

No. 759,948.

PATENTED MAY 17, 1904.

T. A. WESTON.  
TOOL HANDLE.

APPLICATION FILED MAY 9, 1901.

NO MODEL.

FIG. 1.

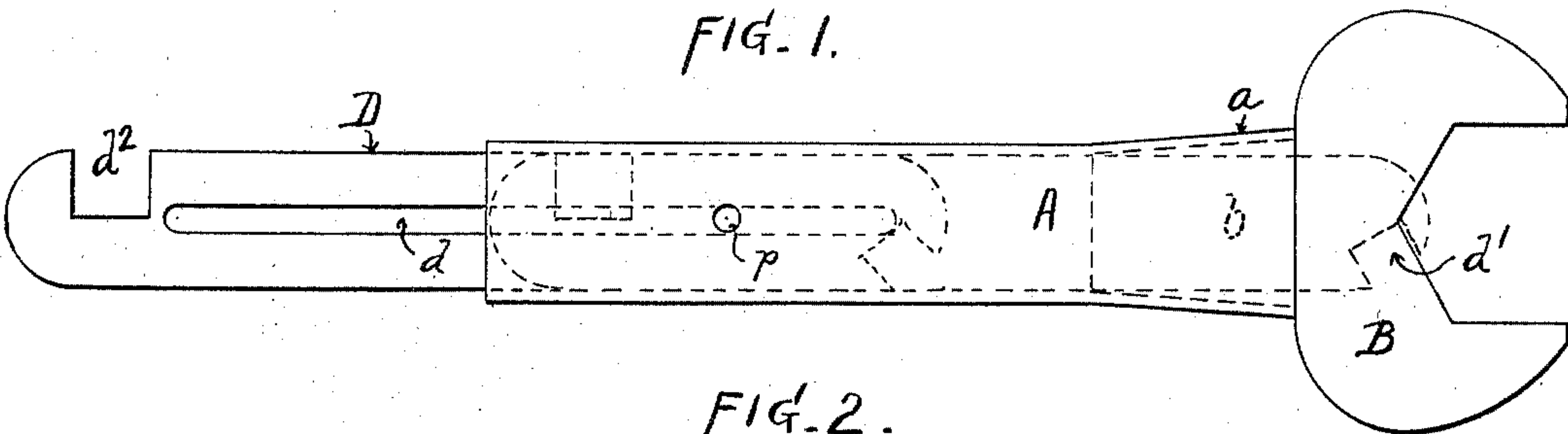


FIG. 2.

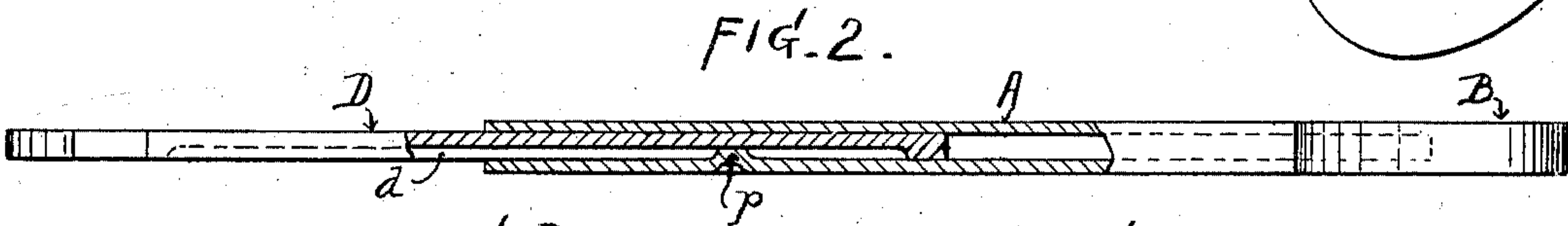


FIG. 3.

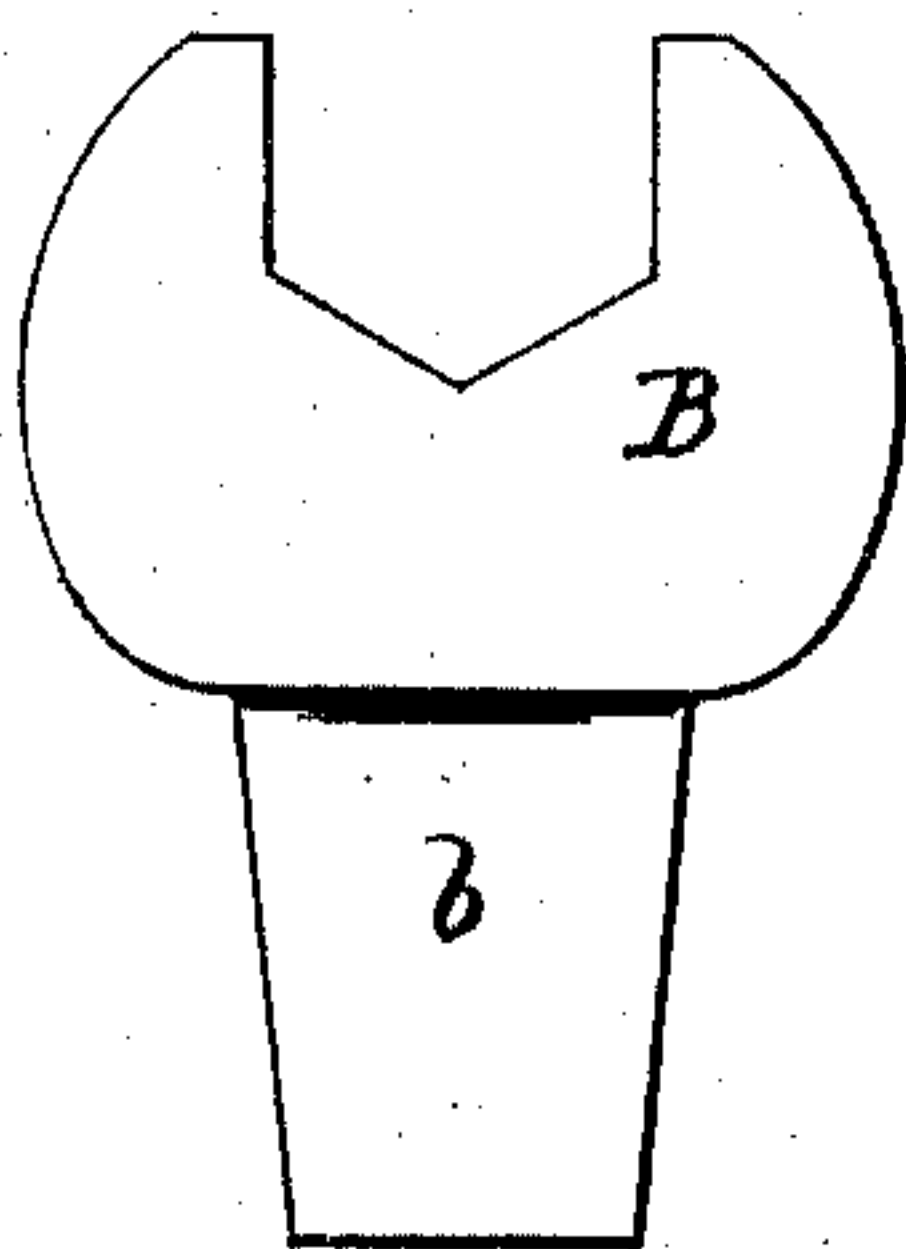


FIG. 4.

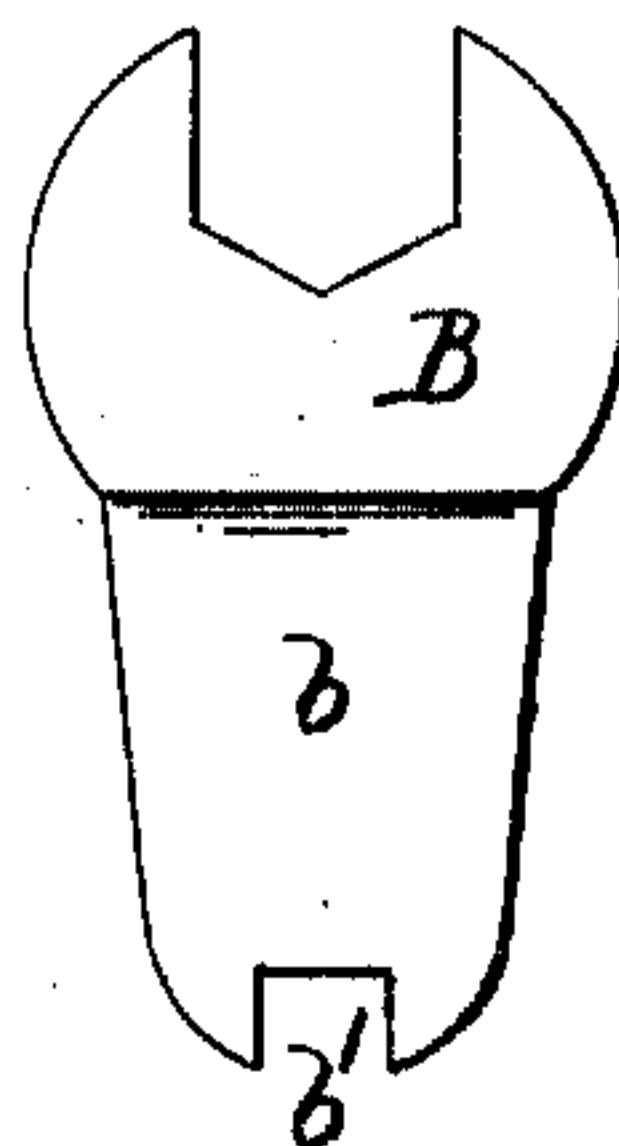


FIG. 5.

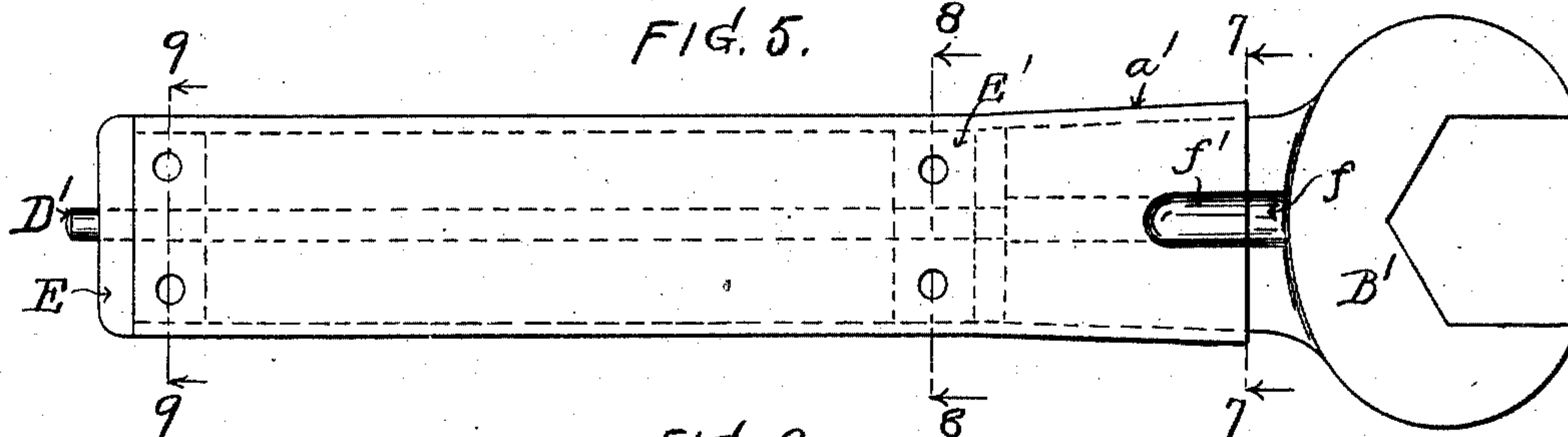


FIG. 6.

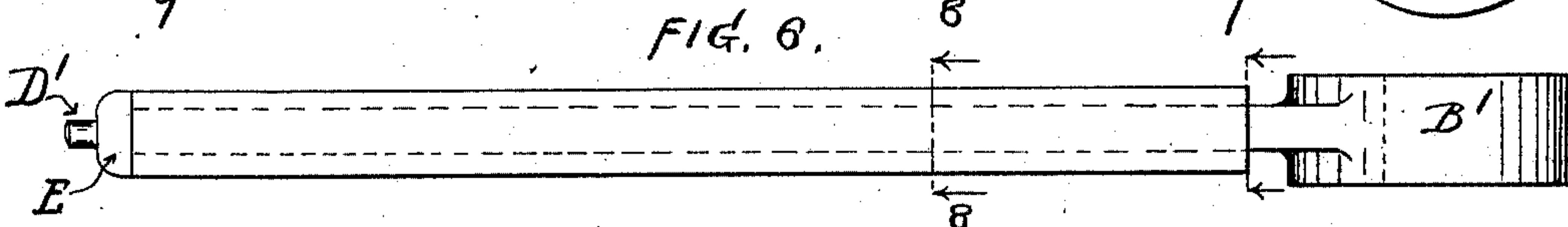


FIG. 7.

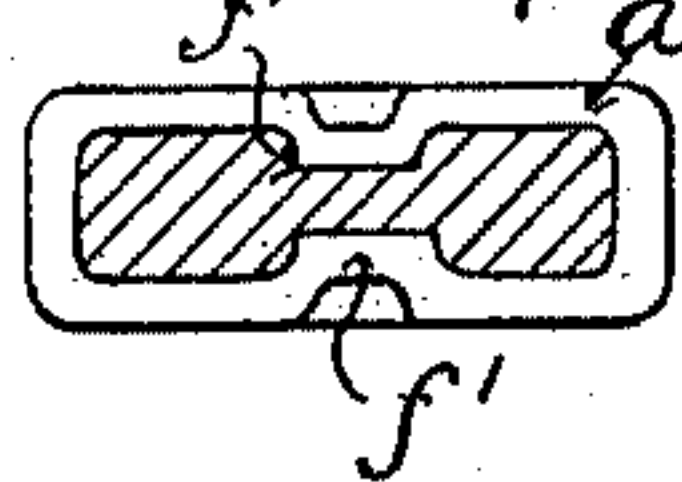


FIG. 9.

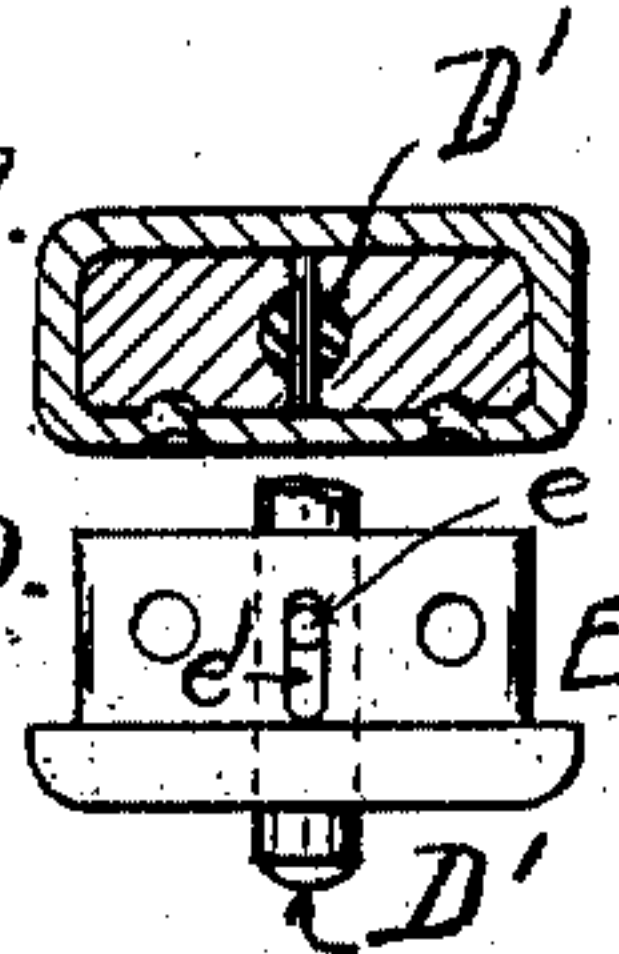


FIG. 10.

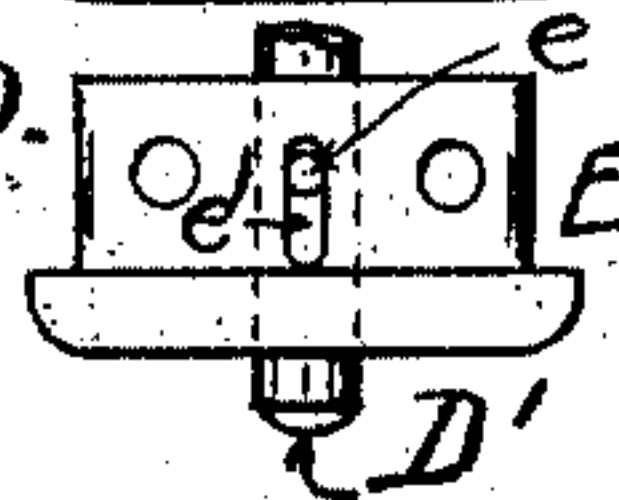


FIG. 8.



WITNESSES:

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BY

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# UNITED STATES PATENT OFFICE.

THOMAS A. WESTON, OF ARDEN, NORTH CAROLINA.

## TOOL-HANDLE.

SPECIFICATION forming part of Letters Patent No. 759,948, dated May 17, 1904.

Application filed May 9, 1901. Serial No. 59,458. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS A. WESTON, a citizen of the United States of America, residing in Arden, in the county of Buncombe, North Carolina, have invented an Improved Tool-Handle, of which the following is a specification.

The main object of my invention is to so construct the handle part of a wrench, screw-driver, or other hand-tool as to facilitate the removal and replacement of detachable jaws of varying sizes or other detachable operative parts of the tool. For this purpose I provide my tool-handle with a suitable socket adapted to receive the shank of the detachable jaw or other tool part and with a longitudinally-sliding rod extending through the handle and adapted to protrude at the back end, so that by a blow on the back end of this rod it may act as an ejector for the tool part to facilitate its removal.

In the accompanying drawings, Figure 1 is a side view of a form of wrench embodying my invention. Fig. 2 is an edge view of the same, partly in section. Figs. 3 and 4 are views of different sizes of detachable jaws for the wrench. Fig. 5 is a side view, and Fig. 6 an edge view, of a modified form of wrench. Fig. 7 is a sectional view on the line 7 7, Fig. 5. Fig. 8 is a sectional view on the line 8 8, Fig. 5. Fig. 9 is a sectional view on the line 9 9, Fig. 5. Fig. 10 is a view of a socket and part of ejector-rod at the back end of the wrench, Fig. 5.

Referring to Figs. 1 to 4, A represents the handle of the tool, which may be of flat sheet metal and formed at one end (the right hand in the view) with a tapering socket part *a* to receive the shank *b* of the jaw B of the wrench. Figs. 3 and 4 show different sizes of jaws, but with the same sizes of shanks. In Fig. 4 I have shown the shank as provided with a small jaw *b'*, convenient for small nuts by use of this jaw part alone when detached from the handle. The shank of each jaw part is adapted to make a tight fit in the socket part *a*, a light blow being given to the ends of the jaws to drive the jaw part in tightly.

For the ready ejection and removal of the jaw when desired I provide in the hollow

handle a longitudinally-sliding rod, which in Figs. 1 and 2 is shown in the form of a flat bar D, extending out at the open back end of the handle, but having its extent of longitudinal movement limited by a projection *p*, formed by indenting the metal and entering a groove *d*, formed in the side of the bar D, Figs. 1 and 2. By a sharp blow on the back end of this rod or bar D the jaw B may be readily ejected for replacement by another jaw or for putting the parts away in a pocket or case provided for the purpose or in case it is desired to use a jaw *d'* at the forward end of the sliding bar. For this last purpose the sliding bar has such an extent of forward movement as will allow its end to be projected beyond the end of the socket *a* when the detachable jaw B is removed, as indicated by dotted lines in Fig. 1. Another notch or wrench jaw *d''* of a different size may be formed at the back end of the bar or rod D, as shown in Figs. 1 and 2. When the ejector-rod is slid out, (to the left in Figs. 1 and 2,) it serves also as an extension-lever to increase the leverage of the wrench-handle when desired.

Referring to Figs. 5 to 10, inclusive, the tool-handle in this case is also shown as made of sheet metal and of rectangular flat section, with a tapering socket *a'* at the end to receive the tapering shank of the jaw B'. The shank of the jaw may be provided also with longitudinal grooves *f* to receive guide and strengthening ribs *f'* on the socket, Figs. 5 and 7. The ejector-rod in this case is shown as a cylindrical rod D', having a much more limited movement than the rod D of Fig. 1, this movement being limited in this case by a cross-pin *e* on the rod entering grooves *e'* in a guide-piece E at the back end of the handle, Figs. 9 and 10. Toward the forward end of the handle and just back of the tapering socket is a second guide-piece E', Figs. 5 and 8. These guide-pieces E E' are fixed in place by projections on the handle formed by indenting the metal of the handle into recesses formed in the said guide-pieces. As I have intimated, my improvements are applicable to other kinds of tools than wrenches.

I claim as my invention—

1. The combination of a wrench-jaw having

a tapering shank with a handle having a tapering socket and provided with an ejector-rod to force out the detachable jaw.

2. A tool-handle having a socket to receive  
5 the shanks of detachable tools with an ejector-rod movable longitudinally in the handle and adapted to be extended at the back end of the handle to form an extension-lever.

3. A tool-handle having a socket to receive  
10 the shanks of detachable tools with an ejector-

rod provided with wrench-jaws, substantially as described.

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

THOMAS A. WESTON.

Witnesses:

HUBERT HOWSAR,  
F. WARREN WRIGHT.