ther, the cost of new business is so large, that no matter what may be assumed to be its value to the company or the insured, a limit is put upon the amount a company can afford to write, varying with the size and surplus of the company.

The most satisfactory, and indeed the only satisfactory, way of dealing with the matter seems to me to be to make the initial expense (and all the expense) of the business an element of our computations. A necessary and reasonable expense in the securing of new business, as well as every other necessary expense, may as properly be taken into account in the computations of premiums, reserves, surrender values, surplus, etc., as may death claims, and should be so taken into account. It is time to do away with the idea that all expenses and contingencies are to be provided for by a more or less arbitrary loading or margin added to the computed premium, and, lest that should prove insufficient, by further holding an enormous undivided surplus; and to provide for them in a more rational manner by suitably modifying our fundamental assumptions and computations. A life insurance company has two sources of income, the premiums paid by its members, and the earnings of its investments. These must suffice to provide for the policy-claims and the expenses of the business; the latter as truly and as certainly as the former. If all investment expenses, and all taxes and losses on investments, are to be charged against the earnings on investments, as they should be, the rate of interest assumed in the computations should be such as the company, so far as human foresight can avail, will be certain to realize, net, over all such expenses, taxes, and losses.

Nor can I conceive of any good reason, if we choose to analyse a given policy into a pure endowment and a term insurance, why a lower rate of interest should be assumed in the computation of the premium for the pure endowment than in the computation of the term premium, although such a practice has been advocated by no less an authority than our ex-president, Mr. Sheppard Homans. Certainly a company is likely to net quite as high a rate of income from the pure endowment reserve, which remains intact in its custody for a term of years, as from the initial reserve on a term insurance, which is mostly or wholly used year by year in the payment of the death cost. If it were desirable to make any distinction (I do not think such a distinction of consequence), it would seem more reasonable to assume the lower rate for the term part of the premium.

As ample provision should be made for investment expenses in the assumption of the interest rate, and not by an arbitrary addition to the premium, so ample provision should be made for such of the ordinary and continued insurance expenses as are properly assessable upon the death cost by a loading of the death-rate or mortality table. For the ready and equitable distribution of the surplus, the mortality table should express the relative probabilities of death at different ages. It is not necessary that it should express the actual probability of death, but only that the actual probability should bear a fixed and known ratio to that given by the table. The table used should, then, represent a fixed per cent. of the probable mortality at each age, such per cent. being taken high enough to amply provide for all the ordinary expenses properly assessable under the death cost, as well as for the death cost itself. An addition of twenty-five per cent. to the probable mortality after the expiration of the first five years of insurance should be more than sufficient. To the premium computed on the basis of the assumed interest rate and the modified mortality table should be added, as a provision for the first cost of new business, an annuity, contemporaneous with the premium payments, the present value of which is equal to the necessary first cost of such new business in excess of the subsequent annual expense and of the gain in the first two or three years from a favorable mortality. The sum so found should be increased by a small per cent. to provide for such continued expense as may be assessable against the premium.

In the computation of the premium we have provided in what seems to me a rational way, for (*a*) the first special expense of the business, (*b*) a percentage charge against the premium year by year to cover expenses so assessed, (*c*) a margin of income from investments to cover investment expenses, (*d*) a percentage of the death cost to cover other expenses, and (*e*) policy claims. If it is thought more equitable to assess general expenses upon the amount insured rather than upon the death cost, it is only necessary to add to the premium computed upon the unmodified mortality table and the assumed rate of interest, an annuity for the premium-paying term, the present value of which is equal to the present value of an annuity equal to the expense to be provided for and running through the term of the policy, instead of increasing the assumed mortality.

PRINCIPAL CONFLAGRATIONS IN THE UNITED STATES DURING EIGHT YEARS.

From the *Chronicle* of New York, we copy the following conflagration record, which will be found interesting :—

	Property loss.
1885 (November), Galveston, Texas	$2,000,000
1886 (January), Detroit, seed warehouse	1,000,000
1886 (March), Key West, Fla., general fire	1,417,300
1887 (April), Lake Linden, Mich., general fire	840,200
1888 (February), Buffalo, general fire	1,100,000
1888 (September), Baltimore, general fire	894,000
1889 (February), Buffalo, general fire	1,097,000
1889 (April), New York city, general fire.	1,907,000
1889 (June), Seattle, Wash., general fire	6,626,000
1889 (July), Ellensburg, Wash., general fire	1,115,000
1889 (August), Spokane Falls, Wash., general fire	4,800,000
1889 (November), Lynn, Mass., general fire	4,973,446
1889 (November), Boston, general fire	3,857,233
1890 (January), Baltimore, grain elevator and vessels.	673,724
1891 (March), New York city, general fire	1,556,948
1891 (July), Cincinnati, general fire	1,335,000
1891 (November), St. Louis, general fire	1,197,327
1892 (February), New Orleans, general fire	1,075,000
1892 (February), Memphis, Tenn., general fire	900,000
1892 (April). New Orleans, general fire	2,000,000
1892 (June), Creede, Col., general fire	675,000
1892 (July), Bay City, Mich., general fire	640,000
1892 (October), Milwaukee, Wis., general fire	4,200,000

THE REBATE QUESTION.

Various specific abuses in life insurance have for years been claiming the attention of insurance journalists and insurance agents. Since the formation of life insurance associations, these useful organizations have taken up the discussion. The question of rebate has been prominently before the life insurance public, and its evils have been dwelt upon and execrated. Remedies have been proposed in legislation, in voluntary action, in promises of honor, in every way except the right way. There is not a thoughtful man to-day, who is willing to be honest with himself, who does not know that the rebate evil has its root and sustenance in a soil deeper than the voluntary action of the agent, and too deep to be touched by any statute. Why have commissions been raised? Because the command to the agent has been "get business!" In order to get business the agent must pay for it. The agent who gets twenty-five per cent. of the first premium as his commission manifestly cannot make much deduction to the assured. But the agent who receives seventy-five per cent. commission has in his hands a potent inducement to a prospective insurant. It all depends on how much