

For each of these divisions the sickness experience for each year of age is divided into the first three months, second three months, second six months, second twelve months, and after two years duration.

Monetary tables have been prepared from the several bodies of data obtained in the course of the inquiry (with the exception of Group G, miners) and also from the experience of the society as a whole. These tables are arranged in sets according to the rates of interest involved—namely, 3, 3½, 3¾, and 4 per cent. The number of tables in which 3 per cent. interest is involved is twenty-two, and the number in which each of the other rates is employed is eighteen, making seventy-six monetary tables in all. Each set of values is followed by the necessary commutation columns, by which rates for every possible variety of temporary or deferred benefit may be calculated.

It would be interesting, but foreign to the present purpose, to enter at any length upon the question of the contributions and valuation reserves required under the various aspects of locality, occupation, and varying benefits which are investigated in the report; but this much may be said, that it appears clear from the examples given, the cost of the aggregate benefits has increased in the great majority of instances. Also that much of the excess of cost disclosed, arises from the great increase in protracted sickness; hence the higher the benefit allowed in cases of continuous sickness the greater is the additional liability resulting from the change of experience.

This short outline will give those interested some idea of the magnitude and complexity of the work undertaken and completed with such conspicuous ability by Mr. Watson, as must increase the reputation he had previously acquired as one of the highest experts and most trusted guides in the actuarial section of friendly-society work in Great Britain.

SICKNESS AND MORTALITY EXPERIENCE, NEW ZEALAND FRIENDLY SOCIETIES.

It will be recollected that after the passing of the Friendly Societies Act of 1877, it was resolved (consequent on the absence of colonial data) that the Manchester Unity experience of 1866–70 should be made the basis of the tables to be constructed as standards in the Registrar's office, and that the rate of interest employed should be four per cent.

Before many valuations had been made it was found on comparing the actual experience of sickness and mortality with the rates given in the standard tables that considerable differences were exhibited in both, especially in respect of the distribution of the sickness, and the amount experienced at the higher ages.

Whether these departures from the standard rates could be regarded as permanent features or merely accidental fluctuations, due in some measure to paucity of numbers in the colonial experience, was for some years necessarily a matter of doubt.

It was made apparent, however, on successive valuations of the largest and most representative districts in the colony that the aforesaid features of the experience would have to be regarded as special characteristics, and the increased liability being recognised, societies were warned as to the danger which threatened their finances from this low death rate and excess in the sickness experience.

This condition of things continued until early in 1898, when the late Registrar considered the time had arrived for abandoning the Manchester Unity experience of 1866–70 and “substituting as far as possible in the calculation of present values, New Zealand rates of sickness and mortality” (see 21st Annual Report, pages 3 and 4). A table of annual contributions for benefits (on a 4-per-cent.-interest basis) and examples of how the same was to be applied in the determination of rates, was published in the same report. Naturally there will be a desire to know whether the adjusted rates of sickness and mortality adopted as the basis of the monetary tables, by which to determine the annual contribution for benefits, and the valuation reserves, for the friendly societies of this colony compare favourably or otherwise with those of the other investigations mentioned, but this question raises many most difficult points. All that can be done is to present a summary of the New Zealand results, in comparison with those of other investigations, and indicate the chief differences.

COMPARISON OF NEW ZEALAND SICKNESS AND MORTALITY RATES, WITH VARIOUS OTHER DATA.

Ages.	Rate of Sickness per Annum (Weeks).				Rate of Mortality per 100 per Annum.			
	New Zealand Societies, 1886–97.	Friendly Societies, England, 1876–80.	M.U., Group A.H.J., 1893–97.	M.U., Whole Society, 1893–97.	New Zealand, Males, 1880–92.	Friendly Societies, England, 1876–80.	M.U., Area 1, 1893–97.	M.U., Whole Society, 1893–97.
16–19	0·80	0·88	0·86	0·92	0·41	0·73	0·21	0·25
20–24	0·82	0·85	0·82	0·90	0·53	0·57	0·34	0·37
25–29	0·77	0·87	0·88	0·95	0·54	0·62	0·46	0·46
30–34	0·84	1·02	0·97	1·06	0·63	0·78	0·53	0·55
35–39	0·93	1·24	1·14	1·27	0·74	0·98	0·66	0·70
40–44	1·27	1·47	1·44	1·58	0·92	1·16	0·85	0·95
45–49	1·84	1·89	1·82	1·99	1·20	1·48	1·08	1·17
50–54	2·53	2·39	2·56	2·75	1·52	1·90	1·51	1·69
55–59	3·68	3·36	3·79	4·02	2·17	2·78	2·10	2·42
60–64	5·50	5·17	6·00	6·31	3·08	3·91	3·17	3·56
65–69	9·92	8·73	10·26	10·59	4·46	5·71	4·71	5·41
70–74	14·77	14·46	16·91	17·40	6·32	8·07	7·08	8·09
75–79	20·94	20·27	25·02	25·15	9·88	12·15	10·78	12·04
80–84	28·76	27·36	32·25	32·27	14·58	16·01	15·97	17·66