"THE SOO"

Home of

The Spanish River Pulp and Paper Mills, Limited

Sault Ste. Marie, Canada

"Should you ask me whence these stories,
Whence these legends and traditions,
With the odour of the forest,
With the dew and damp of meadows,
With the curling smoke of wigwams,
With the rushing of great rivers,

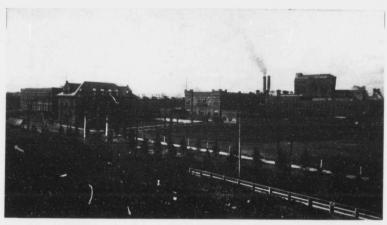
I should answer, I should tell you, From the forests and the prairies, From the great lakes of the Northland, From the land of the Ojibways."

-Hiawatha.

47878

"THE SOO"

A few facts and photographs which briefly tell the story of the Company which produces the greatest amount of newsprint paper in the Dominion of Canada.



Power House General Offices Machine Shop

Paper and Sulphite Mills

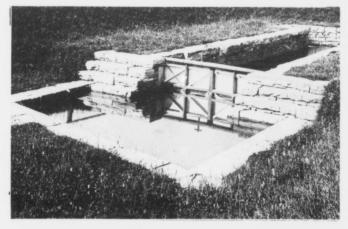
MILLS AND OFFICES AT SAULT STE. MARIE

" THE 500"

The early days of Sault Ste. Marie are rich in the lore of a past that is slipping from us far too quickly. The country surrounding the present city was the scene of many an interesting tale of the life of the Red Men. The Sault Ste. Marie Indians were of the Algonquin stock, the most numerous of Indian tribes. Where they came from we do not know. For over three hundred years the white man has known of their existence around St. Mary's Rapids, but statements made by the Indians themselves lead us back into a very obscure past. The legends tell of red men living by a great ocean to the west. They were fighters and hunters of the sturdiest type.

But Sault Ste. Marie was not always the name of this locality. As the waters tumbled down over the rapids, through the narrow straits, the braves gathered on the shores murmured to each other "Baw-a-teeg," which was the word used in speaking of the phenomenon. When speaking of the place it was called "Baw-a-ting." The generations who lived and died in Baw-a-ting spent their time in hunting, fighting, fishing and feasting. From the earliest time the tribe around St. Mary's River was known as the Ojibway tribe. The totem of the Sault Indians was the crane.

Until the time of the American Revolution there was no thought of dividing the history of the two shores of the St. Mary's River. Whatever happened on either side entered into the tale of the St. Mary's country. Voyageurs travelling up to Lake Superior portaged impartially on the north and south shores of the falls.



First Lock (restored) built at Falls of St. Mary's River, on Canadian side, by Northwest Fur Company, 1797-8. Length 38 feet; width 8 feet 9 inches; lift about 9 feet.

"THE SOO "-Continued

Just when the first white man set foot in the St. Mary's country is not known, but in 1668 a small white settlement of between twenty and twenty-five voyageurs had been formed. Space does not permit an outline of the years which have intervened, but suffice it to say that they have been crowded full of tradition and history well worth the reading.

The original Block-house, built by the Hudson Bay Company in 1792 and used as a powder magazine, is still preserved on the ground adjoining the paper mill.

The growth of the Sault has been steady since 1901, when the population numbered 7,169; in 1911 it had increased to 10,984 and in 1920 it has an estimated population of 22,000.

The future of Sault Ste Marie is bright, and as an industrial community she is bound to forge ahead rapidly during the next twenty-five years.

Sault Ste. Marie is the home of the Algoma Steel Corporation, which employs 3,500 men, and is one of the largest industrial concerns in Canada. In 1901 the walls of the first building of the steel rail mill were built, and in March, 1902, the first rail was rolled. The new \$7,000,000 addition to the Steel Plant, which is in course of erection, will have a yearly output of 150,000 tons of steel.

With the new addition the mill will have a total output of about 400,000 tons annually of rails and structural steel.



THE SPANISH RIVER PULP AND PAPER MILLS, LIMITED

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A. H. CHITTY, Asst. Secretary and Treasurer.

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W. FURNISS, Asst. Comptroller. OPERATING DEPARTMENT

C. H. L. JONES, Manager.

C. C. IRVINE, Asst. to Manager—Commercial.

L. H. SHIPMAN, Asst. to Manager—Asst. the Manager—Asst. the Manager, Asst. to Manager, Asst. to Manager, Asst. the Manager, Asst. to Manager—Asst. the Manager, Asst. to Manager, Asst. the Manage L. H. SHIPMAN, Asst. to Manager-Tech.

W. J. HUSSEY. General Superintendent, ESPANOLA.

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A. KAVANAUGH, General Superintendent, STURGEON FALLS.

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The Sault mill is the largest of the three operated by the Company, employing 800 men. The mill commenced operations in 1911, being at one time part of the Lake Superior Corporation.

Espanola is a modern industrial community, inhabited almost entirely by employees and their families, who number about 2,500. The town has a fine hotel, a community hall and two up-to-date schools: also a hospital, a fully equipped athletic park with baseball field, football field, tennis courts, skating rink, curling rinks, dancing pavilion and refreshment booths. There are three churches in the community.

Sturgeon Falls is an up-to-date industrial community. Practically all of the four thousand people who live in the city work in and about the woods and mills of the Spanish River Company. The town has several hotels and theatres and a number of fine residences.



The following are a few facts regarding the equipment and output of the three mills:-

PAPER MILL

Sault Ste. Marie—	Espanola-
2-156" Black & Clawson Machines.	2—164" Pusey & Jones Machines.
1—186" Pusey & Jones Machine.	2-120" Rice, Barton & Fales Machines.
1-198" Pusey & Jones Machine.	2-166" Pusey & Jones Machines.

Sturgeon Falls-

2-120" Bagley & Sewall Machines.

1-166" Pusey & Jones Machine (now being installed).

	Sault Ste.	Marie	Espanola	Sturgeon Falls
Daily Normal Production	225	tons	280 tons	75 tons (2 machines)
Annual Normal Production	70.000	и	87.000 "	130 " (3 machines)

SULPHITE MILLS

	Sault Ste. Marie	Espanola	` Sturgeon Falls
Digesters	Four-17' x 54'		Two-16' x 54'
Daily Normal Production	130 tons		60 tons
Yearly Normal Production	40,000 "		18.500 "

The equipment for making acid at the Sault consists of a Jenssen four-tower limestone system. The Sturgeon Falls mill is equipped with the Barker Milk of Lime system.



WHEN THE "DRIVE" COMES DOWN

 HE	SOO	

GROUNDWOOD MILLS

	Sault Ste. Marie	Espanola	Sturgeon Falls
Number grinders operated by water—			
3-pocket	16	29	21
4-pocket	8		
Number grinders operated by electricity.	6		
Average daily production	175 tons	200 tons	130 tons
Water head on wheels	18 ft.	63 ft.	36 ft.

WOOD POOM

WOOD	Sault Ste. Marie	Espanola	Sturgeon Falls
Knife Barkers	2		11
Drum Barkers	9	3	3
Chippers	3 -		2

OF ACTUED MATE

	SCHOULE	CIVILLE			
verage	number cords				
sawn	daily (Summer				
Mon	ths)	1,000	500	600	
otal nun	nber cords wood				
used	annually	130,000	65,000	75,000	

BOARD MILL

Sault Ste. Marie-One-100" Black & Clawson 4-cylinder machine.

Daily normal production 35 tons.

BOILER HOUSE

	Sault Ste. Marie	Espanola	Sturgeon Falls
Number of Boilers	14	10	10
Total Capacity B.H.P.	7.000	2.900	2.900

ELECTRIC POWER

At Sault Ste. Marie the electric power necessary to operate the Sault Mill is generated by the Great Lakes Power Company in their power house adjoining the Sault Mill, where 35,000 h.p. is developed, and an additional 8,000 h.p. will be developed on completion of a new addition now under construction.

At Espanola and Sturgeon Falls the Company generates its own electric power, of 6,500 h.p. at Espanola and 3,500 h.p. at Sturgeon Falls.

QUALITY OF PRODUCTS DEPARTMENT

The Quality of Products system is designed so that we may measure the qualities that go to make up paper and pulp in numerical terms, enabling us to contract with our customers to furnish them with a certain known grade of paper. Under this system we have an accurate record of the kind of paper we are making, and by furnishing this information to the men working on the machines we have been able to raise the quality of our paper until now we feel we are making as good, if not the best in Canada.

We grade our newsprint for each of eight different qualities, as follows: Basis Weight, Finish, Cleanliness, Strength, Formation, Thickness, Color and Moisture. Samples graded are average sheets of the day's run, 12" x 18" in size. Each sheet is tested for the above named qualities as follows:

Basis Weight. The average basis weight of the paper is obtained by weighing a sample from each roll of paper shipped.

Finish. The finish of each sample sheet is determined by a comparison with standard finish samples.

Cleanliness. The cleanliness of each sample sheet is determined by comparison with standard cleanliness samples.

Strength. The average Mullen pop test is determined by testing a sample from each roll of paper shipped.

OUALITY OF PRODUCTS DEPARTMENT—Continued

Formation. The formation of each sheet is determined by comparison with standard formation samples.

Thickness. In obtaining the average thickness of the samples ten sheets are measured at one time on an automatic micrometer.

Color. The color is tested by a comparison against standard color samples.

Moisture. The percentage of moisture in paper is found by drying samples of paper in small ovens located near the rewinders.

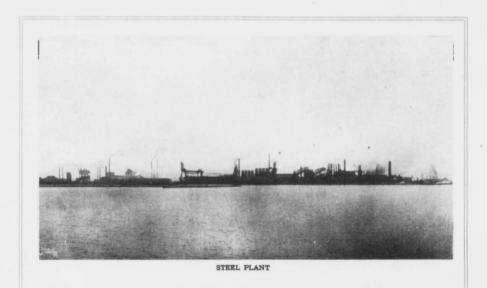
Total Progress Value. The total progress value or quality of paper is determined by giving each quality a certain weight value depending on its importance.

INDUSTRIAL RELATIONS

The Company treats its 7,000 employees as business men, and at all times endeavors to give them a square deal, for which in turn the Company expects a square deal from all its men.

WOODS DEPARTMENT

The woods operations of the Company are vast and require the services of nearly 5,000 men.



ST. MARY'S LOCKS AND CANALS

The St. Mary's Rapids are about half a mile wide and three-quarters of a mile long. The fall ranges from 17 to 21 feet with the varying stages of water.

The first canal was built on the Canadian side of the river by the North-West Fur Company in 1797. The lock was 38 ft. long, 8 ft. 9 ins. wide with a lift of 9 feet. It is still preserved as a historic relic on the grounds adjoining the General Offices of the Paper Company.

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On the American side there are four locks. The Weitzel lock, 515 feet long and 80 feet wide, with 17 feet of water, was completed in 1881. The Poe Lock is 800 feet long, 100 feet wide and has 22 feet of water on the sills. It was built in the years 1887-1896. The third and fourth locks, 1,350 feet long and 80 feet wide, with 24½ feet of water, were opened to traffic in 1914 and 1919 respectively, taking six years to build.

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" THE SOO "

ST. MARY'S LOCKS AND CANALS-Continued

Traffic through Canals during Season 1919—	
No. of passengers	56,992.
Passages through canals	
Total lockages	
Season of navigation	8 months and 6 days
Total freight carried	68 235 542 tone
Total valuation of freight.	\$014 513 044
Total valuation of registered vessels	\$240 571 650
Average distance freight was carried	915
Time Canadian canal was operated.	. 815 miles.
Time American canal was operated	. 250 days.
Passengers carried by American vessels	.25%
" " Canadian "	.75%
Freight carried during 1919—	
Wheat	113.734.848 bushels
Other grain.	
Flour	
Lumber	
Iron ore	
Coal, soft.	
Coal, hard	. 2,412,989 tons

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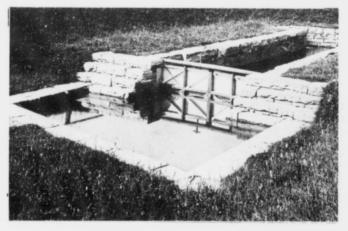
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H. C. McCOY, Purchasing Agent; J. F. TRAYNOR, Asst. Pur. Agent; F. M. O'BRIEN, Traffic Manager; A. J. GAUDETTE, Order Dept.

R. M. OLZENDAM, Secty, Dept. of Industrial Relations.

G. H. KOHL. Hydraulic Rogineer.

B. J. WATERS, Cost Engineer.

A. G. DURGIN, Research Dept. L. H. SHIPMAN, Asst. to Manager-Tech.

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STURGEON MILL

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WHEN THE "DRIVE" COMES DOWN

GROUNDWOOD MILLS

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4-pocket	8	* * *	
Number grinders operated by electricity.	6		
Average daily production	175 tons	200 tons	130 tons
Water head on wheels	18 ft.	63 ft.	36 ft.

WOOD Knife Barkers Drum Barkers Chippers	ROOM Sault Ste. Marie 2 9	Espanola 3	Sturgeon Falls 11 3 2
SLASHE: Average number cords sawn daily (Summer	R MILL		
Months)	1,000	500	600
Total number cords wood	130 000	65,000	75.000

BOARD MILL

Sault Ste. Marie—One—100" Black & Clawson 4-cylinder machine.

Daily normal production 35 tons.

BOILER HOUSE

	Sault Ste. Marie	Espanola	Sturgeon
Number of Boilers	14	10	10
Total Capacity B H P	7 000	2 000	2 000

ELECTRIC POWER

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QUALITY OF PRODUCTS DEPARTMENT—Continued

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Moisture. The percentage of moisture in paper is found by drying samples of paper in small ovens located near the rewinders.

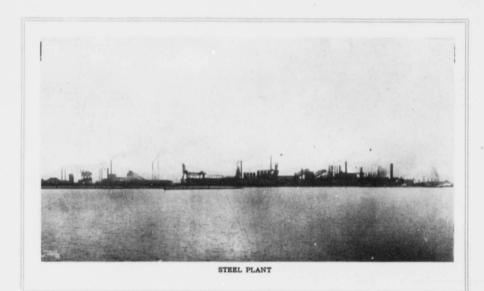
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Traffic through Canals during Season 1919-

ST. MARY'S LOCKS AND CANALS-Continued

Traine through Canais during Season 1919—
No. of passengers
Passages through canals
Total lockages
Total lockages
Season of navigation 8 months and 6 days.
Total freight carried
Total valuation of freight\$914,513,944.
Total valuation of registered vessels
Average distance freight was carried
Time Canadian canal was operated
Time Canadian canal was operated
Time American canal was operated
Passengers carried by American vessels 25% " Canadian 75%
Freight carried during 1919—
Wheat
Other grain
Flour 8,087,554 barrels
Lumber 244,426 M. board feet
Iron ore
Coal, soft
Coal, hard