LIFE INSURANCE.

years 1857-1871, was 22.5 per 1000, and it is stated that, deducting 40 per cent., we find the average death rate among the adult population of 25 years and upwards, to have been 13.5 per 1,000. A similar calculation is applied to the death rates of other countries, and of large cities in various parts of the world, it being assumed throughout that, deducting 40 per cent. from the rate of mortality among the general population, we get the rate of mortality among the adult population who are 25 years of age and upwards.

This reasoning is altogether fallacious. It is true that according to the Registrar General's Returns for England and Wales, the annual mortality is about 22.5 per 1,000: that is to say, 225 persons die in a year for every 10,000 of the population : and if we allow that 40 per cent. of the persons dying, or 90 in all, are under the age of 25, it follows that 60 per cent., or 135 in all, are adults over that age. It is not a fact, however, that the death rate among these adults is 13.5 per 1,000 ; for this would imply that out of 10,000 adult persons, 135 die in a year; whereas all that the statistics show is that out of 10,000 persons of all ages, from birth upward, 135 adults die in a year. In order to determine the death rate among the adult population, it is necessary to ascertain how many of the 10,000 persons are adults. And until this is done, it is impossible to draw any conclusion whatever as to the death rate among them.

The figures given by the late Dr. Farr in his English Life Table, published in 1864, enables us to do this. He states that the population of England and Wales was 15,929,492 in 1841, and 17,082,849 in 1851, and taking the mean of these we get the population in 1846 to be 16,956,171. It further appears that the number of these who were under 25 was 9,341,607 and the number who were 25 or more was 7,614,564. He also states that the number of deaths which took place in England and Wales in the seventeen years, 1838 to 1854, inclusive was 6,470,720, which gives an average of 380,631 for each year. Moreover, 205,714 of the persons so dying were under 25 years of age, and 174,917 were over 25. We are able by means of these figures to calculate the death rates (1) among the total population, (2) among the persons under 25 and (3) among the adults over 25, and we find that the rate among the total population was 22.5 per 1000 ; among those under 25 it was 22.0 per 1,000 ; and among the adults of 25 and upwards it was 23.0 per 1,000.

These figures, as to the accuracy of which there can be no dispute, show conclusively how erroneous are the arguments of the Mutual Reserve Fund. The rate of mortality among adults of 25 and upwards is not, as they assert, much less than the rate among the general population (60 per cent. of it) but is actually greater.

The erroneous nature of the reasoning will become still more evident if we apply it to a somewhat different case. Suppose it has been observed that the death rate in England and Scotland is 22.5 per 1,000 and that the deaths which occur in Scotland are 40 per cent. of the whole, then, according to the reasoning of the Mutual Reserve Fund, the rate in England will be 13.5 per 1,000. Here it is obvious that the conclusion is incorrect ; and that we can draw no conclusion whatever as to the rate of mortality in either England or Scotland until we know something more about the number of the population in each. If, for instance, the population of Scotland were 40 per cent. of the population of the two countries, then it is clear that the deaths in Scotland, being 40 per cent. of the whole deaths, would be in the same proportion as the population and the proper conclusion

from the figures would be, that the death rate in Scotland is the same as in England, being 22.5 per 1,000 in each.

The above fallacious reasoning is a fair specimen of the arguments put forth in all the publications of the Mutual Reserve Fund. And if such arguments are used in good faith, it is clear that no reliance can be placed on the statements and estimates of persons so ignorant of the subject they profess to expound. Their statements as to the mortality experiences of life offices are equally untrue. It is not the fact, as they assert, that the death rate of a prosperous life assurance company reaches its moral level in about 12 or 13 years ; nor is it true that at no period does the death rate of a healthy and prosperous company exceed 14 per 1,000. For information on this point we naturally turn to the returns made to the Board of Trade. But we find that, unfortunately, these returns contain no information as to the number of lives assured, nor as to the number of deaths : in fact, this information is only given, so far as we are aware, in the Reports of two Companies. It is therefore, in general, difficult to ascertain what is the exact death rate in most life assurance offices. The returns contain, however, information as to the total sum assured, and the claims paid ; and from these we calculate approximately the claim rate or the proportion of the total sum assured which becomes payable by death in a year. But in most cases we are met by the difficulty that the claims paid include bonus additions, the amount of which is not stated ; and the figures got from the returns are therefore not suitable for our present purpose. There are, however, two assurance companies which make no bonus additions to their policies, but divide all their profits by reduction of the premium, namely, the London Life Association and the Metropolitan. The returns of these offices therefore enable us to calculate what percentages of the original sums assured have become payable by death in each of the last 20 years. Both offices may fairly be called "progressive," for during the last 20 years the sum assured in the London Life Association has increased from about 7½ millions to 9½ millions, and in the Metropolitan the sum assured has increased 30 per cent., namely, from a little more than 4 millions to considerably more than 5 millions. Comparing, now, the claims in these two offices with the sums assured, we find that during the last 20 years, the yearly claims have averaged £21 7s per £1,000 assured in the former, and £21 15s per £1,000 in the latter. In each case, therefore, the claims have been 50 per cent. greater than the 14 per 1,000 which the Mutual Reserve Fund says is never exceeded. Looking at the experience of individual years, we find the claim rate ranging from 15 to over 28 per 1,000 ; so that in no single year has it been so low as the 14 per 1,000 which the Mutual Reserve Fund would have the public believe is the highest a progressive Assurance Company will ever experience.

In addition to the two offices already mentioned, there are two others which state in their annual reports the number of lives at risk and the number of deaths during the year. These are the Nationale Provident and the Scottish Equitable, both doing a large and prosperous business. In the Nationale Provident the net sum assured increased during its last quinquennium from £11,050,656 to £11,725,174. The number of deaths in the quinquennium was 2,097 ; the average number of lives assured during the time being 20,269, and the average annual death rate for the five years 20-7 per 1,000. In the Scottish Equitable during the same period, the net sum increased from £9,385,748 to £10,457,265. The deaths were 1,512, the average number of lives assured being 15,920, with an average annual death rate of 19.0 per 1,000, this

lower figure being accounted for by the large amount of new business transacted. It is only when the young and recently assured lives in an assurance office are very much more numerous than the old lives, that the rate of mortality can be so low as the 14 per 1,000 which the Mutual Reserve Fund Association states can never be exceeded. The four prosperous offices we have been considering are now experiencing a rate of mortality approaching that which they anticipated and for which, in successive investigations they have made proper provision. And any office which, from the insufficiency of its premium rates, is unable to do this, will infallibly become insolvent sooner or later. Only one ordinary life office, the Scottish Life, was started in this country in the same year as the Mutual Reserve Fund namely 1881 ; and while we find the death rate in the Scottish company about 7 per 1,000, in the Mutual Reserve it is already nearly 13 per 1,000, proving that the latter has been much more attractive to elderly lives and therefore will arrive much more rapidly at the period when deaths which MUST happen begin to drop in. Up to now. as it takes no lives over 60, the Mutual Rreserve Fund has not had to meet a single claim where the assured had reached his expectation of life. In spite of this fact, however, the amount added to the very inadequate reserve fund, is annually decreasing ; and it is not difficult to forecast the position of the Association when, in the not distant future, the age of the the lives assured will exercise its full effect upon the claims.

Winnipeg Clearing House.

Clearings for the week ending February 21 were $688,505, balances, $145,346. For the previous week clearings were $642,440. For the corresponding week of last year clearings were $732,381.

Following are the returns of other Canadian clearing houses for the weeks ended on the dates given :

	Clearings.	
	Feb. 7th.	Feb. 14th.
Montreal	$10,667,160	$8,818,495
Toronto	8,360,870	4,521,813
Halifax	1,233,261	954,132
Winnipeg	730,687	642,440
Hamilton	677,532	626,079
Total	$21,669,510	$15,562,959

Manitoba Flour in Montreal.

The small arrivals of flour of late from Manitoba have been very marked, only 2 car loads being reported so far this month. This is owing to the fact that millers cannot sell their flour at a profit on this market, owing to the advanced prices that have been paid for their wheat. But those who suppose there is no flour in Manitoba are mistaken, for although they are not sending it forward at present, they are offering it for open water shipment, which shows that they are by no means out of stocks. In this market Manitoba strong bakers flour is held firmly, despite the talk on the part of buyers that prices are being shaded.—Montreal Trade Bulletin, Feb. 16.

They seem to have been having a particularly bad time in Eastern Canada this winter from storms and railway blockades resulting therefrom. The commercial papers from Montreal and Toronto have several times reported the markets mainly influenced by railway blockades and severe weather. Potatoes jumped from 47 to 63 cents per bushel in Toronto recently on account of the cutting off of rupplies, which is only one of many occurences resulting from the railway blockades.