

LOGGING—STEAM vs. HORSES.

The following letter appears in the *Northwestern Lumberman*—

We find a general impression that steam logging is profitable for very large contracts, but that sledging is cheaper for small operations. This is a question which will interest your readers, and we give below figures for comparison.

We first state the cost of getting in 12,500,000 feet of logs on a five mile haul by sledging on snow or ice tracks. Allowing an average for each two-horse team of 250,000 feet for a season of 90 good sledging days, the investment will be about as follows:—

50 two-horse teams, at \$400 each team	\$20,000
50 sleds and harnesses, at \$70	3,500
Grading five miles of road, say	4,000
	\$27,500

* OPERATING EXPENSES.

50 drivers at \$40 per month, cost of board included, for four months	\$8,000
Oats and hay for 50 teams, at \$1 per day for each team, for six months	9,000
Expenses of pasturing, six months	775
Blacksmith, harness and wagon mender and stable man, six months	1,350
Repairing road	1,000
Yearly expense of replacing horses, harness and sleds, say 20 per cent. on \$23,500	4,875
	\$25,000

Or, in round numbers, the cost of sledging may be reckoned to \$2 per 1,000, provided there is neither too much nor too little snow, that work is not interrupted by storms or thaws, and that the season is as perfect as if made to order. The actual average cost of sledging from year to year, taking the seasons as they come, is probably from \$3 to \$4 on hauls of three to five miles.

The investment required for putting in 12,500,000 feet of logs over a five mile track in one winter is about as follows:

Iron rail, 16 lbs per yard, spikes and splices for five miles	\$8,700
Cross-ties, and grading and laying	6,600
One locomotive and 20 cars	8,300
Tools and incidentals	1,500
	\$25,000

OPERATING EXPENSES.

10 loaders at \$40 per month, cost of board included, for 4 months	\$8,000
2 unloaders at \$40 per month, cost of board included, for 4 months	320
1 engineer and 1 fireman \$115 per month, cost of board included, 4 months	480
1 carpenter, at \$20 per month, board included, 4 months	240
5 trackmen at \$40 per month, board included, 4 months	800
1 brakeman at \$40 per month, board included, 4 months	160
Fuel, 1 cord per day, at \$1, for 90 days	90
Oil and repairs for locomotive and cars, \$25 per day, for 90 days	1,350
Depreciation for year on rails, cars and locomotive, allow 10 per cent on \$17,000	1,700
	\$20,880

Or 55 cents per 1,000 feet to get in 12,500,000 feet of logs by steam in four months' time. The locomotive can do this work easily in three months, which would reduce the cost to about 40 cents per 1,000 feet. These figures must be moderated by each operator to suit the length of haul, and the quantity of logs to be used, but in practice the advantage of steam power is even greater, as shown by the following examples of roads each operated by a locomotive built by our firm at Pittsburgh:—

A road eight miles long was built, and 18,000,000 feet got in over it in one year. The largest day's haul was 247,000 feet, which cost 25 cents per 1,000 to haul. The average cost was less than 50 cents.

Another road eight miles long, operated 10 months in the year, got in 60,000,000 feet in one year, at an average cost of 54 cents per 1,000 feet, equivalent to about 40 cents per 1,000 feet for a five-mile haul.

Another road three and one-half miles long, got in 22,000,000 feet in five months, during which the road was shifted to reach another tract.

Another road, eight and one-half miles long, got in 33,000,000 feet in nine months, running night and day.

It can be claimed fairly that for hauls of from three to five miles, for getting in from 5,000,000 to 10,000,000 feet in one season, steam logging, provided good locomotives and cars are used, is cheaper than sledging, both in original investment and in operating expense. Other incidental advantages of steam are certainty of operation, as no snow, too much snow, mud, winter and summer need not be considered. In sledging operations, more money may be spent

in waiting for the snow, which after all may fail, than it would cost to haul in the logs by steam; the output can be doubled by hauling nights; the haul may be doubled at but slight extra cost; from 20 to 25 per cent more logs can be got in from the same land, as the low cost of hauling makes poorer grades profitable to market; timber hurt by windfall or fire can be got in at once and marketed, instead of being left to worms and rot.

H. K. PORTER & Co.

HEMLOCK OR PINE?

Hemlock is well adapted for any of the coarser uses in building, where small timber is required. It makes a better joist and a better scantling than pine, for the reason that it is stiffer timber, and holds a nail so firmly that it is difficult to draw one after it has been driven. In sand it is more durable than pine, but in clay soil it is not so good. It is fully the equal of pine for durability in positions where it is exposed both to wet and dry, but while as good, is no better when always under water. It is cheaper, selling on the market by the cargo, at about \$2 less than dimension sizes of pine. It is not adapted to so many uses as pine, and while better for graneries, for the reason that rats and mice avoid it, being unable to gnaw through it, is not in thin lumber so well adapted for use. It is not more in favor, because in the past pine has been cheap and plentiful, and while better known is easier worked. It is in good repute in the eastern states, where it largely fills the place of pine for coarse uses, and is to some extent used for finishing purposes, but we must confess to prejudice against it in this connection. As pine becomes scarcer hemlock is coming more into favor, as may be seen from the fact that stumps which were held a year ago at 25 cents per thousand is now selling for \$1. The main disadvantages of hemlock consist in a disposition to shake and unsoundness, and it is then comparatively worthless, its culls being the meanest lumber known. We have knowledge of hemlock shingles put upon a barn roof 40 years ago and in as good condition to-day as pine shingles put on some years later. The shingles curl enough after a rain to permit of their drying out readily so that they do not decay as speedily as pine, while flattening to their place at once under a shower. For actual value as studding joist and granary uses, hemlock is worth more money than pine, for stiffness, durability and freedom from the encroachments of vermin, and the prejudice against it because of its stiff slivers, gives way rapidly under experience in its use.—*Northwestern Lumberman*.

TIMBER NEWS.

The *Ottawa Citizen*, of June 13th, says:—The following is a statement of the timber which passed through the undermentioned slides and works since the 2nd inst.:

PORTAGE-DU-FORT SLIDE.
1 raft belonging to David Moore, composed of 150 cribs.
ARNPRIOR SLIDE.

Rafts.	Owners.	Cribs.	Saw Logs.
1	Hilliard & Dickson	28	785
1	Jonathan Francis & Co	145	3,500
1	Wm. McKay	70	1,075
	Perley & Pattee		2,000
	J. R. Booth		1,000
		443	6,260
			3,000

THROUGH GATINKAU BOOM.

Owners.	Saw Logs.	Flat Timber.
Gilmour & Co	4,986	
G. B. Hall & Co	24,642	
Hamilton Bros.	3,082	
W. C. Edwards & Co	4,135	103
J. McLaren & Co	6,841	
	43,683	103

And H. B. Rathbu & Son 2,729 railway ties.

EFFECTS OF EMIGRATION.

The *Timber Trades Journal* says:—Another question which bids fair to influence somewhat the price of wood goods in the near future is the extremely large proportions to which the emigration movement from Sweden to America has attained of late. The numbers of the working classes that are leaving must, within a short time, raise the price of timber considerably. As soon as the saw mill industry gets busy we shall probably hear of a deficiency of workmen and attempts to obtain higher wages.

The report of the *Sjora Kopparbergs Bergslags*

being in negotiation for a piece of ground at the mouth of the Dal River suitable for a saw mill site has been confirmed, and it is understood that the transaction is now closed. The piece of ground obtained is situated at Harnas, close to Skutskar, where the Siderfors company have their shipments. This step is supposed to be preparatory to the removal of the saw mill to the coast, and has been taken to avoid the heavy railway freight from Koronas to Gelfe.

Several extensive new saw milling concerns are reported as having got lately into full work in different parts of the country; one of these is a new mill, with a capacity of about 5,000 standards annually, erected by the Hellefors Bruks Aktie Bolag on their property near to Filipstad. They own a large quantity of growing wood intersected by the Bergslagens railway, and "presumably ship their produce from Gotland." Another mill is the undertaking noticed before in my letters as having been erected in Gelfe Bay by the owners of the Ockelbo Works; this concern has also commenced operations, and is estimated as being able to produce 4,000 to 5,000 standards annually. The firm is the owner of extensive forests in the Gelfe district, and able to supply the mill in question with logs for a long period. A third mill is that lately erected by the Jemtlands Sangbruks Bolag along the new line between Sundswall and Dronheim, near Morall station, west of Ostersund. This concern will ship at Dronheim, in Norway, and their production will be 5,000 to 6,000 standards annually. The company is said to consist principally of shareholders from Bergen, in Norway.

I should not be surprised to hear of a lively speculation in growing wood taking place in the district whence the Norwegian company referred to obtains logs. The Sundswall people have no doubt done well in the surrounding district, but signs are not wanting that the attractions of an ice-free harbor will ere long cause considerable competition for growing wood reachable by the new line of railway. This railway is to be opened in its entirety by the king about the 20th of July, in connection with which an exhibition of the products and industries of Norrland is to be held at Sundswall. As forest products and manufactures are more important than anything else in Norrland, it may be taken for granted that they will play an important role in the exhibition, thus rendering the same extremely interesting to the trade.

THE TIMBER TRADE OF BORDEAUX.

The *Timber Trades Journal* says the principal feature of this week's timber trade is the arrival of some German hewn timber and balks, which have been eagerly looked forward to for several months. From the German ports they write that there are still many contracts to carry out, owing to the high rate of freight on account of the scarcity of vessels, for which reason, and also owing to the upward tendency of prices, it will be almost impossible to obtain any shipping orders for some time to come.

The scarcity of long lengths and heavy average from the German ports leads buyers to direct their attention to the American supplies, where they will find all kinds of dimensions, even the largest ones, at, as we think, more suitable prices.

SWEDISH PROSPECTS.

The *Timber Trades Journal* says:—Speaking of the present state of the saw mill interests in Sweden, we learn that it is likely to expand considerably this present season, as the letter referred to mentions no less than three new establishments of the kind just got into full work, which are estimated to add altogether about 15,000 standards to the customary annual production. On the other hand, the plentifulness of money has again given life to forest speculation in Sweden, which had been very quiet since 1874; and when capitalists begin to bid against each other for that kind of property it looks like an enhancement of the value of everything connected with it, and they still appear to believe that prices will not give way. There is always this point in their favor, that Swedish shippers can always get a profit in our markets when most other shipping countries are losing on the current prices of their wood. The

price of spruce at the public sales in London and Liverpool will seldom, on an average, leave £4 per standard to the shipper; yet for white-wood of same dimensions the price is £6 10s. f.o.b. in Sweden, and the charges of getting the goods forward to the shipping ports are understood to be greater in America than in Sweden. Spruce has given way a little in Liverpool at the last sales, but it is a wood that on the west coast is generally in good demand. On the east side it is not to be driven off by the white-wood of Northern Europe, but on the east coast it gets no secure footing.

Queer Geography.

The following item which appears in the *Stillwater Lumberman*, published in the town of Stillwater, Minnesota, will be read with some amusement:—

"On the line of the Northern Pacific, between Hat Portage and Winnipeg, large quantities of lumber and ties have been destroyed by recent forest fires."

Some of our friends to the south of the line, seem determined to annex us, whether or no.

Missouri is better supplied with forests than any other western state north of Arkansas. One-fourth of its area is covered with trees and in some districts, particularly the river bottoms, the swamp lands of the southeast, and the Ozark mountain regions, these trees are of the most valuable character.

The *Bellefonte Intelligencer* says we have received a specimen of an artificial material which is intended to take the place of wood for all purposes for which wood is now used. It is made of straw ground to a fine pulp and subjected to a tremendous pressure—the result being a material closely resembling wood, though harder. It is manufactured by the Straw Lumber Co., of Lawrence, Kan.

A Boston trade circular says eastern lumber is in fair request, but prices are easier on spruce and hemlock. Coarse pine boards, dry, are wanted; lath and sawed cedar shingles are scarce and high. The scarcity of small vessels adapted for this market, and the fact that hardly any of this class have been built the last few years, promises to keep freights firm during the season. There has been considerable delay already in shipping the orders, owing to a lack of suitable vessels.

The *St. Louis Republican* says the people of the United States little dream when they skun the cream from the virgin soil of the west and send it to Europe in the shape of wheat and fall the monarch trees of their forests by the millions every year, that they are making wanton drafts on the sources of their wealth which it will take generations of careful effort to repair. They, and perhaps their children, may not suffer any great inconvenience from the loss of the riches they are so profligately dissipating; but their children's children will hardly pass away without suffering by the great mistake.

A CORRESPONDENT of the *Montreal Gazette*, writing from St. John, N. B., says:—The lumber business is good. Stream driving is excellent, on account of the floods, and few logs will remain on the banks and bars this summer. Our harbor and the North Shore ports are full of ships after deal cargoes, and it is noticeable that the percentage of steamers is steadily increasing. We have a dozen of them at a time here, and there are nine or ten in the Miramichi also, this being their first year in that river. Many of them came here immediately on returning to England from Indian voyages, and some of them are to return there after carrying the cargoes they are now loading. They are all English, while most of the sailing vessels that came for deals are Norwegian barques.

A healthy man never thinks of his stomach. The dyspeptic thinks of nothing else. Indigestion is a constant reminder. The man who finds himself suffering will spend a few cents for a bottle of Zoposa, from Brazil, the new and remarkable compound for cleansing and toning the system, for assisting the digestive apparatus and the liver to properly perform their duties in assimilating the food. Get a ten cent sample of Zoposa, the new remedy, of your druggist. A few doses will surprise you.