

METHOD OF FASTENING CABLE.

Cable should be fastened directly to the building by means of 13 $\frac{1}{2}$ -inch galvanized fence wire staples, put in every two or three feet apart. It was once thought that the cable should be insulated from the building, but this has been found to be unnecessary. If the staples split the wood, it is well to have holes bored for them with a brace and gimlet bit.

POINTS.

Copper or iron points may be used. They should be strongly fastened vertically to the peak of the roof, not more than twenty feet apart. Points should be placed on cupolas and chimneys. It was once thought that points should extend quite high above the buildings, but this is no longer considered necessary. It is sufficient if the tips of the points are from twenty to thirty-six inches above the parts of the building upon which they are located; twenty inches above the chimney, and thirty-six inches above the peak when the point is on the ridge of the roof. The ends of the points should be sharp. This allows the negative electricity to pass off the point and become neutralized, preventing the building from a stroke of lightning if the electric charge gives sufficient time to become dissipated, and at least tending to lessen the strength of the stroke by making it cover a longer period of time. Figure 1 shows two points which can be readily and inexpensively made on almost any farm, snipped with repair tools. Both points are fastened to the horizontal cable that runs along the peak of the roof by means of 3 $\frac{1}{8}$ -inch galvanized iron tees such as are used in ordinary pipe work, but the method of holding the points in a vertical position is different in each case. The point to the left is made of 3 $\frac{1}{8}$ -inch round iron; the upper end is drawn out at the forge and filed to a sharp point; the lower end has a few threads cut on it. The tee is drilled and tapped at the proper angle to tightly fit the threads on the lower end of the point, and the horizontal cable is passed through the tee, the point being screwed down tightly against the cable. The following method is used to hold the point in a vertical position: A piece of 1 $\frac{1}{2}$ -inch round iron, about ten inches long, is flattened out as shown in the figure and drilled and counter-sunk for three No. 10 screws. The upper end, which is left round, is threaded with a 3 $\frac{1}{8}$ -inch pipe die, so that it can be screwed into the galvanized tee. This piece of iron is fastened to the slope of the roof, as shown in Figure 6, and can be readily bent to hold the rod upright.

The point on the right (Fig. 1) is very simple in construction. It is a short piece of the five-sixteenth inch galvanized cable with four of the strands of the upper end spread and the other three twisted