

panies reporting in any one year was 68 and the lowest 46, the average being 55. These companies report that about 50 per cent. of all their risks are rodded. From the reports the following facts are gleaned:

The total lightning claims paid by all these companies for the whole eight years on *rodded* buildings was only \$1,464.30, which is an average of \$10.15 per company per year. On *unrodded* buildings, however, they paid lightning claims amounting to the large sum of \$341,065.32, which is an average of \$775.15 per company per year—and the number of unrodded buildings insured was the same as the number of rodded ones. Comparing \$775.15 with \$10.15 we see that for every \$1 paid on rodded buildings \$76 was paid on unrodded ones, or the rods save \$75 out of an expected loss of \$76, if the buildings had not been rodded. This shows an efficiency of 98.7 per cent. It is probable that some improper rodding is included, as the rods were not subject to inspection.

The case is not yet complete, however—in both Ontario and Iowa the reports cover some defective rodding. The true efficiency of lightning rods can only be determined when we consider a large number of properly rodded buildings.

INSPECTED RODS IN MICHIGAN SHOW AN EFFICIENCY OF 99.9 PER CENT.

In Michigan the writer was fortunate enough to procure such a report. The Farmers' Mutual Lightning Protected Insurance Company of Michigan, as its name implies, insures only rodded buildings, and that only after the Company's inspectors have carefully examined the rodding and approved of it. During 1909-1912, inclusive, in a business which for the four years totalled \$55,172,075 risk, this company paid only \$32 for damage to buildings by lightning, in three small claims all traceable to defects in rodding which were overlooked by the Company's inspector.

The Patrons' Mutual Fire Insurance Co. which also does business all over the State of Michigan insures both rodded and unrodded buildings. In the same four years, a total risk of \$59,567,272 this company paid lightning damage on buildings to the extent of \$32,268.78, which is 1,008 times as much as the protected company paid. In conversation the Secretary of the Patrons' Company said that in eleven years they had only had three small claims for lightning damage on rodded buildings, all the rest of their lightning damage being on unrodded ones. They report 20 per cent. of their risks rodded. Deducting these rodded risks we see that the \$32,269 damage occurred on unrodded risks amounting to \$47,753,818. At this rate the loss on \$55,172,075 of unrodded risks, the same risk as the Protected Company had, would be \$37,282, which is 1,168 times as great as the loss on the same amount of properly rodded risks. Thus we see that when the damage to properly rodded buildings amounts to \$1, the damage to unrodded ones amounts to \$1,168, or in other words, rods save \$1,167 out of an expected loss of \$1,168, indicating an efficiency of 99.91 per cent., or a saving of \$999.10 out of an expected loss of \$1,000, thus substantiating the claim made on page 1.

INSURANCE ASSESSMENTS FAVOR RODDED BUILDINGS.

The Protected Mutual began business in October, 1908. Its risks now total \$35,000,000, while the Patrons' Mutual in the same time has only increased from \$12,000,000 to \$19,000,000. So phenomenal has been the success of the Protected Company that it began to draw members rapidly from the other companies. To