W. F. PATTERSON.

Screw-Driver.

No. 163,401. Patented May 18, 1875.

Fig. 1.

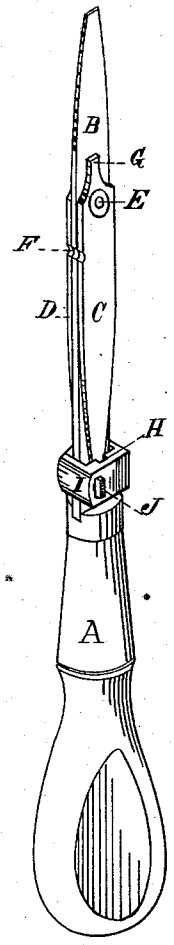


Fig. 2.

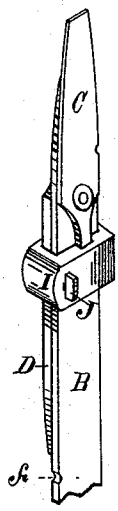
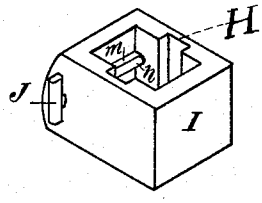


Fig. 3.



Witnesses:
Lewis Shaw,
H. E. Metcalf

Inventor:
William F. Patterson,
Per C. A. Shaw,
Atty.

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

WILLIAM F. PATTERSON, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SCREW-DRIVERS.

Specification forming part of Letters Patent No. **163,401**, dated May 18, 1875; application filed April 27, 1875.

To all whom it may concern:

Be it known that I, WILLIAM F. PATTERSON, of Boston, in the county of Suffolk, State of Massachusetts, have invented a certain new and useful Improvement in Screw-Drivers, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is an isometrical perspective view, showing the clamp as arranged for using the central blade. Fig. 2 is a sectional perspective view, showing one of the auxiliary blades advanced for use; and Fig. 3, an isometrical perspective view of the clamp detached.

Like letters of reference indicate corresponding parts in the different figures of the drawing.

My present invention is designed as an improvement on the screw-drivers described in five several Letters Patent of the United States heretofore issued to me, and numbered, respectively, February 24, 1874, No. 147,785; November 24, 1874, No. 157,102; January 19, 1875, No. 158,807; March 9, 1875, No 160,543; March 23, 1875, No. 161,056; and consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by which a more effective implement of this character is produced than is now in ordinary use.

The nature and operation of my invention will be readily understood by all conversant with such matters from the following description:

In the drawing, A is the haft or handle, and B the main or central blade. Pivoted at E to the main blade B, in such a manner as to have a common center of motion, there are two auxiliary or supplemental blades, D C, provided at their bases with the tenons G, the main and auxiliary blades being correspondingly nicked or laterally grooved at F. A clamp, I, having the internally-arranged slots H, is fitted to slide over the blades, and is provided with the eccentric shaft J. This shaft extends laterally through the clamp at one of the apertures or mortises in which the blades fit, and is so constructed that it may be turned to project its eccentric or rounded side *n* into the mortise, or to bring its flattened side *m* flush with the side of the same, as desired, the nicks F *f* being designed to receive the shaft when so turned as to project into the mortise.

In the use of my improvement when the supplemental blades are not required they are reversed, as shown in Fig. 1, bringing their points nearest the haft A, in which position they are secured by turning the shaft J, so as to bring the part *n* into the nick *f* at the base of the main blade. In case either of the auxiliary blades are required, the parts are arranged as shown in Fig. 2, in which the tenon G of the blade C is inserted in the slot H, and all of the blades clamped together or secured by turning the shaft J into the slots F.

I do not herein claim anything shown or described in either of said Letters Patent when in and of itself considered; but

Having thus explained my improvement, what I claim is—

In a screw-driver, substantially such as described, the blade B, provided with the reversible auxiliary blades C D, and the clamp I, provided with the mortise H, and the eccentric shaft J, all constructed and arranged to operate substantially as and for the purpose set forth and specified.

WILLIAM F. PATTERSON.

Witnesses:

H. E. METCALF,

GEO. G. SHAW.