

water. Of what benefit is it to me that flour is selling retail at \$4 per barrel, when I have not got the \$4 to pay for it. As a rule better times mean increased consumption, even though prices should again go up to the coveted dollar a bushel. Roller flour is another item, unknown a few years ago, tending to increase consumption. Seven years ago the world was mostly fed upon flour, a barrel of which was made from 260 lbs. of standard wheat. The introduction of roller flour has, however, so changed the tastes of the people, that even the farmers themselves now demand a quality of flour that takes 8 per cent., or 22 lbs. more wheat per barrel to make. There is no reason to believe that any family will on this account, eat 8 per cent. less bread than heretofore, as the quality is so much superior. Taking into consideration the changed circumstances mentioned, we repeat that the probabilities are that the average price of wheat in the present decade will be considerably higher than in the decade just past.

SIXTY-THREE varieties of wheat are reported to have been sown on the Brandon Experimental Farm this year. It should be possible to obtain from such a diversity of samples a variety capable of evading the innumerable pranks of diversified climatic conditions.

It seems altogether probable that the United States is about to take steps to cripple the two Canadian transcontinental railways in their competition for through traffic with U. S. roads. The Senate committee on Interstate Commerce has presented its report, in which it is recommended that of 50c. for the entrance fee of 50c. and clearance fee of 50c., or \$1 every time an American vessel visits a Canadian port on the great lakes or their tributaries, is demanded, all Canadian vessels be required to pay like fees in the ports of the United States; that so long as the discrimination in tolls of 18c. per ton on products of the United States in favor of Montreal or ports below that city on the St. Lawrence river is made by the Dominion Government, a discriminating toll on the tonnage of Canadian vessels should be imposed upon all such vessels every time they pass through the Sault Ste. Marie canal, and that either such a license system shall be established as will be applicable to the Canadian railroads doing business in the United States, or that some other plan, not injurious to the general trade and commerce of the country, be adopted which shall secure to American railroads an equal chance of competing with Canadian railroads. We are not of course so unpatriotic as to desire to see Canadian railroads deprived of any of the traffic which they have succeeded in securing. At the same time we are not insensible to the fact that in their efforts to secure this traffic the Grand Trunk and C. P. R. have dealt most unjustly with Canadian shippers, by charging them higher freights than were being paid by American shippers, and neglecting to furnish them with the number of cars required and at the time required. In fact, American shippers have received every consideration, while Canadian shippers have received none. Whatever therefore may be the consequences to the Canadian roads of the repressive measures which the United States Government is asked to adopt, the interests of Canadian shippers will not unlikely receive benefit therefrom.

A BILL designed to regulate the method of assessing machinery in mills and factories, for taxation purposes, has passed its second reading in the British Parliament. It provides that with the exception of gasworks where the plant is necessarily part of the premises the only element to be taken into consideration in estimating the rating liability of any factory or workshop shall be its motive power, with the fixed appurtenances, such as shafts, wheels and drums, for the transmission of such motive power. On the other hand, it is expressly stated that no machinery, whether attached to the tenement or premises, or not, shall be considered in estimating the rateable value of any tenement or premises occupied for any trade, business or manufacturing purposes. This measure is evidently very much required, in view of the statement of Sir William Houldsworth, seconder of the Bill, that the difference in the rating of manufacturers' plants as between certain parishes, was as 5 to 1. The London *Miller*, referring to the effect of this lack of uniformity in methods of assessing machinery, says: "As a matter of fact, manufacturers no longer to use a popular but expressive phrase 'know where they are,' and are utterly unable to make those calculations as to the cost of their production which are indispensable to their business. How can a manufacturer make large plans for the extension of his works, if he is uncertain as to the incidence of one of the most important charges to which he is subject? Of the utter capriciousness of the present

system of rating, an excellent example will be found in the case of a well-known flour miller, who owns two large and well-fitted mills not many miles apart, and who is assessed on the whole plant of the one, while only rated on the fixtures of the other." The method of assessment in Canada is, we believe, uniform throughout each province, however it may vary as between different provinces. In Ontario, which doubtless may be taken as an example of the most liberal legislation yet adopted on the subject, the practice is to assess all machinery to the full value of the manufacturer's interest therein as personal property. Should there be claims against the property, the amount of such claims is deducted from the assessment. The statute empowers municipalities at their discretion to remit the taxes on any machinery used for the purpose of manufacturing an article not previously made within the bounds of such municipality. It will thus be seen that hereafter, or so long as present practice obtains, Canadian machinery users will receive less liberal treatment than is provided for their British contemporaries under the Bill to which we have referred.

THE condition of business throughout Canada during the past six months has been too stagnant to be satisfactory, and little improvement is looked for until the new harvest is gathered. The feeling prevails that a bountiful harvest such as has not been experienced for several years, is required to counteract the influences which have obtained tending to depress trade, and cause the wheels of commerce and industry to revolve with accelerated motion. In view of the prevailing condition of affairs as outlined above, it is with regret we observe that the spring bulletin of the Ontario Bureau of Industries regarding crop prospects, is far from encouraging to those who have been looking forward to a harvest more than usually plentiful. Respecting wheat conditions throughout the province the bulletin speaks as follows: "Fall wheat presents a very uneven condition. Some fields are exceptionally fine and others unusually poor in appearance in the same township and even on the same farm, according to the soil, cultivation and physical aspect of the country. Hence it is extremely difficult to make an accurate report upon the outlook of the crop. Throughout the west seeding was driven late into the fall on account of the drouth, and the acreage was somewhat reduced thereby. When winter set in the crop had hardly made sufficient headway to stand the alternate freezing and thawing of the mild winter which followed, with insufficient snow to protect the young plants. On this account the crop suffered more or less from winter killing, and in the extreme west it is very uneven and poor. Considering all these unfavorable conditions, however, the crop may in other portions of the province be said to have wintered better than was expected, as seen in Huron, Bruce, Brant, and some other counties, but the night frosts and cold, dry northerly winds and rains, commencing in February and continuing late into the spring, played havoc with the crop and greatly reduced its vitality and retarded its growth. On low, loamy soils the condition of the crop is very unpromising on account of the frost's action, being patchy and delicate, but on light, rich loams, where well underdrained, and especially where protected by bush or the lay of the land, and where the crop was got in early and the land well prepared, it generally presents a very fine appearance. This is particularly the case in Norfolk, Welland, Huron, Brant and some other counties, while the worst reports come from Essex, Kent, Lambton, Lincoln and Halton. In these latter counties, Lambton and Essex especially, it is probable that a considerable portion of the wheat land will be plowed up and seeded anew. Many farmers are harrowing spring wheat into the bare patches amongst the fall wheat. Little or no damage is reported from worms or insects of any kind. The recent rains appear to have improved the outlook, although the crop is still backward, and with a favorable season there is reason to anticipate a fair although not a large harvest. Correspondents exhibit a remarkable unanimity in their statements regarding the small amount of wheat in the hands of farmers."

MONTREAL, 7th May, 1890.

Editor ELECTRICAL, MECHANICAL AND MILLING NEWS.

DEAR SIR, We notice in your May issue an item purporting to give the present duties exacted by Custom House on electrical goods. It is well to point your attention to its incompleteness in the omission of the following: Copper wire, 15% *ad valorem*; covered wires, for electric purposes, other than cables, 35% *ad valorem*.

The first is new, the second an addition of 10% to the old tariff.

Yours respectfully,

J. ROSS, SON & CO.

THE CHATELOUP ESTATE.

MONTREAL, 6th May, 1890.

Editor ELECTRICAL, MECHANICAL AND MILLING NEWS.

REFERRING to an item on page 3 of your May issue, said to be an extract from the *American Machinist* respecting the will of the late E. Chateaufort, manufacturer of this city, I think it would be well to correct the erroneous statements that have appeared in the above paper as well as in the press generally, concerning the disposition of the estate.

1st. The estate, at its utmost, is not half a million, but a quarter of a million.

2nd. The estate was not divided amongst his employees. It is true that he left three or four of his chief men about \$2,000 each, and to subordinates, sums ranging from \$500 to \$50 the whole probably not exceeding \$15,000.

3rd. The residue was left to a niece, daughter of his brother, at the time of the death living in France whom he had lost sight of for 16 years.

4th. The heiress, accompanied by her husband is now in Montreal with proofs of her identity, and will take possession after the legal formalities are completed.

The matter itself is not very important to the commercial world, apart from the wild inferences drawn from the supposed facts, but I have seen this so often in the papers that when I saw you circulating it too, I thought it might do good to inform you of the real facts.

I am, yours respectfully,

J. ROSS.

REPAIRING LEFFEL WATER-WHEELS.

A CORRESPONDENT writes us as follows: Thousands of these water wheels have been in use in Canada for periods ranging from fifteen to twenty years, and are getting shaky and being replaced. To a miller doing a small business, the replacing of one of these wheels means an expense which at present he can ill afford. The writer, in using these wheels for seventeen years past, has ascertained the three weak points at which they first give out.

First, the stuffing box casting becomes shaky and will not hold the neck of the wheel firm. In one instance the casting broke. To send away and get a new one, supposed a week's idleness. My remedy was, to break off the whole top of the casting, plumb the wheel, tie a piece of thick brown paper around the neck that comes up through the casting, plug with putty to a depth of about two inches around the neck, and then fill in with Babbit metal the space two inches deep around wheel, doing away with gluts altogether. The wheel ran as good as new.

Second, the step wears down letting the wheel partly down into the circle nozzle of wheel. My remedy for this is to turn the wheel on its side, push it up to its proper place, then push up spider till the lingnum vitæ step is tight to slip of wheel again, boring new holes through the casting to receive the set screws. In order not to weaken the casting it is better to turn the spider around into a new place. If there should be a piece of casting on end of spider's arms, hindering it from going up, take a cold chisel and cut them off.

Third, a wheel sometimes appears to its wonted powers. At full gate it seems not to have more than three-quarter power. As a rule this comes from the small pins in quadrant becoming worn and only holding gate three-quarters open. To remedy this take off your quadrant and go to the nearest blacksmith who, in half an hour will punch out the old, worn pins, and put in their place new steel pins, and your wheel will then have full power again.



Mr. James Greenless, of Alhston, Ont., has purchased the Cremore saw mill from James Jerrett.

Messrs. Ludlam & Co., of Windsor, Ont., will erect a planing mill and establish a lumber yard at Comber.

The Beck Manufacturing Co., of Penetanguishene, is rebuilding the burner at the big mill, and fitting up ready for the season's cutting.

Messrs. Francis Bros., of Pakenham, Ont., have sold to Messrs. Saxe Bros., of Albany, N. Y., the White Fish Lake Indian reserve for \$100,000.

Mr. Brimacombe's steam saw mill near Tyrone, Ont., has been destroyed by fire for the third time. The origin of the fire is unknown, and the loss will be heavy as there was no insurance.

A saw mill 122 feet long, is said to have been invented and exhibited at the World's Fair which will cut up a log into boards and deliver them at the other end of the mill in thirty seconds from the time the log comes into the mill. The inventor has taken out patents for United States, Canada and England.