

# Ontario Department of Agriculture

## ONTARIO AGRICULTURAL COLLEGE

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### Lightning Rods

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#### "LIGHTNING RODS! ARE THEY ANY GOOD?"

Hundreds of times during the past thirteen years this question has been put to the instructors of the Department of Physics. Hundreds of times we have answered "Certainly," only to be immediately confronted with the logical sequent "How do you know?" Until a year ago our chief reason was "Because science says so," but to the farmer that reason has seldom carried conviction, not because he doubted our word particularly, but because he is accustomed to dealing with individual concrete examples, and he has sometime or other known or heard of a "rodded" building having been burned, and with him this one example carried more weight than the teachings of science, no matter how imperfectly the rodding may have been done.

To-day, however, we are no longer dependent upon science alone for our answer, to-day we know from experience that lightning rods, properly installed, are almost absolute protection. Out of every thousand dollars worth of damage done to unrodded buildings by lightning nine hundred and ninety-nine dollars worth would be saved if those buildings were properly rodded! A pretty strong statement, you say. We realize that it is strong. It has taken thirteen years of investigation to compile the data upon which that statement is founded.

Away back in 1901, when Prof. J. B. Reynolds was head of the Department of English and Physics, he began to investigate the efficiency of lightning rods. Five years later, when two departments were formed of one and he chose the Department of English, leaving the writer the Department of Physics, the writer thought he could not do better than continue the work so ably begun. To-day after eight years' further study added to the five we have the problem solved.

#### LIGHTNING RODS SAVE BUILDINGS IF STRUCK.

The first question we asked ourselves was this: "If a rodded building is struck, is it as likely to be burned as an unrodded one which is struck?" Reports were received from a number of selected observers in the various counties, also from insurance companies, but a still greater number were clipped from the daily and weekly papers, and in all cases where the owner's address was learned he was written to for a personal report. In the ten years from 1901 to 1910 reports were received covering 599 buildings that were struck by lightning. Of these