

No. 883,389.

PATENTED MAR. 31, 1908.

J. CLAY.
SWITCH CLIP.
APPLICATION FILED AUG. 20, 1907.

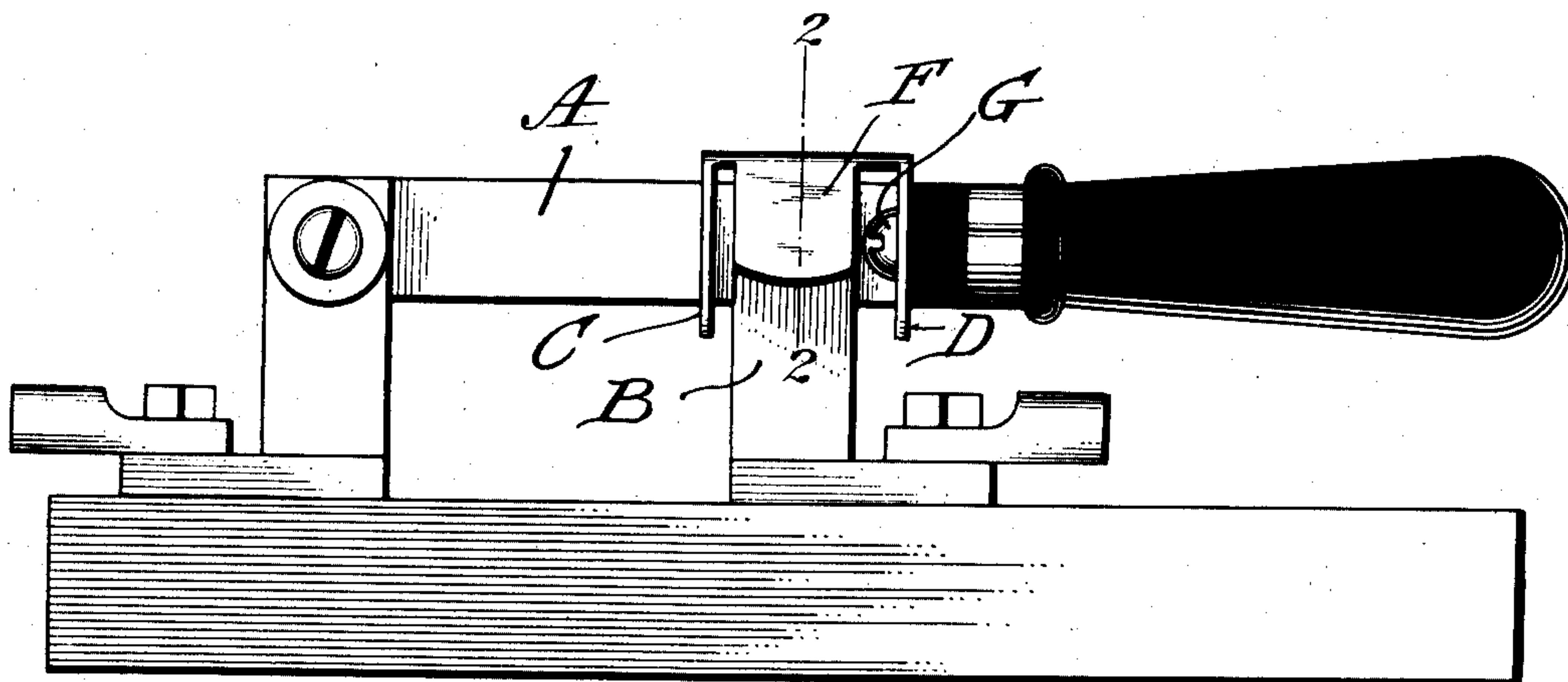


Fig. 1.

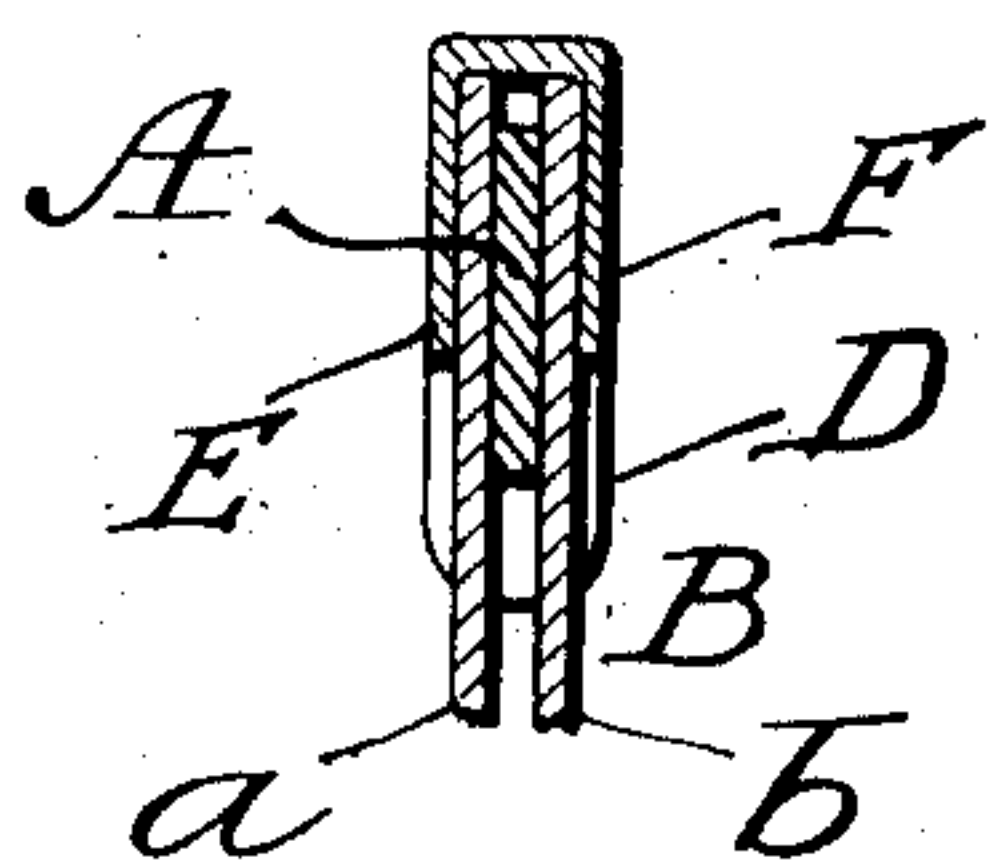


Fig. 2.

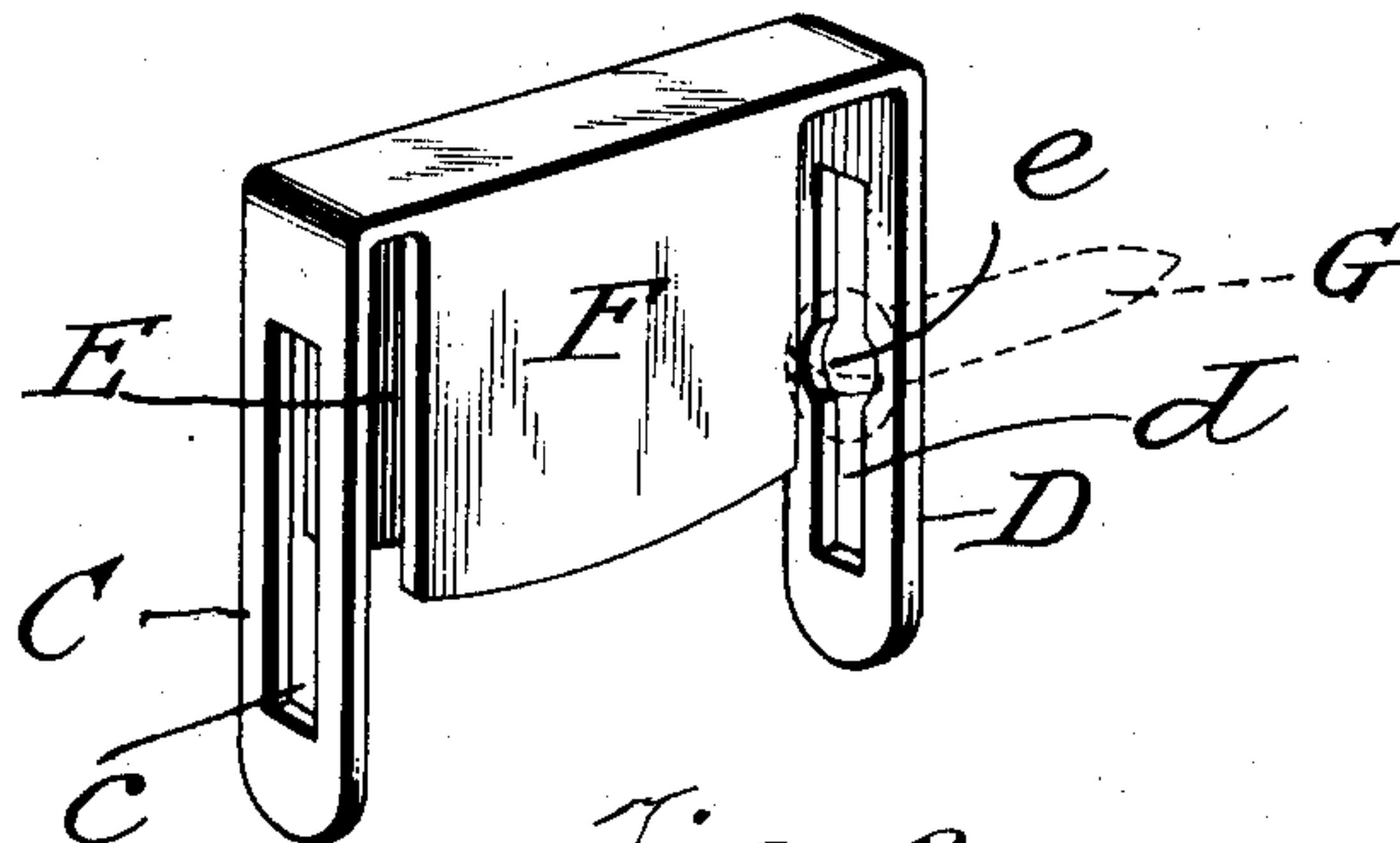


Fig. 3.

Witnesses:

A. R. Appelman
Elizabeth L. Stein

Inventor:

John Clay,
By: Philip K. Stein, Atty.

UNITED STATES PATENT OFFICE.

JOHN CLAY, OF NEW YORK, N. Y.

SWITCH-CLIP.

No. 883,389.

Specification of Letters Patent.

Patented March 31, 1908.

Application filed August 20, 1907. Serial No. 389,404.

To all whom it may concern:

Be it known that I, JOHN CLAY, a citizen of the United States, residing in the city of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Switch-Clips, of which the following is a specification.

My invention in switch clips relates to an attachment to the blade or arm of an electrical switch, having the form of a clip and is adapted when the blade is thrown in to the switch clip, to engage the jaws thereof, and the object of my invention is to insure increased conductivity between the switch blade and clip of switches embraced in that class known as knife switches.

It is also the object of my invention to provide a more effective means of securing a good electrical contact between the switch blade and clip in the usual type of knife blade switch than by any of the means hitherto in vogue and previous to my invention in so far as I am at present aware.

Other objects of my invention will appear in the drawings hereto attached when taken in connection with the descriptive matter relative thereto, which together form part of this specification, and the distinctive features of novelty are more particularly pointed out in the claims.

With reference to the drawings, Figure 1, is a side elevational view of my invention as attached to a switch arm. Fig. 2, is a vertical sectional view thereof taken on the line 2—2 of Fig. 1. Fig. 3, is a perspective view of my improved clip somewhat enlarged.

In the different figures, similar characters of reference are employed to designate like parts throughout, wherein,

A illustrates the usual type of switch blade or arm as employed in the majority of single and double pole electrical switches and B, the usual type of spring switch clip.

In practice I have found that during continual use, the engagement and disengagement of the blade A with and from the clip B has the tendency of spreading the jaws *a, b*, so that the degree of contact between the said jaws and the blade A diminishes, owing to the wear of the co-acting parts and also to the loss of resiliency of the jaws *a, b*, resulting in a depreciation in the conductivity of the switch at its point of contact. It is to circumvent this difficulty that I have directed my invention, and to this end my invention provides an attachment to the switch

arm A which is constructed in the manner of a clamp which forces the jaws *a, b* on to the blade A when the latter is engaged in its clip B.

My improved switch clip as illustrated in connection with the switch arm A in its simplest form, consists of preferably a blank of sheet metal, folded in a manner so as to provide two perforated lugs C, D through which the switch arm A is passed, and two lateral clip lugs or jaws E and F adapted to straddle the blade A and the jaws *a, b* of the switch clip B. The lugs E and D are adapted to fit tightly on the switch arm A by providing the perforations *c*, and *d* in said lugs of sufficient dimensions to engage said arm by its edges and sides, and in addition to the securing of my improved clip to the arm A, I provide an additional perforation *e* to engage the head of a screw G, which is employed as the customary fastening between the blades and handles of switches of this character.

It will be observed by the foregoing description when taken together with the illustrations that when the switch blade A is thrown into the clip B, the jaws E and F of my improved switch clip or clamp overlap and engage the jaws *a, b* of the switch clip B, and thus prevent the latter from spreading thereby obviating the depreciation of contact between the switch blade A and the clip B, and

Having fully described my invention, I claim as new and desire to secure by Letters Patent of the U. S.

1. In an electrical switch, a clamp carried by the switch arm and secured thereto, consisting of a pair of perforated lugs and a pair of contact clips integrally formed with said clamp and the said clips, being adapted to engage a switch clip upon the closing of the switch.

2. An attachment for electrical switches comprising a supplemental clip provided with jaws connected by intermediately disposed integrally formed perforated lugs, said clip being carried by and secured to a switch blade of the said switch and adapted to engage the co-acting switch clip and force the same into contact with the said blade upon the closing of the switch.

3. In an electrical switch an attachment for the switch blade, consisting of a clip provided with lateral jaws and perforated securing lugs integrally formed therewith, said lateral lugs adapted upon the closing of the

switch, to thrust the switch clip against the blade of said switch.

4. In an electrical switch, a clamp carried by the switch blade, consisting of a blank 5 formed about the switch blade and provided with a pair of securing lugs and a pair of lateral clips, said clamp being attached to the said blade by the securing lugs and a perforation in one of the said securing lugs adapted to receive the neck of a screw, said switch 10 clamp being adapted to engage the switch clip upon the closing of the switch.

5. In an electrical switch, provided with a switch arm and a switch clip co-acting therewith, the combination with the said arm and 15 said switch clip, of a clamp provided with a perforated securing lug secured to the said switch blade and lateral contact lugs adapted to contact with the switch clip upon the 20 closing of the switch.

6. An attachment for electrical switches, consisting of a clamp, formed of a blank of

conducting material having two substantially oppositely situated perforated lugs adapted to engage and be carried by a switch 25 blade and two contact lugs substantially at right angles thereto, adapted to contact with a switch clip upon the closing of the switch.

7. The herein described invention, comprising a switch arm, a spring clip attached 30 thereto, consisting of a pair of perforated lugs, and a pair of contact lugs substantially at right angles thereto and a common fastening for the switch blade handle of the said switch and clamp, said clamp adapted to en- 35 gage the switch clamp upon the closing of the switch, substantially as described.

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

JOHN CLAY.

Witnesses:

R. G. GLIDDEN,
JOHN NORDSTROM.