that we are not surprised that the insurance companies have resolved to make a material advance in the premiums on mercantile risks in the latter city. Toronto has no steam fire engines, no salvage corps, no water tower, and nearly 80 per cent. of its water mains are only 6 inches and under. Thus we may say that it will take at least twelve months to bring that city's fire appliances and protection up to date, for it must not be forgotten that the water mains must be sufficiently large before the steamers and water tower can be thoroughly relied upon. We are not aware whether the Toronto Board of Trade is still intending to depreciate the increase in rates, but we should think the last fire was the best reply to a Board composed of pusiness and common-sense men. We should also hope now that the municipal Insurance Scheme will either miscarry or be "still-born," for it would do more to injure Toronto's credit at home and abroad than would any number of such fires which have occurred since the opening of this year; indeed, the very proposal of such a scheme has been enough to lessen the competition for the city's bonds already.

We have often spoken strongly about our own city's shortcomings, so that our friends in Toronto need not suppose it is because we live in Montreal that we have written as we have done, but from an honest desire to exhibit the true aspect of the case. Toronto has outgrown its fire appliances, let her now put her shoulder to the wheel, respecting her fire protection, when, she may depend upon it, the insurance companies will do the rest.

In conclusion, we would suggest—and our remarks apply equally to Montreal as to Toronto in this particular—that there should be a by-law in every city prohibiting the erection of stone or brick buildings, covering large areas, without any inside walls, and being supported on the ground floor entirely by iron pillars, except at each extremity of the building, so that especially in corner-stores of such construction there is considerable danger, when there is a fire, of the iron columns snapping and bringing down the whole structure.

## TORONTO AND STEAM FIRE ENGINES.

In our June 1st issue, 1894, of the CHRONICLE we printed a Table of "Fire Protection Statistics" which under twenty-three heads gave much valuable information relating to the fire protective appliances of 15 large American cities, also of Montreal and Toronto. We subjoin an extract from that table, which may be useful now that the Toronto City Council has decided to purchase steam fire engines and generally to increase the fire appliances. It will be noted that Rochester, Syracuse, Albany and Hartford, all with smaller populations than Toronto, have respectively 6, 8, 10 and 8 steam fire engines, and it would therefore seem that Toronto, with the smaller number i.e., six engines, which Rochester, with a population of 140,000, considers necessary, would be none too well equipped, Montrial with a population only 18 per cent. larger than Foronto having nine engines. In the matter of comparative annual expenditures on Fire Depar nents, Toronto seems to have been extremely parsimonious, expending per capita only 800, 0" 520 if cost of water supply be deducted. A more generous treatment of its Fire Department will prove to be the truest economy.

Name of City.	Steam Fire Eng nes.	latio as to Population.	Annuel cost of Fire Depart- ment p. capita,
		One for	\$ c.
Hartford	8	6,650	1 22
Albany	10	10,000	1.00
Buffalo	23	11,116	1.13
Boston	40	11,212	: 70
Minneapolis	18	11,444	' 1.51
Syracuse	S	11,875	t.05
Cinconnati	26	12,100	1.33
Detroit	20	12,500	1.43
St. Louis	35	12,900	1.18
Milwaukee	15	13,631	not given
Pittsburgh	17	14,00	1.20
Chicago	76	15,800	1.16
Cleveland	17	15,882	1.22
Rochester	6	23,333	1 43
Montreal	9 -	25,000	0 75
Washington	δ,	32,300	1.30
Toronto	o '	19 ,000 '	o.So

## LIFE RESERVES.

The adoption by the Sun Life of Canada of the Institute of Actuaries Hm. table and four per cent. interest, as the basis on which to calculate its reserves, has naturally given rise to considerable discussion in insurance circles. The question, whether, in view of the downward tendency of the rate of interest, the present government standard should not be altered from four and one-half to four per cent., is rapidly becoming a binding one. Not only has the Sun Life come down to four per cent., but the Great West of when commencing Jusiness, as Winnipeg adopted will be seen by a let. in another column The Canada Life has also recognized the necessity of such a change being made in the near future, by putting aside a special reserve of \$250,000 as a preparation therefor. A letter which we have received suggests the thought that probably our readers will be interested in knowing how the change of stan 'ards affects different companies. The following figures are culled from the returns made to the American States Departments

DIFFERENCE BETWEEN \* SERVES AS AT 31ST DEC., 1892.

		-	-
Company.	Amer., 41 p.c.	Combined, 4 p.c.	Per et.
Altua	\$ 30,087,700	\$ 31,760,355	105.59
Germania	15,221,179	16,316,505	107.19
Home	6,096,340	6,506,887	106.73
Manhattan	11,157,584	12,024,657	107.77
Mutual lenefit	44,578,375	47,266,347	106.03
Mutual, N.Y	148,564,551	158,137,191	106.44
National, Vt	6,895,028	7,414,009	107.53
Phoenix Mut	\$,399.473	8,869,968	105.60
Provident Savings	388,146	494,715	127.46
Travelers	10,440,741	11,305,362	108.28
Union Central	,756,805	8,453,987	108.99
Union Mutual	5,623,635	5,954,068	105.88
United States	5,686,341	6,203,120	109.09
Washington	10,715,695	11,578,894	108.05
Total (14 Coys.)	\$311,611,593	£322,285,565	106.63