

C. B. SCHOENMAN.

SWITCH JAW.

APPLICATION FILED SEPT. 25, 1912.

Patented Feb. 11, 1913

1,052,975.

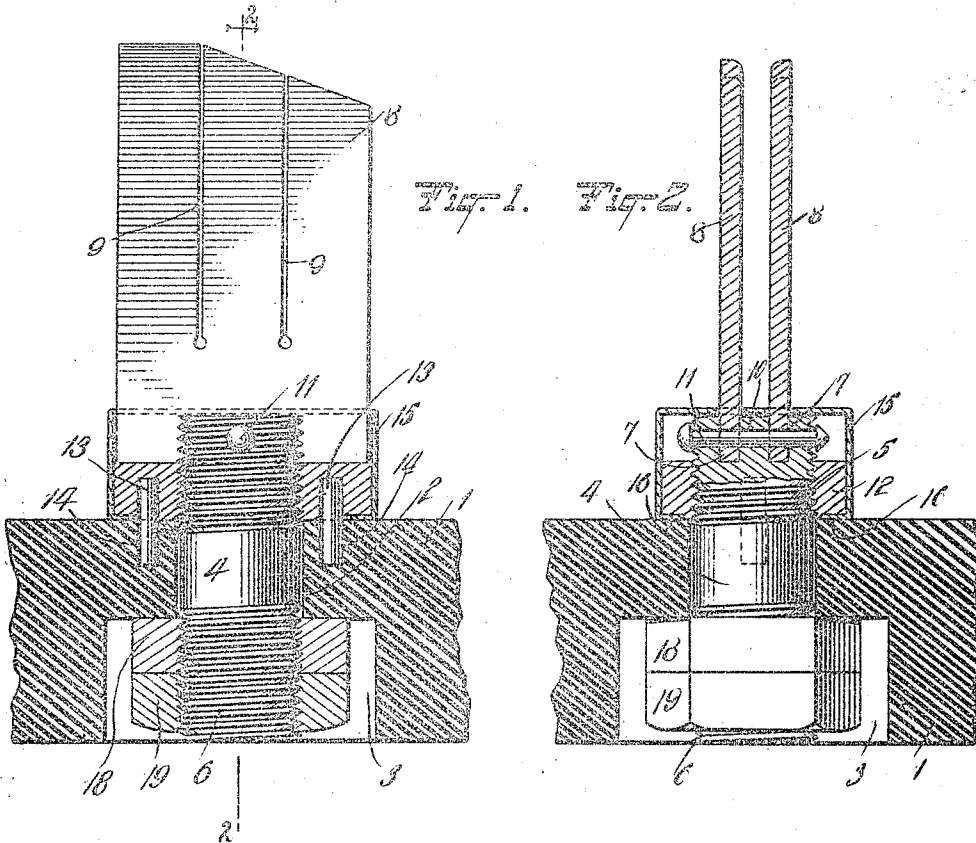
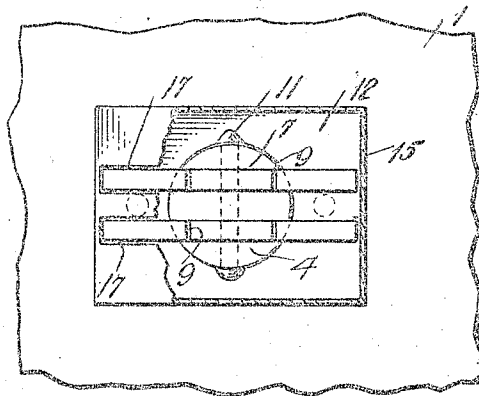


Fig. 3.



WITNESSES

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CHARLES B. SCHOENMAN, OF WILKINSBURG, PENNSYLVANIA.

SWITCH-JAW.

1,052,975.

Specification of Letters Patent. Patented Feb. 11, 1913.

Application filed September 25, 1912. Serial No. 722,211.

To all whom it may concern:

Be it known that I, CHARLES B. SCHOENMAN, a citizen of the United States, and a resident of Wilksburg, in the county of Allegheny and State of Pennsylvania, have invented a new and Improved Switch-Jaw, of which the following is a full, clear, and exact description.

This invention relates generally to structures used in electrical work, and more particularly to a jaw especially adapted for use with knife switches, fuses and the like.

The principal object of the invention is the provision of a structure lessening the labor and material necessary heretofore in turning out switch jaws, the construction shown and described doing away with the necessity of the use of the more expensive copper and permitting the use of other metals.

Other objects and advantages of the invention following the use thereof will appear as the description of the preferred form proceeds, the inventive idea being included within the spirit of the appended claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which like characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a side view partially sectional of the jaw mounted in position on a panel; Fig. 2 is a sectional view on the line 2—2 in Fig. 1; while Fig. 3 is a plan view partially sectional.

The jaw herein described and claimed is adapted to a variety of uses, and the particular embodiment shown comprehends its use on a panel or base 1 of suitable material, the base being provided with an opening 2 extending therethrough, the back of the base being counter-bored in order to form an enlarged opening 3 for the reception of parts to be hereinafter described. It is, of course, obvious that the particular form of the panel or base is not essential to the use of the jaw described, and that any suitable and desirable panel may be used.

The structure comprises a stud 4 having threaded ends 5 and 6, one end of the stud being also provided with transversely extending slots 7 which may vary in number, which slots are adapted to receive the lower ends of the jaws 8. Each jaw may vary in size and shape, and the number carried by

any stud may also vary, depending on the current intensity, the jaws shown following the well known construction and being provided with downwardly extending slots 9, whereby greater resiliency is afforded and a closer contact with the blade is permitted. The threaded end 5 of the stud 4 is provided with a transversely extending opening 10 through which a pin 11 is passed, which pin may be either in the form of a rivet or screw, and the purpose thereof being to securely retain the jaws 8 in the slots 7; the jaws may also be soldered, if so desired. Surrounding the stud 4 and in threaded engagement with the end 5 is a nut 12, preferably of rectangular shape, although not essentially so, and provided on one side with lugs or dowels 13 adapted to be entered into openings 14 in the panel or base 1, and serving to prevent movement of the nut 12 relatively to the panel when the parts are assembled. The threaded end 5 of the stud 4, and also the lower ends of the jaws 8 and the pin or rivet 11, are preferably covered by a cap 15 adapted to lie closely adjacent the sides of the nut 12 and to extend upwardly therefrom for a distance sufficient to inclose the end of the stud, one side of the cap being open, and the edge portion 16 adjacent the said open side being adapted to be bent or overturned, as shown particularly in Figs. 1 and 2, in order to come between the top of the panel or base and the under side of the said nut; the use of the cap, which will preferably be made of the same material as the switch jaws, presents a finished appearance, not unlike the appearance of the more expensive structures. Referring particularly to Fig. 3, it will be noted that the top of this cap is provided with longitudinally extending openings 17 adapted to receive the jaws 8, thereby effectively inclosing all the structure adjacent the lower ends of the jaws.

The parts are assembled as follows: After the stud 4 has been threaded and milled the nut 12 is positioned thereon; the jaws 8 are then entered into the slot 7 and the pin or rivet 11 is passed through the transversely extending opening 10; the cap 15 is then positioned on top of the nut 12, and the edge portions bent or overturned as described; after which the jaw is ready to be positioned on the panel; the panel being provided with the openings 2, 3 and 14 the threaded end 6 of the stud is passed

through the opening 2 into the counter-bored portion 3, the dowels 13 entering the openings 14, after which the jaw is firmly positioned by tightening the nut 18 which is positioned within the enlarged or counter-bored opening 3; the lock nut 19 is then placed on the threaded end 6 of the stud with the lug in electrical contact with the cable or electrical conductor positioned on the stud and between the said nuts.

The nut 12 may be made of hardened steel, if so desired, or any other material cheaper than copper may be availed of, the current being carried by the said jaws and the stud.

It is clear that in place of the dowels 13 other equivalent devices may be used, as screws or pins, and if necessary the position of the dowels within the openings in the nut 12 may be insured through the use of said screws extending at right angles and into engagement with the said dowels.

Various minor changes in design and material may be availed of in order to embody the inventive idea in switch jaws adapted to carry current of different intensities whether used on the switch panel or whether in engagement with the blade end of fuses, etc.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. A structure of the class described comprising a stud, spaced jaws carried by one end of the stud, means passing through the stud and engaging the jaws whereby the parts are fixed, a nut on the stud, a cap covering the nut, and means whereby the stud and nut may be secured on a panel.

2. A structure of the class described comprising a stud, a nut on one end thereof, slots in the said end, jaws positioned in the slots, an element passing through the stud

and engaging the ends of the jaws whereby the parts are held fixed, a cap covering the said nut and the end of the stud, means carried by the nut for engagement with a panel, whereby the nut is prevented from turning relatively thereto, and other means carried by the stud for holding the parts fixed on the panel.

3. A structure of the class described comprising a stud, a nut on one end thereof, slots in the said stud, switch jaws positioned in the slots, a pin passing through the stud and engaging the said jaws, whereby the parts are held together, a cap covering the nut and the said end of the stud, lugs on the nut adapted to engage a panel, whereby the parts are prevented from relative movement, and means on the other end of the stud for engagement with the opposite side of the panel, whereby the structure is held in position.

4. A structure of the class described comprising a stud, transversely extending slots in one end thereof, jaws positioned in the said slots, a pin extending through the stud and the jaws for holding the parts together, a nut on the said end of the stud, the nut being provided with lugs for engagement with a panel, whereby relative movement of the parts is prevented, a cap engaging the sides of the nut and provided with openings through which the said jaws extend, whereby movement of the stud and jaws relatively to the nut is prevented, and nuts carried by the other end of the stud for holding the parts in position on the panel.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES B. SCHOENMAN.

Witnesses:

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S. H. HUNTER.