

be formed by reading this notice. It is necessary to visit Deseronto, have an interview with the Messrs. Rathbun, and be escorted over their great works by Mr. J. M. Poitras, the very courteous and well-informed chief inspector of the lumbering department; listen to the "hum" of the countless machines; witness the busy activity of some 1200 employees; see the happy faces of the children going to and fro to their different schools; view the hive of working bees at the wharves and quays with their fleet of steam and sailing vessels entering or leaving the harbors; all this and more is needed to comprehend what this now great merchant prince, his family have done for mankind generally, and Deseronto and its inhabitants particularly.

The Rathbun Company, Ltd. is strictly confined to the family of the Rathbun's. E. W. Rathbun Esq., is president and manager of the company (also Mayor of Deseronto) and is ably assisted by F. S. and H. B. Rathbun, Esqs., and a very efficient staff of counting-house and other officials.

The little mill of 38 years ago and small office, has given place to a palatial building for office purposes, 45x85 feet, three stories high, and fitted with every modern convenience, and fire proof, with their own Terra Cotta fire proofing material from cellar to roof, at an estimated cost of erection of some \$20,000. They now have two mills with a capacity of 200,000 and 50,000 feet a day respectively, a shingle mill of 200,000 shingles a day capacity; a flouring mill with 200 barrels a day output; a car works, where they can completely make and turn out four cars per day.

This company has also boiler shops where they make locomotive, stationary and marine boilers; machine shops where they build locomotive, stationary and marine engines; and have a full equipment of steam hammers and all modern machinery necessary for executing first-class work. Their door, sash and blind factory is a building of 400x75 feet, two stories high, and in it they manufacture doors, sashes and blinds which they ship to all parts of the world besides supplying the home trade. Their Chemical works are composed of a nest of eight charcoal kilns, with a capacity of 50 cords each per day. In their Terra Cotta works they make porous terra cotta fire-proof building materials, flat arches, segment arches, for protection of iron girders and iron columns, partitions, roof linings, furring, etc., and porous terra cotta hard bricks for sewers, drain tiles, etc. This is a daily increasing industry and the manufactures, of this branch are now being used by architects and builders in the large cities and towns throughout the Dominion. It was used in the buildings of the Bank of Commerce, New Canada Life Insurance Co. and Board of Trade offices in Toronto, and in many large buildings in Montreal.

Some conception of their lumber operations may be formed by the fact that their estimated handling from their own mills during the past year are from 55 to 60 millions of board lumber and some 10 million feet of short lumber, lath, etc. In addition to above they operate rented mills at Ottawa, Calumet, Hawkesbury, Hungerford and Chandos, which swell their annual output to the respectable total of about 100 millions of board lumber for past year.

In addition they own and run a fleet of some six steamers and ten sailing craft; the sailers are used for lumber carrying only, and a portion of the steam craft are used for passengers and freight and make daily trips to many ports in Ontario and U. S. and in some instances trips twice and thrice daily.

This mammoth firm also own the Bay of Quinte railway (4 miles); Napance, Tamworth and Quebec railway, (60 miles) and the Thousand Islands railway (4 miles). They are also bankers and general merchants.

Besides their great central establishments at Deseronto, (where they have a perfect system of fire-saving and appliances for same, and which are hired by the Deseronto corporation in time of need) they have some 19 branch houses in the Dominion of Canada and agencies in England, Scotland, United States, Australia, New Zealand and South Africa.

The staff employed necessary to efficiently conduct

this gigantic concern, including agencies and the wood operations, is roughly estimated to consist of some 3,500 men, boys and girls. So the Rathbun family may be fairly considered to have well earned the title of "Merchant Princes of Canada."

R. O. D.

ONTARIO'S TIMBER RESERVE.

North Bay is of picturesque appearance, situated on the north shore of Lake Nipissing, a beautiful sheet of water 70 miles long and twenty to thirty wide. By some difficult portages a passage is had by French River to Georgian Bay. Lake Nonsbonging, nine miles to the south-west, is also a grand sheet of water and is surrounded by high mountains and green glades, forming, with Trout lake, the head waters of the river Mattawa. From North Bay a government road has been constructed in a line due north to the head of Lake Temiscaming, a distance of 80 miles. This road, although not yet available for summer travel, opens up a large and valuable timber and agricultural country, which up to a very recent period has been a veritable *terra incognita* known only to the voyageur or the Hudson Bay trapper. Although it can never be what may be called a good agricultural country, yet millions of productive acres lie between North Bay and Lake Temagaming, and millions more between that and Temiscaming, where already twenty-five new townships have been surveyed by the R. C. Colonization company, and about 60 per cent. of this is said to be good land. Beginning about 15 miles north of North Bay in a country north and west for about 50 miles is the great timber reserve of Ontario. Here are thousands of miles of pine, spruce, tamarac and hardwood yet untouched by the lumberman's axe, and here also is the home of the moose, cariboo, elk and red deer, and the otter, beaver, mink and martin. Its only inhabitants are a few Indians, a branch, of the Algonquin tribe, who speak the Ojibway dialect. The climate as far north as Temiscaming lake, where vegetables and all kinds of cereals have already been cultivated, is not much colder than that of Montreal. Lake Temagaming opens clear of ice about first of May. The scenery around this lake, as well as many others, is charming, varied by mountain peak and waterfall. As no large rivers traverse this region and the small streams are obstructed by rapids and chutes, a railroad must in the near future be constructed to convey to market the valuable timber and minerals which abound in almost inexhaustible quantities. This has already been surveyed and subsidised by the Ontario Government to the head of Lake Temiscaming with a view of its being continued to James Bay, 400 miles further north, near which large anthracite coal deposits have recently been discovered. This road will be a great boon to the lumberman on the Kippewa and Temiscaming districts, who have now to bring their supplies via C. P. R. to Mattawa, then by steamer to Le Clave, then a portage of three miles, then a water stretch to Les Arables, another portage, another water stretch to La Montaigne, then another portage at the Sault, and another water stretch Seven League Lake, thence by the Colonization Railway and teams, while if the North Bay branch was built, supplies could be brought direct from Toronto or any point west via G. T., Northern & Pacific Junction.

UTILIZATION OF WASTE

(Lumberman's Lumberman)

The increased cost of hardwood stumpage and all the accessories pertaining to the manufacture and distribution of the product have forced an issue upon mill men that must be met and overcome if investments in mill plants are to be made remunerative. The opposing force is the low basis of selling prices on nearly all kinds of hardwood lumber as compared to the gross cost.

Between the saw and a settlement with buyers there is a vast field for manipulation, in which grading and measurement cut such an important figure that from sanguinity immediately after the lumber is piled, a mill man becomes almost bankrupt before he has the cash in hand from purchasers, and many times he then finds that for a season's labor and risk he has simply made one hand wash the other. It does not necessarily follow that trickery has proved an important factor in

such a result, in fact, it can be usually traced to legitimate causes, due wholly to the vicissitudes of an ever changing trade. A few lessons of such nature bring to the surface the conundrum, what shall be done to profitably utilize that portion of a mill product that has always gone to waste?

The first answer is, turn slabs, edgings, ends, branches and stumps into piece or dimension stock. Such a solution sounds well; but where are the buyers, what the particular uses to which such stock can be applied? Again, if the buyer and various uses are found, will not the investment in machinery made necessary in the operation rid the business of all profit? These are questions that must be solved by those directly interested, as much depends upon whether extra power must be employed, and whether the operator is in a position to go into the business extensively, or can only do a moderate amount, the cost of which would be as great as though dealings were heavy.

Generally speaking, it will not pay for a small operator to go into the manufacture of piece stock, as in order to make money in the business, a mill man must be prepared to make and fill large contracts, the details of which will vary radically, and probably necessitate the purchase of raw material outside the product of his own mill.

Throughout the country east of the Mississippi river the largest breweries in the world are located. Have poplar men ever thought to compute the number of bungs that are used annually in beer barrels? Each bung means the utilization of a piece of poplar one inch thick and 2½ inches square. The makers of clock cases, located extensively throughout Connecticut, use millions of feet of walnut, ash, oak, cherry and white pine "cut to size," as the saying is, and it is exceedingly hard work for a stranger to get any information about the trade unless he skirmishes around among the factories and gets a list of the sizes used, which are multitudinous; but the use is there, and it only needs looking after. Desk makers never thought of buying anything but long lumber until a down-east Yankee put them up to buying piece stock, and now regular shipments are made of rails, draw fronts, slats and panels. It is the same with makers of cabinet organs, chamber sets, folding beds, chairs and numerous other articles of furniture. Carriage makers have for years been heavy buyers of piece stock, using oak and ash principally. An almost unknown use for piece stock is the manufacture of gun stocks, and the wood most used is walnut. For such a purpose a gnarly, cross-grained, flinty cull is far preferable to clear straight-grained wood; in fact, the latter is not used if the former is obtainable. The thickness most used is two-inch, and the blocks are cut about 18 inches long, with one end six inches wide, the other about four inches. These measurements are not exact, as the stocks made by various manufacturers of guns and rifles necessarily vary. For such work, the crotch of a tree, or a twisted, gnarly root, makes a salable gun stock, and the cost is almost entirely in labor. Particulars and sizes can be easily obtained by addressing gun makers. The photography craze has proved a boon to the handlers of mahogany and cherry. The former is used most largely in the manufacture of cameras; but the latter is called heavily into use, and as the parts are all small, it creates a use of waste material even to the smallest edging. Photographic printing frames are made of cherry and birch, and there are thousands now in use which in time must be replaced. We might go on and enumerate an almost endless variety of uses of hardwoods, where regular or stock sizes play an important part, and which wide-awake lumbermen can, with a little effort, become familiar with.

In ordinary cases, a few hundred dollars invested in proper machinery will transform waste material into a salable product; still the business requires study and attention, and no one or two markets should be depended upon as an outlet for shipments.

—An American firm from Bath, Maine, recently made contracts for fifty car loads of tamarac knees and futlocks at Chambour, Lake St. John. This timber is to be taken to Quebec by rail, then lightered across the river, loaded on Grand Trunk cars, and sent by rail to the ship building ports of Maine.