

No. 860,117.

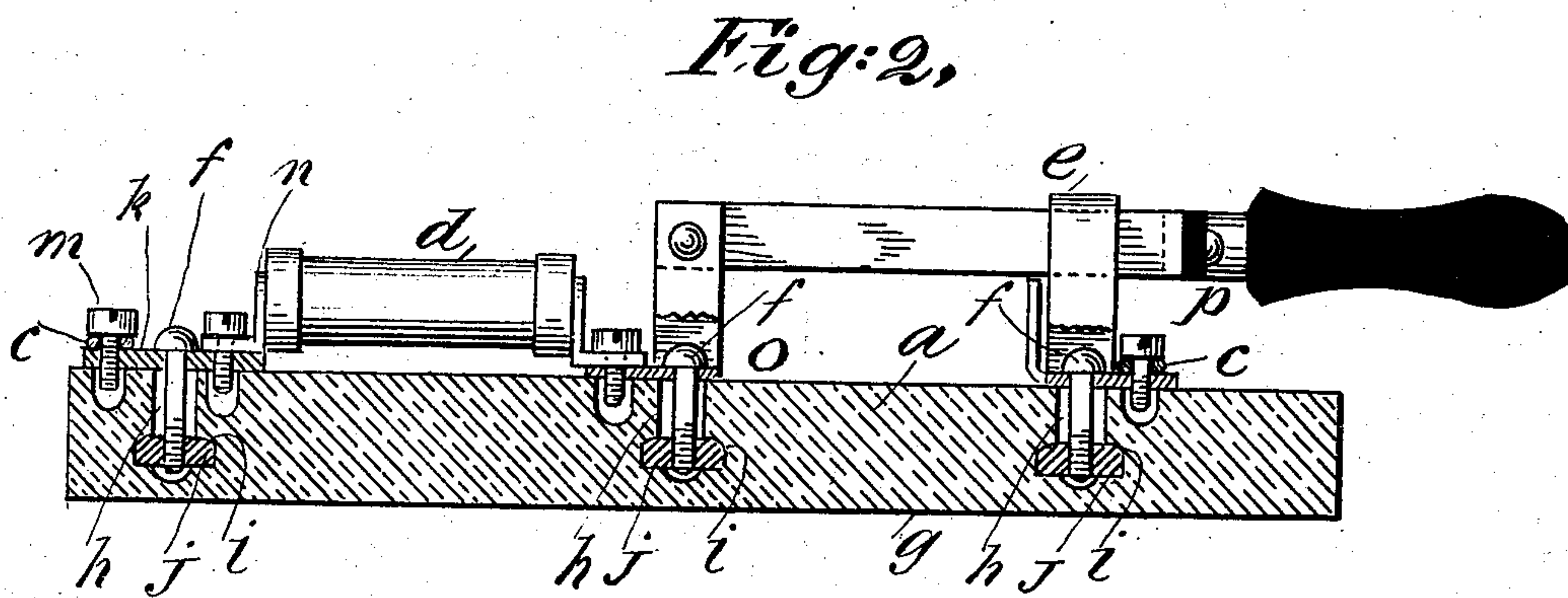
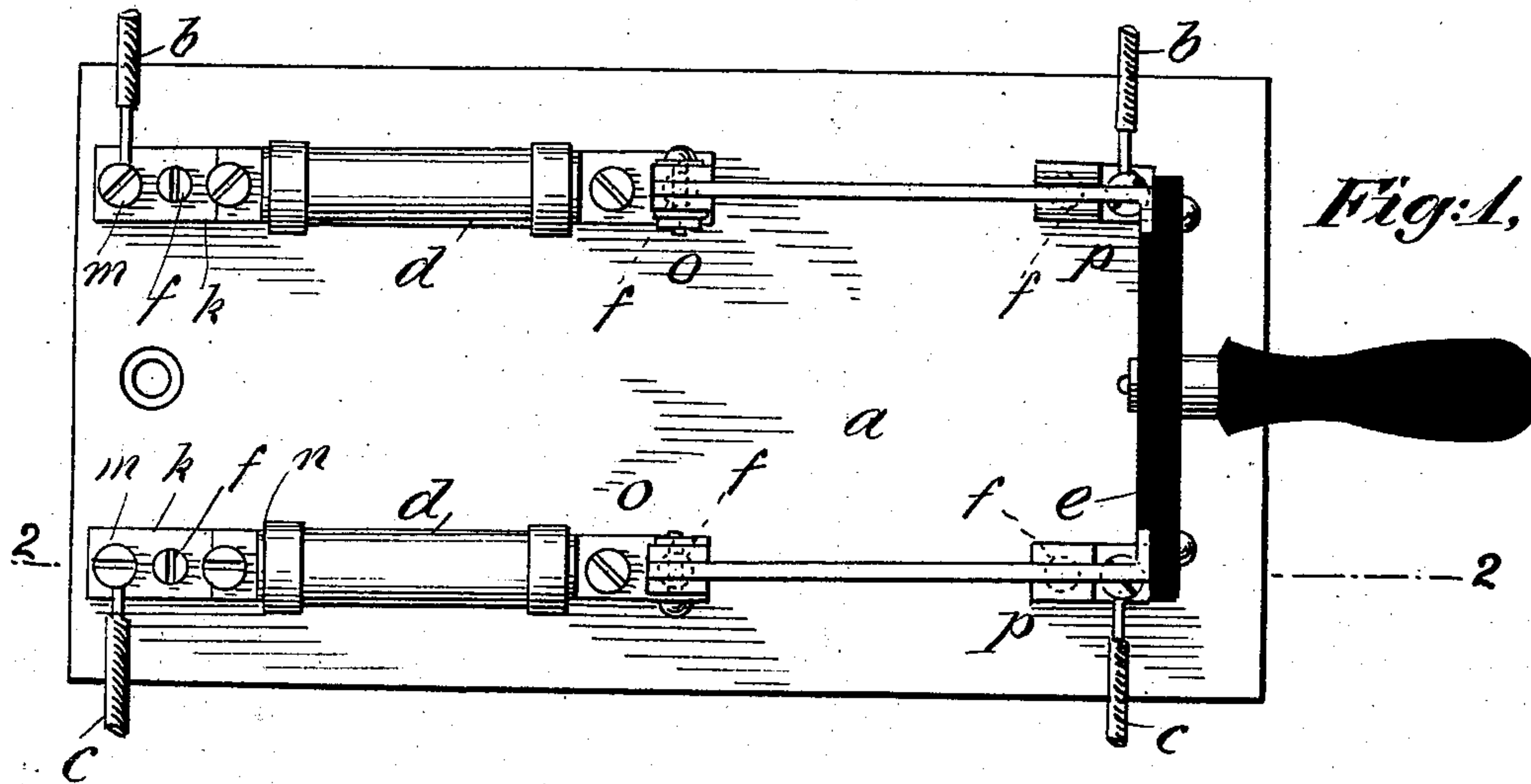
PATENTED JULY 16, 1907.

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BASE FASTENING DEVICE FOR ELECTRICAL APPARATUS.

APPLICATION FILED JULY 9, 1906.



WITNESSES

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BASE-FASTENING DEVICE FOR ELECTRICAL APPARATUS.

No. 860,117.

Specification of Letters Patent.

Patented July 16, 1907.

Application filed July 9, 1906. Serial No. 325,225.

To all whom it may concern:

Be it known that I, LOUIS BATES, a citizen of the United States, and residing at Hoboken, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Base-Fastening Devices for Electrical Apparatus, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

10 This invention relates to electric switches, cut-outs, measuring and similar electrical apparatus, and is more particularly an improvement on the devices heretofore used in connection with a non-conductive base plate the different mechanical features which make up this
15 class of current conveying apparatus, and one object of my invention is to prevent the accidental formation of an arc on the back of such non-conductive base between projecting points of the fastening devices, and another object being to provide an effective, cheap and neat
20 device whereby the projecting ends of the fastening material are entirely eliminated, and whereby the rear of the base plate is left smooth and unbroken and will offer no means of accidental short circuiting between any of the parts of the devices assembled on the front part of
25 the same.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each
30 of the views, and in which:—

Figure 1 is a plan view of a two pole electric switch; and, Fig. 2 a vertical longitudinal section on the line 2—2 of Fig. 1.

35 In the drawing a simple two pole switch is employed as the means of illustrating my invention, in which *a* is a base plate of non-conductive material provided with the line terminals *bb* and *cc*, non-arcing fuses *dd* and the usual double knife plate switch *e*. Screws *f*, as usual, are employed to fasten the different features
40 of this switch to the base plate *a*. Instead of letting these screws entirely penetrate the base plate, as heretofore, and secure the same on the underside *g* of the base by means of washers and nuts, which procedure does thereby offer the possibility of the formation of a
45 short circuiting arc between these penetrating points,

I provide a drill hole *h*, which only partly enters into the base plate *a*, as shown in the drawing, and by means of a special tool I undercut the inner end of the drill hole as seen at *i*. A suitable metal *j* is entered into the drill hole *h*, and of a diameter equal therewith. The
50 same is expanded within the enlarged portion *i* of the drill hole by means of hydraulic or other power pressure, until this metal entirely, or nearly, fills out the undercut portion *i* of the drill hole *h*, which operation prevents the withdrawal of the metal *j* from the same. 55
This metal has now the form of a plate, can now be properly centered, drilled and tapped, as seen in the drawing, and serves for the introduction of the threaded ends of the screws *f*. A plate *k* can thereby be firmly secured to the base *a* which will in turn serve to fasten
60 thereto the binding post *m* and support *n* for the fuse *d*. All the other features of the electrical apparatus which are to be assembled on its base can be fastened thereto in a similar manner, as illustrated at *o* and *p* in Fig. 2
65 of the drawing, which shows the same manner of fastening the switch proper to the base by means of a counter-sunk metal plate inserted and expanded within the non-conductive base plate *a*.

It is obvious that perfect freedom from short circuiting at the side *g* of the base plate *a* is hereby attained,
70 and that the attachment of the assembled features is effected in a perfect manner thereby.

It is also apparent that this device can be employed for any and all kinds of electrical apparatus which depend upon their assemblage upon a union base.
75

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

In a fastening device for the assemblage of various parts of electrical apparatus, a base plate of non-conducting material provided in one side with drill holes which
80 pass only partially therethrough, said drill holes being enlarged at their inner ends to form chambers or recesses in said plate, metal plugs secured in said chambers or recesses, and screws passed into said drill holes and secured in said plugs, said screws serving to hold the parts
85 of the electrical apparatus on said base plate.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 7th day of July, 1906.

LOUIS BATES.

Witnesses:

F. A. STEWART,
C. E. MULREANY.