

WOOD PULP DEPARTMENT

SITE FOR A PULP MILL.

RICHIBUCTO, N. B., is said to be very favorably situated for the manufacture of chemical pulp. Mr. F. Schield, in a recent communication, figures out the cost of building a pulp mill as follows:

COST TO BUILD A PULP MILL.

Building, including land, all foundations, chimneys, etc., \$35,000; steam plant, including 4 boilers, 150 h.p. each, 110 lbs. pressure, steam pipe for heating and conducting steam to digesters, engines and paper machines, including all valves, gauges, etc., \$20,000; power plant, including boiler feed system steam engine at 340 H., condenser dynamo with small engine and all wires, \$14,000; transmission of power, including all shafts, pulleys, gears, bearing and belts, \$10,000; water, including pumps, water pipes, valves, tanks, etc., \$10,000; wood room, including saws, barkers, splitters, chipper, sorting arrangement and conveyors to digesters, \$15,000; digester room, containing bins to hold the chips for digesters at 6 tons capacity each, lined, with all the gauges, pipes and other appliances, vats to empty the fibre into, \$50,000; paper machinery, including pumps, conveyors to transport the cooked fibre, 2 openers, vat, screens, 2 paper machines, etc., \$30,000; acid making, including towers, sulphur or pyrites for acid tanks, pumps and pipe linings, \$10,000; small machine shop and carpenter shop, \$5,000; total, \$200,000.

A comparison is given between the cost of manufacturing one ton of pulp in the United States and in Canada, as follows:

IN THE UNITED STATES.

2 cords of wood	\$12.00
300 lbs. sulphur	2.75
½ ton limestone	.75
1½ tons coal	3.75
Labor	10.00
Freight on pulp	3.00
Maintenance of plant, etc.	5.00

Total.....\$37.25

IN CANADA.

2 cords of wood	\$4.00
300 lbs. sulphur	2.25
½ ton limestone	.50
1½ tons of coal	3.75
Labor	8.00
Freight on pulp	4.00
Maintenance of plant, etc.	6.50

Total.....\$29.00

The above shows a difference in favor of Canada of \$8.25 per ton, which equals \$57,750 per annum, or about 28 per cent. on \$200,000. Fibre in England is worth from \$35.00 to \$55.00 a ton, according to quality. There is an unlimited demand. The failure of many pulp mills in the United States is claimed to be due to a lack of knowledge on the part of the management.

The Acadia Pulp and Paper Mills Company are about to build a dam across the outlet of the La Have Lake. The dam will be 600 feet long and eight feet in height at the deepest point. The purpose is to raise the water by six feet and reserve the extra water for use at the pulp mills at New Germany, N.S., during dry spells. At present these mills have to be closed down for two or three months for want of water.

OBSTACLES TO THE DEVELOPMENT OF TRADE.

The High Commissioner for Canada has forwarded to the CANADA LUMBERMAN a copy of a communication received from the Darwen Paper Mill Company, Limited, Darwen, Eng., which speaks for itself:

DARWEN, July 25th, 1898.

DEAR SIR, With reference to your letter of the 18th instant, we beg to say in reply, that we have fairly large contracts for Canadian wood pulp over the next twelve months. The principal objections to an increase of the business are:

(1) That the pulp is not packed as well as that from Scandinavia.

(2) The pulp is supposed to contain 50% moisture. We find from actual working that this cannot be relied upon, and the consequence is frequent disputes between the parties concerned. Regularity in this respect is of great importance, and we naturally prefer to do business where this annoying feature is not present.

Large Canadian mills seem determined to adapt themselves to the English business, but in view of the lower prices of pulp from Scandinavia it is doubtful whether the Canadians will care for the business at the low prices which will doubtless prevail next year.

We should like to hear what prospects there are in Canada of a duty being put on timber for pulp making passing into the United States. You will remember that we expressed an opinion that this would help to foster Canadian industry with this country.

Yours truly,

(Sd.) J. E. CROFT,

For the Company.

PULP MILL AT EAST ANGUS.

THE Royal Paper Mills Company have extensive paper, pulp and saw mills at East Angus, Que. The saw and pulp mills have both been completed within the past year, and are modern in every respect. They are situated across the river from the large paper manufactory.

The saw mill is 36 x 126 feet, with an ell 24 x 36 feet. The power is furnished by two large water wheels. It is substantially built, and rests upon solid masonry. In the basement are the water wheels and the shafting, also the pumps that supply the reservoir on the hill above the pulp mill at an elevation of 100 feet. From this reservoir an eight-inch pipe is laid to the pulp mill, giving a water pressure of forty pounds to the square inch. This pipe feeds a system of hydrants that affords protection from fire. The first floor is devoted to clapboard sawing and planing, and to the cutting and screening of chips. The second floor is where the lumber is cut. One circular saw here makes an average of 80,000 feet in twenty-two hours of each day, and is the fastest machine of its kind in Canada. On this floor is a planer and a flooring machine, and also the machines that take the bark from the slabs, which are exclusively used for pulp wood.

There are three carriers run by machinery between the saw mill and the pulp mill. One carries the chips out of which the pulp is made, another the saw-dust and shavings to the furnaces, and a third the slabs and edgings also to the furnaces.

In the pulp mill, the boiler house is 63 x 94 feet in size, and contains six steam boilers, a rotary furnace for reclaiming soda ash, and a Yar-Yan evaporator. There is here, also, the steam engine which furnishes the power for the pulp mill. The room where the caustic liquor is made is 29 x 78 feet. It contains 12 iron tanks, 10 feet in diameter and 12 feet high, standing on solid masonry.

The washing room is 61 x 78 feet. It is a model of convenience, and plenty of storage for liquor, ample stuff chests and eight washing pits. Everything in this room rests on masonry. The pumps are all in line in this room. There are four large digesters in the digester building, which is 35 x 55 and 70 feet high, the upper part making an ample storage for chips. The finishing room is 108 x 43 feet. It now contains one machine, and a second one is to be put in. There is also a shipping room, 60 x 43, and a room for the storage of soda ash, 48 x 43 feet.

The capacity of the mill is 16 tons of dry pulp per day. It is the intention of the company to put in another Yar-Yan evaporator, another rotary furnace, another digester and a wet machine, which will bring up the capacity of

the mill to about 20 tons per day. For these purposes the company asks for subscriptions for their capital stock to the extent of \$25,000.

PULP NOTES.

The Sault Ste. Marie Pulp Company have been making some improvements to their grinders.

Kidd & Riley, of Sarnia, Ont., are taking a considerable quantity of pulp wood from Manitoulin Island, in Lake Huron, this season.

It is expected that the new English company which has taken over the pulp mill at Sturgeon Falls, Ont., will have it in working order by October 1st.

It is said that Mr. Mernier, owner of the Island of Anticosti, intends erecting a pulp mill on the island. He recently visited the extensive mills at Grand Mere.

The Riordan Pulp Company have commenced the erection of a pulp mill at Hawkesbury, Ont. The mill will be eight stories high, covering an area of about three acres of ground.

It is stated that certain Toronto parties will erect a large pulp mill in the near future at Escuminac, near Carleton, in the Baie des Chaleurs, the proposed output being 100 tons per day.

Mr. T. R. Allison, pulp mill designer, who built the Masterman pulp mill at Chatham, N. B., has been engaged by Messrs. John Bertram & Sons, of Dundas, Ont., to superintend the building of pulp machinery.

The new pulp mill at Mispec, near St. John, N.B., is nearing completion, and some of the machinery, manufactured by Messrs. John Bertram & Sons, of Dundas, is now being installed. Mr. B. F. Mooney is manager.

Mr. R. Cullen, superintendent of the sulphite plant in the Riordan paper mills, Merriton, Ont., has gone to Hawkesbury, Ont., to superintend the erection of the mills to be established there by the Riordan Pulp Company.

The Chicoutimi Pulp Company shipped no less than a thousand tons of pulp to England by the steamer Manchester Trader. The cargo was taken to Quebec by 24 cars of the Quebec and Lake St. John railway and seven schooners.

The Miller Brothers Company, a Montreal concern, will shortly ask for a Dominion charter, to manufacture paper, wood and straw pulp, etc. The capital will be \$300,000. W. T. Miller, of Montreal, and W. S. Miller, of Glen Miller, Ont., are interested.

A representative of a large Hamburg firm, it is said has made arrangements for the transmission of the entire product of the Chicoutimi pulp mills from Quebec. The pulp will be taken to Quebec, partly by cars and partly by sailing vessels, and will be forwarded by steamer every fortnight.

The Shawenegan Water and Power Co., which has been incorporated to develop and utilize the water power at Shawenegan, Que., will not manufacture pulp at present, it has been decided, confining itself to the production of power. The incorporators of the company are: David Russell, Montreal; John Joyce, Boston; William Strachan, Montreal, and others.

The making of wood into wood pulp and thence into paper set inventors thinking, and a result is the discovery of the transformation of wood fibre into strong and handsome cloth. The wood is boiled, crushed, and the fibres separated into parallel lines, dried and spun, the same as cotton or wool. Oak, hickory and locust make a very handsome cloth, while bamboo produces one which is almost iron-like in its strength and elasticity. The cost of the new process is not large, but is still a little above that of converting cotton or linen into substantial tissues.

A GOOD SALES AGENT.

THE value of the CANADA LUMBERMAN as an advertising medium for manufacturers of machinery and appliances adapted to the requirements of saw and planing mill operators, is well known to those who have given it a fair trial. For the benefit of persons who have not made a test of our advertisement pages, we may be permitted to repeat the statement recently made to our representative by the manager of the Canadian Locomotive and Engine Co., Kingston, Ont., that as a direct result of the publication in the LUMBERMAN of a description of the Dredge saw-mill machinery exhibited by the company at the Toronto Industrial Exhibition last year, they made a sale of five machines to one firm.