

INDUSTRIAL HAZARDS IN LIFE INSURANCE

How Companies Handle the Problem—Difficult to Obtain Basis for Calculations

That there are three chief factors tending to make certain occupations hazardous, namely: (1) The danger arising from accident. (2) The danger owing to impairment of health directly from occupation. (3) The danger owing to impairment of health from the habit of indulgence in alcoholic liquors likely to be formed by those engaging in such occupation, and that it is quite possible for an occupation to be affected by more than one of these contributing factors, was indicated to the Toronto Insurance Institute by Mr. W. A. P. Wood, B.A., A.I.A., F.A.S., of the Canada Life Company, in his recent address.

Examples of class (1), he said, are to be found in workers with electricity, railway employees, miners, saw-mill and cartridge factory employees and those engaged in the manufacture of gun-powder and dynamite. Class (2) would embrace all such as employees in paint works, glass works and potteries, metal grinders and polishers, marble and stone carvers and cutters. In class (3) one would place those who, either directly or indirectly, are brought into contact with the liquor industry. This, therefore, would embrace proprietors, managers and employees of distilleries, breweries, hotels, saloons, liquor stores, both wholesale and retail, and restaurants selling liquors, stewards of clubs and on boats and in many cases proprietors and employees of pool and billiard-rooms.

But how do life insurance companies deal with those engaged in hazardous occupations? Although in life insurance the claims are distributed over all policies, still it is considered that the levelling process should not be carried to such an extent as to take in all occupations on the same basis, no matter how hazardous they may be. It is felt that the regular premium should apply only to those likely to experience about the same rate of mortality, and that it is only just and fair that if an occupation is very hazardous those engaged therein should have to pay more for the same amount of insurance than have those engaged in occupations showing normal mortality.

Methods Used in Fixing Premiums.

At the present time there are six chief ways in which extra mortality on account of occupation has been taken care of. They are as follows:—

- (1) By rating the life up a certain number of years, the same for all plans and ages (sometimes modified so that after age 40 the number of years gradually decreases).
- (2) By charging the premiums produced by mortality tables, in which the assumed higher mortality is a percentage of the normal mortality, said percentages being the same for all plans and ages.
- (3) By charging a flat extra premium, sometimes varying with the plan of assurance, but the same amount for all ages within the same plan.
- (4) By placing liens against the policies.
- (5) By placing the policies in a special dividend class so that the extra mortality experienced in the class can be ascertained and a deduction made from the dividends allotted to those policies equivalent in value to the extra mortality experienced.
- (6) By limiting the plan of insurance to short-term endowment policies only.

Some companies when dealing with hazardous occupations make two distinct classes, one for cases where the accident hazard predominates, and charge extra premiums in accordance with the first method, and the other class for those in which the health is liable to become impaired, and use the second method for such cases. This seems a reasonable way to treat those engaged in these occupations, although no great injustice is done by combining the two into one class. It would be sufficiently accurate to use the third method for practically all cases.

The question of hazardous occupations has many difficulties. One cannot rely on the judgment of the men engaged in any particular occupation in regard to the degree of hazard connected therewith. It is very seldom that any person in such an employment is prepared to admit that the extra hazard is anything like as great as outsiders believe to be the case. Just recently I asked a gentleman, who at one time was engaged in insurance work, and who is now connected with one of the large Canadian industries, in

regard to the extra hazards of the various classes of men in his employment, and he said that he did not think there was anything specially hazardous about the various occupations, and that the men should all be able to get insurance at the standard rates. He added that perhaps he had lost the insurance point of view. There is difficulty, then, in getting reliable information from those directly concerned with any occupation. Moreover, the mortality as shown for various occupations by the recent Medico-Actuarial investigation has to be considered very carefully before being used as a basis for obtaining extra premiums for these occupations. The exact extra premium which should be charged for each and every hazardous occupation is not obtainable. Insurance companies should be well satisfied if they are able to approximate that premium.

ONTARIO HYDRO'S FINANCES

In the seventh annual report of the Ontario Hydro-Electric Power Commission, the total capital expenditure to the end of the last fiscal year is given as \$10,130,048. Of this amount \$5,960,856 represents the investment in the Niagara system, the balance being made up as follows:—Port Arthur, \$103,730; Penetang, \$16,241; St. Lawrence, \$124,201; Severn, \$675,951; Wasdell's Falls, \$201,327; Eugenia Falls, \$238,739; Renfrew, \$20,763. There is in addition a large amount charged to plant, equipment, stock and tools.

The total power consumption on the Niagara system, based on the average horse-power, is 50,752, which cost the municipalities \$465,098, and after allowing for maintenance and operation, interest and all other charges, the surplus applicable to sinking fund and depreciation, if that were chargeable this year, would be \$149,123.

The detailed figures of the adjustment of capital expenditure, operating expenses and fixed charges against the municipalities show favorable results.

FINANCING GOOD ROADS

A bill has been introduced into Ontario legislature to encourage highway improvement in the province. Hon. F. G. Macdormid, minister of public works, stated that the provincial highway commissioners divided highways into four classes—namely, (1) market or county roads, (2) township roads leading to them, (3) suburban roads in centres of population, (4) interurban roads or main highways.

A bill proposes to increase the contribution for the construction of county roads from 33½ to 40 per cent. Regarding interurban roads, a petition of one-half the municipalities interested in the construction of such a road will enable a start to be made. The present law only applies to a city, town or township, and the object of the bill is to enlarge this so that the work can be undertaken.

In connection with suburban roads, the bill provides for the appointment by the lieutenant-governor-in-council of boards of trustees to define suburban areas around centres of population, the initiative being taken by the county councils. These boards, who are to be appointed upon application, will define the areas and construct the roads, the distribution of payment being 30 per cent. by the city, 33 per cent. by the county, and 40 per cent. by the government.

The government proposes to encourage the townships to appoint highway commissioners in connection with township roads. Where the municipal councils employ these commissioners to expend the money on roads raised by municipal taxation the government will grant 25 per cent. of the cost of the salaries of such commissioners, up to \$600.

There is a new departure with regard to maintenance, the government proposing to contribute 20 per cent. to the cost of maintenance of county roads. The bill will come into operation in 1916.

"The hours of the Canadian bank clerk will be long, and, from an American point of view, his pay will be small. If he has an iron constitution, sound nerves, and an unconquerable stomach, together with a clear head, a steady will, and a good character, he may some day be manager of a branch and perhaps a general manager." Professor Joseph French Johnson, Dean of New York University School of Commerce, Accounts and Finance.