

A MODEL SHINGLE MILL.

A VISIT TO THE PARKIN LUMBER CO.'S WORKS
AT LINDSAY.

THE accompanying view is a good representation of the new shingle mill recently put in operation by the Parkin Lumber Co., of Lindsay. On the invitation of the proprietors and Mr. F. J. Drake, the mechanical expert, a LUMBERMAN representative paid a visit to this establishment during the past month, and amid the hum of machinery and the general bustle, which the turning out of 120,000 shingles a day makes necessary, he witnessed with interest the process from stage to stage of the log being converted into that unpretentious but ever-necessary commodity the shingle.

Our illustration shows the main building, dry kilns and railway siding, the public and private offices, engine and boiler room being situated in the rear. The mill building proper is constructed of brick, being 45 x 100 feet in size, and composed of three floors, or flats. This, as well as all connecting buildings, is so constructed as to be practically fire-proof, the object being to do away entirely with fire insurance, which, according to the past experience of the firm, proved anything but satisfactory.

Viewing this as the most complete shingle mill yet constructed in Canada, and, perhaps, second to none on the continent, both as regards buildings and general equipment, a brief description of the mode of manufacture from the log to the perfected article may prove of general interest to LUMBERMAN readers.

The logs are drawn into the mill by endless chains, driven by friction-gear log jacks, so constructed that the chain can be driven forward or backward, as the operator may desire. The log is then delivered to the drag saw, where it is held in place by two improved log holders, which hold the log perfectly rigid while being sawed into proper lengths for shingles by means of drag saws. These drag saws are made entirely of iron and steel, driven by friction, the saws being 12 x 78 inches in size and run at 180 strokes per minute. The blocks pass from here to a saw splitter, or bolter, with a 4 in. steel mandrel, and balance wheel weighing 1,200 lbs. The blocks, after being split, are elevated nearly 24 feet on an incline to the shingle machines above. From these machines the shingles drop to the jointers, where they are edged and sorted, great pains being taken to secure the greatest quantity of first grades out of stock being manufactured. The jointers all consist of 40-inch saws, with iron frames, constructed for two operators, who edge and sort shingles into three different classes. They are then packed into quarter-thousand bundles, twenty inches wide. From here they are conveyed in cars, constructed for the purpose, to the dry kilns, where they are made shipping dry and ready to be placed on board cars for shipment to the United States.

The line shaft is of 4-inch steel, turned to gauge and polished. The bearings, or journal boxes, are all of four

diameters, or 16 inches in length, for a 4-inch shaft and lined with the best quality of Spooner's "Copperine." All pulleys are turned inside and outside, and perfectly balanced. The log jack frames are of iron, made in one solid casting. The friction gearing is so powerful as to be capable of breaking a three-quarter inch chain. The drag saws also have heavy iron frames throughout, no timber whatever being allowed in their construction, even the pitman being of steel. The log holders were designed especially for this mill, operated by friction, and guaranteed to hold anything from the size of a match to a log five feet in diameter. The saw and refuse conveyors, and block elevator troughs, are all made of heavy sheet iron, with endless chains, and are complete in every detail.

The detail equipment of the mill is as complete as modern engineering skill could well devise, no pains having been spared by the inventor of the machinery and engineer of the work to construct everything in the most modern and best style.

The credit for the success of this model mill is largely due to Mr. F. J. Drake, of Belleville, Ont., who

"The country is very level with good drainage towards the streams. Back ten miles from Rainy river and upon the heads of the Black Rapid and Beaudett rivers there stands in groves a fine lot of No. 1 pine which will find its market in the prairie country a few miles west of it that contains no rich timber for a thousand miles. This reservation is being surveyed by the government preparatory to selling its ten to twelve million feet of pine to the highest bidder at no less than \$3 per 1,000. The pine lands are being subdivided into forty acre tracts with a good plan transit line around each forty.

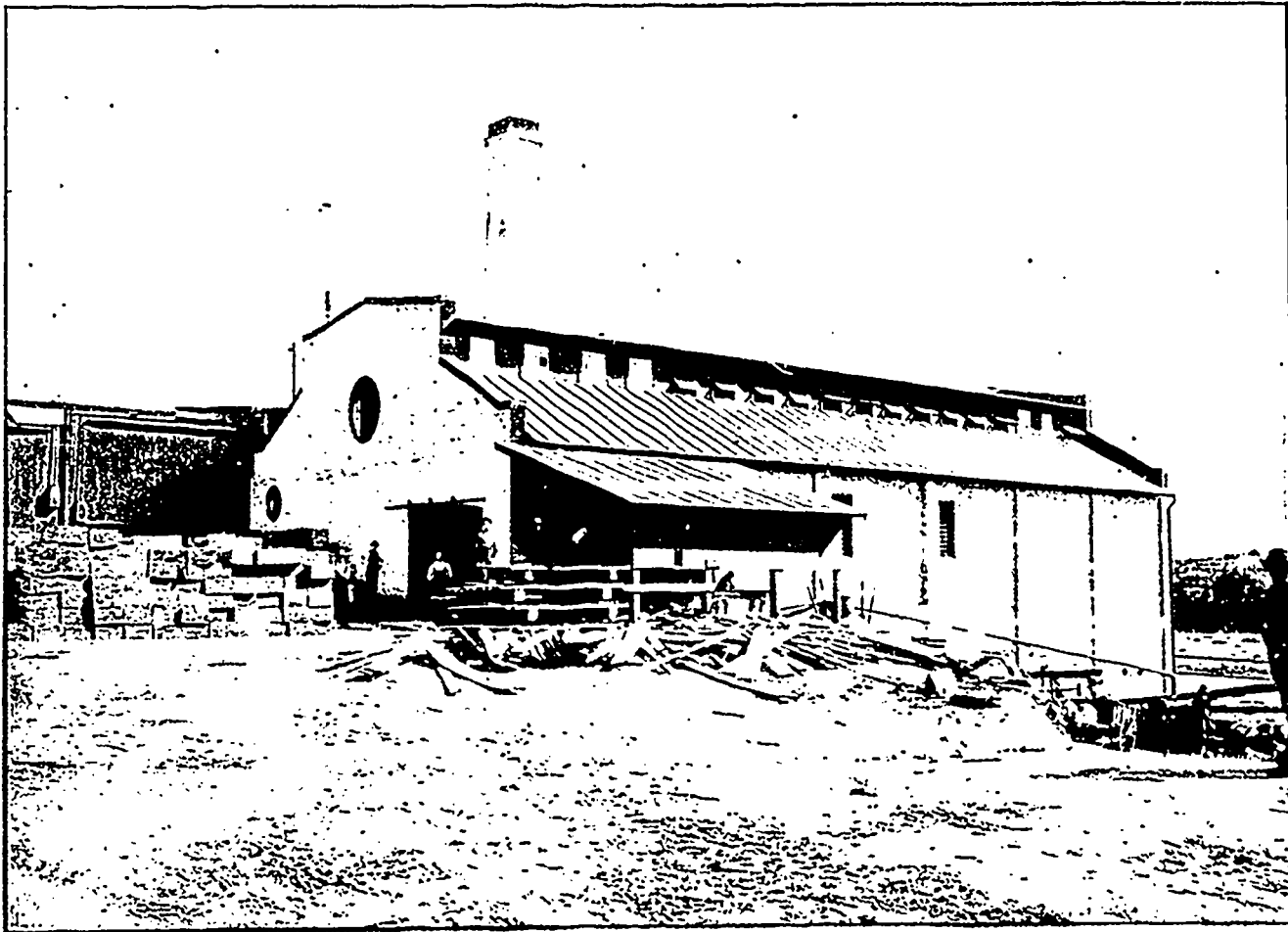
"The country farther east, out of which the Big and Little Fork rivers flow, is much the same with the exception that it seems to be a little higher and the timber of an older growth. These two streams are over 400 miles long and are fed with innumerable branches, all with deep, swift current, and high, clean banks. All these streams rise to a great height in time of freshets, but generally do not overflow their banks. Five million acres are drained by these streams, the water from which flows north through Rainy river and the Lake of the Woods into Hudson bay.

"Nearly all the good pine in this northern country stands on these two streams, and it is estimated that they contain upward of fifteen billion feet. Only 30,000,000 feet is now cut annually on them, and the logs all find a market with the Canadian manufacturers at Rat Portage and vicinity at from \$8 to \$15 per 1,000 and quick sale, being a much better price than could be had in Minneapolis. The cost of driving on these streams is hardly 25 cents per 1,000, with comparatively no loss, as there are no marshy rivers to run through and no place to lose logs by getting out of the channel.

"Several million acres of this country is yet unsurveyed, consequently unexplored. Further up on Vermillion and other American streams, the country is rough and considerably rocky. The pine is smaller, running about ten logs to the 1,000. The same can be said of the Canadian side of this big water course. Rainy river is from one-quarter to one-half mile wide, with a deep channel and two mile current, clean, high banks, and with about six hundred farms fronting it on the Canadian side.

"One farm at the foot of Rainy Lake at Fort Francis (an old Hudson Bay fur company post, has been cultivated for eighty years. On the American side at the mouth of Big Fork river, there is a new town being started named Hannahford. At this place the Canadian lumbermen have built a boom to hold logs that formerly went to the mouth of Rainy river to be rafted. It is rumored that the seven mill companies at Rat Portage intend moving their mills up there, and will barge their lumber across Lake of the Woods instead of towing logs in rafts, as an average loss of about 20 per cent. will be saved, besides the difference in cost of towing."

THE CANADA LUMBERMAN, \$1.00 a year. Subscribe



THE PARKIN LUMBER CO.'S SHINGLE MILL, LINDSAY, ONT.

supplied nearly all the machinery from his own patterns and personally superintended the work of construction. He is proud of his work and invites all interested to pay a visit to Lindsay and see in operation the best equipped and most complete shingle mill in the Dominion.

RAINY RIVER PINE.

IT is hardly possible in some cases to give a description of climatic and natural conditions in one section of either Canada or the United States without finding that these have a close relationship to conditions on the opposite side of the border. A writer in a Minnesota paper has been telling of the big lumber country on the north side of that state, and in doing so furnishes certain information of interest to lumbermen along the Canadian line.

"Commencing with the north side of the Red Lake Indian reservation," Mr. C. S. Sheppard, writer of the article, says, "I find that the country along Rainy river has a very rich soil with clay subsoil, and is heavily timbered with poplar, spruce and white and black ash.