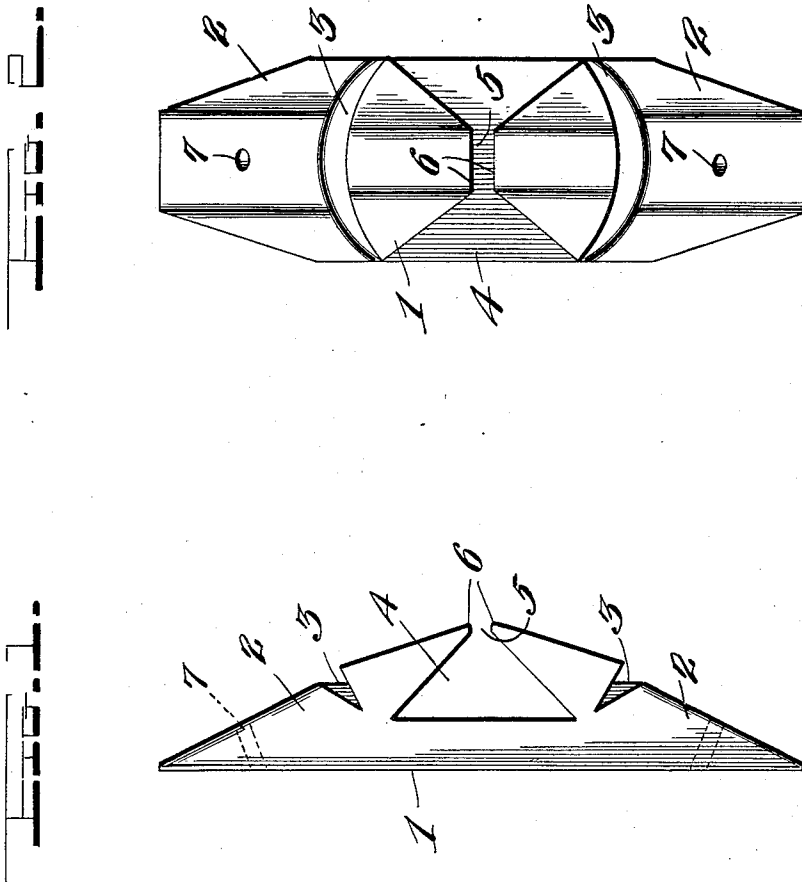


J. M. SWEENEY.
INSULATOR.
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1,008,087.

Patented Nov. 7, 1911.



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES M. SWEENEY, OF HOWELL, FLORIDA.

INSULATOR.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JAMES M. SWEENEY, a citizen of the United States, residing at Howell, in the county of Santa Rosa and State of Florida, have invented certain new and useful Improvements in Insulators, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to insulators and more particularly to that class of insulators which are used for holding telephone wires and transmission lines to the sides of posts, or the like.

One object of this invention is to provide an insulator which will normally tend to hold the wires securely thereto, without the necessity of having tie wires wrapped around them.

Another object of this invention is to arrange this insulator so that the nails, or other securing means, will be disposed through holes angularly drilled through the insulator in order that a secure anchoring arrangement may be had.

A further object of this invention is to have this insulator of a design that can be readily and cheaply manufactured.

Further objects of this invention will become apparent as it is more fully set forth.

In the usual type of insulators, means are required to tie the wires to the same, usually by means of an additional tie wire, or through the medium of an extra piece clamped upon the wires. This invention eliminates the absolute necessity of the use of a tie wire, or similar means, because of the arrangement of its parts, and their shape, which is adapted to clamp the wire together in a somewhat wedge fashion. Instead of having the flanges for the nails, or other securing means, projecting from the main portion of the insulator in the usual manner, this device has its flanges extending slantingly from the main portion of the insulator to the ends thereof, in a manner clearly illustrated in the drawings.

Referring particularly to the drawings: Figure 1 represents a view in elevation of an insulator embodying this invention; Fig. 2 is a plan view of Fig. 1.

Similar reference characters refer to similar parts throughout the drawings.

In the accompanying drawings which illustrate by way of example, an embodiment of this invention, 1 represents the main

base portion of the insulator which has its ends, of flanged portions 2 beveled toward the ends, in the manner clearly shown in Fig. 1. The portion of the insulator above the flanged portion is a V shaped groove 3, on the sides to receive the tie wire. One of these V shaped grooves being disposed on both sides of the insulator. In the middle portion of the insulator is a wedge shaped groove or slot 4 having its narrow ends disposed to the upper portion of the insulator, so that a wire, pushed through the intervening space between the projecting toes 6 of the insulator will be prevented from forcing its way out of the slot 5, under ordinary conditions.

When the wire, or wires are placed in the slot 5 they tend to return to their normal size and fill up the entire space in the slot. The resiliency of the insulation and the wires tending to keep them securely within the insulator. Of course it is understood that the size of this slot is so arranged as to assist in this resilient action, that is, its size if made a little smaller than the normal size of the wires, with their insulation.

Referring particularly to Fig. 2, the effect of the insulator will be readily seen on the wire, and the reason why the same cannot be pulled laterally through the insulator under normal conditions, is apparent because the area of the wire's insulation will be compressed within the wedge shaped slot 4 and the wire on each side of the insulator, that its insulation will take up more area than that within the slot. When this device is used, the same is usually put flat up against the post or the like to which the insulator is to be fastened, and the nails are disposed within the holes 7 which are slantingly disposed through the flanges 2, and the nails are driven into the post. The slanting direction of the nails will tend to form a securer hold on the post. Should it be desired to install a number of wires on this line, the same are placed one by one through the opening between the toes 6 of the upper portion of the insulator, until they are placed within the clamping portion, or slot 4 of the insulator. These wires will of course tend to expand and fill up this space so that their total diameter will be much greater than the width between the toes 6. The wire is then tied in the usual manner by twisting a wire around it.

While this device is particularly intended

for the use of telephone wires, it can be used for solid wires, such as are used for transmission and other purposes, and it is not desired to limit the invention in any way, otherwise than necessitated by the prior art, as many modifications in the construction of this invention may be made without departing from the principles thereof.

10 While this device is an insulator, it is also a bracket and is particularly intended to hold only one live wire at a time, the V shape space being made large enough for the ordinary size wire used. When the line
15 wire is placed in between the toes it will drop into the V shape groove and will jam to a certain extent, but the weight of the wire between one bracket and another will draw the wire sufficiently through the insulator to conform with the sag. The sag
20 permitted will be sufficient for the span to be covered and the insulator is so arranged that the amount of strain put on the wire at each insulator or bracket will be as uniform as possible, at the same time it will be
25 taut throughout.

Having thus described this invention what is claimed is:

1. An insulator comprising a main body portion having its ends slantingly flanged, 20 having holes therethrough, a pair of toe pieces disposed on the upper side of said body and so arranged to form a wedge shaped groove between them, and V shaped grooves between them and the flanged 35 portions.

2. An insulator for holding wires comprising a body portion having a flat bottom and having its ends slantingly disposed therethrough, a pair of toes disposed on the 40 upper portion of said body and disposed so as to form an inverted wedge shaped slot, and having the portion between the toes and flanged portion cut out in order to form a V shaped groove to receive tie wires and 45 the like.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

JAMES M. SWEENEY.

Witnesses:

A. F. SCHELLY,

MATT F. WININGHAM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."