

(No Model.)

D. F. BARBER.
Countersink.

No. 230,603.

Patented Aug. 3, 1880.

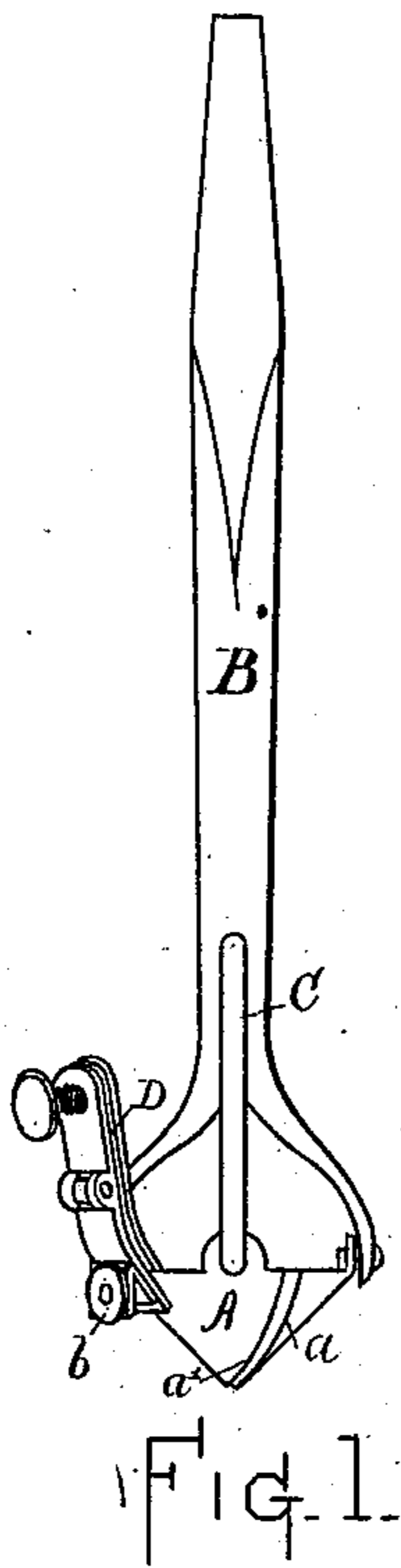


Fig. 1.

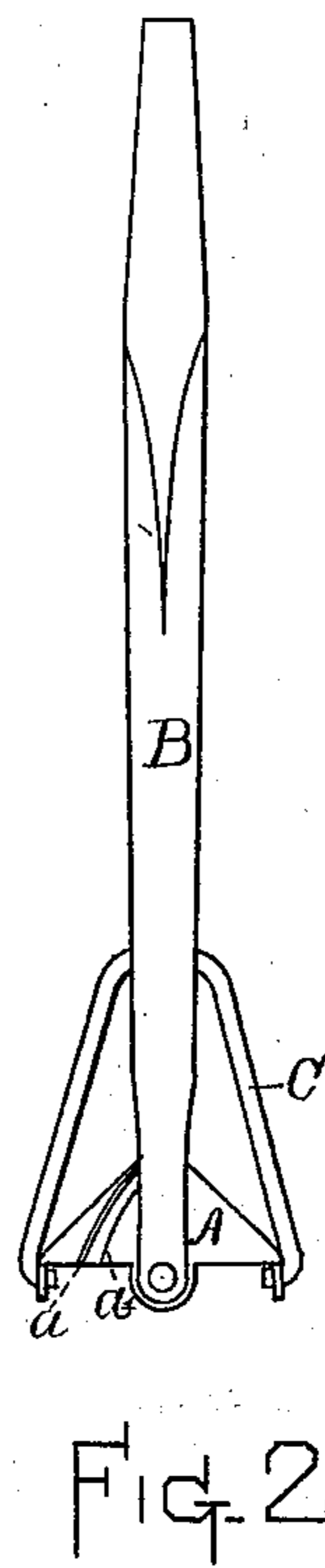


Fig. 2.

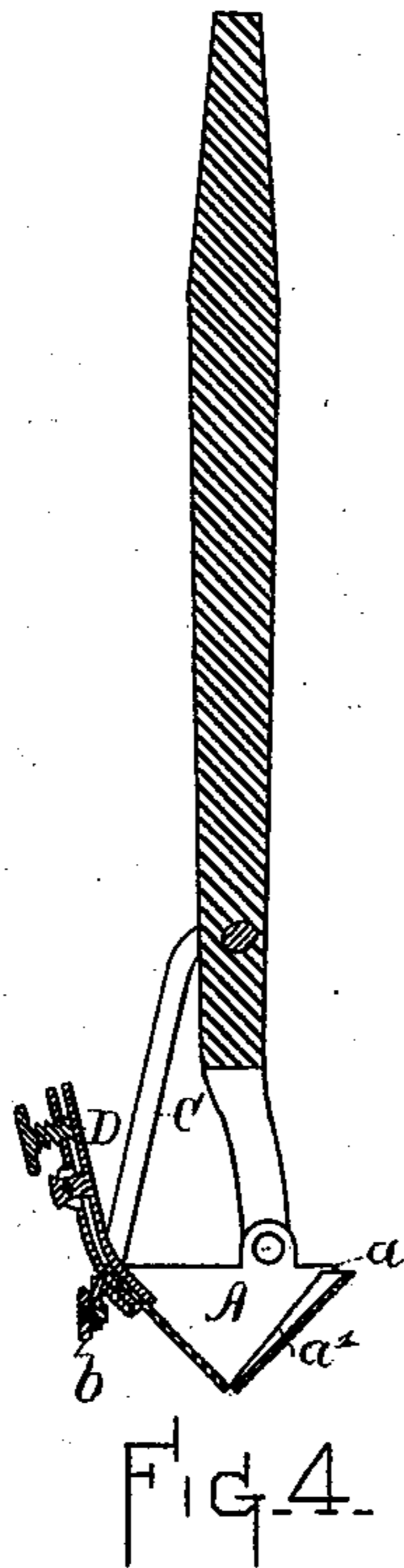


Fig. 4.

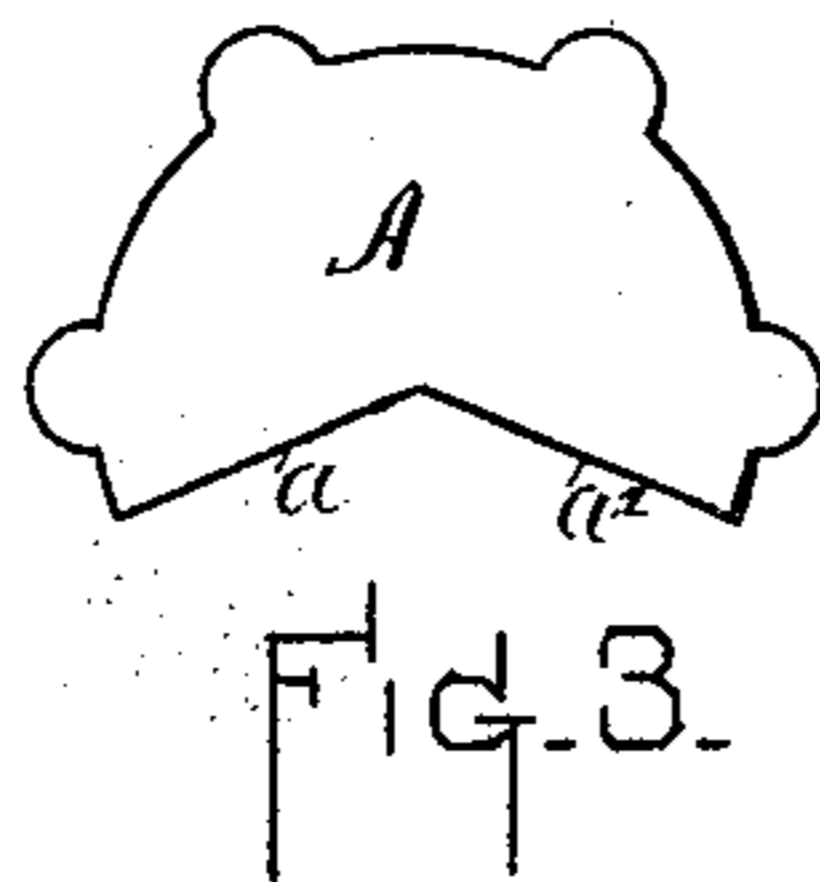


Fig. 3.

Wm. Zittel.
J. R. Snow.

D. Fletcher Barber.
by J. I. Maynard
his atty.

UNITED STATES PATENT OFFICE.

D. FLETCHER BARBER, OF NEWTON, MASSACHUSETTS.

COUNTERSINK.

SPECIFICATION forming part of Letters Patent No. 230,603, dated August 3, 1880.

Application filed April 26, 1880. (No model.)

To all whom it may concern:

Be it known that I, D. FLETCHER BARBER, of Newton, in the county of Middlesex and State of Massachusetts, have invented an Improved Countersink, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, making a part hereof.

In the drawings, Figure 1 is a side elevation of my improved countersink. Fig. 2 is the same with the cutter reversed to adapt the tool for use for pointing dowel-pins. Fig. 3 is a plan of the blank from which my new cutter is formed. Fig. 4 is a section.

My cutter A is hollow, conical in form, and made of sheet-steel from the blank shown in Fig. 3, and has two cutting-edges—one, *a*, projecting a little beyond the exterior surface, the other, *a'*, a little beyond the interior surface—the space left between these cutting-edges forming an escape-aperture for the shavings. This cutter is mounted upon a stock, B, so that it can be reversed, as clearly shown in the drawings, and thereby adapted for two uses—one as a countersink and the other for forming a conical end on a dowel-pin, or the like.

C is the catch by which the cutter A is held in the desired position. This catch is a bent piece of spring-wire, which passes through a hole in stock B, so that the bent ends of it will engage with the holes in the ears on each side of the cutter. The other pair of ears are connected by rivets to the forked end of the stock B.

D is a clamp composed of two strips of sheet-metal hinged together near their middle, and

having a set-screw passing through one end of one of them, by which the other ends of the two strips are made to act as a clamp in the well-known manner. A small roll, *b*, is secured upon a stud fast to the outer member of the clamp. This clamp is applied to the countersink, as shown in the drawings, and held in place by tightening the set-screw. The roll *b* comes in contact with the wood when the countersink is of the proper depth. This adjusting-roll clamped to the countersink and adjustable thereon also forms a part of my invention. It can be used with the ordinary countersink.

What I claim as my invention is—

1. In combination, cutter A, made in the form of a hollow cone not truncated and having two cutting-edges, *a a'*—one internal, the other external—stock B, and catch C, whereby the cutter can be reversed in its stock, as and for the purpose specified.

2. In combination with countersink-cutter A, clamp D, composed of two strips of metal hinged together, having a set-screw at one end and roll *b* at the other end, as and for the purpose specified.

3. The countersink-cutter A, made in the form of a hollow cone not truncated, with an opening from its apex to its base, and provided with two or more rivet-holes near its base by which to attach it to a forked stock, as described.

D. FLETCHER BARBER.

Witnesses:

J. E. MAYNADIER,

WM. ZITTEL.