A few weeks later we wrote to all the Mutual Companies doing business in Ontario, enclosing a card for reply asking whether they would co-operate with us, and suggesting that if they were prepared to do so they should put a question on their application form asking whether the buildings were rodded. We received favorable replies from thirty-eight companies. In the beginning of December we sent out report forms to be filled by them. Eighteen of them kept a special record of all business from July 1st, 1912, and reported results to us.

IN ONTARIO EFFICIENCY OF RODS IN 1912 WAS 941/2 PER CENT.

From the reports of these eighteen companies, covering more than one-quarter of the Province, it was found that in every 200 farm buildings insured, 42 were rodded, which is 21 per cent., but out of every 200 farm buildings struck by lightning only 3 were rodded—we should have expected 42 if the rods were no good.*

Or stating it in another way, in every 7,000 unrodded farm buildings insured by these companies, 37 were struck by lightning, of which several were burned; but out of every 7,000 rodded ones insured, only 2 were struck (and damaged only)--we should have expected 37 if the rods were no good, hence, in Ontario as rods are installed, an unrodded building is 181/2 times as likely to be struck as a rodded one is. These results cover all kinds of rods used in Ontario and doubtless include some improper rodding. To prevent damage in 35 cases out of an expectancy of 37 means an efficiency of 941/2 per cent.

This result was almost astounding. From scientific considerations we were led to believe that rods must prevent strokes, but we were not prepared for such a sweeping result as this. But you say, "This is only one year's reports, and an-

other year might give the very opposite result."

EFFICIENCY OF RODS IN ONTARIO IN 1913 WAS 92 PER CENT.

During 1913 the insurance companies continued their most valuable co-operaion. Forty of them kept special records for us, sixteen being able to give us reports complete in every particular. They represented twelve different counties, and of the buildings insured by them 26.2 per cent. were reported as rodded, showing an increase since last year of 5.2 per cent. The total number of claims paid for lightning damage to buildings was 193, of which 36 were burned, amounting in all to \$40,904.53. If the rods had no effect—good or bad—we would have expected 26.2 per cent. of the strokes and damage would have been on rodded buildings, which would mean 50 strokes and \$10,715.98, while as a matter of fact the number of strokes to rodded buildings was only 8, and the damage only \$57.64, a saving of \$10,658.34. To save this amount out of an expectancy of \$10,715.98 shows an efficiency of 99.5 per cent.

Of the other twenty-four companies, fifteen were located in the counties above referred to and nine in other counties, in some of which the percentage of rodded buildings is exceptionally high, a fact which we know by personal inspection, so we may safely say that in the whole forty companies the rodded buildings total

26.2 per cent. or more.

NOTE: If the efficiency be calculated from these figures it will not agree exactly with that in the succeeding paragraph. This is because the actual percentage was not exactly 21, but that was the nearest whole number—we could not have a fraction of a building struck.