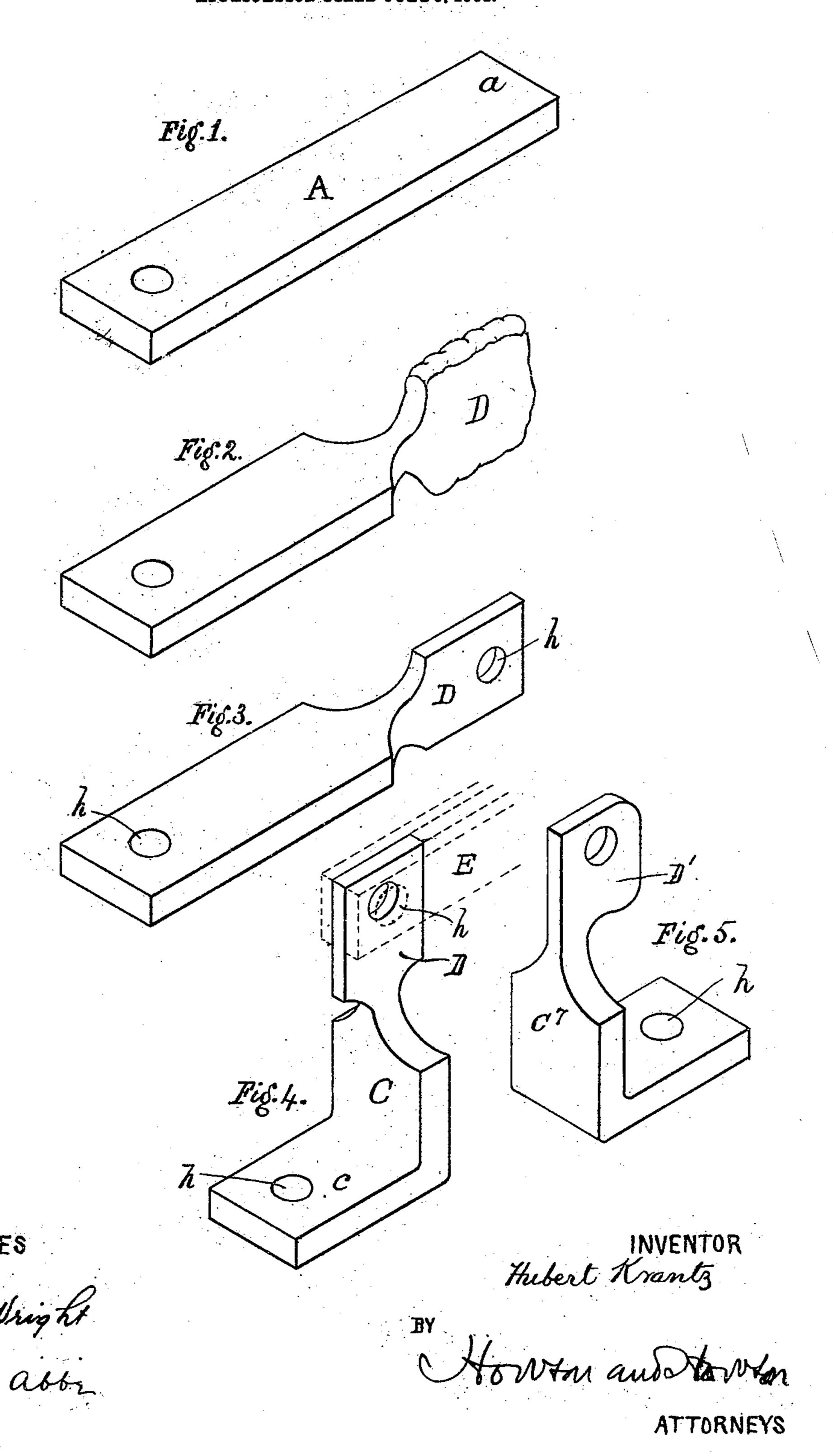
## H. KRANTZ.

## CLIP FOR ELECTRICAL APPARATUS. APPLICATION PILED JULY 5, 1904.



## UNITED STATES PATENT OFFICE.

HUBERT KRANTZ, OF BROOKLYN, NEW YORK.

## CLIP FOR ELECTRICAL APPARATUS.

No. 869,852.

Specification of Letters Patent.

Patented Oct. 29, 1907.

Application filed July 5, 1904. Serial No. 215,330.

To all whom it may concern:

Be it known that I, HUBERT KRANTZ, a citizen of the United States, residing in the borough of Brooklyn, in the county of Kings, State of New York, have invented an Improved Clip for Electrical Apparatus, of which the following is a specification.

This invention relates to clips for electrical apparatus such as knife switches, fuse holders and the like, which are adapted to be secured on a suitable base and 10 are provided with upstanding plate-like members to which a switch blade or the like may be removably attached.

The object of the invention is to improve the construction of these clips, so that joints, soldered or oth-15 erwise, may be avoided and a clip formed adapted to perform all the duty required of it, out of one integral bar of conducting material.

In the accompanying drawings, Figure 1 is a perspective view of a bar from which the clip is formed: 20 Fig. 2 is a perspective view of the bar after the first step of manufacture: Fig. 3 is a similar view of the clip after the second step: Fig. 4 is a perspective view of a completed clip: and Fig. 5 is a perspective view of a modification.

25 In carrying out this invention in my preferred manner I first take a rectangular bar of conducting material A (Fig. 1) and squeeze, upset or hammer out, or flatten out edgewise, the end portion a of the bar to form a flat plate-like centinuation D at right angles to the 30 plane of the bar, as shown in Fig. 2. I may then finish the edges of the upset portion by filing or cutting the edges to produce a finished appearance, as shown in Fig. 3. I then bend the body of the bar at right angles or into an L-shaped form, as shown in Fig. 4, so

that a portion c of the bar may be affixed to a suitable 35 base and the turned-up part C stand perpendicular to it, with the upset plate D at right angles to the plane of the bar from which it is formed. The plate D and the bar c may either or both have holes h formed therein, as desired, to form means for securing the clip to the 40. base or for attachment of knife switch blades E to the plate D as shown by dotted lines in Fig. 4.

In Fig. 5 I have shown a modified form of clip C1 in which the plate-like portion D1 is formed entirely to one side of the bar instead of centrally, as shown in the 45 preferred form.

Although I have described my preferred manner of making these clips to be by forming them from a solid bar by hammering and bending, I do not limit myself to a clip formed in that manner, as many other well- 50 known processes of manufacture might be adapted to produce such an improved clip. Neither do I abandon my right to the invention disclosed here in as to my preferred method of making these clips.

I claim as my invention:

55 An L-shaped terminal clip for electrical apparatus, comprising a base of substantial thickness, an upstanding portion integral with the base and bent at right angles thereto, said upstanding portion having cut-away shoulders at the top and a narrow neck terminating in an integral plate 60 of less thickness than the upstanding portion and lying in a plane at right angles thereto and perpendicular to the plane of the base.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses. 65

HUBERT KRANTZ.

Witnesses:

WM. McIntosh,

LEO F. OEHRIG.