PILING UP LIFE INSURANCE SURPLUS.

Surplus, as everybody has come, in some measure, to understand, is one of the essentials of sound life insurance. As with other essential attributes of the business, there has, however, been thrown around it a good deal of unnecessary ambiguity and not a little absurdity. The technical terms of the actuary and the traditional explanations which are burdened by logarithmic profundity have been employed usually to demonstrate its necessity and to advocate its increase. Theories, however, do not always agree with every day common sense, nor with plain, practical facts, and we deem it tolerably easy of demonstration that the managers of our life insurance companies are, many of them, in bondage to theories in the matter of the true functions of surplus. In the first place, the real relation of surplus to sound life insurance is simple and easily understood when stated in the every day language which we apply to other kinds of business. Divested of all technicalities and bookish terms, it is simply the difference between what a company owns and what it owes, actually or prospectively. The "reserve" made up of such portions of the premiums as scientific accuracy pronounces adequate with interest and future premiums to meet future mortality liabilities is held in trust for the policyholders, and is in the nature of a debt which must be paid as it matures at consecutive future periods. When to this we add current debts of whatsoever kind, we have total liabilities, the difference between which and the assets owned is surplus.

That there should be any surplus is due to the fact that the portion of the premium charged, which is designed to meet current expenses, is often more than sufficient for the purpose, that the actual payments for death claims are less than the expected payments provided for in the premiums, and that the actual rate of interest on invested funds is greater than the assumed rate. There are minor sources from which contributions to the company's treasury are made, but surplus comes mainly from the three sources above named. In its legitimate uses the surplus plays the part of a safety fund. It is designed to make assurance doubly sure, and has no other proper function. The premiums in the level premium companies are purposely fixed on a higher scale than is necessary to meet the actual conditions of the business so far existing, in order that more adverse conditions may be met if they should chance to arise in the future. The surplus bears about the same relation to life insurance that the air-cushion in the modern elevator or lift bears to that somewhat uncertain convenience. As in all kinds of business, there are some contingencies in life insurance which cannot be foretold with mathematical precision. What are they? Are they such as to justify the holding of a large or only a small surplus?

In the experience of any ably and honestly managed company—and it is only such that this article cares to consider—we know of but two contingencies which justify the keeping of a surplus. One is the possible loss on investments, and the other is a decrease in the interest rate realized below the rate assumed. Such are the vast accumulations held by the life companies to-day, that interest-bearing investment of the funds cannot be made without including a class of securities more or less fluctuating in character, such as stocks and bonds of large transportation or telegraph or manufacturing companies and the like. Judiciously selected municipal bonds, first mortgages on real estate, loans on the companies' own policies secured by the reserve, and perhaps one or two other forms of investment, are practically beyond contingency; but to invest and keep invested profitably the vast amount of life insurance assets without dealing in some securities more or less contingent is probably an impossibility. It is probably true that with well managed companies the appreciation of the fluctuating class of securities named will, in the long run, equal or exceed the loss from depreciation, but the element of uncertainty exists, and if a period of depression, such as took place in December last in stocks and bonds in New York, were lengthened out for a year or two, a little surplus would serve to keep the insurance ship on an even keel, and therefore is needed. So far, however, as the probability that the companies will be called upon to calculate their reserves on a lower rate of interest is concerned, and that an extraordinary surplus should be accumulated to meet that contingency, we regard the contingency as exceedingly remote. The simple fact that the companies in the United States and Canada have experienced but a slight reduction in the realized interest rate during the past five years, and that the actual rate is and is likely to continue considerably above the assumed rate, shows the remoteness of the interest reduction contingency. Some surplus is necessary without doubt, but how much? In order to show the trend of surplus accumulations, we have compiled, from the most reliable sources accessible, the total surplus on December 31 of each of the past five years, held by all the companies reporting to the New York Insurance Department, together with the liabilities and the ratio of the former to the latter. The exhibit is as follows:—

Year.	*Liabilities.*	*Surplus.*	*Ratio.*
Dec. 31, 1895	$983,413,497	$158,735,798	16.14
" 1894	916,591,138	139,740,544	15.25
" 1893	855,308,038	116,549,186	13.62
" 1892	789,674,117	114,060,520	14.44
" 1891	723,045,945	96,356,907	13.33

We find also that the above surplus for 1895 was equal to 13.9 of the total assets, and in 1894 to 13.2, being 11.9 and 12.6 respectively for 1893 and 1892. The practical question is, are the companies here considered justified in holding continuously such sums as surplus instead of returning the major portion of it in dividends to policyholders, to whom, in insurance on the mutual plan, it of course belongs? We think not. We are familiar, rather too familiar, with the old, exploded reason given by the advocates of piling up an immense surplus, that one of the unforeseen contingencies to be provided for is the possible recurrence of epidemics producing an abnormal death rate, and also that expense of management may exceed the "loading" charged up to the regular premium. So far as the first is concerned, actual experience for more than a hundred