

THE PROTECTION OF FARM BUILDINGS FROM LIGHTNING

INTRODUCTION.

The subject of protecting buildings from lightning is one of growing interest to the farmers of Manitoba. Severe electric storms have done considerable damage to property and have been attended by some loss of life. Naturally, therefore, the farmer has begun to look for some means of preventing these losses.

Two questions are most commonly asked concerning this subject: first, is there any adequate system for protecting buildings from lightning, and second, if buildings can be protected from lightning, what is the most economic and substantial method of protection? This bulletin will discuss these questions as briefly and clearly as possible, explaining methods of protection and materials used, to the end that the farmer can put up his own lightning rods if he cares to do so.

PROTECTION FROM LIGHTNING.

It is an accepted fact that buildings can be adequately protected from lightning. The leading electrical and scientific authorities of the day are a unit in this matter. Electric railroads and telephone companies protect their equipment from lightning. Large factories and power plants protect their chimneys from danger from electrical discharges by use of points and grounds. It has been conclusively proven that buildings properly rodged and grounded with metallic conductors are protected from destruction from electric storms. Sometimes a discharge of lightning is so strong as to almost defy the laws of electricity, and some damage is done to parts of a protected building; but this damage is slight, as the metallic conductor handles enough of the discharge to afford protection from fire in these extreme and unusual cases.

EXPLANATION OF DISCHARGES OF LIGHTNING.

It is not the object of this bulletin to go into a detailed technical discussion of the phenomena of lightning, except whatever may be necessary for the understanding of the practical phases of protection from lightning. Generally speaking, there are two kinds of electricity, known for the want of better names as positive and negative electricity. One kind is not produced without also producing the other. These opposite kinds of electricity have a strong attraction for each other,