

LUMBERING IN DAKOTA.

The following items come from Grand Forks, Dakota:

Since the opening of the new survey—less than a week—75,000 acres of land have been filed upon at the land office.

Mr. Frank Howard, of Ann Arbor, Mich., is in the city with a view to ascertaining the degree of success that might be anticipated if a \$100,000 saw mill were to be erected here. He represents Michigan capitalists and says that he will agree to build a \$100,000 saw mill and purchase the logs now offered for sale by W. T. Walker, if the city of Grand Forks will come forward with a \$30,000 bonus. It will be necessary to invest at least \$500,000 in the enterprise, and Mr. Howard says that he can give the assurance that the work would be commenced at once. He says that Mr. Walker asks twice too much for his logs, and that the reason he (Mr. Walker) doesn't run them down to Winnipeg, as here before, is that the Canadian Pacific railroad is interfering with his business.

The Red Lake river is admirably adapted to driving logs. On the east side of the Red Lake is timber to the amount of 8,000,000 to 10,000,000 feet of lumber and on the north side the amount of timber is too great to estimate. The logs offered for sale by Mr. Walker are floated down the Clearwater river, which enters the Red Lake river at Red Lake falls, and come from Mr. Walker's land, which lies between the Whitearth and Red Lake Indian reservations. They are good logs and are guaranteed to average 33½ per cent. of clear lumber.—*Lumberman's Gazette.*

HINTS FOR TRANSPLANTING

We take the following from the circular of the Quebec Commissioner of Crown Lands in regard to the public Arbor Day:

1. Choose trees for transplanting from the skirts of the woods (as much as possible) where they have not been crowded.
2. Do not take them over eight or ten feet in height, except with very special care.
3. Do not grudge the time necessary for taking them up well, with a good ball.
4. In doing so, try and preserve as many rootlets and radicles as possible, rather than big roots. The success, in planting, depends upon the preservation of those rootlets and radicles (through which the water in the soil and various mineral elements in solution are taken up and conveyed, as food, to the tree.)
5. Be very careful not to allow those rootlets and radicles to dry up; shelter them from the sun and wind the moment they are extracted from the ground, and try and keep them fresh with damp moss or otherwise.
6. Trim up neatly the tap root and all the broken ends of large roots, with a slanting cut of the knife, (it will give more surface for the formation of rootlets.)
7. If the large roots are much shortened in extracting the tree, the branches ought to be somewhat shortened, & the roots may not be able to supply food in sufficient quantity for the head, and the tree will suffer.
8. Make the hole for transplanting wider and deeper than the ball of the tree, and partly refill it with good mellow soil; it will give a better chance to the rootlets and radicles, for an immediate start.
9. Do not allow stagnant water in your plantation; if the soil is liable to get overflowed, provide for its drainage.
10. Do not replant the tree any deeper than it originally grew.
11. Turn it to the same points of the compass as it originally stood, it appears a good precaution, and an easy one to take (by means of a compass and a string tied round the tree, with the knot to the north.)
12. Spread the roots, rootlets and radicles carefully; pack up between them with fine mellow earth and water before closing the hole.
13. Stake the tree, two stakes will generally do, place them so that they will steady the tree against the prevailing winds, tie with straw ropes, or surround hard ropes with straw, so as not to injure the bark.
11. Keep the ground free from grass and weeds and prevent it hardening at the foot of the trees.
15. Fence strong enough to keep away cattle.

16. The qualities of the soil in which trees are to be replanted, must be carefully considered in selecting the trees.

For rich, deep, mellow soil, moderately damp, take butternut, oak, elm and black walnut.

Maple and basswood will, of course, do admirably well in such excellent soil, but a soil presenting the same qualities, in a less degree, will give very good results for those two kinds of trees, they are more accommodating.

Ash will do well in cold rather damp compact soil, where maple would not grow.

Tamarac grows well in low wet land, provided the soil is not too compact.

Dry sandy soil ought to be reserved for pine and spruce.

N. B. The period fixed for "Arbor Day" has been chosen with regard to deciduous trees. In the Province of Quebec, pine and spruce succeed better when transplanted later, about the beginning of June, when the buds are on the point of opening.

GENERAL REMARKS.

It is generally admitted that the cheapest and safest mode of cultivating forest trees is by sowing their seed.

There will be less check in the growth if the seed can be sown at once where the tree is destined to remain permanently.

But it is not always practicable to do that, ground may not be ready, may not even have been decided upon, &c.

In that case, sow in seed beds and rear up seedlings in nursery.

The season for sowing black walnut, butternut, oak, basswood, sugar maple, acer negundo, is in the fall, the moment the seed is ripe.

Soft maple and elm ripen their seed about the middle of June, and it ought to be sown at once, quite shallow, sheltered from the sun and moistened.

Sow fir tree seed in the spring.

Until the nurseries are sufficiently advanced to provide trees fit for transplanting, get them out of the woods, observing precautions indicated above.

Those who do not wish to sow their own trees can procure seedlings at wonderfully low rates from the nurseries.

THE MANITOBA TRADE.

A correspondent of the *Northwestern Lumberman* writes as follows:—

WINNIPEG, April 18.—The lumber business here is in a demoralized condition, and the prospects for a profitable season's business are not of the best. There are further south of us a number of parties who seem to want to do business for pleasure, not profit. Last year prices were maintained that left a good margin for handling, and very little cutting in prices was done unless on large bills, when some slight concessions were made. The trouble this season arose something in this way: In February the city council advertised for tenders for 1,500,000 feet of plank for sidewalks, to be delivered free on board cars here. Amongst those sent in were Woods & Co.'s, a new firm here, for \$24.88 per thousand, and one of J. C. McDonald for Little, Peck & Co., of Duluth, for \$24.95. The board of works recommended that the tender of Woods & Co. be accepted, but when it came before the council to be ratified it was referred back to the board. In the meantime McDonald wrote a letter to the council offering to take the lumber off the car and put it in his yard and deliver it to the city as required. This meant a saving to the city of fully 8 per thousand. His offer was accepted, but the contract was never signed. Within the past week J. R. Sutherland & Co., a local mill firm, offered the city all it wants at \$24, and D. E. Spraggan, another local mill man, not to be underbid, offered the same at \$21 in his yard, or delivered in any part of the city at \$25.25. Last season the city paid for the same grade \$30 per thousand, so that this is a very big cut. Joist and scantling, up to 16 feet, sold all last season for \$30, but a cut of from \$2 to \$4 is being made now, and the same all through the list. No. 2 common cannot be placed in yard here for less than \$26.50 to \$27.50, so that those dealers who have to buy in St. Paul and Duluth will have to sell at a loss. Of course these local mills can sell at these prices, but it cuts the margin very fine. Their logs cost them here \$16 per thousand, log

measure; but labor is high, and quite a number of logs are lost, so it runs up cost. Later on in the season, when business gets opened up, dealers may see the folly of cutting prices, but as there is a very heavy stock to come from Lake of the Woods region, and this is the only market, they have prospects that are not any too cheering. —*Felix.*

PACIFIC COAST LUMBER INTEREST.

Californians, not content with forcing their way to the front rank as wheat shippers, are beginning to turn their attention to lumber, and are seeking markets where their different varieties of native and Pacific coast wood are likely to be appreciated. Redwood, fir, black walnut, cedar and white pine are available in unliquidated quantities, having stood for ages unacquainted to the assaults of the hardy and persistent woodman, and it is with a view of introducing these and many other varieties of finishing woods, that capitalists intend entering the field as competitors in eastern and foreign markets. Redwood has been in use here for some time, but builders generally are not fully acquainted with all its merits. It is used for many purposes, rough as well as fancy work. It is lasting, worked up either into shingles or for paneling purposes with a high polish. Recently a shipment was made from San Francisco to Glasgow of Washington Territory red fir, cedar and black walnut, and an assorted cargo of woods followed to London. The scarcity of the lumber supply in many portions of Europe offers an excellent opportunity for Pacific coast shippers, and with their known energy, it would not be a surprise to see, at the expiration of a few years, shipments of lumber making from San Francisco and North Pacific ports to Europe as frequently as wheat goes now. At the present time shippers are not fully posted as to the requirements of European consumption, the cargoes forwarded thus far being of an experimental character, simply with a view of ascertaining the tastes. The ventures made in the way of shipments to Panama and other South Pacific ports, have met with such encouragement, that the trade of Montevideo and Buenos Ayres in white pine is now viewed with some jealousy. Australia is buying largely in the San Francisco market for building purposes, and the demand is rapidly increasing. Canada and the West, keep a good lookout for your trade! or some fine day you may awake to the fact, that instead of a prospective famine in lumber, it may turn out a feast, with a surplus to spare.—*Lumber Trade Review.*

NORTHWESTERN PROSPECTS.

The fact that what is called coarse lumber at Saginaw valley points is selling for from \$1 to \$1.50 per thousand lower than last fall's figures, while what is called good lumber is reported to be selling fully as high as it did last year, is of some significance. It may be taken to mean that the coarser grades of stock throughout the country that draws a large proportion of its supply from eastern Michigan, must rule lower this season than they did last year, for after the mills start up an advance in the value of general stocks cannot be looked for. The concession already a fact at Saginaw points, and the acknowledgement made in western Michigan that green lumber must sell this year at least 10 per cent. below last season's prices, coupled together, certainly indicate a lower range of values all along the line. The information of a break at Winnipeg, conveyed in a letter printed in this issue, shows that there is a powerful competition for northwestern trade, in which Minneapolis, Duluth, Lake of the Woods and the local mill men of Manitoba are engaged. The antagonistic attitude of the yard trade and the cargo market in this city, and the rivalry between Chicago and Mississippi river points for the Kansas, Nebraska and Colorado business, thrown into the devil's broth with the other difficulties, will help the bears of the trade at large in their scheme. Taking everything into consideration, the outlook is a little dubious for the sticklers for last year's prices. Nothing but an overwhelming demand can stop the tendency to weakness; but we must acknowledge, at the same time, that there is a probability that the demand will come very near the overwhelming. But a relentless com-

petition of sections, and an unprecedented output of lumber, are certain to characterize the season's business, and it is a question as to whether the requirement of lumber will be sufficient to withstand these two adverse influences.—*Northwestern Lumberman.*

A PETRIFIED FOREST.

The visitor to the petrified forest near Corvizo, on the Little Colorado, will begin to see the signs of petrification hours before he reaches the wonder, here and there at almost every step in the road small pieces of detached limbs and larger stumps of trees may be seen almost hidden in the white sand. The road at a distance of ten miles from Corvizo enters an immense basin, the slope being nearly a semi-circle, and this enclosed by high banks of shale and white fine clay. At the entrance of this semi circular basin the exploring party camped and a fire was quickly burning. The meal consisted of bacon, beefsteak and coffee, after partaking of which the party camped for the night. In the morning it only required half an hour's good driving to reach the heart of the immense petrified forest, and then such a wonder met our gaze as no one can ever realize until they make that very trip for themselves.

The petrified stumps, limbs, and, in fact whole trees, lie about on all sides, the action of the waters for hundreds of years has gradually washed away the high hills round about, and the trees that once covered the high table lands now lie in the valley beneath. Immense trunks, some of which will measure over five feet in diameter, are broken and scattered over a surface of three hundred acres. Limbs and twigs cover the sand in every direction and the visitor is puzzled as to where he shall begin to gather the beautiful specimens that lie within easy reach. There are numerous blocks or trunks of this petrified wood that have the appearance for all the world of having been just cut down by the woodman's axe, and the chips are thrown around on the ground so that one instinctively picks them up as he would in the log camps of Michigan and Pennsylvania.

Many of the small particles and even the whole heart of some trees have now become thoroughly crystallized and the beautiful colored cubes sparkle in the sunshine like so many diamonds. Every color of the rainbow is duplicated in these crystals, and those of an amethyst color would pass the eye of a novice for a real stone. The grain of the wood is plainly shown in nearly every specimen—making the pieces more beautiful than ever.—*From the Albuquerque Journal.*

THE *Timber Trades Journal* of London, England, in allusion to the attempted amalgamation of the Grand Trunk and Canadian Pacific Rail ways says:—"The timber trade will perhaps be better promoted by the separation of these two great lines of railway than by their union. Monopolists are less likely to consult public convenience than those who have to contend with a little wholesome opposition. To facilitate the timber traffic they will have to go on a approximation to the penny postage system, or inland telegraphy, which take no note of distance. From its great bulk, in proportion to value, ordinary timber, like coal, will not bear accumulating charges, by length of way. Our railway companies have not yet recognized this fact, hence the Manchester ship canal."

THE *Warton Echo* says:—"We are informed that Messrs. Bible and Chisholm are erecting a new saw-mill at Stokes Bay, which will be completed in a few weeks. They are putting in a powerful engine and first-class machinery, which will have a capacity of about 1,500 ties per day. The firm have a contract to supply the W., G. & B. division of the Grand Trunk with 160,000 ties. The settlers of the Peninsula will have no trouble to dispose of their cedar at good rates. At Bible and Chisholm's mill in the Township of Lindsay, on Tuesday, the 10th inst., 1,024 ties were sawn in the short space of ten hours, under the management of Mr. S. Lownsbury, the head sawyer. The ties were all large ones, and no more than two were cut from the same stick. This is extraordinary work, as 500 is considered a day's cutting."