stock on change in Winnipeg for some time, and if the quotations sent out from Montreal are as near the mark generally as they are in the case of grain and flour, they are a great deal worse than useless, because they are altogether misleading. One Montreal exchange of last week now before us, purporting to be a trade journal, actually quotes No. 1 Manitoba hard wheat at \$1.23 to \$1.24 and No. 2 hard at \$1.21, while spring wheat patent flour is quoted at \$5.75 to \$5.90. These prices are known to be absurdly astray—so much so that it might be taken that they were typographical errors, were it not that the same figures have been repeated in preceding issues since last summer.

A reference to several other Montreal trade exchanges shows that they are more or less astray in their grain and flour prices. For instance, the lowest quotation given for No. 2 Manitoba hard wheat at Montreal is 98 cents, and the usual quotation is 98 cents to \$1 per bushel. Now these quotations are just 2 to 4 cents per bushel above sales made on 'change in Winnipeg, for delivery at Montreal. No. 2 hard wheat has sold repeatedly during the last three weeks in Winnipeg for delivery at Montreal at 96 cents per bushel.

The publication of these misleading quotations is an injury to the grain trade of Manitoba, besides being generally unreliable to parties who may be governed by them. The following item clipped from a recent issue of the Winnipeg Free Press, will illustrate this point:

"At a meeting at Cartwright, Man., called for the purpose of discussing farmers' interests generally, all appeared to have the one object in view, viz., by what means can we obtain a fair value for our grain. Quotations from the east were read, and Manitoba prices compared, when it was clearly shown that we are simply beaten out of from 15 to 30 cents per bushel on our wheat. All present pledged themselves to meet again on Tuesday, 13th January, a committee being appointed to procure all possible information respecting grain rates, prices, the prospects of securing a flat storehouse from the C.P.R., and to devise means and find out the best association to form ourselves into for our protection. The meeting was very harmonious, as it is apparent that wheat rings and monopolies must come to an end before farmers can present."

Of course this is all very ridiculous to those who understand the situation. These Cartwright farmers evidently had before them some Montreal trade quotations, and from these they could easily make out that they were being beaten in the way stated. We have shown that No. 2 hard wheat is actually quoted 25 cents per bushel above its selling value at Montreal. This is one way in which these misleading quotations do injury to the trade here. Now, if we take 60 cents per bushel as the aver. age price to farmers in Manitoba for No. 2 hard wheat, and add to this 28 cents per bushel for freight charges to Montieal, and 3 to 4 cents per bushel as the cost of buying and running elevators, we have a total cost of 91 to 92 cents per bushel as the cost of No. 2 bard wheat at Montreal. The shipper here who sells at 98 cents delivered at Montreal has a margin of 4 to 5 cents a bushel, out of which he has interest and insurance charges to pay, and perhaps com missions, before he pockets his profits. We

rather imagine the Cartwright farmers will look for a wider margin than this before they take all the risks involved in building elevators and shipping grain. The cost of buying and running elevators of course depends upon the quantity of grain handled. At some points where receipts are light, or competition large, it will exceed the cost stated. Another risk to be taken into account is the loss on grades. We heard of one buyer who lost between seven and eight hunared dollars on one day's transactions recently through being plucked on his grades. When all these things are taken into account, some little margin to come and go on is required.

EARLY SOWING.

The last bulletin from the central experimental farm at Ottawa, which has just been received by THE COMMERCIAL, is the most valuable yet issued. In this Prof. Saunders, director of the system of Dominion experimental farms, relates the results of practical experiments in early and late sowing of grain. The knowledge gained in these experiments alone is sufficient to warrant all the trouble and expenditure in establishing these farms. Every farmer who desires to excell should possess himself of a copy of this bulletin for constant reference.

The experience gained by these experiments at the central farm last season point to the great value of early seeding. "It is generally conceded," says the professor, "that the farmer who makes a practice of getting his seed into the ground at the earliest opportunity, after the land is in suitable condition to receive it, realizes, as a rule, the best return, but to what extent the adventage is on his side, has not heretofore been submitted to careful test in Canada." The experiments were carried out as follows:—

"Thirty-six plots of one-tenth of an acre each were devoted to a test of the relative advantages of early, medium and late sowing of barley, oats and spring wheat, two varieties of each grain being sown. It was decided to sow one of these ranges of six plots every week until all were seeded, making altogether six sowings. The varieties of grain chosen were as follows:—Barley. Prize Prolific and Danish Chevalier (both two-rowed sorts); Oats, Prize Cluster and Early Race Horse: Spring Wheat, Red Fife and Ladoga.

and Ladoga.
"The first twelve of the thirty-six plots were cultivated with a disc harrow, and six of them harrowed with a common iron harrow, on the 21st of April, 1890, and sown on the 22nd; the other six plots in this series were harrowed and sown on the 29th. The next twelve plots were similarly cultivated, six of them were harrowed on the 5th of May and seeded on the 6th, while the other six plots in this range were harrowed and sown on the 13th. The remaining twelve plots were cultivated with the disc harrow and six of them were harrowed with the iron harrow, on the 19th and sown on the 20th, the last six plots of the series being well harrowed on the 27th of May and sown on May 28th. From these particulars it will be seen that the ground was well stirred before each sowing so as to destroy all young weeds which might have started. By the treatment given, the latter plots may be said to have had at the start some advantage over those earlier seeded as far as weeds were concerned; but before the grain matured the weeds made greater headway on the later sown plots."

The result of these experiments is certainly surprising and is such as to astonish the most

enthusiastic advocate of early sowing. In the case of red fife wheat, the first sowing returned 11 bushels per acro, the second nine bushels the third 8 bushels 15 pounds, the fourth 4 bushels 20 pounds, the fifth three bushels, the sixth 2 bushels 35 pounds. The first sowing of ladoga wheat gave 10 bushels 45 pounds, the second 9 bushels 15 pounds, the third 8 bushels, the fourth 3 bushels 55 pounds, the fifth 2 bushels 50 pounds, the sixth 2 bushels 30 pounds. In the case of barley and oats, the result is equally The first sowing of barley, prize surprising. prolific variety, gave 40 bushels 30 pounds, the second 24 bushels 38 pounds, the third 16 bushels 22 pounds, the fourth 14 bushels 3 pounds, the fifth 10 bushels 15 pounds, the sixth 11 bushels 2 pounds. Prize cluster oats returned 37 bushels 2 pounds from the first sowing, 33 hushels 23 pounds from the second, 30 bashels 20 pounds from the third, 27 bushels 17 pounds from the fourth, 20 bushels 10 pounds from the fifth, and 17 bushels 22 pounds from the sixth and last date of sowing.

These experiments are sufficient to forever decide the value of early sowing, and account for the fact that the farmer who is early at it is the more successful. It shows that great loss results from late seeding. These tests are particularly valuable in the case of barley, as many farmers imagine that it does not matter much when barley is sown, so long as they get in their wheat in good time. The test shows that the loss of one week in the sowing of barley amounted to about sixteen bushels per acre, while the delay of two weeks resulted in a loss of considerably more than half the crop. According to these experiments, says the Professor, "It would appear that the farmers of Ontario may lose by a delay of one week in the time of seeding over 2; millions of dollars on the barley crop alone, and by a delay of two weeks, taking the average results of the two experiments, more than 33 millions, estimating the value of barley at 50 cents per bushel."

CIVIC TAXATION.

Mayor Pearson, of Winnipeg, in his inaugural address to the new city council for 1891, referred among other matters, to the tax question. The present system of taxation was characterized as iniquitous, and a business tax was recommended as a substitute for the present personal taxation. "Is it not monstrous," asked his worship, "that in addition to the other taxes which they, with other citizens, are liable to, our retail and wholesale merchants should be called upon to pay sums ranging from \$10 to \$1,000 on their personal effects, their stock in trade, which thus costs the purchaser so much more, and is finally paid by the consumer, whilst lawyers, doctors, bankers, brokers, commission agents, life, fire and loan companies, and the various other occupations enjoying all the benefits of our city government and improvements equally with the merchant, contributing not one cent, other than the realty tax, to the cost thereof, while carrying incomes often far exceeding those of our wealthiest merchante."

There is certainly great inequality and injustice in the system of taxation followed in Win-