(No Model.)

J. FREARSON.

SCREW DRIVER.

No. 308,247. Patented Nov. 18, 1884.

FIG. 2.

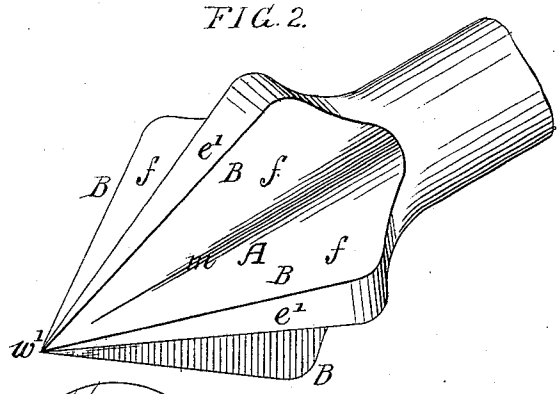


FIG. 1.

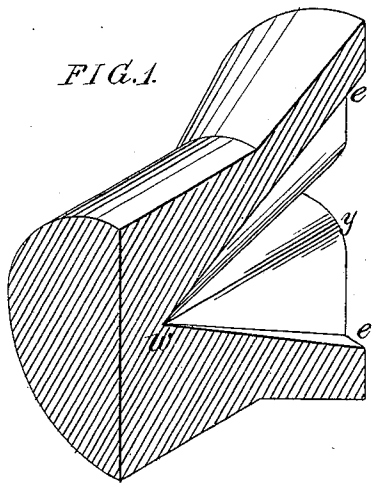


FIG. 4.

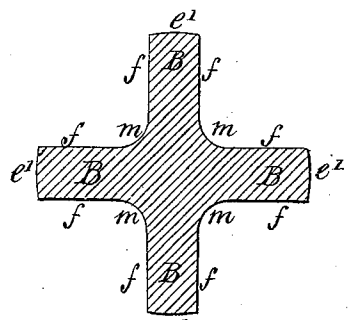


FIG. 3.

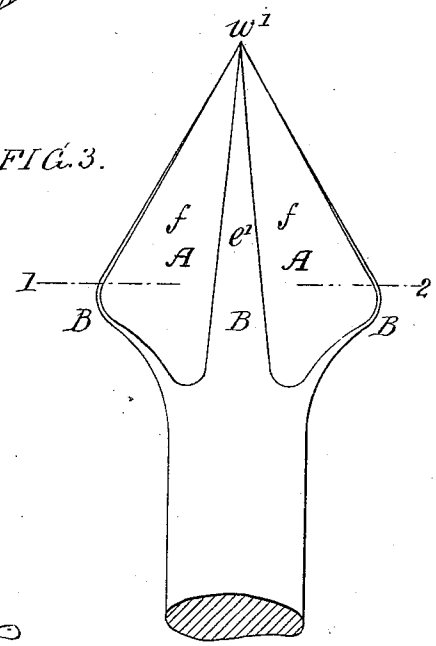
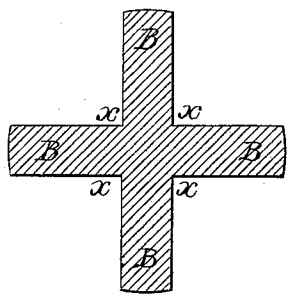


FIG. 5.



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UNITED STATES PATENT OFFICE.

JOHN FREARSON, OF BIRMINGHAM, COUNTY OF WARWICK, ENGLAND.

SCREW-DRIVER.

SPECIFICATION forming part of Letters Patent No. 308,247, dated November 18, 1884.

Application filed December 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN FREARSON, of Birmingham, in the county of Warwick, in the Kingdom of Great Britain and Ireland, have invented a certain Improvement in Screw-Drivers; and I do hereby declare the following to be be a full, clear, and exact description of the same.

My invention consists of an improvement, fully described hereinafter, in the screw-driver for which Letters Patent of the United States No. 179,695 were granted to me July 11, 1876, the main object of my present invention being to make a much stronger screw-driver than that described in said patent.

In the accompanying drawings, Figure 1 is a sectional perspective view of a screw-head to which the improved screw-driver is adapted; Fig. 2, a perspective view of the end of the screw driver; Fig. 3, a side view of the same; Fig. 4, a transverse section on the line 1 2, Fig. 3, and Fig. 5 a view illustrating the character of my patented screw-driver.

The screw-head which is shown in Fig. 1, and which forms the subject of a separate application for a patent, has a cruciform orifice formed by two nicks crossing each other at right angles, the nicks being, within the limit of the head, of angular form, and of the greatest depth at the center of the head. The ends *e* of the nicks, as well as the sides of the same, converge to a central point, *w*, as also do the rounded corners *y*, described in a separate application for a patent as an improvement in the screw-head described in the Patent No. 145,411, granted to me December 9, 1873.

The screw-driver described in my aforesaid Patent No. 179,695 has angular tapering ribs, substantially like those illustrated and marked with the letter B in Figs. 2, 3, and 4 of the accompanying drawings; but each groove between the ribs terminated in a sharp corner, *x*, as shown in Fig. 5—a defect which my present invention remedies.

It will be observed that the bottom of each groove A is rounded at *m*, so as to add great strength to the working end of the screw-driver. The edges *e'* as well as the sides *f* of the tapering ribs B converge to the point *w'*, so as to fit snugly in the orifice of the screw-head, and the concave bottom *m* of each groove B is continued throughout the entire length of the working-head of the screw-driver, the concave bottom, however, tapering to the point *w'*, where it disappears.

I claim as my invention—

A screw-driver the working-head of which has tapering angular ribs B and tapering angular grooves A, rounded or concave at the bottom, as set forth.

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

JOHN FREARSON.

Witnesses:
J. KEENE,
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F. BRAME,
Union Passage, Birmingham.