

come across the ocean in ballast to take it away from Montreal; and they would have to charge higher freights than vessels which come out with cargoes to New York. In this fact, resides the limitation of the trade of the St. Lawrence; and we could not get rid of it if we were to build canals wide enough and deep enough to admit the largest vessels which it would be profitable to employ in this service. There is an unhealthy disposition to ignore this limitation, and to talk as if the possibilities of the St. Lawrence route could be made commensurate with the size of the canals. This is a pure and a very mischievous delusion. On the size of the canals much depends, it must be allowed, but not everything, as those who talk wildly on the subject ask us to believe.

TRADERS WHO WILL NOT INSURE.

Among the economic resolves which many storekeepers make is that of carrying their own risks in the matter of fire insurance. It is a mistaken policy, and has meant ruin to many a worthy and struggling dealer. Rich and established firms may venture upon it because able to stand the loss, if any occur. Those who do so are, however, rare. But for a beginner to brave the risk of losing all he has in the world for the sake of \$75 or it may be \$20 fire premium yearly, is not proper economy, but unbusinesslike recklessness.

The arguments by which traders sometimes justify themselves for not insuring, while plausible are unfortunately weak. One will say: "I have a fire-proof shop, well isolated, and it will not burn down in twenty years." Another argues: "Lightning never strikes twice in the same place, and a place once burned rarely suffers in that way again." How absurd such contentions are may be seen in the result of a fire in Shelburne the other day. On the 4th May, 1884, the Royal Block in Shelburne, Ont., containing five shops, was burned. The block was rebuilt in white brick, roofed with slate and galvanized iron, and was the finest structure in the place. Yet through the criminal act of a drunken incendiary it was destroyed by fire on the 4th instant. A firm whose store in the block held a stock of some \$8,000, are ruined thereby. Competent, worthy, well-doing men, they were too confident that fire would not reach them and have paid a distressing price for their neglect to insure.

Fire insurance, as a provision against disaster, is one of the necessary things for a trader. If his stock is paid for, he owes it to himself; if not, he owes it to his creditors to provide against such a contingency. It would be, indeed, a kindness on the part of wholesale merchants to their customers to insist that the latter should insure to within a reasonable margin of the value of their stock. If this were done, we should hear of fewer instances in which compromises are sought because of "unfortunate losses by fire." Is it properly called *misfortune* when retail dealers suffer because of neglect to insure? We cannot admit the plea. One may feel sorrow for the result but must condemn the false economy or the unbusinesslike negligence which accounts for the disaster.

FIRE INSURANCE IN CANADA IN 1885

The results of last year's fire underwriting in Canada, as shown in the report of the Superintendent of Insurance, are more encouraging than has been the case for several years. There is no change in the list of the companies doing fire business during the year 1885. The same companies as appeared in the statement a year ago appear in it now, twenty-nine in all, viz.: six Canadian, nineteen British, four American.

It is possible to report, together with a larger volume of premiums, and a reduced aggregate of insurance, a material lessening of losses by fire. Something of this result, if not the whole of it is, doubtless, due to the efforts of the Fire Underwriters' Associations. The total amount of assurances effected by these 29 companies was \$500,453,000, the premiums on which amounted to \$5,016,000. This gives an average premium of \$1,002 per \$100 insured, while in the previous year the ratio was \$0.968 per \$100. The aggregate net loss by fire was \$2,837,850, as compared with \$3,161,262. It will thus be seen that the ratio of loss to premium, which in 1884 was 64.7 was reduced last year to 56.57. A saving of three hundred thousand dollars in fire-waste in a single year is something to congratulate the country upon; but the saving ought to be far greater. It must be remembered, of course, that these figures do not represent the fire loss of Canada. There must be added the losses of the Mutuels and other companies reporting to the Ontario Inspector. Add to these the fire losses insured abroad in companies which do not report to our offices and those that have no insurance at all, and we have a total sufficiently startling, probably not far from \$12,000 per day "gone up in smoke and ashes."

We compare the insurances, receipts and losses of each of the past six years. See table on page 1184:

Total Amount Insured....	1880	\$384,051,861
" " " "....	1881	441,416,238
" " " "....	1882	478,044,416
" " " "....	1883	513,580,302
" " " "....	1884	513,983,368
" " " "....	1885	500,453,437
Total Cash Premiums....	1880	\$3,479,577
" " " "....	1881	3,827,116
" " " "....	1882	4,229,706
" " " "....	1883	4,624,741
" " " "....	1884	4,980,450
" " " "....	1885	5,016,132
Net Fire Losses.....	1880	1,524,836
" " " "....	1881	3,212,381
" " " "....	1882	2,807,368
" " " "....	1883	3,048,724
" " " "....	1884	3,165,762
" " " "....	1885	2,837,850

How the various groups of companies, Canadian, British, and American, fared with respect to business secured and losses suffered will appear from the following table:

1885	PREMS.	LOSSES.	AMT. INS'D.
British Companies	\$3,371,325	\$1,908,451	\$336,624,547
Canadian " "	1,276,127	717,866	126,205,774
American " "	368,180	211,533	37,623,116
Total	\$5,016,132	\$2,837,850	\$500,453,437

Analysis of the figures shows that, compared with the previous year the share of the business secured by the home companies has increased, thus:

PERCENTAGE SECURED OF TOTAL BUSINESS.

	1885.	1884.
British Companies.....	67.22	69.66
Canadian " ".....	25.34	22.96
American " ".....	7.44	7.38

Total. 100.00 100.00

All three groups of Co's have shared very evenly in losses, but the Canadian and British companies gained at the expense of the American, which in 1884 made a very much better showing than either of the others.

RATIO OF PREMIUM TO RISK.

	1885.	1884.
British Companies.....	1.001	
Canadian " ".....	1.011	
American " ".....	0.978	
All Companies	1.002	0.968

RATIO OF LOSS TO PREMIUM.

	1885.	1884.
British Companies.....	24.05	63.34
Canadian " ".....	56.60	64.80
American " ".....	57.45	50.12
All Companies.....	56.57	64.70

It is agreeable to observe that the ratio of expense to premium is smaller than before, the improvement being most noticeable in the case of the British companies. It cost these, according to the statement, only \$24.03 to get \$100 premium, where in 1884 the figure was \$24.60. The Canadian companies expended \$29.40 as compared with 30.70 the previous year, and the American spent 23.41 as against 21.60. The ratio on the whole business is thus: per \$100, as against \$25.90 in 1884.

RATIO OF EXPENSES TO PREMIUMS.

	1885.	1884.
British Companies.....	16.17	24.60
Canadian " ".....	29.40	30.70
American " ".....	23.41	21.60
All companies	23.39	25.90

The fact that the Departmental heading, "Net amount at Risk at date," shows an increased total over 1884, while the adjoining column of "Amount of policies" shows a decrease, is an indication of the growth of term business. It is, furthermore, proper to remark that the ratio of expense of Canadian companies is made to appear unduly large, because the expenses of foreign companies, as given in the return, do not include Head-office expenses, such as policies, calendars, and other supplies sent to Canada.

A VALUABLE METAL.

SECOND ARTICLE.

Continuing the analysis of the properties attributed to the new metal, aluminum, as recounted in the paper of Mr. J. A. Price, we find the statement made that this metal has never been found in a pure state, but is known to exist in combination with nearly two hundred different minerals. Corundum and pure emery are ores that are very rich in aluminum, containing about fifty-four per cent. The specific gravity is 27.3, two and one-half times that of water. It is lighter than glass or as light as chalk, being only one-third the weight of iron, and one-fourth the weight of silver; it is malleable, tough and hard.

It is the metallic base of mica, feldspar, slate, and clay. Professor Dana says:—"Nearly all the rocks, except limestones and many sandstones are literally ore-beds of the metal aluminum." It appears in