

MR. E. B. EDDY'S MILL AT HULL.

The night will be still fresh within the memories of residents of Ottawa when a few hours of fierce fire swept away almost the whole of one of the greatest industries of the vicinity, for a time threw hundreds of hands out of employment, and destroyed property valued at hundreds of thousands of dollars. The calamity for a time spread consternation in the vicinity generally, and deep as would have been public sympathy for the enterprising proprietor, Mr. Eddy, it was rendered all the more profound by the fact that he was then absent from home and in a poor state of health, which it was feared the disaster would still further impair. But where most men will sink Mr. Eddy will swim. If he did not speak he acted the words of Shakespeare:

"Sick now, droop now,

How have I leisure to be sick in such a bustling time!"

The fire it will be remembered occurred in winter at a time when many building operations are impossible, but with an energy with which neither sickness, fire or frost could conquer, Mr. Eddy at once set to work to reconstruct. Such buildings as had only been partially destroyed were repaired, and every precaution used to render them as secure as possible against fire. Plans for the new mills were rapidly prepared, and in a few weeks in spite of jack frost the work of reconstruction was begun, and within six months time over the ashes of the old structure has arisen the most substantial and best appointed mill of its size on the continent of America.

The new saw mill, which stands west of the road leading into Hull, is an attractive looking, well proportioned and substantial building. Its side walls are of solid masonry, rising 32 feet from a solid rock foundation, 5 feet thick at the base and three feet thick at the top. These support a "suspended arch" roof of 120 feet span, neatly framed and well braced with iron rods, some 18 tons of rods and bolts being used in its construction. The dimensions of the building are 147x120 feet. The roof itself is of galvanized iron laid upon tongued and grooved sheathing, the latter painted on the inside with fire-proof paint. It contains sixteen skylights, each of a single sheet of glass 5 ft. by 3 ft. and a half in. in thickness, which materially aid in lighting the floor below. The timbers supporting the floor and heavy machinery are of the most substantial character, framed on an entirely new principle, put together without mortice or tenon.

The machinery is all of the most modern and improved kind used in saw milling. On the main floors are four upright slabbers, two stock gangs, a circular, three edgers, three butting tables, a splitter and several stave saws. The saw logs are drawn from the ponds into the mill by three endless jack-chains. The slabber gates work upon hollow cylindrical tubes, through which cold water is forced to prevent any heating of the bearings. The two stock gangs are from the celebrated makers, Messrs. Wickes Bros., East Saginaw, Michigan, and styled "The Wilkin's Oscillating gang," acknowledge to be the best gang saw in the world, cutting from one to four logs at once, as may be devised. These gangs rest upon solid piers of cut stone masonry, 20 feet square and 12 feet high, bolted with 56 iron bolts 2½ inch iron, 18 feet long. The "circular" is from the Stearnes Manufacturing Company, of Erie, Pa., and carries a sixty inch saw with a 42 inch top saw, and will cut logs up to five feet in diameter, and 50 feet in length. Two of the edgers were also made by this firm, and have double the capacity of the old class of edgers. Ranged along the right hand wall are 13 tub and rail stave saws of various sizes. Numerous line rollers convey the lumber from the saws to the butting tables, edgers, etc. On the lower floor is found a wilderness of belting pulleys, wheels and other machinery for the driving power. Here, too, the slabs and edgings, supplied by sluices from the floor above, are cut into laths, pickets, shingles and various small strips. Everything possible of the raw material is utilized in this establishment, even to small pieces one-sixteenth of an inch thick. In one corner of this room is a Silsby rotary force pump, with pipes and hose attached, and having a pumping capacity of 1,600 gallons per

minute. The cutting capacity of the mill is estimated at between forty and fifty million feet in the season. To the south of the mill is a compact stone building 62x60 feet, with the roof in the same style as the main mill. This contains two segments for re-sawing deals, etc., made by Messrs. B. Fricher and Mallory, of Chicago. These are, however, not yet running. To the right a large room is partitioned off for saw sharpening, filing, etc., fitted with five "Corvill patent automatic saw sharpeners" and "Konny's swedge," made by Wm. Hamilton, of Peterborough, Ontario. In front of these buildings is a spacious platform where the lumber is stocked and loaded on tram cars for transport to the piling ground. These two buildings, with machinery in them and the platform, are said to have cost over \$100,000. On the north bank of the Government slide channel there have been erected stone buildings for blacksmith's shop and machine shop, the 40 feet by 60 feet and the latter 80 feet by 60 feet, roofed similarly to the main mill, one being used for the present as a planing mill, adjoining them to the west, the foundations are being laid of a stone storeroom, 120 feet by 60 feet, and two and a half stories high. This will be used for the storage of woodenware and factory supplies. To the west of this again will be the offices in a substantial stone building two stories high, with a mansard fireproof roof, covering an area 30 feet by 90 feet, and affording ample accommodation for the management of Mr. Eddy's extensive establishments. A large stone factory is also in course of construction on the south side of the Government slide, which will be 185 feet by 60 feet and two stories in height. This extensive building will, when finished, be used for the purpose of packing in the upper story and as a planing mill on the lower floor.

On the old site on which before the fire the flour mill lately owned by Mr. C. B. Wright stood, but which has since been acquired by Mr. Eddy, will be erected a fire proof boiler-house, excavations for the foundations of which are now going on, from which will be supplied the necessary heat for the other buildings. It will also contain two Silsby rotary pumps with a capacity of 1,200 gallons per minute each, and from whence pipes and hydrants will be laid through all the yards and buildings.

The fire service will be as complete as it can be made. The three Silsby rotaries will have a combined power of 40,000 gallons of water per minute, the distribution of the hydrants has been thoughtfully and judiciously made, the provision of hose is ample and placed at easily accessible points, and in addition the establishment has a fire corps of its own, composed of its most cool, active and intelligent employees, each of whom knows where his post is in case of emergency, while at the same time the residences of all the foremen are connected with the main office by telephone and electric fire alarms, so that when off duty at any hour of the night or day they can be instantly called if necessity so requires.

The electric service is also very complete. The entire yards, building and piling ground are lighted with electricity, and telephones and fire signals are in position at all important points.

To drive the machinery requires 24 water wheels, with an aggregate force of 3,000 horse power, and work is given, in the various establishments to over 1,600 hands, many families in Hull and its vicinity being employed in it, while while hundreds of other families depend on the work it gives their husbands and fathers for their support. In addition to those employed in Hull, Mr. Eddy employs several hundred men all the year around on his limits in the woods. The piling grounds are commensurate in extent with the rest of the establishment, and comprise, including the old Batson & Currier yard recently acquired by Mr. Eddy, an area of about sixty acres. A tramway conveys the lumber there from the mill, and it will be relaid with steel rails this spring. A walk through is necessary to comprehend the tremendous trade done. It was no small undertaking to build and fit up such buildings in the course of six months, especially when it is remembered that much of the work had to be done during a rigorous winter. Mr. Eddy's energy was equal

to the occasion. He had able aids, too, in Mr. Mousseau his head millwright, Mr. Millon, and Mr. Blackoney, by whom the plans were drawn, the work superintended and the machinery put in position. It must be satisfactory to these gentlemen to feel that the whole work was carried out without one casualty, and that when first put in motion the whole ponderous machinery worked without a hitch. The contractor for the stonework was Mr. R. Lester, and for the ironwork, Messrs. Butterworth & Co.

The late fire it may be remembered, destroyed the pail factory and gutted the machine shops and part of the match factory. Those were, however, rebuilt and refitted some months ago, and operations in them suspended only for a short time.

Mr. Eddy's trade in matches and wooden ware is tremendous, and extends over the Dominion from the Lower Provinces to Manitoba, where his name is a household word. The capacity of his factories for these goods is enormous, being able to supply the wants of double the present population of the country.—*Ottawa Citizen.*

THE HUSBANDRY OF FORESTS.

The grave consequences of the ruthless and wholesale destruction of our forests have recently been enforced with fresh emphasis by both nature and science, and it is high time steps were taken to repair, as far as may be, the damage that has been done. The people of Ohio, who have perhaps suffered more than the inhabitants of any other State from floods that are largely a consequence of the denudation of their forests, are making an earnest effort to guard against these destructive forces in the future. The messages of the more recent Governors of that commonwealth have bristled with warnings against the continued destruction of trees that has been going on for half a century, with exhortations to make the waste places good as far as possible. The traveller through the Ohio valley to-day would hardly believe that that fertile part of the State was a dense forest seventy years ago, but such nevertheless it was. Last Friday was what is called Arbor Day in Ohio—that is, a day set apart by the Governor for tree-planting, a past-time that was generally participated in by the rural population, the children of the public schools in many of the cities having taken part in the ceremony. The State Forestry Association, which was in session in Cincinnati, also participated, thus giving practical point to their theories. Many thousands of young trees were planted in various parts of the state, from which beneficent results are anticipated as the years roll on. The present generation of tree planters may not see the fruits or enjoy the benefits of their work, but the man who makes even one tree grow where none grew before has done something for posterity and his country, and has built a living monument for himself which will long keep his memory green. The idea of an Arbor Day is an excellent one, and might be adopted with advantage by other states.

Of all the natural resources which a state may possess, none are of higher or more general importance than its forests. They supply that upon which a great variety of skilled crafts may be employed. They furnish shelter which is next in urgency to the need of food. They enable us to build fleets of vessels with which to effect the world's exchanges. Unlike mines, they require a costly outlay for working, the forest yields a revenue to the wood-choppers' first day's work. Their beneficent influence upon the climate of a country has been abundantly shown in the sad experience of lands which, like Spain, have been stripped of their growth. The forests are unlike the mines in this, that the latter cannot be worked without a near or remote approach to exhaustion. With the trees of our forests the case is different. They stand as the highest type of growth in nature. Reared as they are by the kindly nurturing influence of the sunbeam, they renew their life as constantly as the day succeeds the night, and their period of growth is fixed according to the stated order of the seasons. The fact that they do not mature in a single season, that one generation must plant, another generation enjoy the abundant harvest, while the intervening generations must be content to watch

with patience the slow but steady growth of some of the more valuable varieties of timber, ought to give to the general public as deep an interest in the husbandry of forests as in that of any other product of the soil.—*N. Y. Shipping List.*

AN ENGLISH VIEW.

There seems to be some movement in the spruce trade of late, though at prices which do not look to be remunerative to the shipper. We hear of sales of St. John spruce under £7 c.i.f., and it is said other lower port deals have been contracted for in the neighborhood of £6 10s. If these figures are to be relied on, we do not, we must confess, understand the reason of the Liverpool brokers and agents for the spruce houses in Canada forcing the market in this fashion at the commencement of the season. There has been no doubt a quietness in the spruce trade at the outports for the past few months, but with the advent of the busy season it does not look either a healthy or encouraging sign for spruce deals to be sold at prices indicated above. It is true, competition is severe among the representatives of the spruce houses, and to place several thousands of standards in Liverpool, and round the coast, may be a very laudable desire on the part of the representatives to show their activity and power in disposing of their shippers' stocks, but if the price is unremunerative we fail to see the benefit to the shipper. This competition to sell, at even a loss, is a deplorable sign, and, if we turn to the freight market, we find it does not strengthen the seller's position in these sales.

Ships for bringing deals from Canada are not plentiful; the brokers do not know where the vessels are. Rates, as yet, are quoted moderate, but as the season advances and the scarcity of the wood-sailing tonnage is felt, as it is from Quebec now, sales of spruce at low figures will not bring happiness to the shippers. From Quebec to Liverpool and London 68s. has been paid for a large ship, and this will stiffen present rates from Miramichi, Bathurst, Shediac, and other North Shore ports. We have been told 65s. will be freely paid from Miramichi to-day. Perhaps it is in the mind of those who are selling spruce at under £7 to do the freighting by steamers, say 55s. This looks a very nice operation to the mind or on paper, but steamers to load at deal ports at low rates of freights must be hard up for cargo in the United States ports, in fact cannot get cargo, before they will go to the expense and loss of time in shifting to bring home deals at such a low figure. We do not say steamers will not be got, but will they be chartered at such a rate as will leave a profit to the shipper on sales under £7 c.i.f.? On the Continent we believe there are several large lines in spruce still to be done. Bordeaux and other Biscayan ports have to be supplied, and here again for what transactions have occurred low prices have been the order of the day. Whether the remaining buyers are going to get their requirements at the same figures is still to be seen, but the divergence between buyers and sellers seems to be about 5c. per standard.

Transactions in Spruce in Ireland have been going on quietly. The most eminent firm in the timber trade in that country, we hear, bought St. Lawrence goods early in the year at £7 10s. c.i.f., and spruce from Miramichi and St. John, we understand, has been sold at equally low prices. Low prices seem to be ruling just now. Do they presage a big stock on the other side.

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