

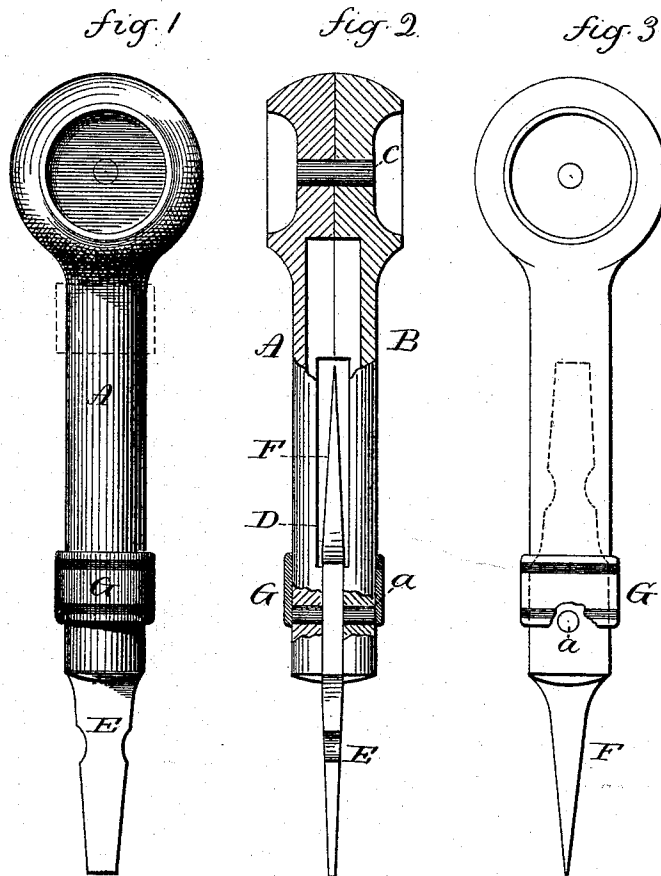
(No Model.)

H. V. SMITH.

CONVERTIBLE SCREW DRIVER AND BORER.

No. 274,042.

Patented Mar. 13, 1883.



Witnesses:

*John Channing*  
*John D. Parle*

*Henry V. Smith*  
By atty. *J. J. J. J.*

*John 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  
Plantville, in the county of Hartford and  
State of Connecticut, have invented new Im-  
5 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 descrip-  
10 tion of the same, and which said drawings con-  
stitute part of this specification, and repre-  
sent, in—

Figure 1, a side view, presenting the screw-  
driver; Fig. 2, a vertical central section; Fig.  
15 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  
20 of which may be used as required; and it con-  
sists 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  
25 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 in-  
active end of the blade will be inclosed, and  
30 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  
40 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  
45 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  
50 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  
55 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  
60 several figures, it holds the blade and pre-  
vents 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  
65 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 pro-  
duce a very cheap handle, and with this con-  
70 vertible 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  
75 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  
80 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  
85 described.

HENRY V. SMITH.

Witnesses:

JOSEPH G. WITHAM,  
L. W. ROBBINS.