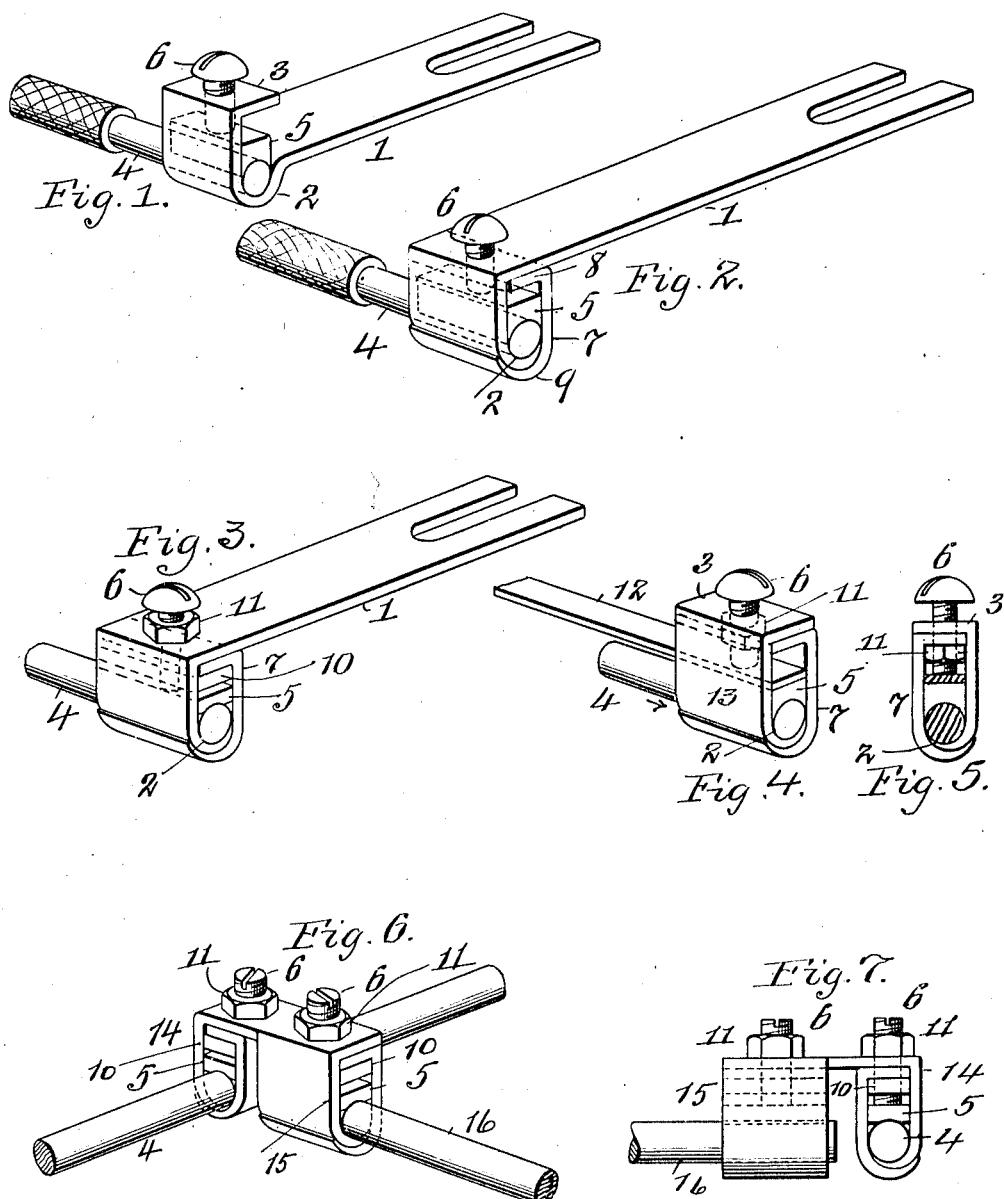


T. E. MURRAY.  
BINDING DEVICE FOR CIRCUIT CONDUCTORS.  
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970,087.

Patented Sept. 13, 1910.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

THOMAS E. MURRAY, OF NEW YORK, N. Y.

## BINDING DEVICE FOR CIRCUIT-CONDUCTORS.

970,087.

Specification of Letters Patent. Patented Sept. 13, 1910.

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To all whom it may concern:

Be it known that I, THOMAS E. MURRAY, a citizen of the United States, residing at New York, in the county of New York and 5. State of New York, have invented a certain new and useful Improvement in Binding Devices for Circuit-Conductors, of which the following is a specification.

The invention is a binding device for circuit conductors, and consists in the combinations more particularly pointed out in the claims.

In the accompanying drawing—Figure 1 shows my binding device in perspective. 10 Fig. 2 is a similar view of a second and modified form thereof. Fig. 3 is a similar view of a third and modified form. Fig. 4 is a similar view of a fourth and modified form. Fig. 5 is a sectional view of the form 20 shown in Fig. 4. Fig. 6 shows in perspective a double binding device of the form shown in Fig. 3, and Fig. 7 is a side elevation of said device.

Similar numbers of reference indicate like 25 parts.

1 is a plate of metal bent at 2 to form a loop, and at 3 to form a flange extending over said loop. A circuit conductor 4 being seated in the loop 2, a block 5 having a 30 concave recess on its under side is applied to said conductor, and a screw 6 inserted through a suitably threaded opening in flange 3, clamps the block 5 and said conductor firmly to said plate. The plate 1 may 35 form a circuit terminal which, by means of the binding device, is connected to the conductor 4. Instead of making a loop at the junction of the bent over end of plate 1 and the body portion of said plate, I may 40 turn said end at right angles and then form the loop 2 by curving the extremity of said bent over end, as shown in Fig. 2. In such case the conductor 4 is seated, as before, in the loop, the block 5 applied, and the screw 45 6 inserted through the body of the plate to bear on said block. In order more completely to inclose the device, I may add a metal cover 7 which at its upper end is bent to form a flange 8, and at its lower end to 50 form a loop 9. This cover is applied as shown in Fig. 2, so that the loop 2 is received in the loop 9, and the flange 8 which has an opening to receive screw 6 comes above block 5, so that the same screw serves 55 to secure said cover in place.

In the form shown in Fig. 3, the construc-

tion is the same as in Fig. 2, with the addition of a spacing bar 10 interposed between block 5 and flange 8 of cover 7, and of a clamping nut 11 on screw 6. The screw 6 60 then passes through the body of plate 1, flange 8, and bar 10 and bears as before on block 5, and is clamped by nut 11.

In Figs. 1, 2 and 3 the conductors connected by the binding device are disposed at 65 right angles. In Fig. 4 the conductor 12 is parallel to conductor 4, and is placed immediately upon the block 5 to which it is secured by the screw 6. The flange 3 and loop 2 instead of being made part of a plate 70 1, which is itself a circuit terminal, are formed from a separate plate 13. The clamping nut 11 is here placed on the screw 6 between conductor 12 and flange 8 and bears on said flange.

In Figs. 6 and 7 the plate 13 has an end portion 14 bent to form the loop 2 for conductor 4, and a side portion 15 bent to form a similar loop for conductor 16. Blocks 5 and spacing bars 10 are inserted as in Fig. 3, 80 and two screws 6 provided with clamping nuts 11 are employed. By this means I connect two conductors 4 and 16 at right angles to one another, but without direct clamping of one conductor upon the other.

I claim:

1. A binding device for electric conductors comprising two plates having hook-shaped edges, seated one within the other, and having inwardly turned mutually overlapping 90 flanges opposite to said hooks, and a clamping screw passing through both of said flanges to engage a conductor seated in the inner hook.

2. A binding device for electrical conductors comprising a plate bent to form a loop, a block in said loop, a spacing bar on said block, and a screw passing through said plate and said bar and bearing on said block.

3. A binding device for electrical conductors comprising a plate bent to form a loop, a block in said loop, a cover plate receiving said loop and having a flange extending over said loop, a screw passing through said plate and said flange, and a 100 nut on said screw bearing on the under side of said flange.

4. A binding device for electrical conductors comprising a plate bent to form a loop, a block in said loop, a conductor on 110 said block, a cover plate receiving said loop and having a flange extending over

said loop, a screw passing through said plate and said flange and bearing on said conductor, and a nut on said screw bearing on the under side of said flange.

5 5. A binding device for electrical conductors comprising a plate having two extensions disposed relatively at an angle and each bent to form a loop, a block in each loop, cover plates receiving said loops and 10 each having a flange extending above its

respective loop, screws passing through said plates and flanges and bearing on said blocks, and clamping nuts on said screws.

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

THOMAS E. MURRAY.

Witnesses:

GERTRUDE T. PORTER,  
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