

*Steel.*—Following work done in 1928, types of reinforcing bars for concrete work had been brought down from a wide range to fourteen. Apart from its benefits to the producer, the step was welcomed by designers of reinforced concrete structures and by erectors. In the Second World War steel compositions were reduced from some 5,000 down to 300, and there seemed no evidence of a wish to revert to greater variety. The view was expressed that simplification had been a significant factor in keeping prices down over a period of rising material and labour costs.

*Grinding Wheels.*—Through the active effort of the producer, users were persuaded to agree to reduction in variety, and so far the number of types of grinding wheels has fallen from 715,000 to well below 300,000, while in abrasive papers the reduction has been from 5,500 to 1,700. The opinion was expressed that but for this simplification the average unit of cost of the products of the industry would be double what it actually is.

*Boots and Shoes.*—A prominent manufacturer of boots and shoes expressed the opinion that simplification was “an essential and prime factor in raising production and lowering costs.” This manufacturer had deliberately concentrated the greater part of his output of more than a dozen factories on six basic types of shoe, with a large degree of standardization of parts and fittings. Labour costs have been reduced by more than 25 per cent. While wages levels had risen subsequently by more than 100 per cent., continuing simplification had resulted in the production of a better quality shoe at a cost increase of less than 80 per cent.

*Farm Machinery.*—A large group of companies manufacturing farm machinery concentrated on standardization of components and on securing a wide variety of performance from the smallest range of equipment and accessories.

### The committee reached the following conclusions :

All the evidence we have assembled endorses the advantages to be gained from simplification as set out in section 2 of this report. The producer benefits through longer runs, increased mechanization, simpler operations, more effective use of capital invested, concentration of sales and advertising effort, and in other ways. The result is higher productivity at lower cost, with consequent increased volume of sales. The consumer benefits through lower prices and ready availability of supplies.

As a result of our visit to the United States we are convinced that one of the main reasons for the high productivity and low cost, which are characteristics of industry there, is the ruthless elimination of unnecessary variety and the resultant concentration of manufacturing resources.

Simplification and standardization have been developed by some sections of industry and by some individual firms in the United Kingdom. We believe that those who have done most will be the first to assert that much more can and should be done.

No doubt there are a few industries in which the scope for simplification and standardization is small, but we are satisfied that such are the exceptions rather than the rule. For British industry in general we are convinced that there is great scope for raising productivity and lowering costs by more general adoption of the policies which have proved so successful in the United States.

Our dominant need to-day is for a greater volume of goods at lower cost from the present productive resources. The home consumer would gain a higher standard of living, both from greater availability of lower-priced goods at home and as a result of increased sales in export markets. Simplification can make a contribution at every level from mass-produced goods to the high-quality manufacturers into which some element of craftsmanship enters.

New Zealand cannot afford to ignore the observations contained in these two most authoritative reports based upon such competent and comprehensive investigations which confirm that no other single factor is so potent as a means of increasing production and correspondingly reducing production and distribution costs as standardization.

## EXCHANGE OF STANDARD SPECIFICATIONS

The exchange of standard specifications among the English-speaking countries has been continued and extended with the development of the International Organization for Standardization. We now exchange standard specifications and related documents with the standards organizations of some twenty-eight countries. Under this arrangement 5,450 documents were received during the year from thirty-five organizations, as set out in the table below. This ensures that, as far as practicable, uniform standards will be adopted by the English-speaking countries, and in particular by the British Commonwealth of Nations. It also makes available to each organization the benefit of the investigations of the others.