Thus we have a new era inaugurated in the lumber trade. A few years ago it was deemed a very ruinous policy to ship lumber by rail, and mills, located along railway lines, were not considered very valuable investments. Indeed, timbered land any great distance from good driving streams was not considered of great value, for the reason that water was deemed the only legitimate outlet for lumber; but the extension of railroads into the very heart of the timber resources of Michigan has gradually exploded this theory, and the signs of the times appear to indicate that the mills along railroads have not only the vantage ground for manufacture of lumber, but are in the early future to be placed upon the same footing in regard to facilities for shipment.—Evart Review.

O. W. CLARK’S BARKING MACHINE.

From the Appleton Post.

Mr. O. W. Clark, the inventive genius of this city, has recently had a model of his barking machine perfected, which he has forwarded to Munn & Co., of New York to be sent from there to the department at Washington, for the purpose of securing a patent thereon. The model is indeed a model of skilled workmanship. It was manufactured at Morgan Merrill & Steele’s foundry in this city, and is perfect in all of its parts. Indeed it will do the work of a large machine and with the same accuracy and neatness. In the course of a few weeks we shall be able to produce an illustration of this machine accompanied by a more detailed description.

Mr. Clark has spent a good deal of time and solid thought upon this invention and the result is satisfactory in the extreme. He has had it in operation in the Bradner, Smith & Co.’s mills for the past six months or more, and it has even more than met his expectations. It should and we trust will be a source of considerable revenue to its inventor.

THE TIMBER SUPPLY.

Facts and Arguments by J. Little of Montreal.

From the Montreal Gazette.

Sir,—I find in your issue of Saturday an article copied from the St. John, New Brunswick, Telegraph, on the subject of the timber supply, from which it appears that the Province, which has for so long a time furnished a large amount of the consumption in Great Britain and the United States, is about used up, the St. Croix being now the only source of supply, and it appears from that paper that the reason of its holding out so long is to be attributed to a large amount of the timber territory drained by that stream being in the hands of private parties, who, however, to meet the demand, have been recklessly sacrificing their property, reducing year by year the dimensions of the timber they get out, while one-third of the whole product is now of the very inferior and almost valueless description called hemlock. The pine is all used up, and it is evident but a few years will serve to throw them out of competition with the province of Quebec in the matter of spruce.

Since I brought the timber question to the notice of the American public in the communications which have been published in the Gazette and the Boston Lumber Trade, I notice the question has been pretty extensively discussed by the American press, and, taking the alarm, a memorial was sent by the President to Congress, strongly urging the necessity of passing an Act providing for the preservation of their timber, and giving bonuses for tree planting—a measure which should have been adopted before the timber lands were
all grabbed up by Railway Corporations, speculators, &c.

I showed in those communications what has not since been successfully disputed in the discussion of the question, that the United States would use up all the pine timber they have east of the Rocky Mountains in from ten to twelve years, and that all our pine and spruce would not give them a full supply of their annual consumption for three years if called on to do so. And now, as serving farther to draw attention to the question, in hope that our lumbermen will take it into serious consideration, and realize the necessity and value of curtailing their operations, I would ask them to reflect on the position the United States would be placed in, and what the price of lumber must be in Canada when it will require one-third more than the tonnage of all the sailing vessels of Europe and America combined to freight the present consumption of pine alone, and double the amount of tonnage of all Europe and America for the transportation of their present consumption of commercial woods of all kinds from the Pacific coast if they be found in that quarter. Is it not evident from this view of the question, which is based on their own Congressional returns of the consumption, that the commercial woods of Canada will in a few years reach a value immensely beyond that of any other description of property we possess? And is it not utter folly for the owners of timber property to be continually, as it would appear, running a race with each other to see who will soonest come to the end of their supplies,—wasting their time, working hard, and sacrificing a material so valuable and indispensable without any advantage resulting to themselves or the home community, when half the labor and capital expended would enrich them all and doubly prolong the time of exhaustion of their stock in trade, which no amount of capital and labor could for generations replace. So far as regards that invaluable wood, the white pine,—every tree of which will be worth as much within the next decade as black walnut is to-day,—the Ottawa lumbermen have the control in their own hand, and are able to govern the markets both of Britain and the Middle and Eastern States of America to their own advantage, if they will make the effort. Let them curtail the supplies by one-half, and they will secure a return of ten dollars for one of profit they now make, and those who hold timber and are able to preserve it from the axe will yet do better.

The question of timber exhaustion is met by some with the argument that iron will take its place to an extent sufficient to keep down its price; but facts are against this view of the question. Let any one travel through Great Britain, and he will neither see any room for improvement, or improvements to any appreciable extent going on; and yet that old and long finished up country consumes annually five millions of loads, or over twice as much as Canada consumes and transports to all countries—paying at the same time double what it sold at here, notwithstanding her abundance of coal, iron, and cheap labor skilled and unskilled, and she will continue to use timber as long as it is to be had, no matter at what cost; so far as regards the United States it must reach four times its present price before its place is supplied to any great extent by iron or any other product, for it is to them a material absolutely indispensable.

Sweden, which has hitherto been the great timber-supplying country of the north of Europe, finding the drain upon her resources so exhausting, has also taken the alarm, and within a few weeks back has passed an edict prohibiting the cutting of timber of smaller dimensions than ten inches in diameter, on the
public domain and all private lands, annulling at the same time all contracts made for timber on account of private parties prior to the passing of the act. As a large amount of their production consists in deals of from five to seven inches wide, this supply will be cut off, and the cost will be much enhanced in furnishing a large description which can only be found at great distances from the floating streams. It takes a hundred and twenty-five years to grow pine trees of ten inches in diameter in that country.

Russia reserves all the timber on the banks of her streams for four miles back, as a breakwater and reservoir to preserve the country from inundations; yet here her greatest wealth of timber is to be found. But the home and foreign supply must be drawn from beyond that distance. A Russia timber firm in London that owns the timber on a river and its tributaries in that country, which empties into the White Sea, as large as the Ottawa, informed me that they are now reduced to supplying themselves with timber of from six to ten inches in diameter, and that Russia has but little commercial timber available for the English market. Parties in Britain now look upon the north of Europe as pretty well "plowed out"; but they are quite sure Canada is yet one unbroken forest. One influential journal, the London Standard, after ransacking European timber sections and finding the supplies all but exhausted, turns it attention to Canada, and assures the British public that there need be no apprehension of a timber famine, as "we have a supply for the most exacting populations of the earth for centuries"; while we ourselves have calculated our supply as not sufficient for the United States alone for a period of three years. Another journal, the Building News of the same city, equally well informed on the subject, sets down our timber territory at "nine hundred millions of acres, or twelve times the area of Great Britain, all told," and what is puzzling to them is that the supply is so enormous "and yet the material so dear in their market." This is the sort of information furnished the people of Great Britain, who are so deeply interested in the question of the timber supply, by some of their leading journals; but they will, however, wake up to its true position when they find the United States will be forced, at higher prices than are now paid in England, to secure all the timber we have, in order to supply the middle and eastern states, which, in five years' time, will be totally stripped of their pine, and pretty well through with their spruce timber, and will also be forced to compete with them for supplies in the north of Europe, and in India and Japan, which are pointed to by some English writers somewhat better posted on the subject, as sources from which in a few years hence supplies must be drawn.

I understand a meeting of those engaged in the lumber and timber trade in the Provinces of Ontario and Quebec is to take place some time in the fall at Ottawa to try and arrive at some means of curtailing the supplies—a very wise measure.

Yours truly,

J. Little.

Montreal, June 13, 1874.

LUBRICANTS.

The friction of the parts in machinery frequently absorbs a large percentage of the power employed. Various lubricating materials are used to reduce this source of waste. When polished steel moves on steel, properly oiled, the friction is about one-fourth of its weight; on copper or lead, one-fifth; on brass, one-sixth. Metals have more friction when they move on metals of the same kind than when on different metals. In