H. TRUMBULL.

WIRE ATTACHMENT FOR ELECTRICAL DEVICES.

APPLICATION FILED OCT. 19, 1905.

922,360. **Patented May 18, 1909.**

Fig. 1.

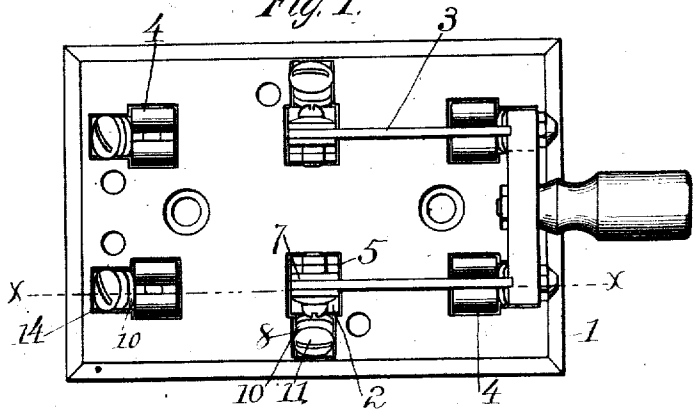


Fig. 2.

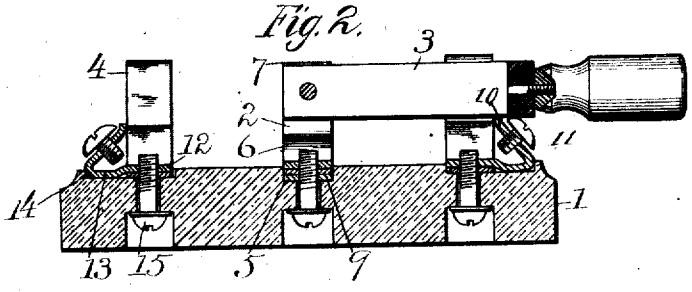


Fig. 3.

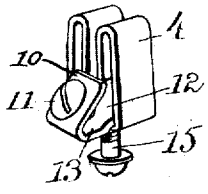


Fig. 4.

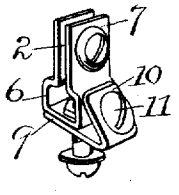
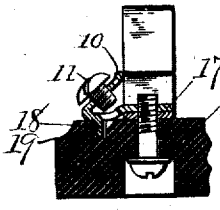


Fig. 5.



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UNITED STATES PATENT OFFICE.

HENRY TRUMBULL, OF PLAINVILLE, CONNECTICUT, ASSIGNOR TO TRUMBULL ELECTRIC MANUFACTURING COMPANY, OF PLAINVILLE, CONNECTICUT, A CORPORATION OF CONNECTICUT.

WIRE ATTACHMENT FOR ELECTRICAL DEVICES.

No. 922,360. Specification of Letters Patent. Patented May 18, 1909.

Application filed October 19, 1905. Serial No. 283,461.

To all whom it may concern:

Be it known that I, HENRY TRUMBULL, a citizen of the United States, and a resident of Plainville, in the county of Hartford and State of Connecticut, have invented a new Wire Attachment for Electrical Devices, of which the following is a specification.

My invention relates to that class of devices used for securing the end of a wire in electrical contact therewith, and the object of my invention is to provide a device of this class in the use of which a wire may be easily attached thereto with little trouble or inconvenience; and a further object of the invention is to provide a device that may be employed for other purposes than that of securing the wire; and a further object of the invention is to provide a device of this class that shall assist in securing the electrical parts used in connection therewith permanently in position.

A form of device in the use of which these objects may be attained is illustrated in the accompanying drawings, in which—

Figure 1 is a top or plan view of a switch base with my improved wire attaching means located thereon. Fig. 2 is a view in lengthwise section through the device on line *x*—*x* of Fig. 1. Fig. 3 is a perspective view showing my improved wire attaching means. Fig. 4 is a perspective view showing another manner of use of my wire attaching means. Fig. 5 is a view in section through a portion of the switch plate showing a modified form of my improved wire attaching means.

In the accompanying drawings the numeral 1 denotes a switch base which is composed of insulating material such as marble, slate or the like. Clips 2 are secured to the base, these clips forming a pivotal support for the switch blades 3. Switch contacts 4 are also secured to the base in position to cooperate with the switch blades.

It will be understood that my invention is not limited to use in any specific form of device, but may be readily applied in numerous cases where it is desired to firmly attach the end of a wire to secure an electrical connection. In the drawings herein I have shown a switch as a device in connection with which my improved wire attaching means is readily adapted, the clips forming pivotal supports for the switch blades, being provided with my improved attaching means, and the contacts for such blades also being provided with the improved attaching means.

The clips 2 are located in shallow recesses 5 formed in the base, these clips having an enlarged opening 6, (see Fig. 4) and supports 7 for the switch blades. A shallow recess 8 extending from the recesses 5 is also formed in the upper surface of the base.

My improved attaching means in that form illustrated as used in connection with a clip 2 includes a narrow plate bent to form a base 9 and an upward extending wire support 10. This attaching means is preferably bent in the form of a V and when used in connection with the clips for the pivotal support of the switch the base 9 is located underneath the clip, as shown in Fig. 4 of the drawings, and the wire support 10 extends upward, its upper end lying in close proximity to one side of the clip or support 7 against which it may bear as a support. A screw 11 is threaded into the support 10 as a means of clamping the wire firmly in position.

In many instances in devices of this character the clips or contacts are located in recesses in the insulated base, and the binding screws are located in a comparatively thin piece within these recesses so that it is difficult to secure a wire in place. By my improved device the binding screw is located in an inclined position and raised well above the insulated base, so that it is comparatively an easy matter to secure the wire in position.

In the form of device shown especially in Fig. 3 of the drawings my improved attaching means has its base 12 located on the upper surface of the foot of the switch contact 4, and the base is bent downward as at 13 so that its under surface will lie in line with the under surface of the foot of the contact and within the contact recess 14 in the base. By this construction a steady support for the contact and wire attaching means is formed in the bottom of the recess and the device as a whole is effectually prevented from turning movement. The upper free end of the inclined portion 10 of the wire support in which is seated the binding screw 11 lies close to the edge of the contact so that the latter may constitute a support for the said part 10, to hold it in position even though considerable force be exerted in turning the screw 11. A screw 15 extends upward through the insulated base in the usual manner to secure the contact in position, and a

similar screw is employed for holding the clips for the switch blades in position.

When devices of this class are used with an insulated base 1 of slate or like material it is a difficult matter to provide recesses in the surface of the base and the clips and contacts are therefore frequently located on the smooth upper surface of the base. In order to securely hold the parts from turning movement, and thus prevent their getting loose I adapt my improved wire attaching means 17 to such a construction. The attaching means is similarly formed as above described and shown in Fig. 3. A lug 18 is formed on the bottom of the attachment, engaging a recess 19 made in the upper part of the base 1. This lug 18 is preferably formed by cutting a tongue within the substance of the base and bending this tongue downward to form the lug, as plainly shown in Fig. 5.

It will be noted that when my improved wire attachment is used in connection with a switch contact the wire support, in addition to providing means for ready attachment of a wire, also serves as a stop for the switch blades, and also as a means for securing the connections against turning movement, which would cause them to become loose. The wire attachment is located at the outer edge of the switch contact, that is, at that edge not facing the opposite contact, and is thus in accessible position for attachment of a line wire.

What I claim as my invention and desire to secure by Letters Patent is:—

1. The combination with a supporting base and a movable switch blade supported thereon, of a pair of contact arms supported by the said base adapted to receive between them the switch blade, a wire attachment formed of a bent plate of metal having a base secured to the contact arms and extending beyond the same in front of the opening between them, and a portion 10 inclined upwardly and also toward the arms of the contact and arranged to form a stop for the switch blade when in engagement with the said arms, and a binding screw seated in the said inclined portion of the wire attachment and arranged to secure a wire to the outer face thereof.

2. A support of insulating material, an electrical device secured thereto and projecting therefrom, a wire attachment including a plate of metal having a base secured to said electrical device, a tongue partially cut from the base and downwardly projecting to engage an opening in the support, said tongue forming the sole means for preventing turning movement of the base, and means for securing a wire to said support.

3. The combination with an insulating base and a pivoted switch blade mounted thereon, of an electric contact mounted on the base, a plate separate from and connected with the contact and extending laterally therefrom, the outer end of the plate being bent upwardly and backwardly so that its free end lies in close proximity to the outer portion of the electric contact to form a stop for the switch blade, and means seated in the upwardly bent portion of the plate for securing a wire thereto.

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