

on just long enough to obtain fibres that can be easily separated. The fibres so obtained are long, flexible and very strong, and are used in the manufacture of so-called kraft papers used for wrapping, bags, etc.

The pulp or fibre from all four processes leaves the grinders or digester pits in a fluid state, consisting of water with a small proportion of fibre held in suspension. It is first screened and thickened, and may then be piped direct to the paper mill. For shipping or storing, it is usually dried out sufficiently to allow it to be formed into sheets and folded into bundles or "laps." For export, these "laps" are baled by hydraulic presses. In some cases the pulp is dried for export by converting it into what is practically a coarse form of paper. Groundwood pulp is sold in laps, either wet or pressed. Sulphite pulp is marketed in laps, sheets or rolls, and soda pulp is usually shipped in rolls.

Table 8 shows the total production of pulp in Canada from 1908 to 1923 inclusive, together with the production of groundwood pulp and the production of fibre by the three chemical processes described. Statistics of values are not available from 1908 to 1916.

### 8.—Pulp Production, Mechanical and Chemical, calendar years 1908-1923.

Years.	Total Production. <sup>1</sup>		Mechanical Pulp.		Chemical Fibre.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Tons.	\$	Tons.	\$	Tons.	\$
1908.....	363,079	-	278,570	-	84,509	-
1909.....	445,408	-	325,609	-	119,799	-
1910.....	474,604	-	370,195	-	104,409	-
1911.....	496,833	-	362,321	-	134,512	-
1912.....	682,632	-	499,226	-	183,406	-
1913.....	854,624	-	600,216	-	254,408	-
1914.....	934,700	-	644,924	-	289,776	-
1915.....	1,074,805	-	743,776	-	331,029	-
1916.....	1,296,084	-	827,258	-	468,826	-
1917.....	1,464,308	65,515,335	923,731	25,918,811	540,423	38,374,191
1918.....	1,557,193	64,356,173	879,510	19,112,727	677,683	45,243,446
1919.....	1,716,089	73,320,278	990,902	23,316,828	725,187	50,003,450
1920.....	1,960,102	141,552,862	1,090,114	49,890,337	848,528	90,053,999
1921.....	1,549,082	78,338,278	931,560	32,313,848	612,467	45,929,513
1922.....	2,150,251	84,947,598	1,241,185	31,079,429	897,533	53,615,692
1923.....	2,475,904	99,073,203	1,419,547	37,587,379	1,012,092	60,674,518

<sup>1</sup>These totals include some unspecified pulp and screenings.

NOTE.—No values available, 1908 to 1916.

The steady growth of this industry up to 1920, when 1,960,102 tons of pulp were produced, will be seen from the above figures. There was a drop in production in 1921, but the production of 1922 reached the highest point in the history of the industry and was followed by a further increase in 1923.

Table 9 gives production of pulp in Canada in 1922 and 1923, by processes and by provinces. During 1923 there were 43 mills manufacturing pulp only and 32 combined pulp and paper mills. These 75 establishments turned out 2,475,904 tons of pulp, valued at \$99,073,203, as compared with 2,150,251 tons, valued at \$84,947,598, in 1922, representing an increase of 325,653 tons or 15.1 p.c. in quantity. Of the 1923 total for pulp, 1,404,488 tons, valued at \$42,748,137, were made in the combined pulp and paper mills for their own use in manufacturing paper. The surplus, together with the product of the pulp-mills, amounting to 1,071,416 tons, valued at \$56,325,066, was sold in Canada or exported. As in the case of pulpwood, a part of the product of this stage of the industry provides raw material for the later stages, while the remainder has a definite market value as such.