

Artificial Abrasives.—The manufacture of artificial abrasives in Canada began about fifty years ago. The discovery of silicon carbide is generally credited to Dr. A. E. Acheson, who built the first commercial plant at Niagara Falls, New York, U.S.A., in 1895 and a little later erected a subsidiary works at Niagara Falls, Ont. Fused alumina was first produced commercially as an abrasive in 1901 by the Norton Company in Niagara Falls, New York, U.S.A.

Most of the North American output of crude artificial abrasives comes from Canadian plants, and most of this production is shipped to parent companies in the United States for crushing, cleaning and grading. Five concerns in Canada now operate 6 large works for the manufacture of these products, as follows: Simonds Canada Abrasive Company, Limited, Arvida, Que.; Canadian Carborundum Company, Limited, Shawinigan Falls, Que., and Niagara Falls, Ont.; Exolon Company, Thorold, Ont.; Lionite Abrasives, Limited, Niagara Falls, Ont.; Norton Company, Chippawa, Ont.

Output in 1946 included 49,953 tons of silicon carbide, 119,223 tons of fused alumina, and other products, such as boron carbide, calcium boride, fused magnesia, etc.

Glass.—Four companies now operate 7 glass factories across Canada. Bottles, jars, etc., are made by the Consumers Glass Company, Limited, Montreal, Que.; and by the Dominion Glass Company, Limited, with works at Montreal; Hamilton, Ont.; Wallaceburg, Ont.; and Redcliff, Alta. Pyrex brand ovenware is made by Corning Glass Works of Canada, Limited, at Leaside, Ont. Window glass is made by the Industrial Glass Works Company, Limited, at Montreal. This latter works, which is the only one of its kind in Canada, came into production in May, 1941, was destroyed by fire in June, 1944, but resumed operations in the autumn of 1946.

Output of pressed, blown and drawn glass of all kinds was valued at \$17,500,000 in 1946. Imports of window glass in that year totalled 43,700,000 square feet valued at \$2,700,000.

In 1946 about 5,921 persons were employed by the Canadian glass industry.

Pulp and Paper.—Paper manufacturing began in Canada early in the last century. The first mill in Lower Canada was established at St. Andrews, Que., near Lachute, in 1803, and the second in the county of Portneuf, Que., in 1810. The Maritime Provinces entered the industry in 1819 with a mill built a little distance from Bedford Basin, near Halifax, N.S. The first mill in Upper Canada was located at Crooks Hollow (now Greensville), Ont., near Hamilton, but the date is uncertain, being set by some at 1813 and by others at 1820 and 1825.

Until Confederation, the industry was confined to the manufacture of paper from rags, but in 1866 Alexander Buntin began to make wood-pulp at Valleyfield, Que., in what is claimed to have been the first wood grinder in America. In 1887, Charles Riordon installed Canada's first sulphite mill at Merritton, Ont., and in 1907 the Brompton Pulp and Paper Company, Limited, built at East Angus, Que., the first mill in North America to produce chemical pulp by the kraft or sulphate process.

In 1881, the output of the industry was worth about \$2,500,000; 40 years later it was \$151,000,000, and at the end of another 20 years, in 1941, it was \$334,700,000. In 1946, the last year for which figures are available, the total was \$527,800,000 and the 113 mills which were in operation employed 44,967 persons. Exports of newsprint alone in that year totalled 3,858,467 tons at \$265,800,000.