The adhesives industry with 22 operating plants showed production in 1946 at \$6,784,313 or 21 p.c. above the \$5,626,892 reported by the 24 plants operating in 1944 and 221 p.c. above the \$2,110,806 reported in 1939. Output of bone and hide glue amounted to 5,224,629 lb. valued at \$1,081,705. Vegetable glues, synthetic resin glues and linoleum cement were the other principal products.

Polishes and prepared waxes were made in greater volume in 1946, the value for the industry at \$9,558,330 being 30 p.c. greater than in 1944 which, in turn, was 113 p.c. above the 1939 total of \$3,461,556.

In the miscellaneous industry, excluding explosives and ammunition, there were 254 establishments making such items as insecticides, plastics, sulphonated oils, matches, etc. Output from these products in 1946, amounted to \$47,665,000 compared with \$40,569,000 in 1944 and \$12,402,000 in 1939.

The Chemical Process Industries

The chemical process industries include those industries which, because of the nature of their products, are classified by the Bureau of Statistics with industrial groups other than the chemical industry. However, chemical processes enter into the manufacture of these products to such an extent that they may be considered as playing a major part in chemical production. These chemical process industries include some of the most important industries in the country. The manufacture of pulp and paper, rubber and rubber goods, glass, artificial abrasives, non-ferrous metal smelting and refining, breweries and distilleries, sugar refineries, leather tanneries, coke and gas plants and petroleum refineries are in this group. Output from these industries in 1946 exceeded \$1,600,000,000,000 in value, and employment was provided for 125,000 workers.

In 1946, the production of newsprint at 4,162,158 tons compared with 3,039,783 tons in 1944 and 2,926,597 tons in 1939 was 42 p.c. above the production in 1939; coke output at 3,363,109 tons was 20 p.c. below the 4,193,424 tons produced in 1944 but nearly 40 p.c. above the 2,410,095 tons produced in 1939. Gasoline sales at 1,144,000,000 gal. exceeded the billion-gallon mark for the first time. Production of refined copper at 167,221 tons was down 33 p.c. from the 250,214 tons reported in 1944 but refined lead at 165,745 tons was up 17 p.c. over the 1944 total of 143,757 tons and refined zinc at 185,683 tons was greater by 9 p.c. than the 1944 total of 169,684 tons. Aluminum ingots production suffered the greatest decline of the metals under review, production having dropped from 460,686 tons in 1944 to 194,117 tons in 1946. Crude artificial abrasives amounting to 169,176 tons showed a decline of about 20 p.c.

Including the process industries and the chemicals and allied products industries, the gross production of these industries in 1946 totalled \$2,050,000,000 compared with \$2,300,000,000 in 1943, the record year, and \$998,500,000 in 1939.

It appears that the chemical industries have emerged from the Second World War in a slightly better position than industry as a whole. The official index of the physical volume of business for all manufactures in Canada, as compiled by the Dominion Bureau of Statistics, averaged 188.4 in 1946, calculated on a base of 1935-39 equal to 100. This indicates a gain of 88 p.c. for industry in general compared with 100 p.c. for the chemical group.

In addition to the industries mentioned above, there are a number of related sub-groups which utilize chemical engineering principles or operate under chemical control. These are as follows:—