

XI. SECONDARY INDUSTRIES

A. GENERAL SURVEY

The term "secondary industries" is an unsatisfactory one in dealing with industrial development, as it is sometimes impossible to draw the line between primary and secondary industries. For the purpose of this discussion it is proposed to adopt the census definition of industry, which reads that industry includes "all manufacturing industries, including the treatment of raw materials, building and construction, and gas, water, and electricity production and supply."

From some points of view the production of such services as electricity may be considered to be a tertiary industry, but since by far the greatest amount of the electricity production is consumed in manufacturing industries it is convenient in this discussion to consider it in the secondary group.

As pointed out earlier, until practically the end of last century New Zealand was concerned almost wholly with agricultural production, and the servicing of such agricultural production. Only to a very minor extent was New Zealand engaged industrially. Such industries as were in existence were primarily of the locality and service type, always with the exception of food processing industries such as freezing-works and, to a limited extent, dairy factories.

Although there was some expansion in the size of industry, there was practically no real industrial development until after the 1914-18 war. Even then, during the third decade, which is marked predominantly by the expansion of the dairying industry, the emphasis was rather on the servicing type of industry, with the introduction at this stage of the servicing of motor transport and other machinery using internal-combustion engines, and the development of electricity.

By 1921 the industrial population was little greater than it was in 1911. The efficiency of that population, however, had considerably increased, consequent on the growing efficiency of the industries of the country. However, there has been a steady growth in the industrial population, a growth which was affected very much less than other economic activity by the depression of the early thirties.

The following table, extracted from the censuses, shows the number of persons engaged in secondary industry at various Censuses from 1901 to 1945:—

Table No. 93.—Table showing the Number of Persons occupied in Secondary Industry at the various Censuses from 1901 to 1936 and an Estimate for 1945

Year.	Males.		Females.		Total.	Index No.
	Number.	Index No.	Number.	Index No.		
1901	70,800	1000	16,561	1000	87,361	1000
1906	84,751	1197	18,749	1132	103,500	1185
1911	93,640	1322	20,157	1217	113,797	1302
1916	85,831	1184	20,170	1218	104,001	1191
1921	98,613	1393	20,319	1227	118,932	1361
1926	113,372	1601	20,616	1245	133,988	1534
1936	129,146	1824	27,712	1673	156,858	1796
1945	134,000	1892	37,000	2235	171,000	1957

Generally, the development of industrial population in both males and females has kept steady pace with the growth of the population as a whole. If anything, the number of females engaged in manufacturing has, until 1945, tended to lag behind the growth of population. This is a particularly interesting phenomenon, as the general impression is that the industrial growth has been very rapid. The definition of industry adopted for this purpose, however, must be kept in mind, for at a later stage it will be shown that in the tertiary group, comprising principally servicing industries, the growth has