

THE CANADIAN MONETARY TIMES

AND INSURANCE CHRONICLE.

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SUBSCRIPTION \$2 A YEAR.

Mercantile.

J. B. Boustead.

PROVISION and Commission Merchant. Hops bought and sold on Commission. 82 Front St., Toronto.

Bantia, Brother & Co.,

WHOLESALE STATIONERS, and Paper, Envelope, and Bank Book Manufacturers, Nos. 3 and 4 Commercial Buildings, Yonge Street, south of King Street, Toronto.

Wm. Croft & Co.,

MANUFACTURERS of Needles, Fish Hooks, Tackle, &c., Importers of Cutlery, Thimbles, Pears and Buttons, Hooks and Eyes, Pins, Combs, and Small Wares in general. 37 Colborne Street, Toronto, Ont.

Childs & Hamilton.

MANUFACTURERS and Wholesale Dealers in Boots and Shoes, No. 7 Wellington Street East, Toronto, Ontario. 28

L. Coffee & Co.

PRODUCE and Commission Merchants, No. 2 Manning's Block, Front St., Toronto, Ont. Advances made on consignments of Produce.

Candee & Co.,

BANKERS AND BROKERS, dealers in Gold and Silver Coins, Government Securities, &c., Corner Main and Exchange Streets, Buffalo, Y. N. 21-1v

John Fiskin & Co.

ROCK OIL and Commission Merchants, Wellington Street East, Toronto, Ont.

Gundry and Langley.

ARCHITECTS AND CIVIL ENGINEERS, Building Surveyors and Valuers. Office corner of King and Jordan Streets, Toronto.
THOMAS GUNDRY. HENRY LANGLEY.

Lyman & McNab.

WHOLESALE Hardware Merchants, Toronto, Ontario.

W. D. Matthews & Co.

PRODUCE Commission Merchants, Old Corn Exchange, 16 Front St. East, Toronto Ont.

R. C. Hamilton & Co.

PRODUCE Commission Merchants, 119 Lower Water St., Halifax, Nova Scotia.

H. Nerlich & Co.,

IMPORTERS of French, German, English and American Fancy Goods, Cigars, and Leaf Tobaccos, No. 2 Adelaide Street, West, Toronto. 15

Parson Bros.,

PETROLEUM Refiners, and Wholesale dealers in Lamps, Chimneys, etc. Waterrooms 51 Front St. Refinery cor. River and Don Sts., Toronto.

Reford & Dillon.

IMPORTERS of Groceries, Wellington Street, Toronto, Ontario.

C. F. Reid & Co.

IMPORTERS and Dealers in Wines, Liquors, Cigars and Leaf Tobacco, Wellington Street, Toronto. 28.

W. Rowland & Co.,

PRODUCE BROKERS and General Commission Merchants. Advances made on Consignments. Corner Church and Front Streets, Toronto.

Sessions, Turner & Cooper.

MANUFACTURERS, Importers and Wholesale Dealer in Boots and Shoes, Leather Findings, etc., 8 Wellington St West, Toronto, Ont

Sylvester, Bro. & Hickman,

COMMERCIAL Brokers and Vessel Agents. Office—No 1 Ontario Chambers, (Corner Front and Church Sts., Toronto. 2-6m

Insurance.

MASSACHUSETTS LIFE REPORT.

We make an extract from the Commissioners report, for 1868, which dwells on certain interesting topics connected with the working of Life Insurance:—

It would seem unnecessary to explain, if the contrary had not been supposed by some who misapprehended the purpose or function of the valuation, that the ratio-column in tables has nothing to do with indicating the actual or relative standing of the companies. Turning for example, to page , it will be seen that the total ratio for the John Hancock Mutual is \$5 13, and that for the Massachusetts Hospital \$34 72. This implies no comparison of the actual resources of those companies, but simply means that the former company should have on the average, an actual reserve of \$5 13 for each \$100 insured by its whole-life policies, and the latter \$34 72 on each \$100—a difference accounted for by the fact that the policies of the Massachusetts Hospital are all older and have had more premiums paid on them, than those of the other company.

This tendency of the net value of reserve to increase with the age of the policy, which demonstrates the vital necessity for a corresponding accumulation of actual funds, and furnishes the measure of its requisite rapidity—will be illustrated if, in any of these tables, we observe how the figures in the ratio column grow larger as we read upward. Taking, for instance, the table for all the companies combined, on pages 195 and 196 we find that for the whole-life policies issued in 1868, on which only one premium has been paid, an average reserve of only \$2 71 on each \$100 at risk is required. For policies issued in 1867, on which two premiums have been paid, the reserve is \$4 95 on the \$100; and so on, by a graduation approaching regularity, as we go backward, until the reserve for policies of twenty-five year's standing and upward, is from \$47 61 to \$66 86 on each \$100 at risk.

The same thing is seen in the endowment tables, with this important difference, that the percentage of reserve begins about twice as high, and runs up about twice as fast. The obvious reason for this is the shortening of the term of the policy, which brings nearer the day of its maturity and payment. The reserve tends to the same altitude as in the whole-life policy. In either case it must come at last to 100 per cent., or the face of the policy; but the graduation is steeper in the endowment, because the summit to be gained is nearer at hand. Thus it will be seen by the table on page 222, that the average reserve on the endowment policies of all the companies, is \$5 45 on the \$100 for the first year of the policy, \$10 42 the second year, and that it reaches as high a point in ten years as it does in about twenty-five years on the whole-life plan. This is a peculiarity worth observing by companies that think they can afford to pay as high commissions and as high percentage dividends on the endowment as on the whole-life premium.

It follows, as a general rule, that the older a company grows the larger the percentage of reserve which it will show—though a very large influx of new policies, relatively to the old, may tempora-

rily reduce the average percentage on all its policies. But it does not follow that two companies of the same age will show the same average percentage, nor that it will be the same in different companies for policies of the same class and year of issue.

If all the policies of two companies for a given year were entered at the same date and age, or were distributed with exact uniformity over the different months and ages of entry, and the condition of the policies were in all other respects coincident, the percentage of reserve for the year should be the same for both; otherwise, it is quite sure not to be the same. Not only would a higher average of the ages of entry call for a larger reserve, but a disturbance still more potent is likely to be found in a larger proportion of limited premium or paid up policies in one of the companies. These policies have so marked an influence on the rapidity of the growth of the reserve, that the ratios which should otherwise observe a pretty regular graduation upward, as we go backward in years, are sometimes thrown entirely out of line by a large infusion of ten-premium and paid-up insurance. An illustration of this is seen in the table of the whole-life policies of the New York Life, on pages 185 and 186, where the percentage of the reserve rises rapidly from this cause to as far back as the year 1863, where it is 18.07 and then as the influence of these classes of policies fades out, drops down again to 14.49, before it resumes the upward graduation. It will follow, also, that as the reserve on paid-up insurance is always higher than on the same kind of insurance where premiums are still receivable, those companies applying surplus to the purchase of paid-up reversionary additions will show relatively a larger reserve.

These suggestions will hardly be necessary for the information of actuaries, and might seem wholly uncalled for if comparison of these tables by the percentage column alone had not sometimes led those less instructed to entertain a pretty strong suspicion of error or injustice in the valuation. The suggestions will have had all the effect desired if such comparisons are made in the future with a sage reference to the fact that the circumstances pointed out, and some others not mentioned, have a decided influence in altering cases.

The fact has been often alluded to that there is a peculiarity in the business of life insurance which makes an inviting field for fraud, and opens a door for a long career of plundering upon the public, while the leak that is undermining its foundation is still concealed from view. This peculiarity lies in the fact that the volume of premiums which begins to flow into the company from its start in business, will not, in accordance with the established law of human mortality, be needed to pay maturing claims on policies until after the lapse of many years. With an ordinary run of new business, and with the dropping out of old policies by forfeiture and discontinuance, it will be about forty years before the outgo for losses will equal year by year the income from premiums. Meantime the excess of premiums may be squandered or misapplied and no external signs of weakness appear.

In fire insurance, it is found that about sixty per cent. of each year's premiums is required to pay the losses of the same year. The remaining