EXCHANGE ECHOES.

Mississippi Valley Lumberman.

There is evidently a growing sentiment among the Canadian people in behalf of commercial union with the United States. If the signs are not mistaken a large majority of our Canadian neighbors are in favor of it, although the central government is opposed to it. Recent events in Manitoba touching the construction of a line of road to connect with the Northern Pacific, indicates that the people of that province are ready not only for commercial union but possibly annexation. Such material prosperity as the Canadas now enity may be attributed to her proximity to the United States. The country is rich in naw material, not the least of which is lumber. Her own consumptive demands are not as large as her supply of raw material, and naturally she would be glad to market her products unrestrictedly on this side of the line. A movement in behalf of commercial union has been started at some cities on the border line where freer trade would contribute to their prosperity, but we are not of the number who are ready to believe that the time has yet come to batter down the protective bars. When the existing relations are dissolved let it be by annexation absolute and unequivocal. The friends of commercial union may claim that the one is a step to the other, and that the opposition of the central government to commercial union springs from fear of political union, but we can bide our time. The time has not yet come for any other relations than now

Lumber Trade Journal, Chicago.

The anxiety of the people of the Dominion to consumate a reciprocity treaty with the United States, which will give both countries a free exchange of business, cannot be watched too carefully. The initiative oppositionto the measuresi nstituted in 1877 by the National Association of Lumber Dealers, should be followed by all other leading industries. The real object of the Canadians is nicely hidden by the offer to give us, free of duty, such commodities as we stand in need of; but how will it be about such as we do not need? How will it be about iron, on our take borders when that which has been supplied by the furnaces of Pennsylvania, Ohio, Indiana, Illinois and Upper Michigan, will be no more. Iron could, by the success of this reciprocity measure, he brought from England to Que-Lec, and given to us as a Canadian product, far below the prices at which it can be manufactured in this lake boundry. Our furnaces and mines might remain idle, to the profit and gratification of our Canadian neighbors. As Mr. Butterworth of Ohio is fixing up some sort of a reciprocity scheme with Canada, we hope to see the National Association of Lumber Dealers, at their next meeting at St. Louis, give voice to their views on this important question.

Northwestern Lumberman.

The observing person who visits the lumber office of any of the great logging and manufacturing concerns this fall will notice a peculiarity that will attract his attention. The univerall sign on the door "no men wanted for the woods," is conspicuous for its absence, and the droves of men with red shirts, top boots and slouch hats are not hanging around street corners or lounging in the corridors of mill offices to any perceptible extent. The general activity has picked them up, and given them employment in other branches of industry, and the gruffness of employers bored by applications for work no longer blanches the cheek of the hardy woodsman. He won't apply very numerously, and the hunting will be transferred to the other side of the outlit. And men will have to be given hig wages and furnished with an apple pie chromo to induce them to go into the woods this winter. They are a scarce commodity. Wages, I am told, will range from \$20 to \$30 a month. It's a very enviable position for labor, even if a little tough on the employer. Men hunters are now raking Canada with fine tooth combs for men for the woods, and the chap who wants work will be cheerfully accommodated. The Timberman, Chicago.

The lumber business on the Saginaw river has become "the e cature of circumstances" to a most remarkable degree, more so, perhaps, than at any great lumber manufacturing centre in the country. In the first place it is very largely dependent on territory which is very remote for logs with which to stock the enormous productive capacity of the monster mills, about eighty of which still continue their work of devastation of the forests of Michigan. In fact, a very large proportion of the pine which now comes to Bay City and Saginaw in the log, and is finally cross-piled on the docks ready for shipment, a few years ago would not have been considered tributary to this market. But necessity, besides being the mother of invention, often forces the adaptation of themselves to circumstances, of the America a people in the business departments of life; and this is especially remarkable in the history of the lumbering interests in the Saginaw district. * * The next important circumstance in the connection alluded to is that of the Canadian ipine timber supply. Disguise it as he may, the Saginaw river of supply embraced in the Georgian Bay country, and very many of them invested their money there, intending to make enormous drafts on the forests of our Canadian neighbors. But these full-blown blossoms of hope have been nipped in the bud by the chilling blasts eminating from the legislative building at Ottawa, in the imposition of a tax on logs exported from the Dominion to be converted into lumber in Uncle Sam's domain. Among those who made heavy investments in Canadian pine may be mentioned: Folsom & Arnold, the Emery & Eddy, and Green Pack, of Oscoda; of course these are only a few of the prominent ones. The first named firm, Folsom & Arnold, have had an extensive mill in operation a few years in the midst of their Canadian pine, which keeps several vessels constantly employed transporting the lumber.

Northwestern Lumberman.

After the old English and Scotch elements of the lower provinces shall have died out, and the younger element of the Canadian communities shall have become embued and vitalized by American ideas and commercial influence, the feeling against complete national union with the United States will have become nearly or quite extinct. The United States can afford to wait for the national, if it can have the commercial union. Uncle Samuel is not vain-glorious for extending his borders. He is benevolent, and willing to take Canada under his waistcoat, when Canada is willing to thus hover. The United States does not need the commercial union as much as does Canada, but is willing to enter into such a relationship for the sake of comity and good neighborhood. The Michigan lumbermen who have invested money in Canadian timber limits will hail with satisfaction the movement that is gaining some headway towards the establishment of complete reciprocity between the two countries.

FORESTS WANTED.

The last three or four years, which cover the whole history of our North-West settlements, are said to have been exceptionally, and in some parts, disastrously dry. The hope of better things is supposed to lie in tree planting, but for this there is no adequate provision, as little can be expected to be done in this way by settlers who have to bend their utmost powers towards keeping soul and body together. no practical person will waste his time nursing forests n. a country where they are almost sure to be swept away by fire. The most practical measure for the afforesting of that country would be the most stringent possible regulations with regard to prairie fires. But for these the country would be full of forests in about ten years; the trees which flourish best, cotton wood, poplar, ash-leafed maple, would spring up of themselves and under their shelter or, as a later crop on the same ground, trees of greater usefulness might perhaps be made to grow. In view of the interests of the vast territories under its guardianship should not the National Government conduct a series of sufficiently comprehensive experiments to secure the best results in the way of tree planting? Diligent observation on the spot and scientific enquiry abroad should be brought to bear to discover, as speedily as possible, by what process of sheltering, from what source of supply or by what rotation of species the most valuable timber can be made to grow. As with our fruit and ornamental trees in the east, the foresters of the great west must look largely to Russia for experience.

A NEW DAM ACROSS THE OTTAWA.

The lumbermen of the Chaudiere and Thos. McKay & Co., have began the work of constructing a roller dam 1,500 feet in length across the Ottawa river, from the small island in the river below the Canadian Pacific Railroad Bridge on the south side of the river, and connecting with what is known as the O'Connor dam on the north side of the river.

To those who are acquainted with the appearance of the river about the Chaudiere Falls it will be remembered that on the south side of the river Messrs. Perley & Pattee's saw mills are situated a little above the falls, and that extending for over a thousand feet from the mill directly up the river is a large dam which composes the northern boundary of their mill dam. Outside of this dam from a point near the saw mills there is a lower roller dam, only apparent during low water, which extends to the island about six hugdred feet above the falls and about four hundred feet in a direct line from Messrs. Perley & Pattee's mill dam.

On the north side of the river Eddy & Hurdman's mill dam extends from the rear of E. B. Eddy's large saw mill directly up the river about 900 feet, where it is joined to the O'Connor dam, which latter extends three hundred feet in a slanting direction along the upper extremity of the large flat rock on the Hull side of the Falls.

cumstance in the connection alluded to is that of the Canadian pine timber supply. Disguise it as he may, the Saginaw river the upper end of the O'Connor dam to the island in the chan ananufacturer has hulded his hopes very largely on the source nel on the south side of the river. The new dam will be 1,500

feet in length and between five and six feet in height and built as a roller dam, that is five feet in height on the side nearest the falls and slanting down to two feet on the upper side so that at high water the water will pass over the dam.

The object of this dam is to raise the water in the river above the Falls to furnish sufficient water to run the mills at the Chaudiere during the period of low water in the river. In addition to giving more water with which to run the null machinery the new dam will be very useful to the city waterworks in furnishing additional power to drive the additional machinery which is now being put into the pump house extension. The building of this new dam, it will be seen, will complete a chain of dams, which stretch across the Ottawa River just above the falls. The new dam as well as the old dam, from Perley and Pattee's mills to the island will of course only affect the flow of the river during very low water, as during high water the dams will be covered. The work of construction was began to-day and will be pushed through to completion as fast as possible which will probably be before the ice takes on the river. The estimated cost of the work will be between six and eight thousand dollars .- Journal,

GALT'S SUBSTANTIAL PROGRESS.

[CONTRIBUTED.]

Below will be found a few of the new buildings erected in Galt during the present year. It was thought by many that considering the great activity in building operations during 1885 and 1886, there would be a decided falling off this year. On the contrary, however, it amounts to the handsome showing of nearly \$210,000. Gait is to be congratulated upon the evidences of prosperity and enterprise which the result indicates. The following are some of the most important structures: Jas. Anderson, 2 brick stores and stone livery stable, \$5000; Imperial Hotel Co., block of brick stores and bank, \$17,000; Town of Galt, stone vegetable market, \$1,800; Litting up new fire hall, \$613; Victoria Wheel Co., addition to factory, \$500; Goldie & McCulloch, rebuilding of machine shop, \$10,000; Victoria Rink Co., opera house and stores, \$17,000; Young & Main, 2 brick stores, \$4,000. Shurly & Dietrich, Saw Works, stone addition to factory, \$1,000; MacGregor, Gourlay & Co., Machine Works, stone carpenter shop, \$1,500; A. I. Campbell, stone carpenter shop, \$1,650; Geo. Hespeler, addition to saw mill for the purpose of manufacturing sash and doors, etc., \$1,000. Until lately the local saw mills supplied the lumber required for building purposes here, but the pine in the vicinity is almost exhausted. On a pury it was found that the five saw mills which used to supply salt had cut as follows. D. Clemens, 750,-000; W. K. Dryden, 1,000,000; G. Hespeler, 1,000,000; R. Gilholm, 1,500,000; Reid Bros., 750,000. Galt builders and lumber merchants imported as follows. The town, for sidewalks, etc., 150,000 feet; R. Freer, for builders' supplies, 450,000 feet; A. McAuslan, 500,000 feet; A. I. Campbell, 200,000 feet; W. & F. A. Scott, 550,000 feet; D. Murray, 2,000,000 feet.

A CHANCE FOR "CRANKS."

Some plan must be devised by which cypress logs can be got out of the swamps, rain or no rain. This is a fine opening for inventors, as there is "millions in it," but we want to warn everybody that it is not a problem that can be solved by figures and drawing. One of these pushing, energetic 'cranks," who don't value anybody's advice, can do it, provided he is at the same time a first-class mechanical engineer. The field is open and the reward sure and free to all. —Southern Lumberman.

NOTES.

Mr. David Griffith, late foreman for Bronson & Weston in the Gatineau district, is dead.

Messrs. S. & J. Armstrong, McKellar, have a large force in the bush near Maganettawan. They expect to get out over 3,000,000 feet during the winter. The logs are for the Georgian Bay Lumber Company.

A discussion is going the rounds of the press as to the relative strength of wet and dry timber. We do not believe there is much to be made out of the discussion, some kinds of timber are stronger when dry, whole other kinds are stronger when wet or green. But most hardwoods when wet will possess more tensile strength than when dry. Timber thoroughly seasoned is more brittle than when green, and with the necessary force will break square off, while the same timber green would stand about the same pressure by bending more or less without breaking. Take a hickory sapling that is almost impossible to break in its green state, although it may bend double, and thoroughly dry it, and you may easily break it almost "square off," as the boys say. So with almost any kind of timber. Drying makes it stiffer, more unyielding, but in very few instances stronger.—Scientific Press.