

THE ELECTRIC LIGHT AND FIRE INSURANCE.

THE electrical industries of this country have hitherto received remarkably fair treatment at the hands of the fire insurance officers. When electric lighting was first introduced upon a large scale, a great deal was said as to the superiority of the incandescent lamp over gas flames in respect to immunity from fire. A fair estimate of the comparative safety of the two methods of illumination may be obtained from the consideration of the fact that, so long as the electric light apparatus remains in good condition, it must also remain a physical impossibility for a fire to break out from any cause due to electricity, but external to the apparatus itself. This is not so with gas. The pipes may all be in good order, there may be no leakage, no immediate menace of fatality either from carbonic oxide poison or from an explosion, and yet the presence of a naked flame must always constitute a certain element of risk, even when the pipes and fittings are perfect. Under these circumstances, it might at first be inferred that, when the fire insurance offices placed the electric light upon the same footing as gas, they did not, after all, treat the new comer as well as he deserved. It must, however, be recollected that insurance offices are accustomed to conduct their business to calculate their premiums, and apportion their risks with mathematical accuracy. The voluminous records of accumulated years enable them, by the "law of probability," to foretell with the utmost accuracy, for several years in advance, what will be the average losses from each class of risk. When, however, a new risk, such as that of electric lighting, arises, having no experience of their own upon which to proceed, they have at first nothing to guide them but the statements of those who are probably more or less interested in the question. Undoubtedly the larger fire insurance offices were enabled fully to appreciate the theoretical side of the question. They were prepared to endorse the statement that, so long as all went well with the wires and other apparatus, so long was it a pure impossibility for a fire to be caused by the electric current. They merely wished to have a little practical experience of the system, so that they might be in a position to estimate the risk of such apparatus *not* remaining in proper condition. In the meantime, we think that it cannot be considered other than a very fair proposal when the companies offered to accept electricity upon the same terms as gas. In the course of a few years they will have obtained sufficient data to calculate for themselves the exact risk from this source, and we will look forward to such a re-adjustment of the scale as will prove a stimulus to the mode of lighting, which all agree to be the best in itself, and which we cannot but think to be more in accordance with the scientific development of the nineteenth century. Meanwhile, the Phoenix Office as taken the lead in issuing a set of rules or conditions to be observed in the installation of electric light in any building insured by them. These rules have been adopted by all other English companies. As both the insurance offices and the electrical companies have become better acquainted with the practical details of the subject, revised sets of rules have from time to time been issued. The eighth addition has now appeared, and this contains clauses relating to the introduction of "secondary generators"—a class of apparatus which, upon the observance of one or two very simple conditions, will be admitted upon the same footing as all other electrical apparatus. It is a remarkable fact, and one which will, some day, call for investigation, that while the board of trade rules fix the limit of potential which may be introduced into any building at 200 volts, the fire insurance offices, whose personal interests are immediately at stake, lay down no general rule upon this point. They are prepared to treat each case upon its own merits, and, under suitable condition, they have already sanctioned the employment of a difference of potential amounting to over 2,000 volts within a single building. The board of trade, in fixing the limit at 2,000 volts, were guided more by considerations of what was then supposed to be dangerous to human life, than by the danger of fire. But it is tolerably safe to say that no difference of potential can be dangerous to life which is not also dangerous to property. In any case, there can be no doubt that the insurance offices have adopted the more judicious course in refusing, for the present, to fix any definite limit.

The manufacturers of electrical apparatus, whether in the shape of heavy electrical engineering work, or in the lighter departments of the industry, have also nothing to complain of with regard to the action of the fire offices. They are at liberty to employ the electric light or not, just as they please. In estimating the risk incurred, the insurance companies simply ignore the presence of electricity, and deal with each establishment, either on the basis of a factory working in wood—as in the pattern shops, or else as employing inflammable materials—as in the winding-rooms, where varnish is freely applied. From 20s. to 25s. per cent. is about the average premium paid by such factories.

Upon the other side of the Atlantic, however, things are not nearly so satisfactory for the electric lighting industry. Their fire insurance premiums are three or four hundred per cent. higher than those above quoted. Much dissatisfaction has long prevailed upon this account, and, at last, action has been taken with a view to resorting to what we cannot but consider the very hazardous expedient of a mutual insurance company. A circular has been issued to the trade, embodying such a proposal, and endorsed by the leading electrical companies of Boston. The subject was to be fully discussed, and some decision taken, at the general meeting of the American Electric Light Association at Detroit. We term this a hazardous proceeding, simply because experience has shown that, except in the case of the most largest and extensive industries, it is not possible to make the mutual system a financial success. It is a fundamental principle of fire insurance, never to retain more than a certain limited risk upon one building, and it is a well-known

fact that the large offices in this country invariably re-insure among themselves to such an extent that they seldom individually lose more than £5,000 to £10,000 upon any one fire. But a mutual company is precluded from distributing their risk, and they cannot claim any assistance from the established offices. The result, in this country at least, has been that although such a company may, by good fortune, sail pleasantly along perhaps for years at a time, yet, when the bad time does come, they invariably go to the wall. Of course, the larger the industry, the more widely the risks are distributed, and the longer is the enterprise likely to survive. But even in the case of so huge an industry as that of the millers' the system has proved unworkable in this country. In America, they are encouraged by the success which has hitherto attended the operations of the "factory mutuals," where, by good management, the working expenses are, at present, very nearly paid out of the interest on the accumulated premiums. But this is a very much larger concern than the proposed mutual insurance of electric light firms, and, consequently, no guarantee for the success of the latter. —*Industries.*

MANUFACTURERS' LIFE INSURANCE COMPANY.

The first annual general meeting of the Manufacturers' Life Insurance Company was held in the council chamber, Board of Trade Rooms, Toronto, on Tuesday, 17th of January current.

The president, Right Hon. Sir John A. Macdonald, occupied the chair, and Mr. J. B. Carlile, managing director, acted as secretary.

At the request of the chairman the report was read to the meeting by Mr. J. F. Ellis, one of the directors. It is as follows.

REPORT.

"The directors have pleasure in announcing at this their first annual meeting, that the operations of the company during the five months of its history have been of a most satisfactory character, having far exceeded in importance their most sanguine expectations.

"A year ago our company was not in existence. About that time our indefatigable managing director, Mr. Carlile, was beginning to think that there was room for another life insurance company in Canada, and with him, to think was to act, so that during the year just past, obstacles that seemed almost insurmountable have been overcome, and results accomplished which are usually only reached by years of steady application.

"Since then the charter has been obtained from the Dominion Parliament. Capital stock to the amount of \$621,000 has been subscribed; \$126,800 of which has been paid up. All the intricate forms incident to the organization and carrying on of the business of a life insurance company have been prepared; its plans have been in the main part devised; its tables of rates have been calculated, and among its schemes we find some hitherto adopted by no other company, but all bearing the endorsement of some of the ablest actuaries on the continent. Its agency department has been so far organized that it forms a complete network over the whole Dominion, only needing a slight revision to make it equal in all respects to the other organizations which it has taken other companies years to build up. So rapidly, and so quietly has all this been accomplished, that the statements which are made here to-day are almost incredible. The company issued its first policy on the 19th day of August, 1887, leaving less than five months for active operations in procuring business.

"The best efforts of our valued staff of agents have been put forth in the meantime with results never before approached in the history of life insurance.

"On the 29th day of December the business aggregated the handsome sum of \$2,564,500, on which the annual premium is \$90,000. In closing our books on the date mentioned, we had in view the requirements of the insurance department; as we could have readily put on our books—had we chosen to keep them open until now—over \$3,000,000.

"Indeed, we can say that the insurances already written exceed that amount. We preferred, however, to close our books promptly, believing that nothing is gained by issuing policies up to the first of March in any one year, and crediting the business to the previous year.

"We have been called upon to pay one claim for \$7,000 under a policy on the life of our first agent, the late Andrew Wilson, in whom the company has lost one of its most efficient workers, and whose place it will be difficult to fill.

"Although it is an unusual course for new companies to pursue, we decided to submit our policies for valuation to an independent actuary, a gentleman of high character and undoubted ability, and his report is before you to-day in the company's general report, showing that a handsome surplus still remains, after providing for all our liabilities, including the statutory reserve on the policies, and in addition thereto a contingent fund. Of the large item for promoting the company, but \$3,555.73 remains unprovided for, which is a most satisfactory state of things, when it would not have been unprecedented had our capital stock been unimpaired at the end of the first year. We therefore congratulate the stockholders on the very satisfactory state of their account.

"The company received 1,035 applications for insurances, amounting to \$2,878,000, there were 915 for \$2,564,500, with annual premium amounting to \$62,000, which were accepted and issued, others amounting to \$119,500 upon 81 lives have been declined and applications for \$115,000 were in course of completion at the date of the report.

"The report would be incomplete did we not tender our thanks to the agents of the company everywhere, for their extraordinary efforts on behalf of the company, and also to the office staff, for whom no hours seemed