

viewpoint of the city and firemen, and who can take up and explain each part of the work, and its relation to the city and their firemen, and how they can expect to get the best results. I have recently employed a man in my department as a deputy who is an experienced fireman with a splendid knowledge of all fire-fighting apparatus and equipment and understands the dangers arising from different conditions, and is by study and experience an expert in inspecting premises and in fighting fires. It will be his work especially to educate the officers and their people to realize that the fire waste can be stopped only in two ways: first, by putting out fires after they are started, and, second, by preventing fires.

LIFE ASSURANCE AND WAR RISKS IN FRANCE.

In France, where every able-bodied man may have to perform active military duties, the native Life Offices have always taken a serious view of the possible effects of the war risk—*le risque de guerre*. In case of war an extra premium of 10 per cent. of the sum assured has to be paid by soldiers and reservists of regiments of the line; 7½ per cent. by territorials and their reserves and 5 per cent. by the auxiliary branches of the army. If an extra is not received a life policy is not forfeited, but the usual conditions applicable to the company are materially changed. Thus, a policy stipulates that if the assured should die during the war or within eight months after the cessation of hostilities the company will only pay to the legal representatives of the deceased a sum equivalent to the actuarial reserve of the policy—in other words, a liberal surrender value. If, however, the assured should be alive after the expiration of the eight months above mentioned, the full amount of the assurance would again be in force, without requiring the policyholder to pass a medical examination, provided that unpaid premiums are paid.

According to *L'Argus*, the *Ministre du travail* et de la *prevoyance* has been corresponding with the French companies. With the exception of the limit of eight months, the *Ministre*, in his letter to the companies, appeared to be satisfied with the conditions above mentioned. In reply to the letter, the companies intimated that they had decided to reduce the eight to three months. The companies also said that if the claims arising from the war should amount to less than the extra premiums received, they will divide the difference amongst the assured.

The French companies have another system under which the military forces above mentioned can effect an assurance by paying at the rate of 5, 3 and 2 per cent. respectively. A fund is thus formed from which all claims are paid. If the fund should prove to be insufficient, then proportionate amounts would be paid. Each of the companies which has introduced this class of assurance has for some time past contributed considerable sums to form a permanent fund.

Do policyholders know that their entire premium never reaches the company? Suppose when a policyholder sent \$100 to his company, he had to send a check for \$2 or \$3 to the tax collector. Would he stand for it?—*Edward A. Woods*.

RATING BOILER RISKS.

In a review of the boiler insurance situation read at the International Association of Casualty and Surety Underwriters' Convention, held this week, Mr. J. W. Rausch, manager of the steam boiler and flywheel departments of the Maryland Casualty Company, suggested that underwriting practice in boiler insurance had not kept pace with boiler development. "In fact," he said, "as respects the rate per boiler, absolutely nothing has been done to harmonize the premium with the hazard. The premium charge for the smallest boiler for a given amount of insurance is exactly the same as the premium for a 1000 H.P. boiler. This method is not only illogical, but is absolutely unfair, both to the assured and the insurance company. For certain economic reasons boilers from 500 to 1000 H.P. are now in common use, especially at the large plants, whereas some time ago a 100 H.P. boiler was probably the average. From this it will be seen that if we take a 2000 H.P. plant composed of two 1000 H.P. units, we will only receive one-tenth of the premium that we would receive if the boilers were all of 100 H.P., and I am sure that anyone familiar with boiler insurance will admit that the premium for an average size horizontal tubular boiler is none too great. The argument has been advanced that since there are only two boilers to inspect instead of twenty, the inspection expense must necessarily be that much less, and further, since the boilers are of the water tube type, the hazard is also less, but on the contrary the expense is not only as great, but the inspection is much more unsatisfactory, and the hazard, instead of being less, is actually greater.

ELEMENTS OF UNCERTAINTY.

"The massive, heavy walls and arches of water tube boilers retain the heat to such an extent that the time allotted for cooling and inspection is usually so limited as to make the conditions under which the boiler is inspected almost intolerable. Then, too, the water tube boiler is of such construction that of the hundreds of tubes only certain ones are accessible by hammer test, and, of course, the condition of the others must be judged by those outside tubes which are accessible. Also, since it is well known that after tubes have been in service for a certain length of time they are liable to fail or explode without warning, we have here another element of uncertainty impossible to guard against. It is not my intention to go into a lengthy argument as to the safety of water tube boilers versus horizontal tubular boilers, except in a brief way and that only in order to more clearly bring out the fact that the present method of charging a flat price per boiler, regardless of size and construction, should be changed as speedily as possible. Notwithstanding claims to the contrary, we all know that water tube boilers do explode, that there are any number of accidents where the property loss alone is from \$10,000 to \$50,000, and we have had at least two practical examples within the last few years, where the property loss was over \$100,000. It is therefore apparent that if the premium income is sufficient to afford a small margin of profit, the owner of the small boiler is paying more than his share and the owner of the large unit is paying altogether too little for his insurance, and please bear in mind that this condition exists in the face of the fact that at the present time the premium on nearly all classes of insurance is based on some analytic scheme of merit rating."