cut by the lumbermen are marked by the government authorities.

In connection with the subject of forest protection in Ontario, it is pleasing to observe that the antipathy held by lumbermen against the movement has been largely overcome. Information has been freely given to the Bureau of Forestry along the lines requested, while improvement is also reported in the methods of lumbering. The necessity of such legislation as would ensure the perpetual reforestation of our timbered lands has, in fact, become recognized by all. The question to be solved is the most comprehensive and advantageous system to be adopted.

## EDITORIAL NOTES.

WE predict ere long the quite general use of electricity for the operation of saw mills, and manufacturers contemplating the erection of new mills would do well to give the matter some consideration. A western exchange says: "At Folsom, California, the American River, Land and Lumber Company are now erecting a saw mill to be driven by electric power furnished by the Sacramento Power Company from the same plant that furnishes the city of Sacramento with its electric power and light."

It is learned that there is an increasing demand in Canada for "Excelsior," or "woodwool," for packing purposes; in fact, we have heard it stated that the supply is not equal to the requirements. There is also a considerable foreign demand for this article, particularly from Great Britain, and its manufacture would seem to present an opening for profitable investment by some enterprising person. "Excelsior" is usually made from basswood, and put up in bales weighing about 80 lbs.

The last quarterly report of the Department of Trade and Commerce of the Dominion contains the unrevised returns of the exports and imports for the year ending June 30th. It is pleasing to observe, as an evidence of advancement, that the value of exports for the past year was 3,300,000in excess of the previous year, and nearly 22,000,000 above the record since confederation. The total exports of the product of the forest show an increased value in favor of 1896 of 33,054,135, the figures being 224,201,285 in 1895 and 27,255.420 in 1896.

OUR contemporary, Timber, of London, Eng., in a lengthy editorial, complains of the quantity of poor manufactured and improperly graded stock which finds its way to the British market from the United States. In the article a compliment is paid to Canadian manufacturers in the following words: "We speak without the slightest prejudice when we say that in the manufacture of lumber our American friends could learn a good deal from the Canadian millmen, whose sawing of third and even fourth quality stuff is beautifully done."

BEFORE this issue of THE LUMBERMAN will have reached its readers, the great Industrial Exhibition at Toronto will have commenced. The suggestion has been made by a lumber merchant that a building be secured at the Exhibition for the use of lumbermen, in which they could meet together for social conversation and the discussion of trade questions. Time will not per-

mit of any steps being taken in that direction this year, but the proposition is worthy of consideration in future. As in former years, a large number of lumbermen and manufacturers will visit the Exhibition, and THE LUMBERMAN extends to all such a hearty invitation to call at our offices in the Confederation Life Building, where they will be afforded facilities for inswering correspondence, and by so doing will confer a favor upon the publisher.

On another page will be found an interesting letter from a correspondent in South Africa relative to the extension of Canadian lumber trade with that country. It is strange indeed that, as pointed out by our correspondent, Canada should be almost unknown in South Africa in matters of commerce apart from the United States. If our lumbermen desire to secure a greater portion of this trade, it is necessary that some such steps as suggested in the letter referred to should be taken. With respect to the trade in staves, of which mention is made, white oak staves are required for that market, and as the supply of white oak in Canada is well nigh exhausted, we cannot expect any development in that line at present. When they start to manufacture their own flour in South Africa there will be an opening for Canadian staves, or for any barrels that do not require to hold liquids.

OUR British Columbia correspondent informs us that there is some dissatisfaction among the members of the lumber combine resident in that province, which may result in their withdrawal from membership at the close of the present year. Should the report prove to be correct, the fact is to be regretted. One of the objects of the formation of the trust was, we understand, to advance prices to a point where the manufacturer could make a living profit, and if the efforts put forth to attain that end are to be met with opposition by manufacturers themselves, the hopes for improvement in the trade of the coast are not very encouraging. As is the case with all organizations, particularly when in their infancy, many points will require to be adjusted. Instead of withdrawing, as contemplated, those who have grievances hould bring the questions before the association at the earliest possible moment, and endeavor to arrive at an agreement which will be most satisfactory to all and in the interest of the trade in general. The manufacturers of shingles on the western coast are suffering from lack of organization. While there is a fair demand for the output of the mills, the price at which Washington shingles are placed upon the market has made it impossible for British Columbia dealers to dispose of their product at a figure which would leave any margin of profit, and several manufacturers have resolved upon shutting down their mills rather than running them at a loss. In this fact is found an argument for the continuation of the lumber combine.

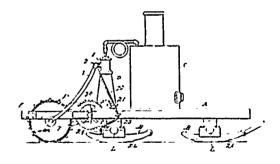
Doubling the length of a board of timber reduces the stiffness eightfold and the strength onehalf. Doubling the width of a board doubles the stiffness and strength. Doubling the thickness of a board or the depth of a timber increases the stiffness about eightfold and the strength fourfold. If it is desired to double the length and retain the same stiffness, it is necessary to double the thickness or depth.

## THE CIRCULAR SAW.

The inventor of the circular saw now in use was Benjamin Cummings, and in a lonely, secluded spot in the north-west corner of the cemetery near the little village of Richmond, Kalamazoo county, Mich., the visitor will find on a white marble slab, nearly concealed from view by a large cluster of lilac bushes, engraved the simple inscription . "Benjamin Cummings, born 1772, died A. D. 1843." Nearly sixty years ago, at Burtonville, New York, and Amsterdam, this man hammered out at his own blacksmith's anvil the first circular saw known to mankind. According to an American contemporary, he was a noted pioneer in Richmond; a first cousin of one of the Presidents of the United States; a slave owner in New York State; a vessel owner on the North river before the days of steamboats; a captain in the war of 1812, where, after having three horses shot from under him, with one stroke of his sword he brought his superior officer to the ground for insult, and because he was a traitor and a coward ; and, after being court-martialed, instead of being shot, he was appointed colonel in his place. The same man, nearly ninety years ago, at Albany, N. Y., took up and moved bodily large brick buildings, and, to the wonder and astonishment of the world, constructed a mile and a half of the Erie Canal, through a bed of rock, and he also built the first low bridges over the same. He also aided in the construction of the first ten miles of railway in the United States, and founded both the villages of Esperense and Bostonville, on the old Schoharrie, near Amsterdam.

## STEAM LOGGING MACHINE.

MR. George T. Glover, of Chicago, has been granted a Canadian patent for an improved steam logging machine, as shown by the accompanying cut. The claim therefor is as follows: A hollow traction wheel or roller having teeth provided with heating chambers communicating with the interior of the wheel or roller, and means suitable for supplying steam to the interior of same, said wheel arranged upon a



hollow axle having its passage connected with the interior of the wheel or roller, and chambered teeth arranged upon the wheel and having three chambers connected with the interior of same. The combination as above, with boxes in which the ends of the axle are journalled, and a steam coupling 7 having a swivel connection with the axle and connected with a suitable steam supply. The runner provided with a groove 28 and a shoe 29 fitted to the runner so as to close over the groove, which latter forms a heating chamber which is supplied with steam, substantially as set forth.

The Gardner Tool Co., of Sherbrooke, Que., are expending a considerable sum on improvements to their factory.