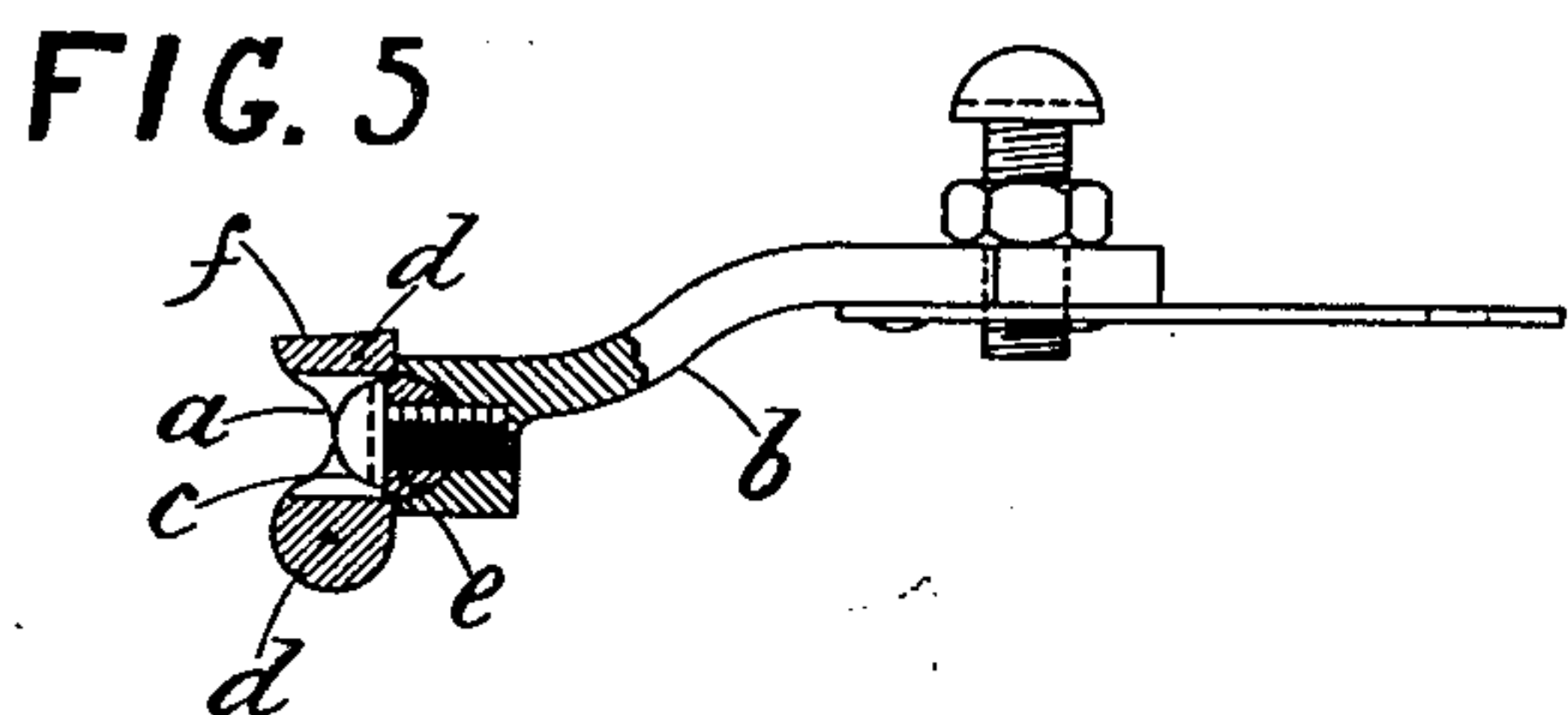
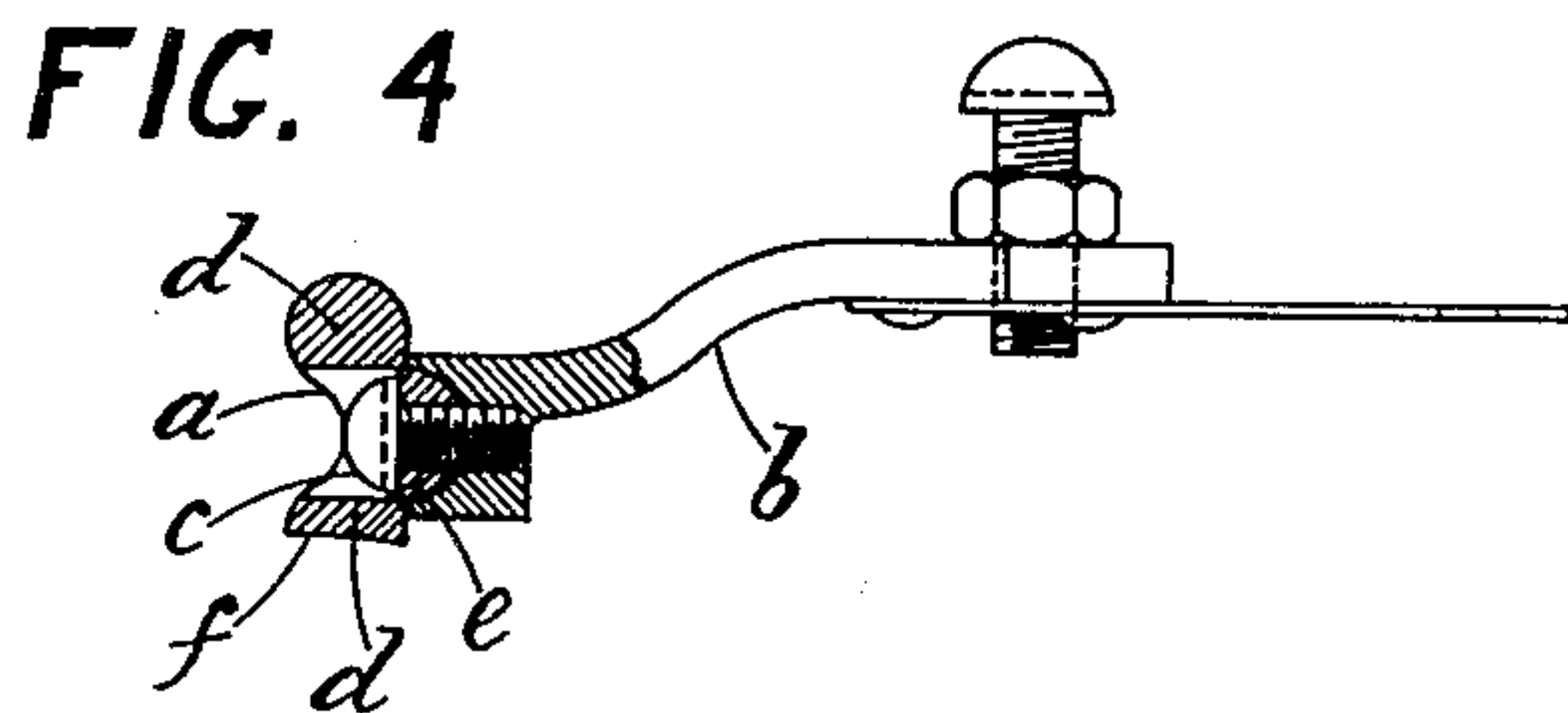
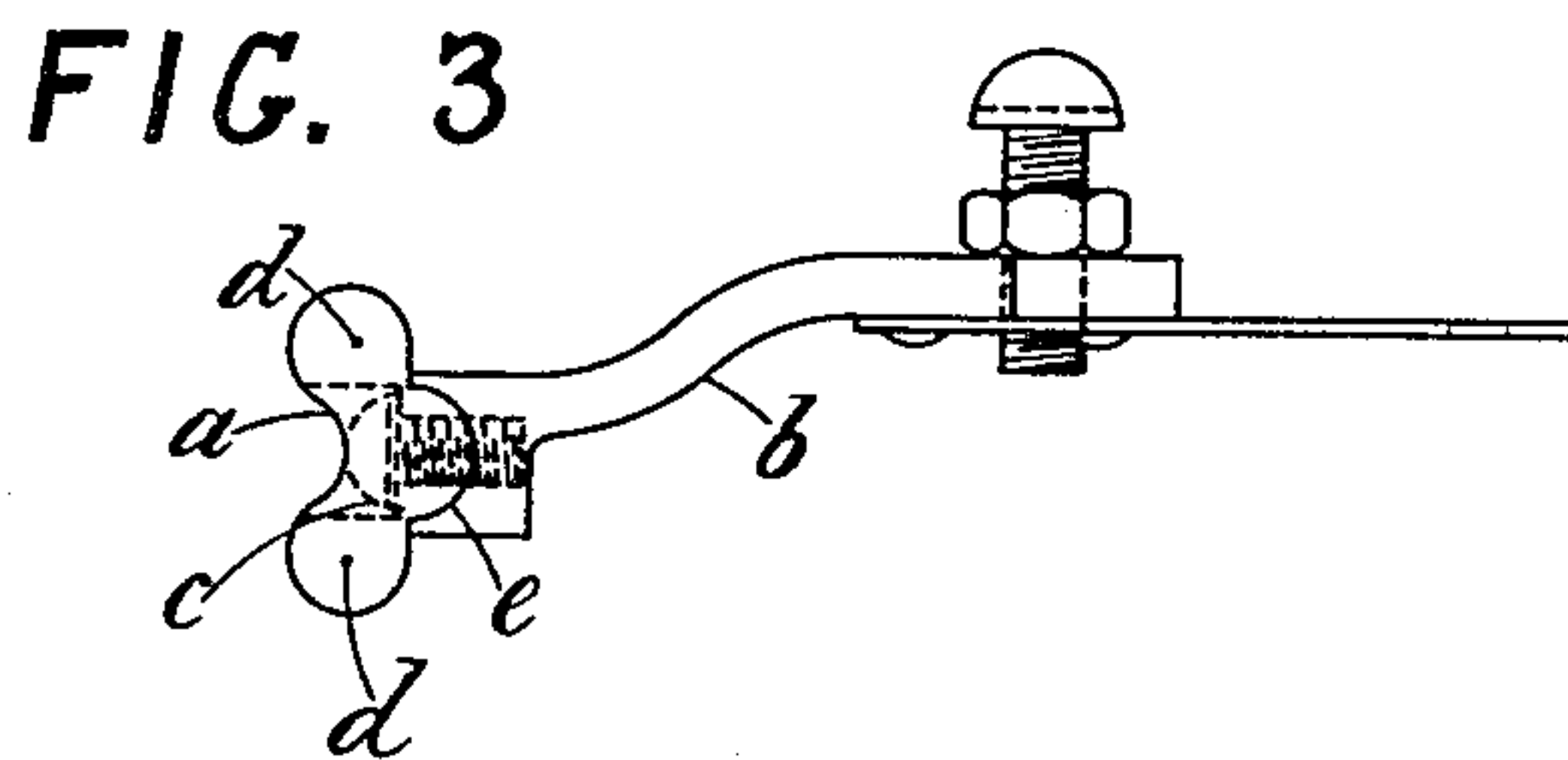
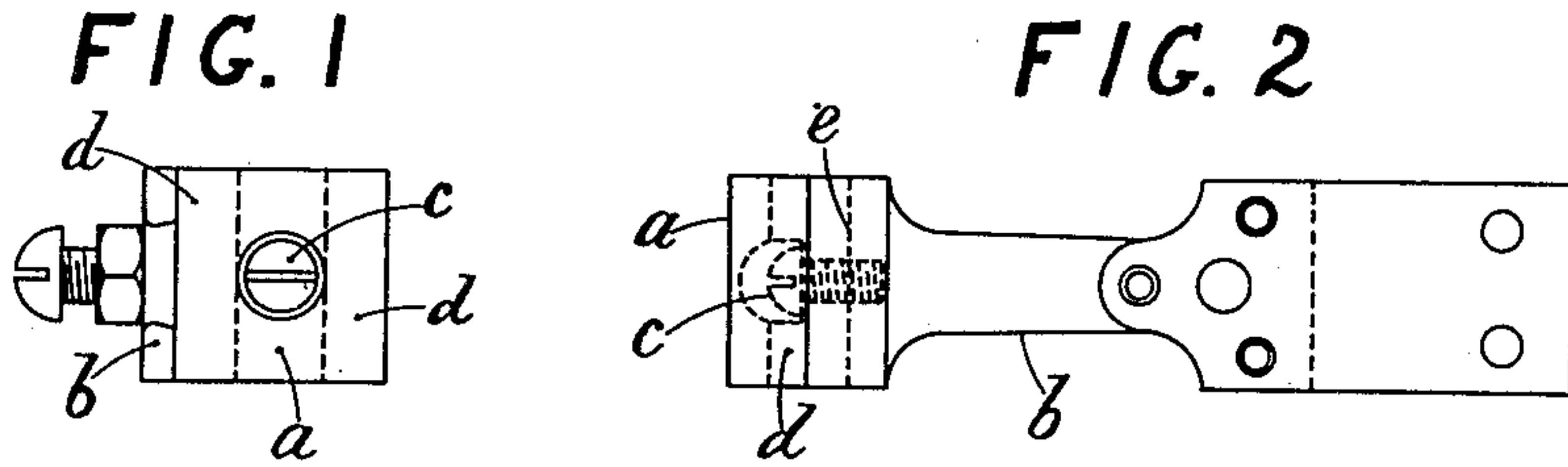


A. WHITE.
 CONTACT FOR ELECTRIC CONTROLLERS OR SWITCHES.
 APPLICATION FILED SEPT. 10, 1908.

913,081.

Patented Feb. 23, 1909.



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UNITED STATES PATENT OFFICE.

ALFRED WHITE, OF SUNDERLAND, ENGLAND.

CONTACT FOR ELECTRIC CONTROLLERS OR SWITCHES.

No. 913,081.

Specification of Letters Patent.

Patented Feb. 23, 1909.

Application filed September 10, 1908. Serial No. 452,491.

To all whom it may concern:

Be it known that I, ALFRED WHITE, a subject of the King of Great Britain and Ireland, and a resident of Sunderland, in the county of Durham, England, have invented certain new and useful Improvements in or Relating to Contacts for Electric Controllers or Switches, of which the following is a specification.

10 This invention relates to contacts for electric controllers or switches and has special reference to contact fingers having reversible and renewable contacts, and it has for its object to provide an improved arrangement of reversible and renewable contact which will be simpler and more easy to manufacture than those at present in use.

According to this invention a reversible and renewable contact is secured to a contact finger or carrier by a screw passing through the contact and into the end of the finger or carrier, and the contact is provided with extensions, wings or shoulders, preferably rounded, for contacting with the controller drum or the like, and the rear face of the contact is furnished with a semicircular or other suitable enlargement, projection or the like adapted to seat or rest in or on a corresponding recess or the like in or on the end of the finger or carrier and prevent turning of the contact in use and to insure a good contact between the contact and the finger or carrier.

I will fully describe my invention with reference to the accompanying drawings wherein—

Figure 1 is an end view, Fig. 2 a side view, Fig. 3 a plan and Fig. 4 a plan partly in section of a controller contact made in accordance therewith. Fig. 5 is a similar view to Fig. 4 showing the contact reversed when worn.

Referring to the drawings, the contact piece *a* is secured to the finger *b* by a screw *c* passing through the contact piece and into the end of the finger. The contact piece *a* is formed with wings or shoulders *d d* for contacting with the controller drum and with an enlargement or rib *e* which seats or

rests in a corresponding groove or recess in the end of the finger *b* and prevents turning of the contact piece *a* when in use.

When one of the wings or shoulders *d d* is worn as shown in Fig. 4 the contact piece *a* can be reversed to bring the other wing or shoulder into position for use as shown in Fig. 5.

A spring washer or the like may be interposed between the head of the screw *c* and the contact piece *a* to prevent the screw working loose in use.

By forming or providing the reversible and renewable contact with extensions, wings or shoulders such as described and shown, a further advantage is secured, namely that when the contact is worn down by use the relatively small area of contact surface exposed (*f*) as compared with previously known renewable contacts, tends to reduce the amount of arcing between the contact and the conducting segments or plates on the drum when the same leave the contact.

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

1. In contacts for electric controllers or switches, a reversible and renewable contact piece adapted to be secured to the finger or carrier by a screw passing through the contact piece and into the end of the finger or carrier said contact piece having wings or shoulders for contacting with the controller drum or the like, and an enlargement or the like adapted to seat or rest in a corresponding groove or the like in the finger or carrier, substantially as set forth.

2. In a contact for electric controllers or switches, a contact carrying arm, a reversible metallic contact piece provided with elongated transversely disposed contact portions along opposite edges thereof, and having a flat rear surface and a fastening means for clamping the rear surface of the metallic contact piece flat against the end of the contact carrying arm, the adjacent portions of said arm and contact piece being provided with interfitting portions preventing relative movement thereof.

3. In a contact for electric controllers or switches, a contact carrying arm provided with a substantially flat bearing surface at the end thereof, a metallic contact piece
5 having a substantially flat rear surface adapted to seat upon the flat bearing surface of the contact arm and provided with elongated rounded shoulders upon opposite edges thereof and a fastening screw passing

through the contact piece and serving to detachably clamp the same to the contact arm. 10

In witness whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

ALFRED WHITE.

Witnesses:

THOMAS LAING WHITEHEAD,
HERBERT HOWARD.