## VII.—SEASONAL FLUCTUATIONS IN EMPLOYMENT.

EXPLANATORY NOTE.

In interpreting the preceding Tables III, IV, V, VI, and Graphs C and D, illustrating the extent and incidence of seasonal fluctuations in employment in the Dominion during the calendar years 1926 and 1927, the following remarks are to be borne in mind:

## SCOPE OF DATA.

The Tables III, IV, V, and VI and the Graphs C and D herewith are based upon employment in (a) the manufacturing industries, (b) the building industry, (c) the Public Works Department. In the case of (a) and (b) the statistics relate to wage-earning employees (i.e., actual factory hands, &c.) and are exclusive of working proprietors, managers, overseers, accountants, and clerks. The figures for (c) Public Works Department cover tradesmen and labourers employed by the

Department.

The investigation has been limited to the above groups owing to the absence of data relating to employment in the other branches of industry and commerce. According to the 1926 census there were in April of that year, roughly speaking, 240,000 wage-earners in the Dominion. These have been classified under the following headings:—

Group.			I	Number of Wage-ea (nearest Thousan	rners d).
Agricultural and pastoral		 	 	44	
Manufacturing		 	 	74	
Transport and communication		 	 	$\dots$ 35	
Commerce		 	 	32	
Building and construction		 	 	16	
Mines and quarrying		 	 	6	
Forest occupations		 	 	$\dots$ 4	
Sport and entertainment		 	 	$\dots$ 2	
Personal and domestic	• •	 	 	6	
Labourers		 	 	20	
				-	
Total		 	 	239	

The information relating to the manufacturing industries is restricted to those set out on the list given at end of this note. It covers only those establishments which have at least two persons engaged or use motive power. That bearing upon the building industry is restricted to the establishments of the same size, and is exclusive of building operations carried on by the General Government.

The numbers given for the manufacturing and building industries represent the numbers of wage-earners employed on the fifteenth or nearest representative day each month, whereas those for the Public Works Department represent the daily average for each month (i.e., 6 workmen engaged for ½ day=3).

## TREATMENT OF FIGURES.

Owing to the wide differences between the numbers of persons engaged in the three groups of industries dealt with it has been necessary to employ what are known as "relative numbers" in order to make intelligent comparisons between the figures. The principle of "relative numbers" is the expression, in terms of percentage ratios, of the different classes constituting statistical series, the crude figures for which are, owing to difference in character or magnitude, difficult of comparison.

The base adopted in arriving at the figures from which the curves on the attached graphs have been plotted has been the arithmetic mean for the twenty-four months in each case. A number of 108 represents an increase of 8 per cent. above the mean, while 92 represents a decrease of 8 per cent. It should be carefully borne in mind that the comparisons are based on the percentage relationship between each figure and the mean, and that the percentage differences represent different numbers of workmen.

Industries covered.

The manufacturing industries included in the tables comprise the following:-

Animal food-

Meat freezing and preserving. Ham and bacon curing. Fish curing and preserving.

Butter, cheese, and condensed-milk manufacture. Vegetable food—

Grain-milling.

Grain-mining.

Biscuit and confectionery making.

Fruit-preserving and jam-making.

Sugar-refining.

Baking-powder manufacture.

Drinks, narcotics, and stimulants—

Brewing and malting.

Colonial-wine making.

Acrated-water manufacture

Colomai-white making.

Aerated-water manufacture.

Coffee and spice grinding and preparing.

Tobacco-preparing and eigarette-making.

Sauce, pickle, and vinegar making.

Animal matters (not otherwise classed)—

Soap and candle making.

Glue-manufacture.

Sausage-casing manufacture. Boiling-down and manure-making.

Working in wood—
Coopering and casemaking.
Sawmilling, sash and door making.
Woodware and joinery manufacture.
Vegetable produce for fodder—
Grain-crushing.

Paper-manufacturers

Paper-manuacuners—
Paper-milling.
Paper bag and box making.
Heat, light, and power—
Gas making and supply.
Electricity generation and supply.
Electric tramways.

Processor relating to stone glay glass.

Processes relating to stone, clay, glass, &c.— Lime crushing or burning and cementmaking. Brick, tile, and pottery making.

Leadlight-making and glass-bevelling.

Electroplating.
Pumice-insulation making.

Concrete block or pipe and fibrous-plaster making.

Metals other than gold or silver—

Tinned-plate and sheet-metal working.

Iron and brass founding.

Engineering. Electrical engineering.

Rangemaking.

Wireworking.

Iron-smelting. Precious metals

Jewellery and watchmaking.

Books and publications—
Printing, publishing, and bookbinding.
Musical instruments—

Musical instruments—
Piano, &c., making and repairing.
Ornaments and minor art products—
Picture-frame making.
Basket, perambulator, &c., making.
Equipment for sports and games—
Billiard-table making.
Designs, medals, type and dies—
Engraving and stamp-making.
Ammunition and explosives—
Ammunition, explosives, and fireworks making.
Machines, tools, and implements—
Agricultural-machinery making.
Brush and broom making.
Carriage and vehicles—

Brush and broom making.
Carriage and vehicles—
Coachbuilding.
Motor and cycle engineering.
Harness, saddlery, and leatherware—
Saddlery and harness making.
Leather-goods making.
Tanning.

Tanning.

Tanning.
Fellmongery and wool-scouring.
Ships, boats, and their equipment—
Ship and boat building.
Sail, tent, and oilskin making.
House-furnishings—
Furniture and cabinetmaking.
Blindmaking.
Mattress-making.
Rug and mat making.
Chemicals and by-products—
Ink-manufacture.

Ink-manufacture. Starch-manufacture.

Chemicals-manufacture.

Paint and varnish manufacture. Sheep-dip manufacture. Match-manufacture.

Boot-polish manufacture.

Patent medicines and preparations manufacture. Textile fabrics—

Woollen-milling. Flock-milling.

Apparel-

Boot and shoe making.

Hosiery-making. Umbrella-making.

Clothing and waterproof making.

Fibrous materials—
Rope and twine making.
Bag and sack making.

Flax-milling.

Miscellaneous.