

A HANDBOOK OF THE CANADIAN PULP AND PAPER INDUSTRY

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A Handbook of the Canadian Pulp and Paper Industry by Various

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VARIOUS

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CANADIAN PULP
AND PAPER INDUSTRY**

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CALIFORNIA
OF THE
**CANADIAN
PULP AND PAPER
INDUSTRY**



**ISSUED BY THE CANADIAN
PULP & PAPER ASSOCIATION**

MONTREAL, 1920

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IN presenting this Handbook, the Canadian Pulp and Paper Association desires to express appreciation of the assistance rendered in its compilation by several Dominion and Provincial Government Departments, notably the Dominion Bureau of Statistics of the Department of Trade and Commerce, and the Departments of Lands and Forests of the Provinces of Quebec, Ontario and New Brunswick. The thanks of the Association are also due the various Canadian Pulp and Paper Companies for photographic and statistical material, freely and fully supplied.

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The statements contained in this handbook are not guaranteed, but have been taken from trustworthy sources and are believed to be reliable and accurate.

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CHAPTER I

Paper-Making in Canada

PAPER has been made in Canada for more than a century. From the records that are available at the present time it would appear that the credit for the first paper mill belongs to what used to be known as Lower Canada. Bouchette's "Topography of Canada" states that Canada's first paper mill was established at St. Andrews, Quebec, in 1803. It was, from all accounts, started by a party of Americans who obtained concessions from the seigneurs. The second mill in Lower Canada appears to have been established at Bedford Basin, near Halifax, in 1818, by R. A. Holland, publisher of the Halifax Record.

In 1825, in a little village known as Crook's Hollow, was erected the first paper mill in what was then Upper Canada. This was a small building, about 30 x 40 feet, in which paper was made by hand. To Mr. Crooks, its founder, belongs the distinction of having earned a bounty of £100 offered by the Government for the first sheet of paper manufactured in Upper Canada.

Simultaneously, on the banks of the Don River, a few miles from Toronto, John Eastwood and Colin Skinner were working to obtain the same honor. They succeeded in producing paper just a few days after James Crooks, so close, in fact, that the Government rewarded their efforts by remitting the duty on the paper-making appliances which they had imported from the United States.

The subsequent history of the pioneer efforts is not recorded. Little development appears to have taken place until 1840, when the brothers Taylor erected a mill in the same neighborhood. This was expanded by the addition of a second mill two miles above the first, and later by a third. These mills manufactured manilla, news and felt paper, respectively. Only one of them is in existence to-day. It is the flourishing property known as the Don Valley Paper Mills.

The establishment of the third mill in Upper Canada, in 1853, is notable for the fact that it marked the entrance of the Barber family into the paper industry, a connection which has lasted for more than half a century. This mill is standing in the same spot to-day, and is the Georgetown mill owned by the Provincial Paper Mills, Ltd. In 1858 a second paper machine was installed. It was supposed to be a marvel in efficiency. A story is told that when James Barber, who had charge of the paper-making end of the business, was informed that the new machine was running 100 feet a minute, he was so astonished that he would not be convinced until he had timed it with his own watch. It does not need much imagination to picture the growth of the industry when one contrasts this with the speed of to-day's machines, some of which run at a rate of from 600 to 1,000 feet a minute.

Established in 1857, ten years before Confederation, the Riordon Pulp & Paper Company, Ltd., forms an interesting chapter in the history of paper-making in Canada. It was in this year that John Riordon commenced business in Brantford, Ontario, as a trader in paper. In 1863 he took his brother Charles into partnership when they commenced the making of wrapping paper at Lock 5, on the old Welland Canal, at St. Catharines, Ontario. The mill capacity at that time was 1½ tons per day. In 1867 they built what was at the time regarded as one of the finest paper mills in America, at Levels 16, 17, 18, 19 and 20 of the Old Welland Canal, at Merritton. It had a daily capacity of ten tons of news and wrapping paper.

In the early '70's the Riordons were among the first on this continent to undertake the making of groundwood pulp, straw pulp and rags forming the raw material for newsprint paper prior to that time. In 1885, John Riordon died, and his son, J. G. Riordon, succeeded to his interests. It was at this time that Charles Riordon became the active head of the company. In 1887, Charles Riordon, in conjunction with the late Governor Russell of Massachusetts, brought the sulphite pulp process to America under patents of Dr. Kelner, of Vienna. The company built a sulphite mill of 30 tons capacity at Merritton, which is still in operation.

Turning once more to Lower Canada, it is found that the next paper mill was built at Portneuf, followed by one at Valleyfield, owned by Messrs. W. and T. Miller, who afterwards sold it to the late Alexander Buntin. Mr. Buntin built extensive additions to the original mill, and installed in it the first wood-grinding machine on the North American continent.

In 1859 the firm of Angus Logan & Company was founded in Montreal, and shortly after this the company had in operation a small mill on the Magog River in Sherbrooke. This consisted of two cylinder machines turning out 2½ tons a day. It employed sixty persons. In 1866 they established a mill in the village of Windsor Mills, and shortly afterwards built what is claimed to be the first pulp mill in Canada. This would appear to be correct, the census returns as late as 1871 making no mention of pulp mills.

From this time on the progress of the industry has been steady and constant. The 1881 census showed Canada to have at that time five pulp mills, with a capital investment of \$92,000, employing sixty-eight people, and having an annual output valued at \$63,000.

In 1891, 24 mills were in operation with a capital investment of \$2,900,907, employing 1,025 persons, and with an output valued at \$1,057,810.

In 1901 there were 25 mills with a capital investment of \$11,558,560, employing 3,301 people and with an output valued at \$4,246,781.

The most recent census, covering the year 1918, a complete digest of which follows, reports the existence of 37 pulp mills, 31 paper mills and 26 combined pulp and paper mills, a total of 94 mills, in operation. The total capital invested in the industry is given as \$241,344,704, of which \$12,520,765 is invested in paper mills exclusively, \$71,708,223

in pulp mills and \$157,115,716 in pulp and paper mills combined. By provinces Quebec leads in the amount of capital invested, with \$101,456,296; Ontario, \$88,576,807; British Columbia, \$42,705,988; New Brunswick, \$7,852,225; Nova Scotia, \$753,388.

The prairie provinces, Manitoba, Saskatchewan and Alberta, and the Province of Prince Edward Island are not represented in the industry. Tentative proposals have been made from time to time for the erection of one or more pulp and paper mills in Manitoba. An official statement furnished from that province for the purpose of this review says, "There are considerable tracts of pulpwood in different parts of the province, notably in certain sections of northern Manitoba not remote from the new Hudson Bay Railway. Projects for the erection of pulp mills or paper mills have been discussed at one time and another and it seems more than likely that these will take some definite form in the near future, but as yet they have not even gone so far as the incorporation of any company for this specific purpose."

From the foregoing, it will be seen that Canada is to-day one of the greatest paper-producing countries in the world. It is probably destined in time to be the greatest. Canada's supremacy in this field rests upon the possession of extensive forest resources and adequate and abundant water-powers. The importance of the latter element may be gauged from the fact that it takes practically 100 h.p. to make a ton of paper and that Canada's water-power development is probably the most economic in the world.

The great development of the industry, which has been a matter of comparatively few years may be traced to several circumstances, not the least important being enactments by the Governments of the several provinces requiring pulp wood cut from Crown lands to be manufactured within the province; the growth in population and the spread of education which have increased the per capita consumption of paper in every civilized country; the great increase in the number of newspapers and periodicals, particularly on the North American Continent; the proximity of the United States with its rapidly growing population, its gradually diminishing supply of paper-making materials and its consequent increasing reliance upon other countries for its paper supplies, and lastly the improvement in paper-making processes of which Canadian paper manufacturers have been among the first to take full advantage.

Rags were formerly chiefly used for the manufacture of paper, followed by straw, esparto grass, cotton waste and other substances. The Chinese, who are credited with originating the art of paper-making centuries ago, used both vegetable fibre and rags. They also used mulberry and other woods successfully in the production of pulp. Wood pulp is said to have been first used by the papermakers of Europe and America about the year 1860, but it was not until several years later that its use had become commercially successful. Out of the necessity of the time came the development of the chemical processes by which a good and cheap paper was evolved, but in the early attempts it was difficult to find the proper wood. Pine and poplar were tried, but without great success. The world was ransacked for wood better adapted for the