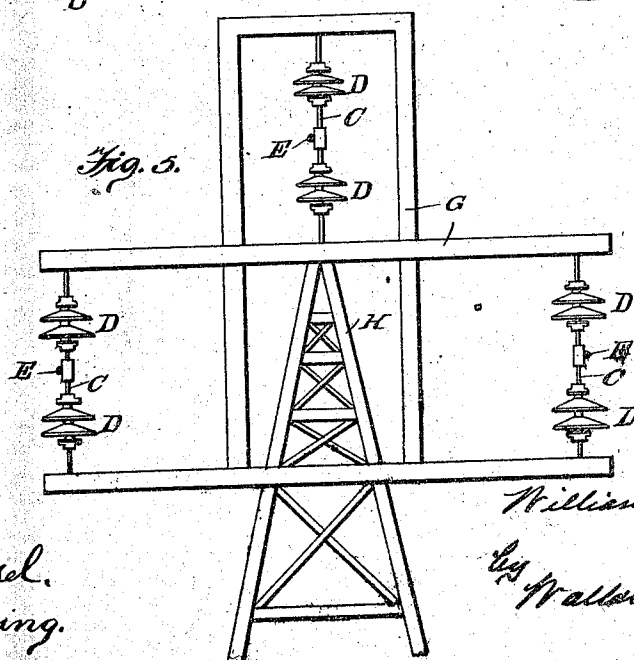
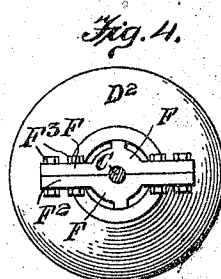
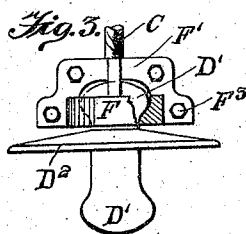
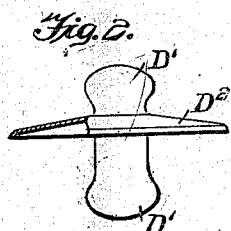
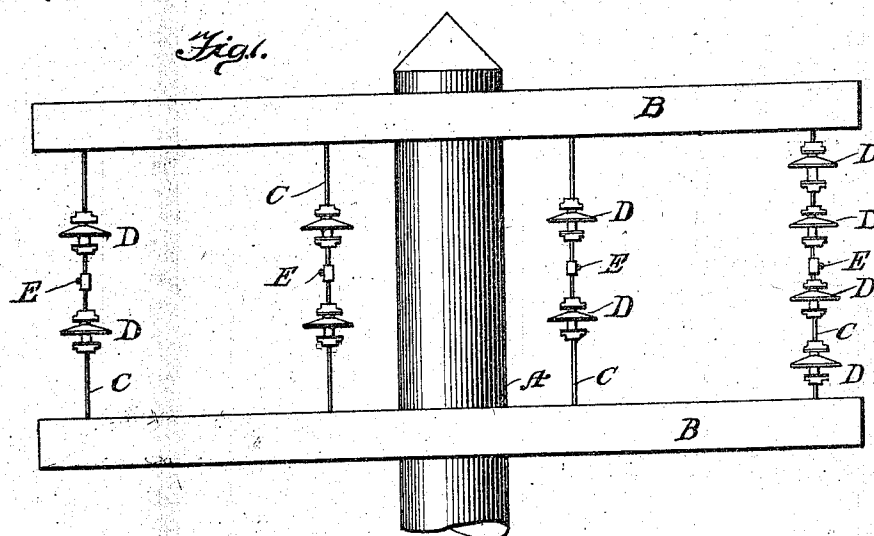


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INSULATOR.
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947,885

Patented Feb. 1, 1910.



Witnesses
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INSULATOR.

947,885.

Specification of Letters Patent.

Patented Feb. 1, 1910.

Application filed April 29, 1907. Serial No. 370,883.

To all whom it may concern:

Be it known that I, WILLIAM S. CONE, a citizen of the United States, residing at Visalia, in the county of Tulare and State of California, have invented certain new and useful Improvements in Insulators, of which the following is a specification, reference being had therein to the accompanying drawing.

The object of this invention is to provide for safely and conveniently insulating and supporting aerial electric conductors, especially such as carry currents of high voltage. It is very desirable that the supports for such conductors should combine great strength, moderate weight, practical safety and good insulation, and it is advantageous to have low cost with adaptability to meet the practical conditions in aerial lines for different purposes. The ends suggested are attained by securing the conductor to a transverse cable, between two insulating blocks interposed in the cable, itself supported in any suitable manner. By "cable" is here meant any rope, wire, or the like, the one word being used for brevity and convenience.

My invention may have different embodiments, and the one selected for illustration is shown in the accompanying drawings, in which—

Figure 1 shows in elevation a vertical pole supporting devices illustrative of my invention. Figs. 2, 3 and 4 are detail views of parts seen also in Fig. 1. Fig. 5 shows a slightly modified construction, the pole being replaced by a tower.

In Figs. 1, 2, 3, 4, A represents an ordinary vertical pole bearing cross-arms B, B which are connected at intervals by vertical cables C, C in each of which are interposed insulating blocks D, D at some distance apart. To the cable, between the blocks D, D is secured, in any suitable manner, the conductor E to be insulated and supported. As shown, each insulator consists of a short heavy bar, which may be of porcelain or other simple or composite insulating material, having enlarged preferably spherical ends D' and provided between its ends with a downwardly extending skirting D² for keeping a portion of the block dry. Each end D' of the block is held in a divided ring F integral with two plates F', F² having, upon the side opposite the ring, a channel to receive the end of one segment of the cable

C, clamped in the channel by means of bolts F³ passing through both plates. The heads D' are not clamped fast in the rings but form with them freely acting universal joints. The outer segments of the cable may be secured to the cross-arms in any suitable manner. One of the cables C is shown as having two insulating blocks, in series, on each side of the conductor, and in general the number of blocks may be increased with the voltage where any high tension currents are carried, and thus current of any tension may be safely carried with no special appliances whatever.

Fig. 5 shows several line wires carried by a preferably insulated framework G supported in a skeleton tower H. The framework may obviously be such as to carry any desired number of wires, and if a well insulated platform be provided for the line-man, work on these lines may be done without interrupting the current. In any case, lines may be repaired or lines may be added without disturbing the transmission by other lines. The blocks are here shown with more than one skirting.

My invention not being limited to any particular construction, I do not wish to limit my claims to any particular construction.

What I claim is:

1. As an insulating support for high tension conductors, a divided cable having its ends provided with suitable clamps, and a bar of rigid insulating material having rounded ends loosely held in said clamps, respectively, substantially as set forth.

2. The combination with the rigid block of insulating material having at its ends rounded heads, of the two part clamps each having the ring to engage one of said heads and the recess for clamping the end of a cable, and means for detachably binding the two parts of each clamp together, substantially as set forth.

3. For supporting high tension conductors, a cable having as a segment a bar forming a material part of the cable's length and consisting entirely of rigid insulating material, said bar being provided with an inclined skirting adapted to keep a portion of the bar dry, substantially as set forth.

4. The combination with two widely separated arms suitably supported, of an approximately vertical cable connecting the free portions of said arms, and a conductor

secured to the medial portion of said cable, said cable having on each side of the conductor a segment forming a material portion of the cable's length and consisting of a
5 bar of rigid insulating material provided with an inclined skirting to keep a portion of the bar dry, substantially as set forth.
5. The combination with a tower provided with widely separated rigid arms one above
10 the other, of a cable connecting the free portions of said arms, and a transverse conductor secured to the medial portion of the

cable, said cable being divided upon each side of the conductor and having its adjacent ends provided with suitable clamps connected by a rigid bar of insulating material with its rounded ends loosely held in the clamps, respectively. 13

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

WILLIAM S. CONE.

Witnesses:

P. PRUYHOOD,

FRED G. HAMILTON.