

APPENDIX No. 1

Q. Do you belong to any association of actuaries?—A. I am a fellow of the Institute of Actuaries of Great Britain, and a member of the Actuarial Society of America.

Q. Is there any Canadian insurance association of which you are a member?—A. There is the Canadian Life Insurance Officers' Association, an association which combines in its membership practically all of the Canadian and British companies. I am secretary of that association.

Q. Did you prepare and publish any work upon actuarial science?—A. I was one of a committee of three that prepared a work entitled 'Net Premiums and Values based upon the Institute of Actuaries' healthy male table of mortality and premium at three and one-half per cent interest'.

Q. You were one of a committee of three?—A. Yes, the work, I may say, involved in that book which you have, was prepared in the office of the Imperial Life of which I am actuary, and under my direct supervision.

Q. On behalf of whom was it published?—A. It was published on behalf of the Canadian Life Managers' Association.

Q. Was it prepared by this committee of three under instructions from that association?—A. Yes.

Q. The committee was chosen by that association?—A. By that association, yes.

Q. What standing has that work in Canada?—A. It is the standard work of the life insurance companies in Canada for basing premium rates and reserves. I think it is also in use in the Insurance Department of Canada.

Q. Will you please look at this table of rates, published in 1894, the table in use in 1889? Look at page 12, of a book entitled 'Mutual Reserve Fund Life Association of New York,' E. B. Harper, president, and marked for identification. I refer to the rates in the fourth column in heavy figures, and tell us whether these rates which were the rates in force in the Mutual Reserve Fund Life Association in 1889, including \$3 for expenses, were sufficient to maintain an insurance policy through life, level premium, without increase?—A. On one thousand dollars?

Q. Yes, on one thousand dollars?—A. On one thousand dollars?

Q. Yes, on one thousand dollars?—A. No, they would not.

Q. Will you tell us to what extent they would be insufficient?—A. They would run from about twenty-five to fifty per cent below the proper rate for a whole life policy by annual premiums.

Q. Is that a mathematical certainty?—A. Yes.

Q. The question I ask is, whether, under, any system of insurance whatever, these rates were sufficient if maintained level?—A. No.

Q. Your answer applies to any system?—A. There can be only one system.

Q. Would these tables of rates used as level rates for life for apportionment of losses, assessments being made for an amount sufficient to meet all losses, result in an equitable adjustment of cost?—A. No, they would not.

By the Hon. Mr. Béique:

Q. Will you explain the question? What is meant by the question and answer?—A. The rates contained on the twelfth page of the manual of the Mutual Reserve Association, dated 1894, and which has been admitted to be the rates in force, by the Mutual Reserve in 1889, column 4, are not sufficient to furnish an insurance of \$1,000 for the whole of life; that they are insufficient in some ages from twenty-five to fifty per cent.

By Mr. Coster, K.C., Counsel for the Committee:

Q. For instance age 100?—A. Age 100 is not given here. The highest age is 60—at insurable ages.

Q. You take it up to 60?—A. That is the oldest age given in the table, from ages 25 to 60.