

determined man in that November week to place himself in opposition to the strong "bull" movement, and attempt to turn the course of the market. But one was found to venture it, probably the boldest and shrewdest broker on "the street," who had gone "short" of Bank of Montreal, Merchants and Telegraph somewhat too hastily, and turned in to break the back of the market. This he did by throwing out large blocks of stock, which caused the advance to hesitate, then waver, and then on the realizing of "longs" trading on margin, rapidly to decline. The scarcity in money in New York, and the "break" in the stock market, there coming about the same time had undoubtedly some influence in precipitating the decline here, some timid operators being frightened out by the fear of money tightening in this city. The week ending December 4 was therefore a sorrowful one for the "long" speculators, but they plucked up heart again on Saturday, and instituted on that day a new advance, which at the time of writing is still progressing. The fluctuations which the market has undergone during the fortnight are illustrated in the following table of quotations:

	Nov. 18.	Nov. 25.	Dec. 3.
Bank of Montreal....	159	164	162
Ontario	98½	103	97
People's	94	95	91½
Molson's	107½	108	101
Merchants	116	119	114
Union	96	93	90
Commerce	138	143½	138
Eastern Townships ..	118	118	113½
Telegraph	133½	139	132½
Richelieu Nav. Co....	62	66	60½
Intercolonial Coal Co..	35	30	25
City Passenger Ry. ..	121	121½	118
City Gas Co.	155	156½	150
Canad Cotton Co....	135	135	115
Dundas Cotton Co. ..	140	135	136

The following table shows the market value of the stocks of eleven banks and five companies at the opening of the present year, three months later, and at the close of last month:—

BANK SHARES.			
	January.	October.	Nov. 29th.
Montreal	\$16,320,000	\$18,540,000	\$19,680,000
Ontario	2,100,000	2,600,000	3,045,000
Merchants	4,652,316	5,890,000	6,578,000
People's	912,000	1,296,000	1,504,000
Molson's	1,520,000	1,980,000	2,140,000
Toronto	2,440,000	2,700,000	2,860,000
Eastern Townships.	1,354,360	1,476,000	1,615,600
Union	1,260,000	1,635,000	1,840,000
Commerce	6,870,000	7,755,000	8,400,000
Exchange	300,000		690,000
Federal	1,000,000	1,220,000	1,300,000
Total	\$38,758,676	\$45,582,600	\$49,742,600

Increase in value in eleven months, \$11,174,000, or about 28 per cent.

MISCELLANEOUS SECURITIES.			
	Jan.	Oct.	Nov. 29
Montreal Tel....	\$1,800,000	\$2,670,000	\$2,740,000
City Pass. Ry....	450,000	720,000	720,000
City Gas Co....	2,000,000	2,637,000	2,826,000
Loan & Mort. Co..	517,000	550,000	605,000
Roy. Can. Ins. Co..	127,500	174,000	290,000
Total	\$4,910,500	\$6,751,000	\$7,100,000

Increase in value in eleven months, \$2,270,000, or 46 per cent.

There has thus been a total increase of \$13,444,500 in the market value of the shares of the sixteen institutions, during the present year.

The market, as has been said, opened strong this week, and is possibly on the eve of another "boom." The prevailing opinion and the one best justified by the facts, favors a firm market in the main, although during the next few days the proceedings at Ottawa and the course of events in New York will affect prices and tend to make them more or less unsteady. However, there is abundance of money lying idle to foster speculation—not the remotest chance of a firm money market during the winter, as the resources of the banks are still increasing, and a general confidence in the stability of the trade revival.

CAUSES AND PREVENTIVES OF FIRE.

Much that used to be considered mysterious and unavoidable in connection with the generation of fire, has of late years been made plain by the results of observation and the researches of science. It is now pretty generally known, for example, that oiled rags will ignite after a given exposure in certain temperatures; that woodwork may be so charred by the nearness to it of heated pipes as to break into flame; that the heavy vapor of benzine will hover just above the floors of buildings, unperceived by the nostrils of those whose heads are four or five feet above it, until it explodes at contact with flame. Elsewhere in this issue we read of fire by concussion; and fires take place, we are constantly discovering, from a variety of causes which in days by no means remote would have been declared out of the question as predisposing circumstances.

An interesting embodiment of recent experience and research on this subject appears in the shape of a report by the Boston Mutual Fire Insurance Co., upon the causes of fires, &c., &c.

One of the first subjects discussed is that of heating-pipes being placed over head in buildings. The placing of steam coils or pipes in this position instead of along or under the floors or along the walls, is found to be not only a saving of space to manufacturers and an economy in construction and use, but to lessen risk from fire. In the report in question, testimony is afforded by the manager of a Canadian mill, the Stormont Cotton Mill, at Cornwall, who states that the system has been applied to every room in the mill except the dye house and drying room, and that it gives entire satisfaction in heating: saving space, diminishing risk from fire, and causing no inconvenience from

cold during all last winter, which last is a strong point in this country. The managers of some thirty-six other mills in the New England States, New York, Pennsylvania, Maryland, &c., are equally pronounced in their favorable opinions as to the entire practicability of this method of heating.

It is a significant statement, that the heaviest losses of the Mutual Insurance Companies which insure mills and factories, have been this year occasioned by the spontaneous combustion of dyed cotton yarn of various colors. Indeed, it is pointed out by an insurance journalist, that this same cause has been at the bottom of nearly one-third of these companies' losses during the past three years. Investigation and experiment are, however, tracking this danger to its source and limiting its destructiveness.

The subject of mill oils, for lubricating purposes, is one to which space is given in the report, the president of the company, Mr. Atkinson, having given much time, during two years past, to investigating the relative value and danger of lubricating oils, to the end that the hazard of fire might be abated. The conclusion reached in this case is that fine mineral oils will serve all the purposes of a cotton mill, both as to economy and safety, and that no vegetable oil is fit to be used as a lubricant; castor oil being the worst of all, because the most viscous, and, if used, is sure to set the mill on fire. Furthermore, the New York *Bulletin* tells us "The result of this investigation has been to inform the members of the New England Mill Mutuals as to the best oils and to drive from the market the unsafe volatile oils formerly foisted upon them. Moreover, another effect was to create a sharp competition among sellers of safe oils and a consequent reduction in prices. This has eventuated in a large saving in the cost of machinery lubrication in cotton mills. Mr. Atkinson computes this saving to the mills insured by the combination of Mutuals at some \$100,000 annually."

Among other subjects treated are, the spontaneous combustion of soft coal, and of dyed goods and yarn; precautions against freezing; hose and its care; risks on textile factories, &c.

The quality and kind of oil used for preparing wool is a matter of great importance to the underwriter, since it is spontaneous combustion that has caused the record of losses on woollen mills to be heavier than on cotton mills. We quote, therefore, says the *Bulletin*, as the result of investigation in this direction, certain propositions submitted by Mr. Atkinson for what they may be worth, viz.:

(1) The wool now used in this country will yield 45,000,000 pounds of grease that is now