

operation reported a capital investment of \$163,092,471 and employed 8,626 workers. The value of smelter and refinery products was \$100,946,136, including aluminium, nickel, cobalt, blister copper, electrolytic copper, zinc, lead, silver, gold, cadmium, bismuth, platinum, palladium, and other refinery products.

Exports of non-ferrous metals and their products reached nearly \$116,000,000 in 1930.

Non-Metallic Minerals.—This group of manufactures includes such leading industries as coke making, oil refining, the manufacture of glass, artificial abrasives, bricks, cement, etc. Final figures for 1930 show that the output for this group was \$25,000,000 or 10.4 p.c. below the corresponding total for 1929.

The petroleum-refining industry is by far the largest of the group. Canada produces some crude oil but the bulk of the oil treated in Canadian refineries is imported from United States or South America. In 1930 there were 15 refineries operating at advantageous points across the Dominion. These units used 1,064,434,974 gallons of crude oil in that year and produced refined commodities worth \$90,809,711. About 5,030 people were given employment and the capital investment was \$69,077,982.

Chemicals and Allied Products.—That chemical manufactures occupy an important place in Canadian industry is apparent from the fact that in 1930 an average of 15,503 persons were employed in the 591 plants which made chemicals and allied products. These plants produce the greater part of the chemicals that are consumed in this country. In 1930 the apparent consumption of chemicals and allied products amounted in value to \$140,000,000, of which \$120,000,000 or 85 p.c. was of domestic manufacture.

Chemicals and like products of great diversity are made in Canada but paints, soaps, medicinals, acids and chemical salts are most important. Production from the 17 plants in the heavy chemical industry, which represents a capital of \$52,000,000 normally amounts to about \$20,000,000 and in 1929 was up to \$28,000,000. Acetic acid, calcium cyanamide, sodium cyanide, caustic soda, soda ash, sulphuric acid, phosphorus, calcium carbide and nitre cake are among the leading products. The export trade in these commodities amounted to about \$11,000,000 in 1930.

The paints industry employed 2,835 workers in 1930 and paid \$4,307,998 in salaries and wages. Production in that year was valued at \$23,966,502. The soap industry is next in importance, there being 68 factories in this line of manufacture with output worth \$18,167,838. The production of medicinals and pharmaceuticals was worth \$17,768,806 and 2,833 people worked in the 144 factories in this industry. Compressed gases, fertilizers, coal-tar products, wood-distillation products, inks, adhesives, polishes, and a multitude of other such products are also made in the chemical plants.

Many chemical products are also made in industries which for statistical purposes are not included in the chemicals and allied products group. For instance, pulp and paper, distilled liquors, brewery products, and artificial abrasives are classified in other groups. By extending the scope of the chemical industry to include these other factories which primarily use chemical processes, approximately 100,000 workers would be employed and production would total about \$631,000,000.

Central Electric Stations.—This industry is shown under the totals by groups in Table 7 as a separate group in order to facilitate the presentation of statistics of power installed in the other groups and industries.

The principal statistics of each of the manufacturing industries of Canada during 1930 are presented in Table 7 on pp. 424-429.