

and servants who are brought into contact with tuberculous animals favours Dr. Koch's theory, the establishment of which as a scientific fact will relieve mankind from a terrible source of anxiety and turn attention to the discovery of the real causes of tuberculosis in human beings and to the establishment of institutions, sanatoria, adapted to promote the cure of this awful disease which is a chronic pestilence.

RELATIVE AMOUNT OF INSURANCE TO AMOUNT OF RISK.

That the fire insurance business is one of contingencies is well understood by those who invest capital in fire insurance companies, and, like other games, of hazard, becomes subject to the very uncertain law of chances for just how to undertake to control those chances and hold them within reasonable limits is as yet beyond the science of our best fire underwriters, as is very apparent in the constantly increasing number and volume of fire losses year by year, despite the utmost efforts to prevent or even to modify them, the average ratio of losses to premium receipts leaves but a small margin for dividends, and the necessary reserves to be laid by to meet sudden calls from heavy conflagrations.

The payment of losses is the intent and purpose of all insurance; the system was organized to furnish indemnity, to a greater or less extent, as might be agreed upon, to the insured, in the event of such loss. The method devised to make good such indemnity was the payment by the insured of a given rate per cent. upon the sums insured, as a premium or consideration for the risks assumed by the company and a subscribed capital was raised and paid in, in part, or the whole liable for any unpaid indebtedness, as an additional security for policyholders. It is thus evident that the success or failure of an insurance company will be solely dependent upon the adequacy of the premium account, out of which losses, management expenses and dividends, if any, should be paid. If the premium income be ample to meet these constantly recurring expenditures, and leave a surplus for a contingent reserve, the company is solvent and sound financially; but, if recourse is had to the invested funds of the company, representing its capital, the company is upon the highway to insolvency, and the sooner its doors are close the better for all concerned.

But the fixing of the rate that the insured shall pay for his promised indemnity has ever been what has been called a "magnificent system of guessing," because "cost" is the unknown quantity in fire insurance. The affixing of premium rates has been the great and yet unsolved problem of the business, and likely to remain so until more harmony and greater system as to the classification of fire risks and hazards shall be found among fire underwriters.

As an insurance principle, companies should have full insurance, or nearly so, or its equivalent, the co-insurance clause upon every risk written by them; but the question of moral hazard here intervenes and the more timid hesitate to permit full insurances in any case, and there are certain classes of hazards

where it would not be for the interest of the companies to carry full lines, such as the most dangerous specialty hazardous operations, not from fear of the moral hazard, but from the nature of the risk itself, upon which the owner could not afford to pay an adequate premium rate.

Another point to be considered in rating is the proportion of insurance taken to the value of the property at risk. A policy for \$5,000 upon a value of \$20,000 covers any and all portions of such \$20,000, and usually at the same rate of premium that an insurance more nearly approximating the value at risk would pay; and in the event of loss the company must pay the amount of its policy, losing all benefit of salvage, the insurance being such a small portion of the values exposed.

The business for some time past has not been generally profitable, and by some it is urged that an increase of rates is necessary to meet the deficiency in results. And just here it is that the failure to grade the rate to the proportion of value at risk works injury to the companies, for under ordinary practice an increase of rates will not return any like increase in the premium income, because, in nine cases out of ten, such addition to the rate only brings a reduction in the amount insured, which will counterbalance the premium rate so that the insured will continue to pay the same amount of premium as heretofore; but, so far as the underwriter is concerned, with a decreased liability in the event of loss, upon the same amount of premium, which would be to his benefit, provided only that the rate has been graded to the amount at risk. Increased revenue from a larger line of insurance upon hitherto underinsured property, brings actually no greater hazard as to losses than that obtained by increased rates, with reduced lines of insurance; the ratios of loss to value at risk remain about the same in either case, but the ratio of premium received to the loss sustained will be greater.

The system of graded rates to correspond with lines of values will largely tend to remove this difficulty, especially if the co-insurance clause to the extent of any deficiency of insurance up to a given value be made a portion of the policy. The equity of this graded co-insurance clause is at once apparent; the insured becomes a coinsurer or not, as he may elect, but he pays a proportionate extra rate for such option, and in the event of loss he recoups the money up to the sum of his loss, within the insurance, without deduction, as if there had been no co-insurance stipulation, this clause becoming operative only should the loss reveal the fact that the value at risk was of such amount as to make the sum of his insurance less than the percentage portion of the whole agreed to be carried, in which case he becomes co-insurer to the extent only that the amount of insurance may fall short of such agreed proportion of actual value.

The above, published some years ago in a contemporary, appears apropos to existing conditions.

BICYCLE ACCIDENT INSURANCE is the latest thing out in that line.