In the reports of the twenty-four companies we find records of two rodded buildings which were burned, one owned by Mr. Harold Currie, of Strathroy, the other by Mr. Murdock Kerr, Embro. Neither of these buildings was rodded according to standard specifications, the former being particularly defective. It is dealt with in detail on page 34. This building would undoubtedly have been saved if properly rodded. Mr. Kerr's rodding was defective in two regards: first, the systems on the main barn and straw barn were not connected, and, secondly, the ground-rods were down only about 3½ to 4 feet, but they were moist when pulled out for examination. Whether the defects were responsible for the fire we have not been able to determine. The bolt was of the ball type, a ball of fire about as large as a man's head coming straight down and hitting the straw barn.

Taking the whole forty companies together, there were 621 lightning damages totalling $113,459.89. 110 of these buildings were burned. We should have expected 26.2 per cent. of the strokes and damage to be on rodded buildings. This would have given 163 strokes and a loss of $29,726.49. As a matter of fact, only 16 rodded buildings were struck and the loss was $3,917.09, so the rods saved $25,809.40, out of an expected loss of $29,726.49, showing an efficiency of 86.8 per cent. Since Mr. Currie's fire was directly due to the absence of ground-rods at a vital point, it seems only fair to consider this barn as not rodded. If this is done the efficiency of the rods in 1913 would be 92.0 per cent.

Perhaps some may reply: "But maybe those rodded buildings expected to be struck were actually struck, and the rods carried off the strokes harmlessly and so the insurance companies, having no claim to pay, have no record of those strokes." If any take this ground, well and good, because it is an admission that the rods in one way or another brought about the desired result, viz., to save the buildings from damage by lightning.

It may be well, however, to remark that in all probability there is some ground for the objection. Probably more than two of the 37 rodded buildings expected to be struck in 1912 were actually struck, and of those expected to be struck in 1913, probably more than 16 were actually struck, and the rods carried off the current without damage, indeed without any trace of the strokes remaining to show that they ever occurred. The exact comparative value of the *saving* and *preventive* functions of rods we are not able to determine, but scientific considerations now lead us to conclude that the preventive function is by far the more important. As the teachings of science regarding the general value of rods have been so strongly confirmed by practical experience, we may with confidence accept the dictum of science when it says that the *chief* function of rods is to prevent strokes from occurring.

For those who want reports over a longer period of years we have them. During these Ontario investigations our attention had been drawn to Iowa and Michigan, where it was reported some advanced work in rodding had been done. Consequently in September, 1913, by the kindness of the Hon. Mr. Duff, the writer was enabled to visit these States and examine conditions at first hand.

In Iowa Lightning Rods Show an Efficiency of 98.7 Per Cent.

In Iowa some valuable data were available. For the eight years 1905-1912 inclusive, a large number of insurance companies doing farm business only have reported the percentage of rodded buildings covered by their risks, and also the claims paid on rodded and unrodded buildings. The highest number of com-