

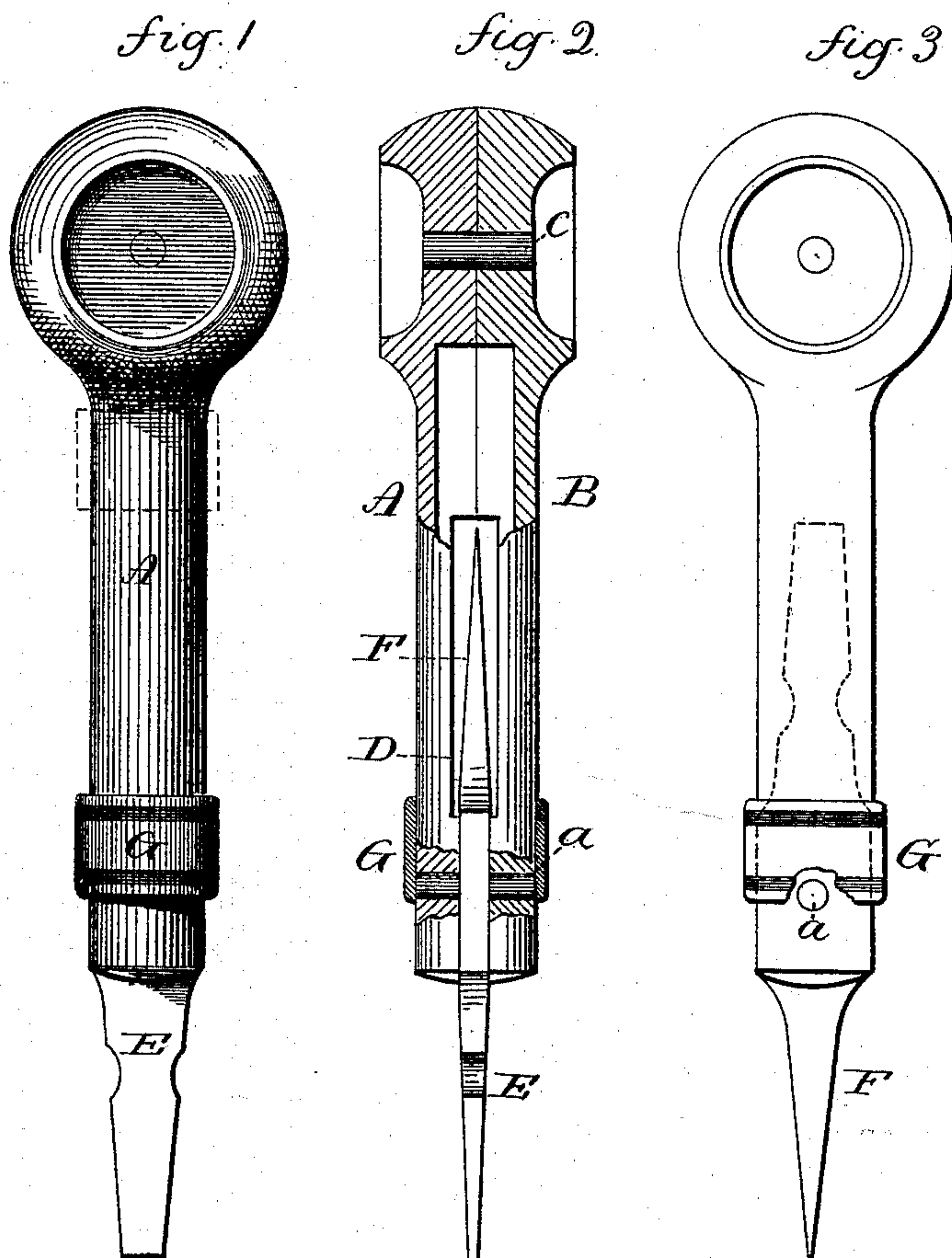
(No Model.)

H. V. SMITH.

CONVERTIBLE SCREW DRIVER AND BORER.

No. 274,042.

Patented Mar. 13, 1883.



Witnesses:

J. H. Chumney
J. D. Parle

Henry V. Smith
By atty. Inventor

J. D. Parle

UNITED STATES PATENT OFFICE.

HENRY V. SMITH, OF PLANTSVILLE, CONNECTICUT, ASSIGNOR OF ONE-HALF
TO GEORGE E. CRUTENDEN, OF SAME PLACE.

CONVERTIBLE SCREW-DRIVER AND BORER.

SPECIFICATION forming part of Letters Patent No. 274,042, dated March 13, 1883.

Application filed September 4, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY V. SMITH, of Plantsville, in the county of Hartford and State of Connecticut, have invented new Improvements in Convertible Screw-Drivers and Borers; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view, presenting the screw-driver; Fig. 2, a vertical central section; Fig. 3, same as Fig. 1, presenting the borer.

This invention relates to an improvement in an instrument for driving screws, the object being to combine in one instrument a device for boring the hole and a screw-driver, either of which may be used as required; and it consists in a handle carrying a blade pivoted in the handle, one end shaped to form a borer to make the hole for the insertion of the screw, the other end a screw-driver, and arranged so that either end may be presented for work, the other inclosed within the handle, the handle constructed in two parts from cast metal, so as to form a central handle, within which the inactive end of the blade will be inclosed, and the two parts of the handle secured together by a transverse rivet, and the blade held in its active position by a collar sliding on the body of the handle, as more fully hereinafter described.

The handle is made from two parts, A B, divided in a vertical or longitudinal line, the two parts fitting together, and so that a rivet, C, inserted transversely through the head end will secure the two parts together. The lower part of the handle has a central slot, D, formed half in each part, and opening to the right and left. In this slot the blade is hung upon a pivot, *a*. The blade is shaped at one end to form a screw-driver, E, and the other end to form a borer, F, the blade arranged so as to

swing through the slot and present either end—say as from the position in Fig. 1 to that in Fig. 3, or vice versa. The pivot through the blade and lower end of the handle serves to secure that end of the handle together; but as the pivot is necessary to the blade, the pivot C is the only additional part required. The body of the handle from the lower end upward is made cylindrical, and on this cylindrical part is a sliding collar, G, and which, when the blade is in the desired position, is moved down to near the lower end, where the blade corresponds in width to the diameter of the handle, and in that position, as seen in the several figures, it holds the blade and prevents its turning upon the pivot; but when it is desired to change the ends of the blade, the collar G is moved upon the body away from the lower end, as seen in broken lines, Fig. 1, which leaves the slot free for the turning of the blade.

By this construction I am enabled to cast the handle with the slot, and also to cast the handle hollow without a core, and thus produce a very cheap handle, and with this convertible borer and screw driver I produce an article convenient for joiners and others.

I claim—

As an article of manufacture, the herein-described screw-driver and borer, consisting of the handle made in two parts, A B, slotted transversely, divided longitudinally through the slot, a blade hung upon a pivot in the lower end of the handle, arranged to turn through the slot and present either end outward, the other end being in the slot within the handle, the body of the handle cylindrical, combined with a collar, G, arranged to slide upon the body of the handle, and the two parts of the handle secured together, all substantially as described.

HENRY V. SMITH.

Witnesses:

JOSEPH G. WITHAM,
L. W. ROBBINS.