

It may be interesting to show what are the annual premiums for males entering at ages 20, 30, and 40, to secure an annuity of £10 at ages 65 and 70 respectively, assuming Neison's mortality, and 4 per cent. interest. They are as follow:—

Age at Entry.	Annuity at 65.			Annuity at 70.		
	£	s.	d.	£	s.	d.
20 ...	0	9	2	...	0	4 11
30 ...	0	16	2	...	0	8 7
40 ...	1	11	2	...	0	16 0

The premiums are here supposed to be non-returnable in the event of previous death. The effect of the mortality experience is well shown by comparing the former of these columns with the following table of premiums for the same benefit according to the Manchester Unity data, assuming the same rate of interest, while the effect of the interest is seen by adding a column to show the premiums according to Manchester Unity data, assuming 3 per cent. interest:—

Age at Entry.	Manchester Unity Data. Four per Cent. Basis.			Three per Cent. Basis.		
	£	s.	d.	£	s.	d.
20 ...	0	7	2	...	0	10 5
30 ...	0	12	10	...	0	17 3
40 ...	1	5	0	...	1	11 5

From these tables it will be seen how very much depends on the mortality experience. "It is under such circumstances as these," Mr. Neison says, "where the improvement of money at interest magnifies results, that serious blunders in the adoption of an erroneous mortality table will be apt to prove hurtful to the interests of a society. . . . This is only one of the many evils connected with the present condition of friendly societies; and, although its visitation be more remote, the awful consequences of such a calamity, like every other evil of procrastination, will be irreparable." We see, hence, how needful it is to beware of assuming too high a mortality in constructing premiums for annuities.* It should never be forgotten that the adoption of the erroneous Northampton table, so fortunate in the interests of *insurance*, caused a loss of about three millions of pounds to the British Government in the transaction of its annuity business.

IV.—THE RETURNS OF SICKNESS AND MORTALITY FOR THE QUINQUENNIAL 1873-77.

When the last report was presented, the whole of the data contained in these returns had been transferred to cards, a specimen of which was shown on page 6 of that report. Since then the data have been subjected to a careful examination, with the view partly of rectifying errors as far as possible, but chiefly of excluding from the experience table which it is proposed to construct all data of a demonstrably erroneous or even of a suspicious nature. This work, which was entrusted to Mr. Frankland, the Actuary, is nearly completed. The result has been the exclusion from the proposed experience of the returns furnished by a considerable number of lodges and courts. The number of lives which the residue of data will embrace may be stated approximately at from seven to eight thousand. This will doubtless be equivalent to between twenty and thirty thousand years of life—an experience about equal in extent to that on which Mr. Ansell's Friendly Societies Table was based. As soon as the weeding process is completed, everything will be ready for the tabulation of results. It is proposed to exhibit the rate of sickness and mortality at each age of life, and, if time permits, the influence of duration of membership on both, so as to illustrate the effect of the selection which members exercise against the societies through discontinuances. The data are of course far too scanty to bring out a reliable law of deterioration of average health, but, if positive results are shown, it will go far to rebut the argument against the use of English data in the construction of premiums, derived from the low rate of sickness which obtains in New Zealand societies. Apart from the altogether vulgar error of those who rely on a low rate of sickness without taking into consideration the ages of the members, there is the subtler fallacy which leaves out of account the effect of recency of admission. From conversation with Mr. Templeton, F.I.A., on the subject of his Victorian experience on this head, Mr. Frankland anticipates that this influence of selection or recency of admission, taken in conjunction with the secession of the healthier members, will be found to be considerable. There is of course another feature which tends to bring out a fictitious appearance of salubrity in the experience of New Zealand societies, namely, the feature noticed in a foot-note to page 10 of the last report, the occasional forbearance of members in good circumstances to claim the allowances to which they are entitled under the rules. From replies to circulars issued by the Registrar, it appears that the saving thus effected has been in many lodges considerable; and it can hardly be doubted, when the economic progress of the colony is taken into account, that this cause of apparently low sickness rates will not operate as strongly in the future as it has done in the past. It would be difficult, however, if not impossible, to eliminate the influence of this factor from the data.

As a first instalment, the Registrar presents the following results deduced from the quinquennial returns of the four oldest lodges which will be included in the experience table—namely, the Nelson, Travellers' Rest, Antipodean, and Rose of the Valley Lodges. These were all established prior to 1850. All are branches of the Manchester Unity of Odd Fellows. The results are given in the subjoined schedule:—

* The same caution applies in a lower degree to the case of premiums for "whole life sickness."