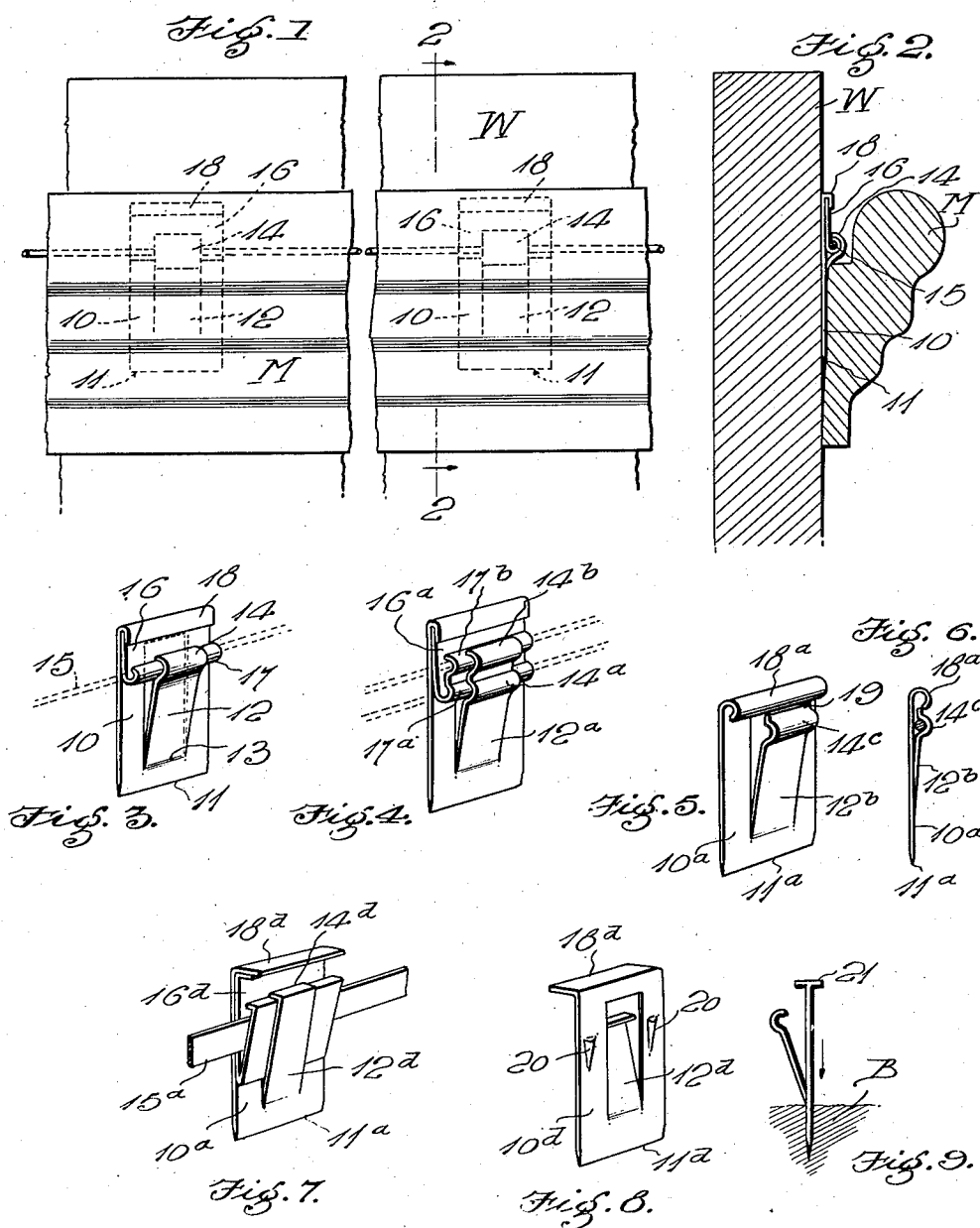


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E. S. LINDMARK
CONDUCTOR HOLDING CLIP
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Witness
H. Woodward

Inventor
Elmer S. Lindmark

By *H. B. Wilson & Co.*
Attorneys

UNITED STATES PATENT OFFICE

ELMER S. LINDMARK, OF NEW YORK, N. Y.

CONDUCTOR-HOLDING CLIP

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This invention relates to a new and improved device for holding a conductor such as an aerial or ground wire, a bell or telephone wire, etc., in any desired location, for instance, behind the upper portion of picture molding, along the upper edge of chair-board, along the edge of door or window frame trim, at numerous locations at the exterior of buildings, etc.

The principal object of the invention is to provide a clip which is well adapted to be forced between two bodies (for instance a wall and a molding) or driven into a body (such as a tree, post, etc.), and embodying relatively movable conductor-clamping jaws which are moved into conductor-clamping position by forcing or driving of the clip into place.

A further object is to provide a device of the class set forth which, while being of extreme simplicity, will be highly efficient and desirable, and may be used to hold various kinds of conductors wherever desired.

A still further aim is to provide a clip embodying an insulating strip for the conductor, secured in place in a unique manner.

With the foregoing in view, the invention resides in the novel subject matter hereinafter described and claimed, description being accomplished by reference to the accompanying drawing.

Fig. 1 is an elevation of a portion of a wall and picture molding thereon, illustrating two of the clips in dotted lines, holding a conductor behind the upper portion of the molding.

Fig. 2 is a transverse sectional view on line 2-2 of Fig. 1.

Fig. 3 is a perspective view of the clip shown in Figs. 1 and 2.

Fig. 4 is a view similar to Fig. 3 but showing a construction which may be used for holding a plurality of conductors.

Fig. 5 is a perspective view showing a different form of construction.

Fig. 6 is an edge view of Fig. 5 showing the conductor-holding tongue held in conductor-holding position.

Figs. 7 and 8 are perspective views showing still further variations of construction.

Fig. 9 is an edge view illustrating a clip which is adapted primarily to be actually driven into a support, instead of being driven between two bodies.

In the form of construction shown in Figs. 1, 2 and 3, the numeral 10 denotes a flat sheet metal blade having a penetration end 11 which is preferably sharpened. At one side of this blade, is a spring metal tongue 12, one end of the latter being secured at 13 to the blade, near the penetration end 11 thereof, the tongue being preferably formed by cutting a U-shaped slit in the blade and stamping the material within the confines of such slit laterally, leaving one end of the tongue integral with said blade. Tongue 12 extends toward the end of the blade 10, remote from the penetration end 11, and said tongue and blade diverge. The free end of the tongue is curved outwardly and is then bent inwardly toward the blade 10, providing a seat 14 which cooperates with the opposed portion of the blade in providing means for holding a conductor 15.

An insulating strip 16 lies against the side of the blade 10 toward the tongue 12 and has one of its ends curved at 17 to pass around the conductor. The other end of the strip 16 is secured to the blade 10 by clinching an end portion 18 of said blade, around said strip.

The blade 10 and the tongue 12, considered in a broad aspect, constitute conductor-holding jaws converging to a common penetration portion (11), and when the device is forced between two objects such as a wall W and a picture molding M, these jaws are relatively moved inwardly as will be clear from Fig. 2, thus moving them to conductor-holding position.

The construction shown in Fig. 4 is very similar to that illustrated in Fig. 3, the only difference being that the tongue 12^a is provided with two conductor seats 14^a—14^b, and the insulating strip 16 is formed with two conductor-engaging portions 17^a—17^b. If desired, this insulating strip or the strip 16^a might well be omitted in certain forms of construction.

In Fig. 5, a blade 10^a is shown having a penetration end 11^a, while its opposite end is

curved substantially upon itself to provide a hook 18^a. The tongue 12^b of this form of the device is provided at its upper end with a conductor seat 14^c and above this seat, with a projecting portion 19 which is adapted to snap into engagement with the hook, when the clip is closed as shown in Fig. 6.

The forms of construction so far described and others along this line, are intended primarily for holding conductors of circular cross section. To hold a conductor of strip or ribbon form as indicated at 15^a in Fig. 7, structures such as those illustrated in this figure and in Fig. 8, may be employed. In these views, 10^d denotes a blade having a penetration end 11^d and a tongue 12^d whose free end is merely bent toward the blade 10^d as denoted at 14^d, providing a seat for the conductor. The end of the blade 10^d remote from the end 11^d is merely bent laterally to provide a flange 18^d which is instrumental in forcing or driving the device into place. If desired, an insulating strip 16^d may be used with this general construction, as will be clear from Fig. 7. Also, the blade 10^d may be provided with outwardly stamped ribs, prongs or the like 20 which are instrumental in holding the device against accidental removal, after it has been forced or driven into position.

Any form of the invention may be made of very light metal or other resilient material to be merely pushed into place between two bodies, such as the wall W and the molding M, or heavier constructions may be used, to be actually driven into a solid body, such as B of Fig. 9, and when the device is to be thus actually driven into a body, it is preferably provided with a driving head such as 21 of Fig. 9, or of any other desired shape.

The device may be embodied in numerous forms other than those herein disclosed, but the illustrations given will suffice to give a clear understanding of the invention, without further illustration or description. It will be observed that the device is not only of extremely simple and inexpensive construction, but that it may be quickly and easily applied or released, and may be advantageously used in numerous locations, for holding a conductor or conductors in desired position. If desired, the clip may be covered with an insulating enamel.

I claim:—

1. A conductor-holding clip comprising a flat blade having a penetration end, a spring tongue having one of its ends secured to said blade near said penetration end, said tongue extending toward the other end of the blade and diverging from the latter, the free end of said tongue being turned toward said blade to provide a seat co-operable with the opposed part of the blade to hold a conductor, and an insulating strip lying against the side of said blade toward said tongue and having one end

bent upon itself to receive the conductor, said other end of said blade being clinched around the other end of said insulating strip.

2. A conductor holding clip comprising a plate of sheet material having one end sufficiently thin to allow forcing of the plate between a wall and a trim member lying against said wall, the other end of said plate being bent laterally to provide a head by means of which the plate may be forced or driven into position, said plate having an opening between said head and said thin end, and a flat tongue integrally joined to the plate at the end of said opening toward said thinned plate end, the free end of said tongue being bent to provide a conductor seat, said tongue being of a size for reception within said opening when the plate is forced into position.

In testimony whereof I have hereunto affixed my signature.

ELMER S. LINDMARK.