On the Principles on which the Funds of Life Assurance Societies should be Invested. By Arthur Hutcheson Bailey, Esq., Actuary of the London Assurance.

[Read before the Institute, 24th February, 1862, and printed by order of the Council.]

OF the many valuable contributions by which the transactions of this Institute have been enriched by the labours of Mr. Samuel Brown, not the least interesting is the paper on the investments of Assurance Companies, read before the Institute on the 25th January, 1858. I feel much diffidence in again reverting to this question; but as Mr. Brown, at the outset of his paper, admits that the subject is too extensive to be exhausted by a single discussion, it has occurred to me that an attempt to arrive at some general principles on which the funds of Life Assurance Societies should be invested, and to consider how such principles can best be reduced

^{*} Supposing a permanent rate of addition of £1. 10s. per cent. per annum.

to practice, might, perhaps, be the means of exciting some useful discussion.

Of the two main elements on which all life assurance transactions depend—the rate of mortality and the rate of interest—the latter, I think, affords more scope for the exercise of judgment and skill than the former. From my own observation and experience, I incline to the belief, that, while there are probably some not inconsiderable variations in the rates of mortality experienced by different Offices, these variations are due less to what is called (not very accurately) the selection of lives—the effect of which, I think, is generally over-estimated—than to the differences of class from which the selection has to be made. However this may be, as far as the mortality is concerned, there can be no doubt that the amount of interest realised on the assets can be materially influenced by the degree of judgment and knowledge brought to bear upon the subject. Mr. Brown has given some apt illustrations of how considerably the accumulation of capital is affected by very small differences in the rate of interest.

From the nature of the business of Life Assurance Societies. their financial arrangements can be made under some material advantages, which it is important to keep clearly in view. They engage to pay fixed sums of money at periods generally long distant from the time when the contracts are entered into: in mercantile phraseology, they may be said to accept bills drawn at very long dates. Unlike Fire Insurance Companies, where the profits of years are sometimes swept away by the disasters of as many days, the probable amount of demands on their resources can be calculated, from time to time, within not very wide limits. To such an extent is this the case, that, notwithstanding all the disturbing effects that war, famine, and pestilence have produced, I doubt whether the ill success of any life assurance project has ever been truly attributable to excessive mortality. Further: Life Assurance Societies, unlike banks and commercial enterprises generally, are not exposed to sudden or unusual demands on their resources in times of panic and financial difficulty; and the object of their investments is not to obtain income for the purpose of expenditure, but to accumulate capital for the payment of claims.

From a careful consideration of these peculiarities, I think that the main principles to be observed in investing the funds of a Life Assurance Society are the following, viz.:—

1. That the first consideration should invariably be the security of the capital.

- 2. That the highest practicable rate of interest be obtained, but that this principle should always be subordinate to the previous one, the security of the capital.
- 3. That a small proportion of the total funds (the amount varying according to the circumstances of each individual case), should be held in readily convertible securities for the payment of current claims, and for such loan transactions as may be considered desirable.
- 4. That the remaining and much larger proportion may safely be invested in securities that are not readily convertible; and that it is desirable, according to the second principle, that it should be so invested, because such securities, being unsuited for private individuals and trustees, command a higher rate of interest in consequence.
- 5. That, as far as practicable, the capital should be employed to aid the life assurance business.

The first two principles may, perhaps, be looked upon as mere truisms. But it should not be forgotten that life assurance investments should not always be regulated by the same considerations as trusts for private and family purposes. In the latter, usually the most important matter is to secure a fixed, or, at all events, an undiminishing income—fluctuations in the value of the capital being less inconvenient.

If these principles generally are sound, it follows, I think, that some modes of investment which are commonly resorted to should be avoided. It may seem a bold assertion, but, nevertheless, I believe it to be true, that the English Funds are altogether unsuited for life assurance investments. For income they offer probably the best security the world has yet seen; but with us that is a secondary consideration; the capital, the security of which is our first object, is subject to very inconvenient fluctuations in value. But it will be urged, that, on account of their ready convertibility, some portion of the assets should always be invested in the Funds. This advantage I believe to be more apparent than real. In the practical working of Life Offices it will commonly be found that, in an easy condition of the money market, the funded property has a tendency to increase, although the purchases must, of course, then be made at prices above the average—because, money being plentiful, eligible securities are then scarce. In periods of pressure, on the other hand, when favourable opportunities for investment are abundant, the funded property is practically inconvertible, from the determination not to effect sales at a loss, except in cases 1862.]

of absolute necessity. I believe that the Assurance Companies are now much less extensive fundholders than formerly. But there is still a prevalent idea that one half the assets should always be invested in the Funds. Upon this rule the wealthiest of the Offices still acts, and the idea has been so fostered by the large profits realised by some of the older Companies from their purchases at the beginning of this century, that it seems necessary to point out that the risk is now in the opposite direction, and that perfect security is very far from being one of the advantages of the Funds.

The same considerations apply to the Preference Stocks of Railway and other Companies, which are now very popular.

It is, I think, generally admitted that the ordinary stock and shares of trading and other Companies are not eligible for Assurance Societies' investments, as being too speculative. Yet so potent is the influence of the magic words, "Bank of England," that an exception is usually made in favour of Bank Stock, in apparent forgetfulness that the dividends of this great Corporation mainly depend upon the fluctuating and uncertain profits of a particular business—that of banking. How little the exception is justifiable by facts, a glance at the price lists of a comparatively short period will show. It will be found that, in 1840, the price of Bank Stock was marked at 156; while it is now (February, 1862), 244.

Leaving the consideration of what investments to avoid, for the more difficult task of what to select, it seems to me that, for what may be called the working capital, the smaller portion of the assets which is required to be readily convertible, the system of deposits with joint-stock banks and discount establishments affords the greatest advantages. These deposits are always available on demand, or at short notice, without expense, and without risk of depreciation like Exchequer Bills. I think that it is important that the amount to be thus held on deposit should be regulated always by the financial requirements of the Office, and never by the rate of interest. I have frequently had occasion to observe, that the effect of making transfers to permanent investments from deposit accounts, from dissatisfaction with the low rate of interest on the latter, has been to obtain a small increase in the interest at a serious cost to the capital. It will also probably be thought prudent to divide the total amount of deposits among different establishments.

According to the principles attempted to be laid down, the most desirable form of permanent investments seems to be bonds

and mortgages—including in that term every species of loan secured on tangible property; the preference being given to such as require policies as collateral security, as life interests, &c., where assurances are indispensable. I cannot think that it is altogether a justifiable proceeding to insist on assurances being effected which the security does not require, strong as may be the temptation to such a course; it would be better to stipulate at once for a higher rate of interest. Indeed, when a borrower finds the loan which he does require, subjected to a deduction for a premium on a policy of two or three times the amount, which he does not requireaccompanied, as is sometimes the case, with a rather pharisaical announcement, that no higher rate of interest than 5 per cent. is ever taken—he must be reminded of the olden time, when the pecuniary necessities of gentlemen of the Charles Surface class were supplied in a currency composed of pictures, wine, and money, in very uncertain proportions.

As, however, the competition for such securities is on the increase, it is impracticable for Offices whose funds are large, to invest more than a part of their assets in this manner. In seeking for other descriptions of mortgages, our principles will lead us to select such as cannot readily be realised, avoiding those that are open to the competition of private trustees. For example, an advance under any of the land drainage Acts, in consideration of a rent charge for a term of years, will command a higher rate of interest than a mortgage in fee on the same estate, although the former charge has priority over the latter. In like manner, securities on the rates of counties and towns, and, generally, loans where the principal is repayable by instalments, are, I think, worthy of attention.

One other class of investments I will mention, which is quite in accordance with the principles laid down, and which seems to me peculiarly adapted for a portion of the funds of Life Assurance Societies—I mean the purchase of reversionary interests. A banker carries on a lucrative business by receiving money on deposit at one rate of interest and employing it at a higher rate; and I believe that a margin of 1 per cent., or less, will suffice to cover risks and expenses, and yield in addition a not inconsiderable profit. Surely, then, an Assurance Company may usefully employ, in the purchase of reversions, part of funds which are not repayable at short notice, but which are to accumulate during the lives of the assured, when it is considered that the margin is probably three times as great as suffices for the operations of the banker. I have,

therefore, never been able to understand how such institutions as Reversionary Interest Societies can have come into existence.

In concluding this hasty and imperfect sketch of a subject on which much difference of opinion exists, and on which a volume might be written, I have purposely avoided entering into details, or attempting to lay down rules by which the merits of any individual security are to be judged. I am aware, too, that other than merely financial considerations must sometimes be allowed their influence—as, for instance, it may be fairly urged that Government securities must be held to inspire confidence with the public. But, I think it will be admitted, that the finances of Life Assurance Societies ought to be managed on some clear general principles, and not, as is sometimes the case, left to depend on the passing impulses of the day, or on ideas derived from other and very different pursuits.