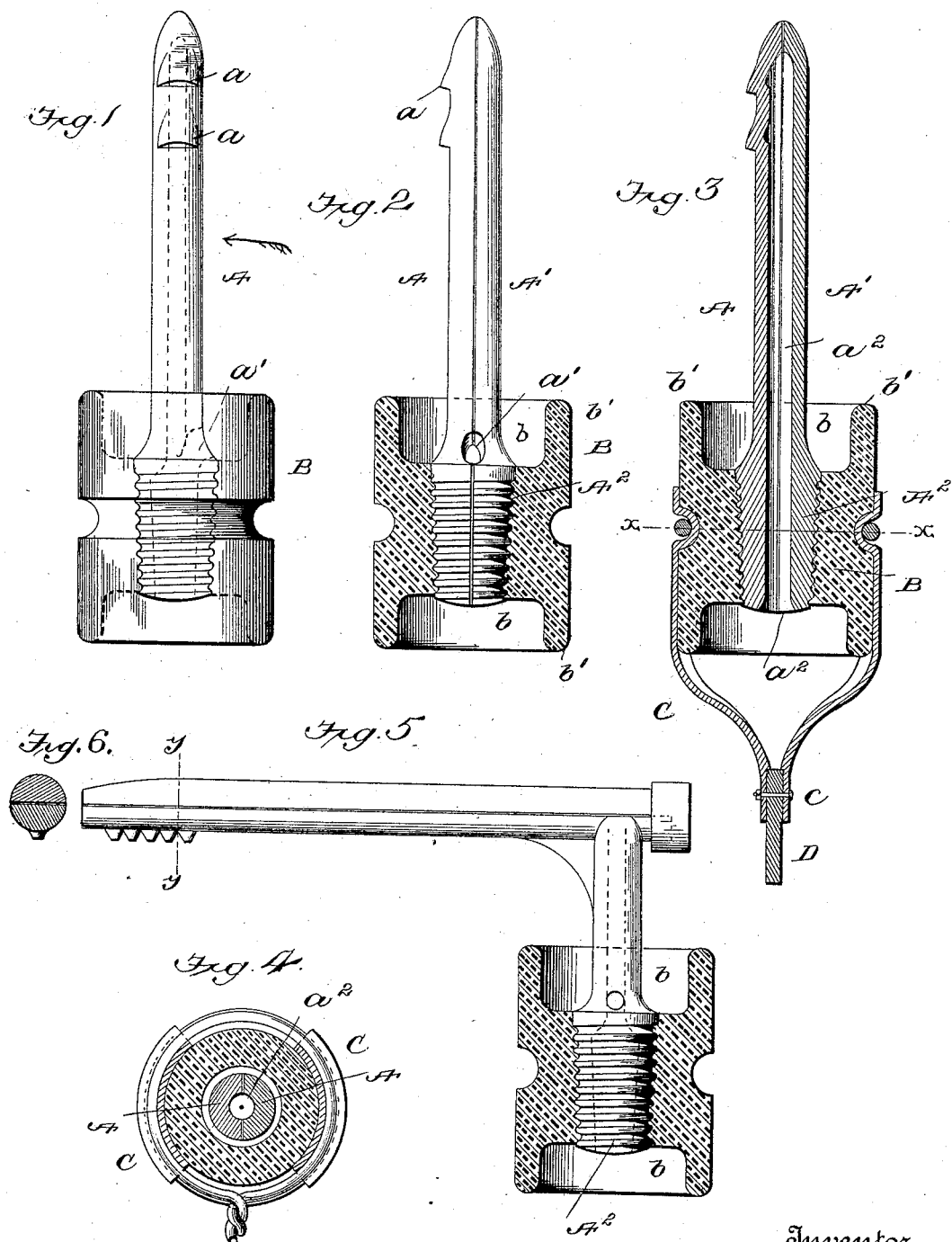


(No Model.)

D. N. OSYOR.
CONDUCTOR SUPPORT AND INSULATOR.

No. 526,498.

Patented Sept. 25, 1894.



Witnesses

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DAVID N. OSYOR, OF COLUMBUS, OHIO, ASSIGNOR TO JOSEPH A. JEFFREY,
OF SAME PLACE.

CONDUCTOR-SUPPORT AND INSULATOR.

SPECIFICATION forming part of Letters Patent No. 526,498, dated September 25, 1894.

Application filed November 29, 1893. Serial No. 492,350. (No model.)

To all whom it may concern:

Be it known that I, DAVID N. OSYOR, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Conductor-Supports and Insulators, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in conductor supports and insulators for electric light wires, trolley lines, &c., and consists in the novel arrangement and combination of parts to be hereinafter described and pointed out in the claims.

It is well known that there are serious difficulties to be met with in using the ordinary insulators, especially in wet, or freezing weather, as the water freezes about the wires and short circuits the current, rendering the wire useless and making work over the wires an impossibility. Especially is this true in mines when electrical work is going on.

My invention is designed to overcome these difficulties.

Figure 1 is a side view of my device. Fig. 2 is a side view looking in the direction of the arrow in Fig. 1. Fig. 3 is a longitudinal section with the trolley line hanger attached. Fig. 4 is a section on line $x-x$ Fig. 3. Fig. 5 shows a modified hanger. Fig. 6 is a section on line $y-y$ Fig. 5.

The support is formed with two parts A, A', being divided longitudinally for a purpose to be hereinafter set forth. Each part A, A', is cast with a longitudinal groove a^2 and a lateral groove or duct a' , so that when the two parts A, A', are put together there is an aperture in the support extending into and connecting with a central duct. On one of the parts A are projections a adapted to engage with the material into which the support is driven and prevent its withdrawal. The part A' is more or less wedge-shaped, for a purpose to be described.

The end A^2 of the support is a little enlarged and has a tapering screw thread, on which is screwed a glass insulating spool B having flanges b' on both ends, and having a groove b^2 extending around its periphery at a central point.

It will be seen that the top of the flange b' extends some ways beyond the aperture a' , the latter being a little above the end face of the spool B.

The conductor hangers C which I use for electrical haulage, conform to the configuration of the spool B and extend downward below it, and are bolted or otherwise secured at c to the conductor or trolley line D. The hangers are wired or secured in any suitable way to the spool B. It will be understood that I do not limit myself to the use of these hangers, for I dispense with them when using my device with telegraph or telephone wires.

As my device is specially adapted for use in coal mines, I will describe the method of putting up the lines there.

A hole is drilled in the roof, and the part A, is driven therein as far as may be desired. Then the part A' is driven in beside it, (it acting as a wedge and driving the projections a , into the coal) until the screw threads correspond. Then the spool B is screwed on, and the hangers with the conductors or the wires themselves are attached thereto.

It is well known that there is a constant dripping of water down on the supports, which acts to make short circuits; but in my device the water runs down into the cup formed by the flanges b', b' , and runs through the ducts a', a^2 , to the floor beneath without overflowing and running down on the wires.

When the support is driven downward so that the part A^2 is uppermost it will be seen that the water will run through the apertures in the same way.

In freezing and thawing weather, I find by actual experience that the ice melts around the iron quicker than around the glass, so that a way is made for the water to run through the ducts.

In Fig. 5 a hanger is shown having the same essential features but being also adapted for use in places where those of the other style cannot be so well employed. Here the perforated part which directly supports the insulator B extends at right angles from the part which is driven into the wall or support. One of this kind can be used advantageously in many of the numerous angles or restricted spaces found in coal mines and similar places.

While I have described my device as adapted for mine work, yet it will be seen that it can be very well used with telephone and telegraph wires, as well as electric light

5 wires.

What I claim is—

1. A conductor support having two parts separable on longitudinal lines, in combination with an insulating spool, secured around
10 outside of said support, and means for fastening said spool on said support, substantially as set forth.

2. A conductor support having two longitudinally separable parts, screw threaded on one end, and an insulating spool adapted to
15 be screwed thereon substantially as set forth.

3. A two part conductor support, one part A of which is provided with spurs or serrations a, a , and the other part A' being wedge
20 shaped, and adapted to slide on the said part A, in combination with an insulating spool secured to said support substantially as set forth.

4. The combination with the support, of the
25 insulating spool having a recessed top, said support having a duct leading there-through and communicating with the recess whereby

water which collects in said recessed top may pass through said duct, substantially as set forth.

5. The combination with the support, of the insulating spool having a recessed top, there being an aperture or duct leading from said
30 recess through the spool, whereby water which collects in the recess may be discharged, substantially as set forth.

6. The combination with the insulating spool, of a support therefor having a duct extending from a point near the upper end of the spool to a point near the lower end of the
40 spool, substantially as set forth.

7. The combination with an insulating spool having flanges b', b' , of a support having a duct extending from a point lower than the top of the upper flange, to a point above
45 the lower edge of the lower flange, substantially as set forth.

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

DAVID N. OSYOR.

Witnesses:

H. H. BLISS,

MARCUS B. MAY.