THE CHRONICLE.

HOW TO INSTAL LIGHTNING RODS.

The Ontario Department of Agriculture which has issued a bulletin on the efficiency of lightning rods, gives the following summary of general directions for properly installing them:

KIND OF RODS.

Material—Copper, aluminum or galvanized iron, preferably the first because of durability. Aluminum may prove equally durable. Combinations are not advised.

Weight—Copper—At least 3 ounces per foot. Aluminum—At least 2¼ ounces per foot. Steel (iron)—At least 4¼ ounces per foot.

Form—Any form that will give durability and convenience of installation.

GROUND CONNECTIONS.

Depth—Down to perpetual moisture. At least 8 feet deep.

Number—On an oblong building, at least two. On an L- or T-shaped building, at least three. On a U-shaped building, at least four.

Location—Preferably at opposite corners. Groundrods should not be bunched, but should be distributed as well as possible.

Method—In deep soil drill a hole at least eight feet deep and run cable down. In shallow soil, attach cable to metallic ground-plate, down as deep as possible; or run it into a well or a stream or a crevice in the rock. If none of these are feasible, put cable as deep as possible and lay large, flat stone over it.

SYSTEMS.

Run cable from ground up corner to eave, thence to ridge, along ridge to other end, thence down to eave, thence to other ground, making a complete circuit.

All cables should be connected in one system.

No stubs or dead ends should be left ungrounded.

Caution—Cables should be protected from ground six or eight feet up by nailing boards around them.

ATTACHMENT.

Fasten cable to barn with nails, staples, clips or metal "dispersers."

Caution-Do not use insulators.

POINTS.

Number-20 to 30 feet apart.

Location—On ridge, first ones not over five feet from end. On or beside chimneys or cupolas. On dormers. Also on silos.

Height—Four to five feet, except those on or beside chimneys, cupolas or similar prominences; these must extend a least eighteen inches above the highest part.

Form-Strong tubes, of same weight and material as rods.

METALLIC PORTIONS OF STRUCTURE.

Roof-gutters-Top connected to rod, and bottom grounded.

Eave-troughs and Conductor-pipes-Free end of eave-troughs connected to rod, and conductor pipe grounded.

Hay-fork Track-Both ends connected to rod.

Tanks-Connected to rod above, grounded below.

Windmill-Connected to rod above, shaft grounded below.

Metallic Roof—Grounded at two or four corners, not from peak under any consideration.

Points should be used on the ridge and other prominences.

WIRE FENCES.

In field—A grounding at least every twenty rods. In yards—At the four corners.

At building-Ground at first post from building.

Weight of Groundings-Equal to three No. 12 or one No. 9 wire.

How Made—Stapled on posts in contact with all wires of fence, and extending at least three feet in the ground, and projecting above fence.

Shade Trees-Protect where feasible.

CANADIAN PRICES UNDER WAR CONDITIONS.

The Department of Labor has issued a bulletin summarizing the general price situation in Canada after one month of war. Since the war began the Department has kept closely in touch from day to day with the situation in leading wholesale markets and with retail prices in each locality, having 10,000 inhabitants or over, throughout the Dominion.

The Department's index number of wholesale prices based on 272 articles selected over the whole field of production and consumption moved up from 135.5 in July to 137.7 in the closing week of August. These numbers are percentages of the general level of prices in Canada between 1890 and 1900.

The rise of 2.2 points indicated, is great, but not unprecedented. Variations of two or three points within a few weeks have happened several times previously. For example, the readjustment of prices to a higher level which took place at the close of 1911, sent the department's number up four points in a single month and during the business boom of the fall of 1912 the number went up over two points for a couple of months in succession.

In Canadian wholesale markets the chief rises of the past month occurred in grains, hog products, drugs and chemicals, miscellaneous goods (notably flour, sugar and tea), textiles, liquors and tobaccos. Some of the advances are directly attributable to the war, others to usual conditions. A few declines have taken place, though none of very much importance.

The Department's daily observation of retail prices is extended over 57 localities, including practically every town of 10,000 in Canada, and covers some thirty odd communities, or about 85 per cent. of the consumption of the ordinary family for food and fuel.

The records for the past month show that the most important advances have been those in flour and sugar. In practically every city flour has gone up from 2-5 to 3-5 of a cent. per pound.

Sugar, likewise, has gone up almost universally by from I to 2 cents and in a few cases more. Yellow sugar has moved up at about the same pace as granulated, though the wholesale rise in the former has been greater.

Mr. E. T. Miller has been appointed branch manager at Regina, Sask., of the Imperial Life.