

experiments in the use of wood. Different species were tried, and finally spruce and balsam fir were found to be the most suitable for the production of all but the best classes of paper.

The preliminary preparation of pulpwood is frequently carried on at the pulp-mill, but there are in Canada a number of 'cutting-up' and 'rossing' mills operating on an independent basis, chiefly for the purpose of saving freight on material cut at a distance from the mill or on material intended for exportation. Pulpwood is measured by the cord (4' by 4' by 8' of piled material), which is approximately equivalent to 500 feet board measure or to 90 cubic feet of solid wood.

There are, in Canada, four methods of preparing wood-pulp, one of which is mechanical and three chemical. Detailed descriptions of these processes are given in the 1931 Year Book, pp. 290-291.

Pulp Production.—Growth was steady up to 1920, when 1,960,102 tons of pulp were produced. There was a drop in production in 1921, but production in 1922, at 2,150,251 tons, more than overtook the previous year's drop. Following this, with the exception of 1924, each year up to 1929 showed consistent growth in the annual production, 1929 creating a record for the industry with a production of 4,021,229 tons. This was followed by annual decreases down to 1932 since when steady increases were recorded, resulting, in 1937, in a new record of 5,141,504 tons, but production in 1938 fell off by almost 30 p.c.

6.—Pulp Production, Mechanical and Chemical, 1931-38.

NOTE.—Figures for earlier years will be found in the corresponding table of previous Year Books.

Year.	Total Production. ¹		Mechanical Pulp. ²		Chemical Fibre. ²	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	tons.	\$	tons.	\$	tons.	\$
1931.....	3,167,960	84,780,809	2,016,480	37,096,768	1,151,480	46,998,988
1932.....	2,663,248	64,412,453	1,696,021	28,018,451	967,227	35,987,294
1933.....	2,979,562	64,114,074	1,859,049	25,332,444	1,120,513	38,781,630
1934.....	3,036,335	75,726,958	2,394,765	30,875,323	1,241,570	44,851,635
1935.....	3,868,341	79,722,039	2,563,711	32,323,820	1,283,743	46,444,144
1936.....	4,485,445	92,336,953	2,984,282	38,674,492	1,480,925	52,701,156
1937.....	5,141,504	116,729,228	3,384,744	46,663,759	1,756,760	70,065,469
1938.....	3,667,789	87,897,148	2,520,738	39,707,479	1,147,051	48,189,669

¹Some of these totals include unspecified pulp.

²Includes screenings.

During 1938 there were 27 mills manufacturing pulp only and 48 combined pulp and paper mills. These 75 establishments turned out 3,667,789 tons of pulp, valued at \$87,897,148, as compared with 5,141,504 tons of pulp, valued at \$116,729,228 in 1937. Of the 1938 total for pulp, 2,956,028 tons, valued at \$56,096,765, were made in the combined pulp and paper mills for their own use in manufacturing paper. Of the remainder, 142,696 tons, valued at \$5,896,616, were made for sale in Canada, while 569,065 tons, valued at \$25,903,767 were made for export. As in the case of pulpwood, a part of the product at this stage of the industry provides raw material for the later stages, while the remainder has a definite market value as pulp.