

sured for about \$6,000. Montreal Telegraph Co.'s office instruments, Hickson & Blesdel, drugs, loss about \$400; covered by insurance. C. W. Papst, books and stationery stock, loss about \$1,000; covered by insurance. Building destroyed, loss about \$3,000; insured for \$2,000. *Napanea*, 29.—Residence of the Rev. Mr. Stewart destroyed. Loss about \$1,000. *Orangeville*, 30.—The storehouse belonging to Mr. J. Lindsey, merchant, situated at the T. G. and B. station, destroyed, together with between 20,000 and 30,000 bushels of grain, principally wheat. Insured in the Hartford and Royal Insurance Companies. *Beltville*, Feb. 1.—The dwelling of P. Tansey, destroyed. Loss \$3,600; insured in the Liverpool, London & Globe for \$2,000. *St. Catharines*, 1.—Residence of Mr. Calvin Phelps, of Merritt, destroyed. Loss about \$1,000. *Underwood*, Feb. 2.—Dwelling of John Shultz, jr., destroyed. *Acton*, 2.—Dwelling of James Dunn destroyed with contents. Loss about \$600; partially insured.

QUEBEC.

Quebec, Jan. 31.—Dwelling of A. H. White destroyed with contents. Building insured for \$10,000 in the Imperial, furniture for \$4,000 in the same company and for \$5,700 in the Royal.

HEATING BY FRICTION.

A Boston man has invented a simple device, which, if its present promises are realized, ought to work a revolution in methods of heating. It is nothing less than an invention to use friction as a practical means of producing heat. At the time of the *Ashubula* horror, when so many persons were burned to death by the wrecked cars catching fire from the stoves, Mr. Webster Wells, then Professor of Mathematics at the Massachusetts Institute of Technology, began to consider the problem of heating the cars without fire. He has now solved it. His invention consists of a strong iron cylinder, at one end of which, inside, is a fixed plate of hardened iron, against which, firmly attached to a revolving shaft, another plate presses, either closely or lightly, as required. The cylinder is filled with water, and this, heated by the friction of the two plates, circulates through pipes, warming the room through which they run just as steam pipes do. The water is kept in constant circulation in these pipes, returning to the cylinder to be heated over again. The water in the cylinder, which is brought to a high degree of heat in a remarkably short time, keeps the plates lubricated, preventing their wearing away at a rapid rate. When worn away the cost of renewing them is trifling, and the machine has no complicated work about it, so that it is easily kept in repair. The power required to run the machine is so slight that the waste, or surplus, power of the engines in use for running elevators and other machinery in hundreds of buildings throughout a city is enough for all ordinary purposes. The machine can be utilized in any place where power is used. The ordinary sized machine has thirty-six square inches of friction surface in its plates, sufficient, it is said, to heat 10,000 cubic feet of space. This requires but half a horse power. A machine with 225 square inches of friction requires but four horse power, and would heat a room 60x200 feet, or containing 126,000 cubic feet. In railroads cars the machine is operated by power taken direct from the wheels, doing away with all danger from fire in case of a smash-up. When the cars are standing still the machine can be operated by power from the locomotive, by a contrivance somewhat like that which operates the Westinghouse brake. In mills it is calculated that a great saving can be made, both in fuel and in the rates of insurance, especially in those run by water-power. The agent of a mill where water-power is used estimates that in twenty years, by the use of this device, a saving of at least \$185,000 in fuel alone could be effected. Prof. Wells is now in Europe, looking out for his patents there. The machine has now been in operation in Boston for seven months.

Financial and Commercial.

MONTREAL WHOLESALE MARKETS.

THURSDAY, Feb. 3rd, 1881.

The Spring trade has been somewhat delayed by the severely cold weather and snow blockades experienced during the week. There is, nevertheless, a steady, firm feeling pervading our market for nearly all staple and seasonable commodities, as circumstances are regarded as never more favorable for an active and prosperous season. Prices generally rule steady and firm; merchants make their calculations without fear of material shrinkage in values, which they were not at liberty to do in recent years. The flour and grain trade continues quiet and somewhat depressed; dry goods orders from travellers are satisfactory; dairy produce inactive with prices steady; in hardware and iron the movement is still small, at unchanged quotations; groceries moderately active, with a decline of $\frac{1}{2}$ ¢ per lb. for refined sugars, and of a slight advance for Valencia raisins. Chemicals, both here and in England, have been decidedly more active, at considerably higher prices for Caustic, Bi-carb, and Sal sodas; the demand for oils and fish has improved; Petroleum firm and unchanged; leather still quiet with prices easier and showing a decline of $\frac{1}{2}$ ¢ for *sok*; green hides have also declined 1¢ per lb.; boots and shoes in continued active request, at uncertain prices; wool, wines and liquors, and seeds quiet and nominally unchanged. The demand for money continues quite limited, in proportion to the supply, and the tone of the market is easy and unchanged. The discount rates for commercial bills still range from 6 to 7 per cent., and loans are obtainable at 3 to 4 per cent. on call, and 4 to 6 per cent. on time, as to collaterals, etc. Sterling Exchange dull, at $8\frac{1}{2}$ to $8\frac{3}{4}$ prem. for round amounts, and $8\frac{1}{2}$ do cash over counter. New York funds firm at $\frac{1}{2}$ to $\frac{1}{4}$ prem. The stock market has continued dull throughout the week, with values somewhat weaker; this is to be partially attributed to calling in loans and the exacting of extra margins, which in some instances are considered extreme. However, the calls were all promptly paid, and the unusually large margins responded to, while, at the same time, criticised. These same parties who made the calls were again offering money freely this afternoon. Compared with a week ago Montreal Bank is $\frac{1}{4}$ per cent. lower, Ontario $\frac{1}{2}$ per cent., People's 2 per cent., and City Passenger 4 per cent. lower. The marked decline in the last-named stock is attributed to the fact that a strong and influential supporter of the Company has retired from the City Council. Other securities remain at about last week's rates. The market closes firmer, without change in yesterday's values.

Sales on 'Change to-day: Morning Board—120 Montreal at 174; 7 Toronto at 144; 18 do at 143; 50 Merchants at 117; 25 Montreal Telegraph at 125; 250 do at 125; 175 do at 124; 75 do at 124; 35 Richelien at 56; 75 do at 55. Afternoon Board—115 Montreal at 174; 10 do at 174; 65 do at 174; 85 Molsons' at 107; 2 Toronto at 143; 25 Merchants at 116; 100 Commerce at 137; 75 Montreal Telegraph at 124; 75 do at 124; 100 do at 124; 230 do at 125; 50 do 125; 220 do at 126; 25 Richelien at 56; 30 City Gas at 152; 50 Canada Cotton Co. at 127.

ASRES.—Receipts of Pots have been fair, and with unfavorable news from England the market has been weak, and prices have declined 10

\$4.60 to \$4.70, for light and heavy tares respectively, tendency being decidedly down. There are no Seconds or Thirds offering. *Pearls* nominal, no sales reported, and no arrivals for some time. Receipts since 1st January, 1,193 barrels Pots, 123 barrels Pearls. Deliveries, 520 barrels Pots, 28 barrels Pearls. Stock in store at six o'clock on Wednesday, 2nd February, 761 barrels Pots, 116 barrels Pearls.

BOOTS AND SHOES.—Trade continues good, so far as orders are concerned; manufacturers are receiving all they can possibly fill, but prices, as a rule, are poor and unremunerative. For this, however, manufacturers are themselves largely to blame, in allowing competition to force down values below cost. The wants of the country are such as to enable them to get better rates, had they the courage to firmly demand them. Houses turning out general assortments report that staple goods are more enquired for than fancy work, and our quotations for these are acknowledged to be quite low enough and high enough; goods can be bought at almost any price within the range given, according to quality. Shipments are going forward regularly, and to-morrow, 4th inst., is the great test-day for remittances.

DAIRY PRODUCE.—The local *Butter* market is firm but inactive; it would appear that the export trade is nearly over for the season. There is a fair local enquiry, and receipts for the week have been larger than for some time, but, while sales of shipping lots of fine goods have been reported, the export demand has been quite light this week. Holders, however, of choice qualities remain firm, and refuse concessions; stocks of fine butter have been reduced to a minimum, and some dealers state that the country is pretty well cleared, while another asserts his readiness to fill an order for 50,000 pkgs. at a suitable price. There have probably been 40,000 pkgs. shipped from this port within the last five weeks, and with stocks so reduced we are left somewhat independent of foreign markets, and may have sufficient home trade to consume our supplies at fair prices, before the new crop will commence to come forward in sufficient quantities to interfere with the sale of present stock. Real fancy tubs, suitable for our up-town grocery trade, are scarce, and for such outside prices can be realized. In medium qualities the demand is small, but, in the absence of fine qualities, retailers have to satisfy themselves with the next best, and during the Lenten season dealers look for a large sale in these qualities at about present rates. Recent sales include, 100 pkgs. Brockville at 22c, 300 do fine Morrisburg at 23c, 600 do sold at Morrisburg to a New York firm at 24c, and 600 pkgs. fine Townships at 23c. Also a lot of 100 pkgs. re-packed butter at 18c. Liverpool cable advices are quite conflicting, one quoting the market quiet, with sales slow, and another on the same date reporting a better feeling; with 80,000 pkgs. in hand at the close of last year, however, it is not likely that the Liverpool market is badly in need of stocks. *Cheese* rules quiet and steady, at 13 $\frac{1}{2}$ ¢ to 14¢ for fine to fancy qualities, with the demand confined to the local trade. There are no shipping lots under offer here; one large dealer is said to be forwarding his stocks on consignment to Liverpool, where prices are quoted at 68s to 70s for finest.

DRY GOODS.—The week's business has been satisfactory for the season. Travellers are rendering a good account of themselves, amidst more than usual difficulties; orders for all kinds of Spring goods and Summer wear, including silks, calicoes, cottons, prints, shirtings, bunnings, printed muslins, parasols, etc., are coming forward rather freely, in some instances more rapidly than can be filled from the limited importations received. In the course of another fortnight or three weeks stocks may be complete in all departments; the new styles of Spring goods are quite attractive, and likely to command ready sale, in fact, better patterns of