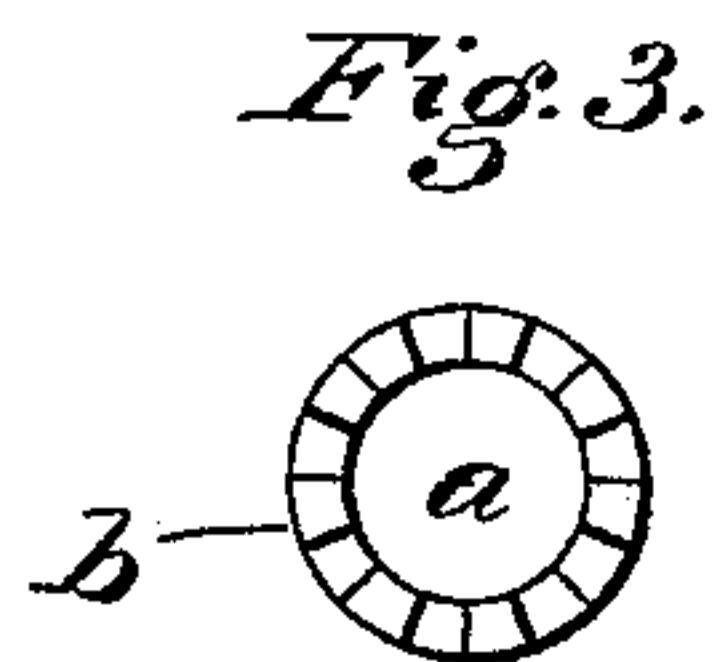
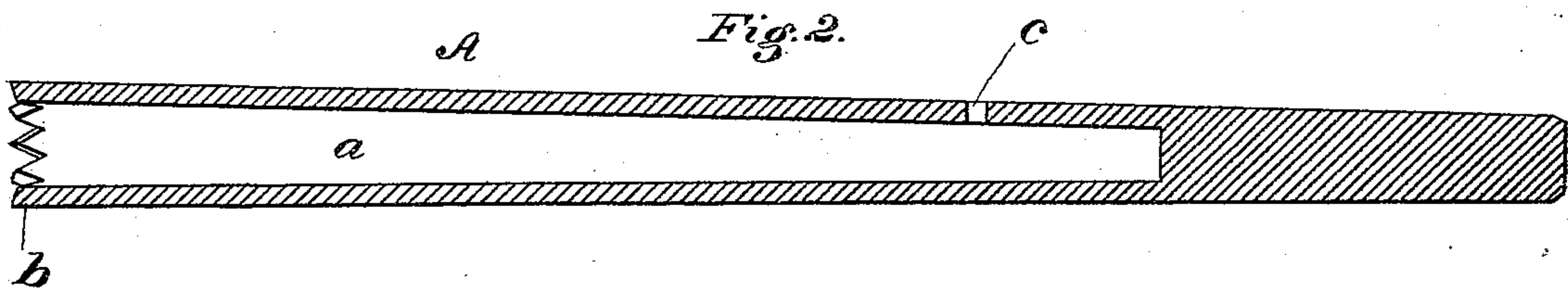
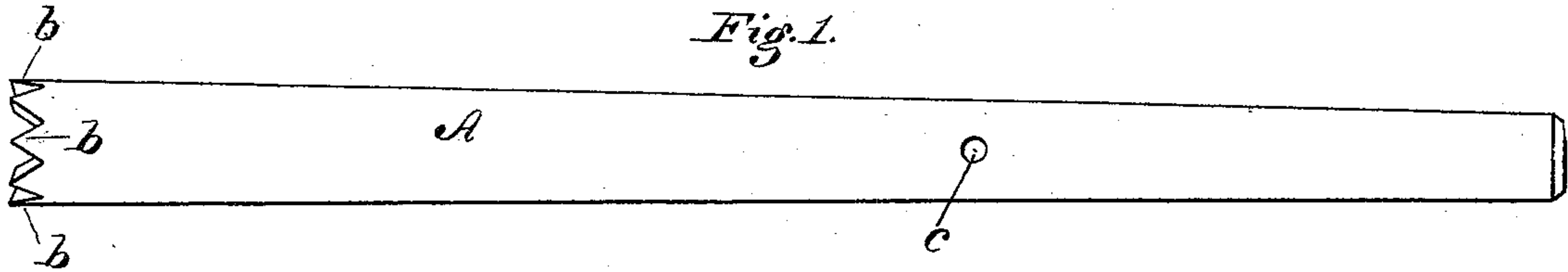


A. H. CRUMP.

CHISELS FOR CUTTING HOLES IN MASONRY.

No. 175,672.

Patented April 4, 1876.



Witnesses:
Orrin Twitchell.
Hill A. Dodge.

Inventor:
A. H. Crump.
By his attys
Dodge & Son.

UNITED STATES PATENT OFFICE.

ALBERT H. CRUMP, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN CHISELS FOR CUTTING HOLES IN MASONRY.

Specification forming part of Letters Patent No. **175,672**, dated April 4, 1876; application filed March 14, 1876.

To all whom it may concern :

Be it known that I, ALBERT H. CRUMP, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain Improvements in Chisels or Drills for Cutting Holes in Masonry, of which the following is a specification:

The object of my invention is to provide a hand tool or chisel by which holes may be cut through brick and stone walls with ease, rapidity, and accuracy; and to this end it consists in a round chisel having its forward end made of a tubular form, and provided with a series of pointed teeth or cutting-lips.

Figure 1 represents a side view of my improved tool; Fig. 2, a longitudinal central section of the same; Fig. 3, an end or face view of the same.

The tool consists simply of a round steel rod, A, provided with a central opening, *a*, from its point inward, and with a series of pointed saw-like teeth, *b*, on its annular cutting end, as shown. By preference the tool is made of decreasing diameter from its point toward its head. In using the tool it is driven sharply forward by repeated blows of a hammer, and at the same time given a slow rotary motion. The series of pointed teeth acting all at the

same time, cut an annular hole into the masonry with great rapidity, leaving a central core, which, with the dust and chips, enters the center of the tool, from which the small particles escape through a side opening, *c*. (Shown in the drawings.) The central space not only receives the dust and chips, so as to avoid the necessity of frequently withdrawing the tool, as usual, but also leaves a free clean surface for the teeth to act upon, and reduces the amount of surface to be cut an amount equal to the area of the opening. By leaving the central opening, and thereby reducing the amount of cutting required, and at the same time providing the series of teeth, the tool is enabled to cut with a speed far beyond that of those constructed in the ordinary manner.

Having thus described my invention, what I claim is—

1. The hollow toothed chisel, constructed substantially as shown and described.
2. The hollow chisel A, provided with the series of pointed teeth *b* and the discharge-opening *c*.

ALBERT H. CRUMP.

Witnesses:

FRANK MCBRIDE,
THOS. M. DEVINE.