

(No Model.)

E. A. BICKEL.

TOOL.

No. 263,104.

Patented Aug. 22, 1882.

Fig. 1.

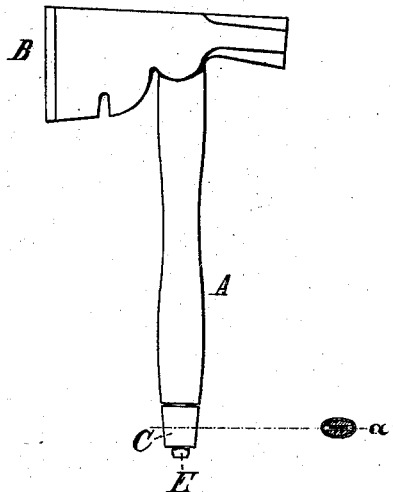


Fig. 3.

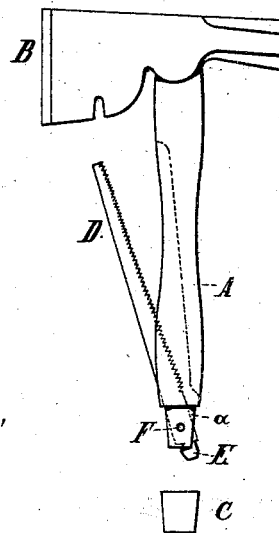


Fig. 4.

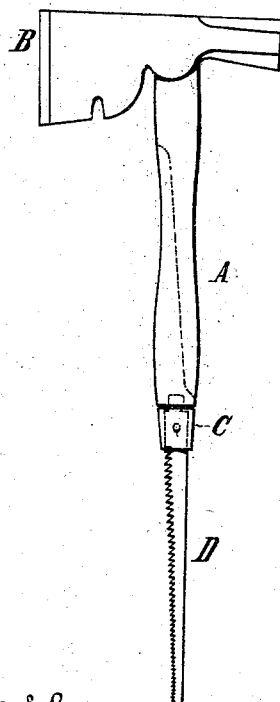
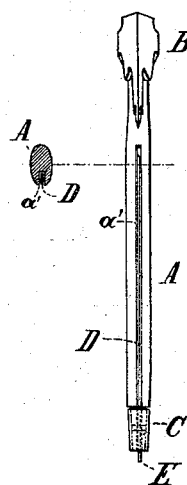


Fig. 2.



Attest:
Carl Spensel.
[Signature]

Inventor
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UNITED STATES PATENT OFFICE.

EDWARD A. BICKEL, OF CINCINNATI, OHIO.

TOOL.

SPECIFICATION forming part of Letters Patent No. 263,104, dated August 22, 1882.

Application filed May 10, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWARD A. BICKEL, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Compound Tool, of which the following is a specification.

My invention relates to a tool or implement in which a hatchet is combined with a saw and screw-driver.

In the accompanying drawings, Figures 1 and 2 are respectively a side and an edge view of my tool in its most compact form, in which it is adapted for use either as a hatchet or as a screw-driver. Fig. 3 shows the same with its ferrule temporarily detached and the saw partially unfolded. Fig. 4 shows the saw fully projected and the ferrule restored to place.

A may represent the helve, and B the blade or head, of a hatchet. The butt end of said helve is turned down to form a tenon, *a*, of slightly-tapering shape, for a metallic ferrule, C.

A kerf or channel, *a'*, which penetrates the helve from one edge and for some distance inward, as indicated by strong lines in Fig. 2 and by dotted lines in Figs. 3 and 4, receives and in its folded condition incloses a saw-blade, D, whose heel end is formed into a screw-driver, E. The blade D E is secured to the helve by a pivot, F.

When desired for use as a hatchet or as a screw-driver the device remains in the form

shown in Figs. 1 and 2. From this form it may be changed to that shown in Fig. 4 by simply withdrawing the ferrule C, unfolding the saw-blade, and restoring the ferrule.

My above-described arrangement is susceptible of several modifications. For example, the saw-blade may be secured on the same principle as that of an ordinary clasp-knife and be held in both its open and shut position by a back spring; or its heel-bearing may be such as to cause it to spring, like a dirk-knife, to the open position on being slightly liberated. In either of these latter forms the sheath and the screw-driver may be omitted.

This implement is thought to be a very valuable addition to the kit of persons who have frequent need to travel by rail or by steamboat, and where in case of accident such a tool may be the means of saving life and limb.

I claim as new and of my invention—

The compound tool herein described, consisting of the channeled helve A *a a'*, hatchet-head B, pivoted saw-blade D, and ferrule C.

In testimony of which invention I hereunto set my hand.

EDW. A. BICKEL.

Attest:

CARL SPENGEL,
SAM'L. S. CARPENTER.