

balance sheets for 1889 were presented at the annual meetings as follows: North British and Mercantile, April 25 last; Liverpool and London and Globe, May 26; Royal, June 13; Queen, May 5. Soon after these statements appeared in the leading British insurance journals in full, and in our own columns in whole or in part. The balance sheets of all these companies for 1889 also appeared some months ago in the *Insurance Blue Book and Guide*, published by Champness & Co. of London, and are to be found (excepting the Royal, which is for 1888) in the current annual report of the Insurance Superintendent of Canada. In our figures we have followed the usual practice of reckoning \$5 as the equivalent of £1 sterling. Just where the *Spectator Year Book* got its figures which misled the *Standard* we do not know, but they are in each case incorrect, and in the case of the North British strikingly so. Here are the correct figures once more: North British, \$50,376,054; Liverpool and London and Globe, \$41,952,455; Royal, \$32,611,075; Queen, \$7,897,472.

ASSURANCE OF DOUBTFUL LIVES.

The expediency of assuring that class of lives which, measured by the conventional standard of the average medical examiner, appear to fall below the standard in point of vitality, is of late receiving something of the attention due to the importance of the subject. Thoughtful actuaries and wide-awake insurance journals are turning the question over, and looking at it in the light of such experience as can be found and from the standpoint of life assurance science; for life assurance is a science in a comprehensive sense. Fundamentally it rests upon as clearly demonstrated mathematical principles applied to facts in human experience as does any science known to the schools. What we call the chances of living or dying are "chances" only so far as the individual life is concerned, for in the aggregation of human lives dying and living are certainties determined by a practically unvarying law. Availing itself of this general law of mortality, life assurance applies it to a class of selected lives—selected as to the minimum and maximum of age and as to apparent physical soundness and prospective vitality.

It would manifestly be just as easy to formulate a table of premiums for unselected lives at the various ages, taking everybody as the census enumerator takes them, as it is to make a table for selected lives. The mathematical calculation would be as correct in the one case as in the other, but the latter would be nevertheless impracticable applied to assurance, unless all the people, without exception, could be induced or compelled to pay the computed premium. Otherwise the good lives, which have contributed to the average vitality, might hold aloof, while the impaired lives would come in, thus destroying the equation. Now, it is manifest that if we could unerringly determine which are the perfectly healthy lives, untainted with hereditary tendencies to disease, and set them aside for a hundred years, constructing a table of mortality

from the carefully observed experience of the remaining impaired lives, it would then be perfectly easy to fix a premium rate adequate for this class. Of course this is impossible; so when we talk about the assurance of impaired lives as a practical achievement, we mean *selected* impaired lives, and not the lame, halt, blind and consumptive, indiscriminately. The recognized difficulty is to fix a limit beyond which the impairment must not go, in order to establish a safe and yet equitable rate. This difficulty, however, may be, or rather has been met, for where lives are intelligently selected with reference to the degree of impairment, a charge suitable to a lessened period of expectancy, based on the impairment, can easily be made to cover all contingencies, and by returning after a certain period all overpayments, if any, to the assured, perfect equity is established while danger is avoided.

This plan, in its essential features, has been tested by the actual experience of both the Clerical, Medical and General and the Gresham Life assurance companies, heretofore noticed in these columns. Other English companies have also had favorable experience on similar plans with this problem, though the two named present a more valuable because a more extended experience. The testimony of both is emphatic as to the entirely satisfactory result reached. We notice that certain flippant commentators have summarily disposed of this question by referring to the experience of an insignificant American company—the American Popular Life—just as they have referred to the experience of the Universal Life, instead of pointing to the experiences of the old and thoroughly reliable English companies before named. The American Popular was managed by a crank, while the Universal was the early prey of professional life assurance wreckers, and neither are worthy of being quoted to prove anything, excepting incompetence and rascality.

Experience would seem to justify the conclusion that perhaps for the present, in place of a better plan of assuring what we call impaired lives, existing companies might generally assume these risks, adding, as many of them now do in exceptional cases, a sufficient number of years to the real age to clearly justify the assumption, reducing the charge where, after five years, a re-examination demonstrates it safe to do so. Or if, as Actuary McClintock of the Mutual Life suggests, a well organized new company, working on conservative lines, should confine itself to lives rejected by the existing companies, it might operate with every probability of success. It is a well known fact that a large proportion of these lives are more in the nature of doubtful than of clearly impaired lives. The cautious examiner often, while strongly inclined to accept the applicant, is simply in doubt, and he is pretty sure to give his company the benefit of the doubt, though very often the result shows the rejected life to have been really a good average risk. At all events, nothing is more certain than that there exists a growing demand for some plan of general application for the assurance of these doubtful lives, and that it may be safely done, has already been demonstrated. Good