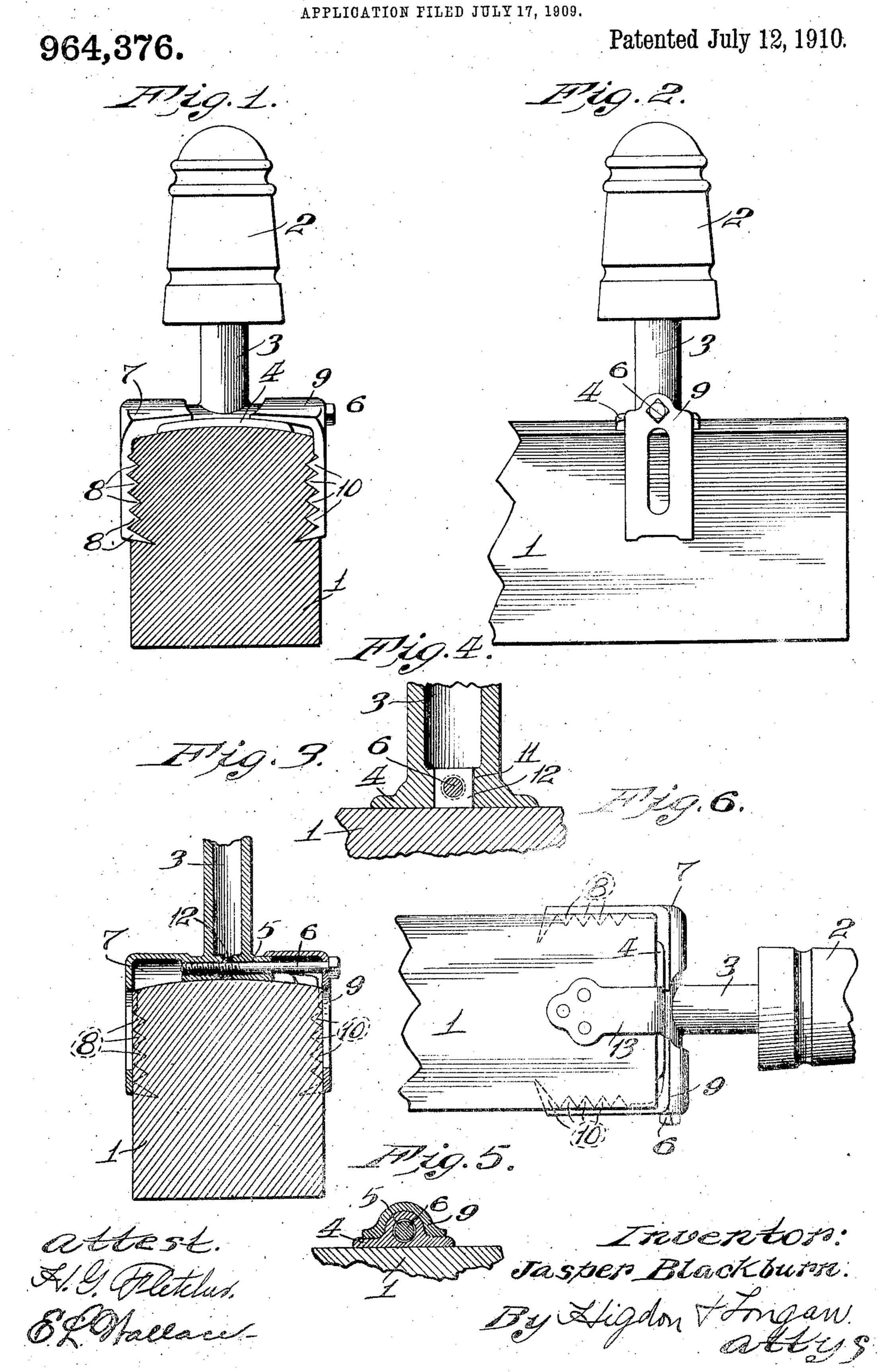
### J. BLACKBURN.

### INSULATOR SUPPORT.

APPLICATION FILED JULY 17, 1909.

Patented July 12, 1910.



# UNITED STATES PATENT OFFICE.

JASPER BLACKBURN, OF KIRKWOOD, WISSOURI.

#### INSULATOR-SUPPORT.

964,376.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JASPER BLACKBURN, a citizen of the United States, and a resident of Kirkwood, St. Louis county, Missouri, 5 have invented certain new and useful Improvements in Insulator-Supports, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, 10 forming a part hereof.

My invention relates to improvements in insulator supports, the object of my invention being to construct an adjustable support which may be readily applied to cross arms 15 of various dimensions, which may be easily shifted on the cross arms to provide for the spacing of line wires and may be readily detached without injury to the support or cross

arm. For the above purposes my invention consists in certain novel features of construction and arrangement of parts as will be hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying 25 drawings, in which:

Figure 1 is a side elevation of the support and insulator in position on a cross arm; Fig. 2 is an end elevation of the support and insulator in position on a cross arm; Fig. 3 is a vertical sectional elevation of the support and cross arm with a portion of the insulator pin broken away; Fig. 4 is an enlarged detailed sectional elevation illustrating the arrangement of the base of the pin, 35 whereby a nut is removably positioned in the base of the pin; Fig. 5 is a detailed sectional elevation illustrating the arrangement of removable jaw and support base; and, Fig. 6 is a plan of the modified form of support <sup>40</sup> arranged on the end of a cross arm.

Referring by numerals to the accompanying drawings: 1 designates a cross arm of ordinary construction, 2 an insulator of the ordinary glass type which is internally threaded and 3 designates the support or pin which is externally threaded at its upper end to be threaded to the insulator 2.

The support or pin is provided with an integral base 4, preferably made of a greater <sup>50</sup> transverse dimension than the support 3 and provided with a core or opening 5 for the insertion of a bolt 6. A clamping jaw 7 is formed integral with the base 4 and arranged to extend over the top and side of 55 the cross arm 1, and is provided with teeth 8 which seat in the cross arm. A movable clamping jaw 9 is arranged for movement relative to the jaw 7 and is provided with teeth 10, similar to the teeth 8 of the jaw 7, and is secured to the jaw 7 by means of the 60 bolt 6.

The base 4 is provided with an angular nut seat 11 and a nut 12 is passed therein to coact with the bolt 6, and, as shown, the core 5 is formed larger than the bolt 6 for 65 purposes hereinafter made clear.

In positioning my support on a cross arm, the member comprising the support 3, base 4, jaw 7 and nut 12 is placed at the desired point on a cross arm and the jaw is struck 70 with a hammer to seat the teeth 8 in the cross arm, the jaw 9 is then positioned on the cross arm opposite the jaw 7, with its inner upper portion riding over the base 4 and is struck to seat the teeth 10 in the cross arm. The 75 bolt 6 is then inserted through the member 9, through the right hand end of the core 5 and seated in the nut 12 and brought to a position to secure the jaws 7 and 9 against movement relative to each other and the bolt pass- 80 ing freely through the right and left hand ends of the core 5 in the base.

It is obvious that by the arrangement of the removable screw seat for the bolt, the bolt and seat may be removed after having 85 been used for some time and corroded or rusted by the element without injury to the support or clamping jaws.

I do not wish to be understood as limiting myself to the use of a removable seat for the 90 bolt as it is obvious that the bolt may be either threaded in the core 5 or extended on through the jaw 7 and threaded in the overhanging wall of the jaw 7.

It is obvious further that the jaw 7 may be 95 formed separate from the base 4 and the bolt extended through the jaw 9, base 4 and seated in the threaded aperture formed in the overhanging wall of the jaw 7.

In the modified form, shown in Fig. 6, I 100 have provided a support especially designed to be employed over the end of a cross arm. When employed in this position the weight of the insulator and wire carried thereby will exert great strain upon the clamping 105 jaws and to provide for this I have arranged an arm 13, formed integral with the base 4 which projects upwardly along the end, thence along the top of the cross arm and is fastened by nails, screws or the like.

I claim:

1. An insulator support comprising a pin,

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a base formed at a right angle to and integral with the pin, jaws arranged to embrace a cross arm and engage said base and means for securing the jaws to the cross arm.

2. An insulator support comprising a pin, a base formed integral with the pin, a jaw formed integral with the base, a movable jaw engaging the base and means for clamp-

ing the jaws to a cross arm.

3. An insulator support comprising a pin, a base formed integral with the pin, there being an angular opening formed in said base, a jaw formed integral with the base, a movable jaw, a nut seated in the angular opening and a bolt extended through the movable jaw and seated in said nut.

4. In combination with a cross arm, an insulator support, a base formed at a right angle to and integral with the support, jaws arranged to engage the base and embrace the cross arm, teeth carried by the jaws and means to secure the jaws to the cross arm.

5. In combination with a cross arm, an in-

sulator support, a base formed integral with the support, a jaw formed integral with the 25 base, a movable jaw engaging the base and means for clamping the jaws to the cross arm.

6. An insulator support comprising a base portion adapted to be positioned on a cross 30 able jaw positioned on said base portion, a jaw carried by said base portion, an adjustable paw positioned on said base portion, a screw-threaded bolt passing through the upper portion of said adjustable jaw and a 35 screw-threaded opening disposed adjacent the base portion for receiving the screw-threaded portion of said bolt:

In testimony whereof, I have signed my name to this specification, in presence of two 40

subscribing witnesses.

## JASPER BLACKBURN.

Witnesses:

E. E. LONGAN, E. L. WALLACE.