

the furnishing of news regarding operations. A journal of this nature, which is supposed to furnish the news of the trade throughout the Dominion, must of necessity seek the co-operation of all interested parties towards this end. As has often been stated in the past, the columns of THE LUMBERMAN are always open for the free and fair discussion of all matters relating to the lumber and kindred trades. Will not those who have ideas and opinions to express endeavor to pay more attention to this department, and by so doing assist us in making the CANADA LUMBERMAN on a par with any similar publication? We cordially invite criticism and suggestions from all regarding matter for publication, and will try to benefit by such and allow our readers to do likewise. Those not already subscribers who may receive a copy of this issue, will be kind enough to give it a careful reading, and if they think it worth the price of subscription—\$1 per year—a remittance of that amount will do us more good than any amount of praise.

THE project of forming at Toronto a Provincial Lumbermen's Association, or a special division of the Board of Trade, seemed to be regarded with favor, and there was some movement towards carrying out the idea. But the matter has been allowed to sleep and no progress has been made, to our knowledge. It would be unfortunate if the attempt should be allowed to fall through, for such an organization would be very beneficial to the timber trade of the country. Union is strength, and such an important industry has many interests that might be furthered by concerted action. Individual lumbermen, however influential, when acting separately and without union, cannot have the same weight as their claims would possess if pressed on behalf of the whole trade by those speaking authoritatively in their name. There are also many points as to which they would do well to develop a common policy after consultation and discussion. The matter should not be permitted to remain dormant, but now that some interest has been excited practical steps should be taken without delay for the permanent organization of the timber trades.

THE rain that fell early last month had the good effect of extinguishing the forest fires that were being vainly combated. Unfortunately before the ravages were stayed there had been much destruction of our forest wealth. Not only did the owners of standing timber see much of their property thus destroyed, but there has been another bad result. On some limits where the destruction was not total the trees have been killed by the scorching to which they were exposed. These lifeless trees must be cut at once or they will be rendered valueless by the various boring worms. By this necessity the plan of operations of many lumbermen will be disarranged, they will be driven to cut prematurely with a tendency to glut the market. Though greater precautions have been taken lately to preserve the forest from destruction by fire the damage that has been done this year shows that still more is required in the way of prevention. It is true that the season was exceptional with its prolonged drought, but there are few years when there is not a period of danger. The lesson should be learned that even greater precautions are not only desirable but would be profitable.

SINCE our last issue the Mercier Administration has come to a decision regarding the ground rents for timber limits in the Province of Quebec. They have decided not to carry out their proposed increase from \$2 to \$5, but to make it \$3, being an increase of \$1 a square mile over the old rental. But while thus seeming to yield to the protest of the lumbermen, the relief thus given is deceptive. Since they have adopted the expedient of drawing larger sums from the trade in another way. The regulation for collecting the dues has been changed, and in future the charge, instead of being by the log, will be by the thousand feet board measure, \$1.30 for pine and 65 cents for spruce. It is calculated that the receipts from this source will thus be increased by 20 per cent., the total increase being altogether more than the additional \$135,000 estimated by the Provincial Treasurer from the increase of the rental to \$5. It appears that the Quebec Government is determined to exact by some means a heavy contribution from this important industry, which was by no means so remunerative as to warrant this addition to its burdens. Another new regulation will be even more obnoxious to many lumbermen and others interested in timber limits. In future the leases are only to be for one year and the tariff is to be subject to annual revision. This will not only reduce the value of such property, but what is of even greater consequence it will deprive the value of stability. One effect of this will be to render it of less credit as a security, so it may be more difficult and will certainly be more costly to obtain advances. This will have a tendency to cripple operations and curtail these operations to the loss not only of themselves but of the whole community. The only mitigating circumstance attending this change of base, is that the smaller

advance of the ground rent, will obviate the pressure that would have been put upon the lumbermen to strip part of their limits prematurely in order to relieve themselves of so much of their ground rent. Thus, however, is partially counteracted by the instability of the tenure. Altogether the new regulations are for the benefit neither of the trade nor of the community.

AN official report has been presented to the Secretary of the Interior at Washington by his own request, which, if adopted, will effect a complete revolution in the management of the forests of the United States, and by the force of example very possibly of those of Canada. The head of the Forestry Division of the Department of Agriculture, having been requested to prepare a scheme for the organization of a forestry department, has done so in a very thorough manner. Having graduated in a German forestry university, he adopts the scientific system of forest culture and management in that country with such modifications as his long experience on the continent suggests as suited to local requirements. He lays stress upon the principal that no more timber should be cut from a forest that is replaced by growth, that renewal by planting should at once follow, and that the enormous devastation by fires should be checked. To attain the objects he suggests, that the forests should be withdrawn from sale and settlement, that the forest reserves should be divided into great blocks, further subdivided into districts. Over these he would place trained inspectors with a staff of foresters, a bureau of commissioners having the general control. There would then be no further leasing of limits, but the right to fell the trees selected by the inspectors would be sold. This is a modified form of the system in vogue in the countries of the continent of Europe where the management of forests is a science. It would be a total change from the system that prevails in North America with minor variations in different portions. It is obvious that such a system adopted in the United States, and this is far from improbable, would have important effects upon the lumber industry of Canada. For a time the cut in the United States would be likely to be diminished, and there would be a greater demand which might be supplied from Canada. But when the system was fully established among our neighbors there would be a steady supply and that prolonged in a manner which does not seem hopeful under present circumstances. If the system should prove successful in the United States there would no doubt be a strong tendency to imitate it in Canada. In our country we differ from our neighbor, the forests not being controlled by the central authority but by the Provinces. This, however, would not prevent the change being made piece meal, for if one Province moved in this direction the others would be likely to follow. The rights of private holders would undoubtedly be respected, but European experience goes to show that individual proprietors would be led to follow the public system. The lumbermen of Canada and others connected with our forest wealth, will watch with interest to see what action is taken by the Washington cabinet and by Congress in regard to this very important report.

BRITISH COLUMBIA TIMBER LANDS.

In the *Canada Gazette* of Oct. 15th is to be found the amended regulations for the survey, administration and disposal of Dominion Lands within the forty-mile railway belt, in the Province of British Columbia. Among other changes which have taken place we find that sub-clauses 4, 5, 6 and 7 of clause 13 are new, and are intended to facilitate the settlement of timbered lands, which would not otherwise be opened for homestead entry. The regulations are copied from the Timber Regulations of the Province of Ontario, and the object is, while permitting such lands as contain merchantable timber to be taken up and cleared for agricultural purposes, to prevent persons who merely desire to obtain the timber, from getting possession of land under cover of a homestead entry, stripping the land of its timber without paying any dues, and then leaving the land much less valuable for all natural purposes, than if it had remained in its natural state. The sub-clauses referred to above read as follows:—

(4) All merchantable timber growing or being upon any land entered or sold within the limits of Dominion lands in British Columbia, and all gold, silver, copper, lead, iron, petroleum, coal or other mines or minerals shall be considered reserved from the said land, and shall be the property of Her Majesty, except that the homesteader or purchaser, or those claiming under him, may cut and use such merchantable timber as may be necessary for the purpose of building, fencing or road-making on the land so entered or sold, and may also, under the authority of the Crown Timber Agent, cut and dispose of all timber required to be removed in the actual clearing of the said land for cultivation, but no merchantable timber (except for the necessary building, fencing or road making as aforesaid) shall be cut beyond the limit of such actual clearing, and all merchantable timber cut in the process of clearing and disposed of, shall be subject to the same dues as are at the time payable by the holders of licenses to cut timber.

(5) The patents on all lands, hereafter entered or sold as aforesaid, shall contain a reservation of all merchantable timber growing or being on the said lands, which merchantable timber shall continue

to be the property of Her Majesty; and any person or persons now or hereafter holding a license to cut timber on such land, may at all times during the continuance of such license enter upon the uncleared portion of such lands, and cut and remove such timber, and make all necessary roads or water-ways for that purpose, and for the purpose of hauling in supplies, doing no unnecessary damage thereon, but the patentees or those claiming under them may cut and use such timber as may be necessary for the purpose of building, fencing or road-making on the lands so patented, and may also, under the authority of the Crown Timber Agent, cut and dispose of such timber to be removed in actually clearing the said land for cultivation, but no merchantable timber (except for the necessary building, fencing or road-making as aforesaid) shall be cut beyond the limit of such actual clearing, and all merchantable timber so cut and disposed of shall be subject to the payment of the same dues as are at the time payable by the holders of licenses to cut timber.

(6) Holders of timber licenses, their servants and agents, shall have the right to haul their timber over the uncleared portion of any land entered as a homestead or purchased as hereinbefore provided, and to make such roads or waterways thereon as may be necessary for that purpose, doing no unnecessary damage, and to use all slides, portages, roads, waterways, or other works previously constructed or existing on any land so entered, sold or leased, and the right of access to, and free use of all streams and lakes theretofore used, or that may be necessary for the passage of timber; and all land necessary for such work is hereby reserved.

(7) All merchantable timber growing or being upon any land hereafter entered as a homestead or sold under these Regulations, shall be subject to any timber license in force at the time of such entry or sale, and may, at any time during the currency of any license or licenses to be issued during such period be cut and removed under the authority thereof.

RAILWAYS AND FORESTS.

The report of the Forestry Division of the United States Department of Agriculture gives information respecting "The relation of Railroads to Forest Supply and Forestry," which should be of much value to the people of Canada.

The total length of railroads in the United States was at close of

1840.....	2,795 miles.
1850.....	9,021 "
1860.....	30,635 "
1870.....	52,914 "
1880.....	93,349 "
1886.....	137,615 "

It is estimated that about 12,000 miles will be completed in 1887.

The quantity of timber required for ties, bridges, station buildings and other structures over these roads is much greater than most persons suppose. It may, indeed, be justly called enormous. In many of the districts in which railroads have been built timber was so abundant that it was used for every conceivable purpose, as being the cheapest of all materials.

The length of track, it will be understood, considerably exceeds the length of road. The report assumes that it is 187,500 miles. Allowing 2,640 ties for each mile, the whole number would be 495 millions, and as each contains three cubic feet of timber on the average, the whole quantity embedded under the entire mileage is 1,485,000,000 cubic feet.

It is difficult to ascertain the quantity used in bridges, trestles and piles; 2,000 feet per mile is considered a fair average. The total at that estimate is 375 million cubic feet.

Telegraph poles number 30 to the mile and in all about five million. At an average of ten cubic feet for each they require 50 million feet more.

But for every cubic foot ready for use in ties, bridges, etc., 1 2/3 feet of round timber is used.

The total quantity cut is therefore 3,150,000,000 cubic feet. It is almost impossible to conceive what these figures mean.

The average life of ties is about seven years; the average life of bridge timber and poles about ten years. To maintain the present roads requires therefore 70,714,286 new ties every year. Allowing for renewals of bridges, trestles, etc., the total quantity required is nearly 255 million cubic feet per year.

Then putting the construction of new roads at the low average of 5,000 miles each year, 13,200,000 new ties and ten million feet of timber, bridges, etc., are required for this purpose.

The total annual demand is now 305,712,858 cubic feet. The demand must increase every year if nothing be done to prevent it. The waste in getting out ties and railway timber is very great. The railroad managers require the best material. When wood is so abundant that much is burned in order to clear the land, the farmers who generally get out ties and timber do not feel the necessity of care or economy. Young oak, larch and pine trees, which furnish but a single tie each, are recklessly cut down, and the means of restoring the forests from which the larger trees have been taken for other purposes are thus destroyed.

The effects of this recklessness are now very perceptible, especially in the wooded districts from which supplies for the prairie roads have been taken. In vast districts what were valuable forests are now mere wastes of brush and firewood.

It is calculated that all the valuable timber on 296,847 acres of well wooded land is required each year to meet the demands of the railroads, assuming that every acre will yield 300