of this aspect of standards activity:—

Milking-machine Rubberware.—The adoption of a standard specification for milking-machine rubberware will result in a saving of approximately 30 tons, or 25 per cent., of the raw rubber used for this purpose.

Bolts and Nuts.—A manufacturer of bolts and nuts states that the production cost of special lines to individual specifications is increased by 50 to 75 per cent. as compared with the standard lines.

The vital importance of such considerations as a means of securing increased war production is emphasized by Donald M. Nelson, Chairman of the War Production Board, U.S.A., in the following statement reported in *Industrial Standardisation* of August, 1941. He says: "The production capacity of the United States for defence could be increased from 25 to 33½ per cent. through the elimination of unnecessary varieties, sizes, types, grades, qualities, &c., of civilian needs."

Similar stress is given to this aspect of standardization in the following statement by Lessing J. Rosenwald, Chief, Office of Production Management, Bureau of Industrial Conservation, U.S.A., as reported in *Industrial Standardisation* of January, 1942: "The purpose of this Bureau," he states, "is primarily to eliminate waste in its many and varied forms, and to aid in making the 'critical' materials serve their best uses and stretch out as far as possible; as well as to endeavour to find adequate substitutions for them when we can. . . . Simplification, or simplified practice, is one means of bringing this about. . . . In many cases 20 per cent. of the sizes, we will say, will take care of 80 per cent. or more of the demand. . . . I realize the importance of standards and standardization. All of our manufacturing efforts depend on proper standards. We could not get along without them. We need minute and detailed standard measurements and specifications because they are vital."

OVERSEAS PURCHASING CO-ORDINATION STANDARDS.

A Specifications Co-ordination Committee has been set up during the year to undertake the co-ordination of Emergency Standards for commodities which now have to be obtained from different overseas sources on account of these supplies being no longer available from the normal sources of supply. The committee consists of representatives of the Ministry of Supply, the Railways, Public Works, and Post and Telegraph Departments, and the Standards Institute. At the end of the period under review twenty-three (23) Emergency Standards and twenty-one (21) Purchasing Directions had been issued.

With a view to facilitating the procurement of commodities vital to the prosecution of the war effort it has become necessary to examine the specifications in use in New Zealand and to correlate these with those in use in the countries whence our requirements of essential commodities must now be secured. Sources of supply of essential materials, equipment, and commodities are undergoing changes which inevitably produce confusion unless something is done to replace individual specifications—some of which are so vague as to be of little value—with national specifications which, as far as practicable, are co-ordinated with the relevant specifications in use in those countries which have become the new sources of supply.

CIVIL DEFENCE.

Twenty-six (26) of the Emergency Standards issued during the period under review relate to civil defence and the emergency precautions services. These include raid shelter, emergency fire-fighting equipment, first aid, protection against flying glass, and other war hazards. Each of these Emergency Standards is based extensively upon reports incorporating the latest experience in Great Britain, modified as necessary to meet New Zealand conditions.

BUILDING BY-LAWS.

Demands made upon committee members and staff by urgent emergency projects has necessarily somewhat arrested progress in connection with the standardization of building by-laws. Attention has, however, been given to Part XIV, "Means of Egress," of the Standard Code of Building By-laws, for which there is an urgent need. The formulation of this Part has been completed, and it is about to be submitted for legal scrutiny. During the year a draft Standard Code of Plumbing and Drainage By-laws was also completed and circulated to interested parties for comment.

COMMODITY STANDARDS.

In accordance with the economic stabilization policy, a comprehensive programme of commodity standardization has been undertaken, embracing essential foodstuffs, clothing, and household commodities. Emergency Standards have been completed for fifteen basic lines of utility footwear; and for