

motor, and in place thereof animals were introduced, such as worn-out horses, asses and mules. Necessarily the mills driven by animals were larger than those intended for men, and the animals were tied to a beam, which passed through the runner stone, and an instrument similar to the one mentioned as in use for men prevented them also from enjoying an extra meal of stolen flour. Better by far were the water-mills, which first appeared at the time of Mithridates, King of Pontus, in Asia Minor, who was engaged in war against the Romans from 88 to 66 B.C., but were unknown in Rome until the time of the Emperors, in the first century A.D. They did not, in fact come into general use before the fourth or fifth century. The principal mills in Rome, on Mount Janiculus, were driven by water from an aqueduct. In the sixth century, when Witiges, King of Goths (535,) besieged the Roman General Belisarius in Rome, and blocked up the aqueducts leading to the city, Belisarius constructed rafts, which he placed on the River Tiber, and erected thereon mills, driven by the current, and thus ship-mills were invented which were even used at a later period. To combine baking and milling in such mills was manifestly difficult, and since that time undoubtedly, these two trades were separated.

Railway Legislation.

Under this heading the *Industrial World* of the 4th inst., has a long article protesting against legislative hampering of railroads, from which we copy the following:

"Those who make a business of opposing railways say to them: 'It is true you own your rolling stock, depots, tracks and other appurtenances, which are just as much your property as the store and goods of the merchant, or the farm and grain of the farmer, but we shall ask the Legislature to say to you how you shall run your road, and what compensation you may obtain for so doing.' 'If the Legislature happens to make a mistake, and gets its schedules so low that your road, to conform to them, must lose a large sum of money, it will not furnish relief by making up the loss, but leave you to pocket your loss, or recoup the damages the best way you can.' Says the *Legislative Reformer*: 'The railways have great power, they represent great aggregations of capital, which are a menace to the interests of the public; they form combinations, and, unless checked by legislation, they will advance their charges so high that the people will be unable to pay them.' What are the facts? The concentration of large capital in the hands of railways or manufacturers almost always, and, we might say, inevitably, cheapens the cost of service or of production. The trunk lines actually carry freight cheaper from New York to Chicago than though they were divided up into a dozen short lines with small capital, and limited equipments. As a matter of fact, the cost of transportation is lower to-day than it was for five, ten or twenty years ago, and this has been brought about irrespective of State laws or anything else, other than the law of competition. The facts shown on every freight bill of to-day are a complete refutation of the charge that there is danger in

the concentration of large blocks of capital in the hands of the railway managers.

The railroads are a necessity to the country. They represent great and important interests. As factors in the settlement and development of the country, they are indispensable. Instead of attempting to repress railroad building, every reasonable inducement should be extended to a new railway enterprise, and protection should be granted to those in existence. It is a short-sighted and suicidal policy to fight the railways, and the country at large will some day awake to a realizing sense of the truthfulness of this assertion.

A Manufacturing Addition.

One of the most valuable additions that have been made to the industrial concerns of the city is the new Winnipeg Iron Works, at the corner of Post Office and Victoria streets. The institution is a kind of supplement to the Winnipeg Barb Wire works, and it is to the energy and enterprise of members of the latter company that the city is indebted for the new institution. The works cover an area of sixty by one hundred feet, and additions are about to be made that will extend them further back. The main building is a solid one, as it must necessarily be, and has two floors of the above area, each with a ceiling sixteen feet in height. One side of each floor is devoted to the manufacture of barb wire, while the other half is used for a machine shop. These are fitted with lathes capable of handling the heaviest work, vertical and horizontal boring machines, and a host of other machinery. A horizontal engine of 35 horse supplies power, and the place has every facility for the repair or manufacture of machinery. In the rear of the machine shops are the foundry and smith shop. The former is 32x40 feet, and has furnace capacity for running nearly four tons of metal, and has facilities for turning out any class of light or heavy castings. The smith shop has four fires, and is fitted up in keeping with other details. The institution will prove a valuable one for the city, and both in the manufacture of machinery and barb wire the proprietors, Messrs. Chisholm, Jones & Co., are no doubt destined to take a leading place in the North-west. We wish the new factory every success.

Butter and Cheese.

There is a marked difference at present, and has been for several weeks, in the cheese and butter markets of the Dominion; not that one has been unusually weak and the other correspondingly strong, for both have showed decided firmness during the present winter. Cheese, however, has been firm in all grades, and the statistics at the close of 1882, showing the stock in Canada to be only about half of what it was a year ago, and that in New York, London and Liverpool about one-third less, has given it another upward tendency, and prices are very liable to advance materially during the present month, and probably hold unusually high during the balance of this winter. In butter the firmness has been, and is still confined, to the higher grades. Market reports from the Atlantic cities west to Manitoba, show that these are

scarce, while inferior qualities are everywhere abundant. A careless onlooker would be apt to come to the conclusion that the majority of the Canadian butter was of poor quality, and that butter manufacture was far from being what it might and should be in the Dominion. It must be borne in mind, however, that the demand, more than the supply, has to do with this state of affairs, and good butter finds ready sale, while poorer grades are not wanted almost at any price. There have been several years of general prosperity in Canada, and the people thereof are not inclined now to use poor provisions of any kind, and such have to find a market by shipment. It must be borne in mind that the North-west now furnishes an extensive market for Eastern butter; and the experience of the past month has taught shippers that grease is not wanted here. Inferior grades of butter are as little wanted here as anywhere, and the finer qualities are as much in demand. The North-west demand therefore assists in creating a scarcity of fine butter in the East, but does not in any way assist in keeping up the price of low grades. There are of the latter now stored away in Winnipeg, quantities that would astonish Eastern butter dealers, did they know their extent; and a market for them is very difficult to procure; yet choice dairy and fine creamery butter are scarce, and finds a ready sale.

Freighting to the Far West.

An instance of the difficulties to be overcome in getting freight from the Red River Valley to far Western settlements was recently related to a representative of *THE COMMERCIAL*, by a commercial traveler, who booked an order for Prince Albert, and made the effort to send the goods out to that place; and how they reached their destination is a record of delay and misfortune.

The freighter started with the goods from Portage la Prairie early in February, 1882, and after experiencing many hardships reached the Touchwood Hills in the end of March. Here he dispensed with sleighing, and proceeded by wagon as far as Humboldt, where he got hopelessly stuck, the horses being completely played out. He was compelled to leave freight at this point and go on to Prince Albert, from which he returned in July with fresh horses. The night before he intended to start back with the freight, the horses broke loose, and were lost for ten weeks. Grazing getting poor then they were caught again, and after the necessary preparations, a start was again made. The upshot of the undertaking was, that the goods reached Prince Albert about ten months after leaving Portage la Prairie.

People who have lived for years in such an inaccessible country, know what value a rail way will be to them; and it is not likely that they will find any great fault with the terms upon which one will be built. At present it costs about \$5 a hundred pounds to carry freight from Winnipeg to Prince Albert, and \$10 to Edmonton, or three months is not considered a long passage for freight during the winter months, and not unfrequently goods have to lay over all winter, waiting for the spring freshets on the Saskatchewan.