

(No Model.)

W. H. SILSBY.

ROCK DRILL.

No. 256,749.

Patented Apr. 18, 1882.

Fig. 1.

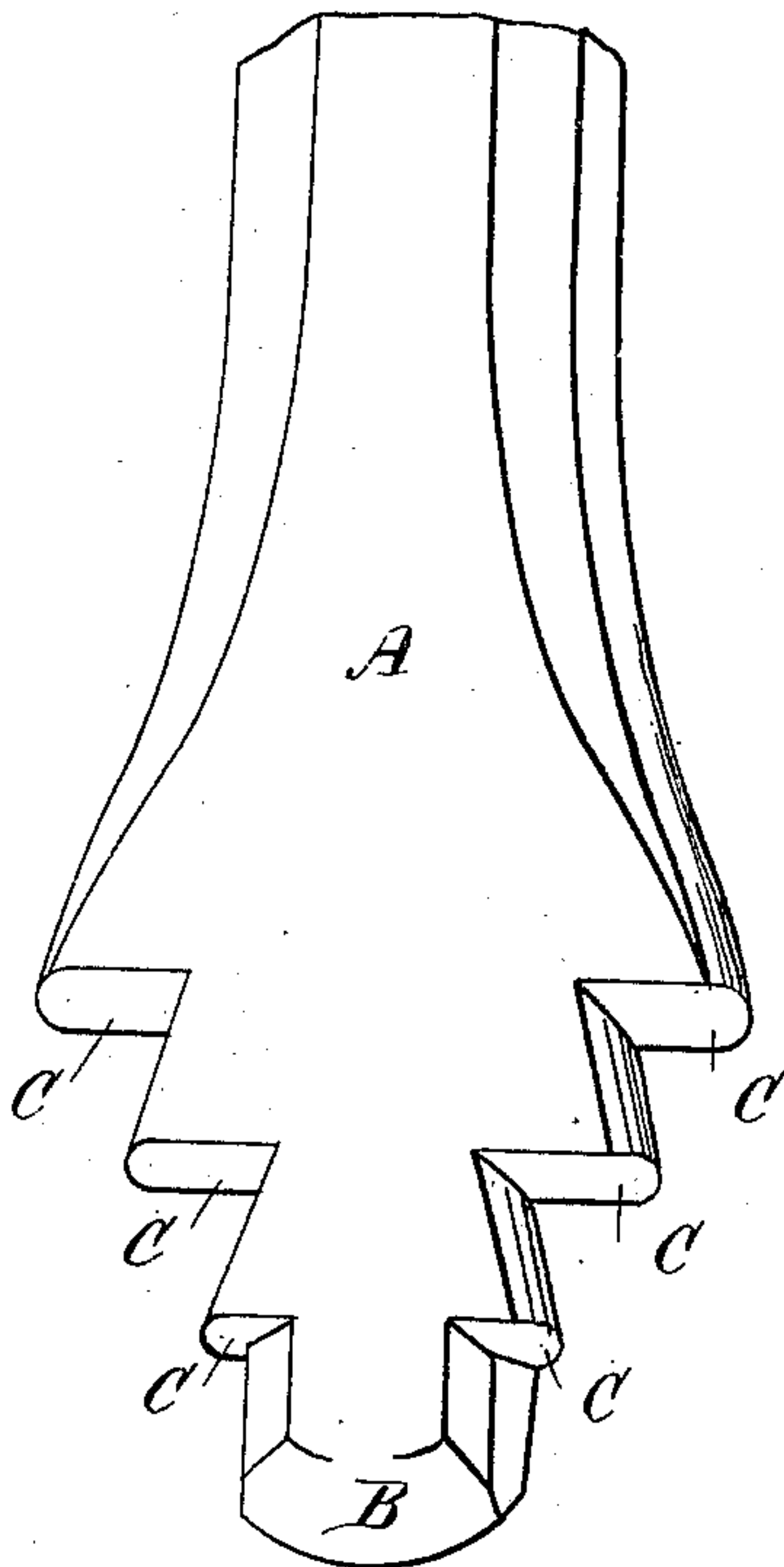
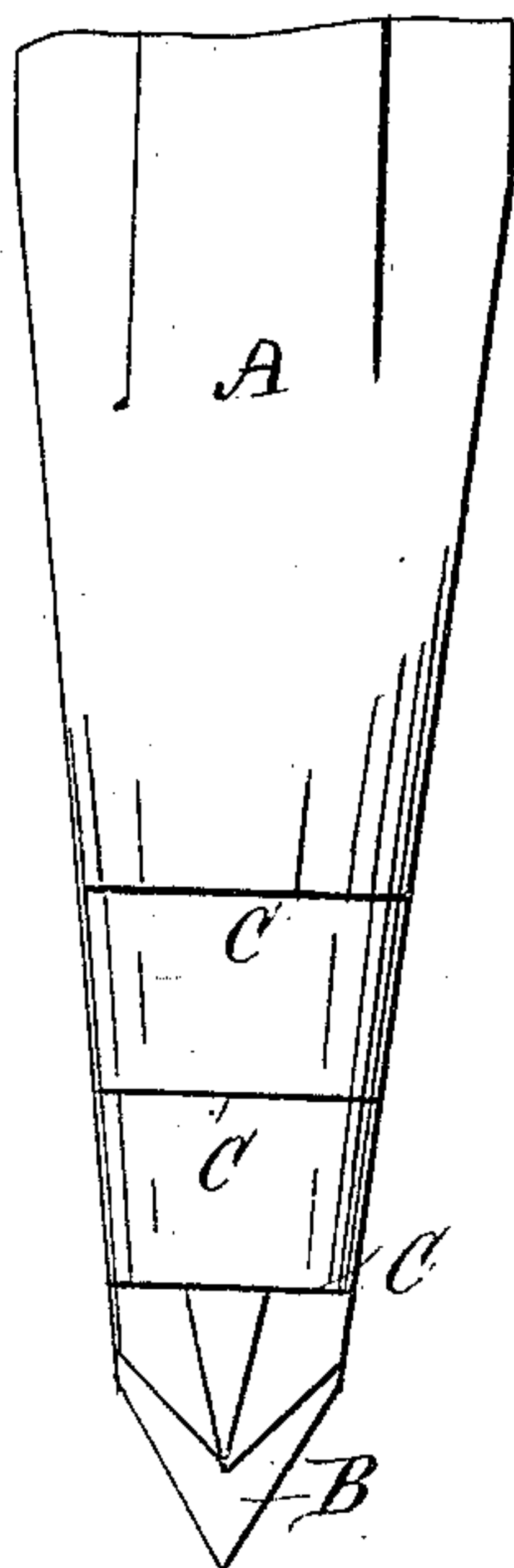


Fig. 2.



WITNESSES:

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ROCK-DRILL.

SPECIFICATION forming part of Letters Patent No. 256,749, dated April 18, 1882.

Application filed December 7, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. SILSBY, of Orleans Bar, in the county of Humboldt and State of California, have invented a new and Improved Rock-Drill, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved rock-drill which will bore a straight hole in a rock and will not follow the seams, and at the same time will bore more rapidly than the drills that have been used heretofore and require less sharpening.

The invention consists in a drill provided with a series of offsets in its sides, whereby two or more side cutters, one above the other, will be arranged in the form of steps in the sides of the drill, the width of which increases from the bottom middle cutting-edge toward the uppermost offset.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a perspective view of my improved drill. Fig. 2 is a longitudinal end elevation of the same.

The drill A is provided with a cutting-edge, B, at its lowest point, and with one or more offsets in the edges or sides, these offsets forming one or more cutters, C, in each side or edge of the drill, each cutter projecting out beyond the one next below it, so that the side or edge of the drill will have the appearance of steps. Those parts of the edges or sides of the drill connecting one cutter C with the other are

inclined upward and toward the longitudinal central line of the drill; but the outer edges of the cutters C are on a line inclined upward and outward from the bottom cutting-edge, B, of the drill. The lowest cutting-edge, B, is beveled from both flat sides of the drill, but the other cutting-edges, C, are flat below and are slightly inclined from the outer toward the inner end in a drill for soft rock; but in a drill for hard rock they are horizontal. The lowest cutting-edge, B, is parallel with the width of the drill, and the other cutting-edges, C C, are at right angles to the cutting-edge B, so that the cuts made in the rock will always be in two directions at right angles to each other.

The number and size of the cutting-edges C may vary with the size of the drill.

This drill operates much more rapidly than an ordinary drill, and if the rocks are full of seams my improved drill will not bind, but will cut a perfectly straight hole.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

An improved rock-drill having the cutting-edge B and the series of side cutters, C, projecting out beyond the one next below it, the side or edges of the drill connecting the said cutters being inclined upward and toward the center longitudinal line of the drill, substantially as herein shown and described.

WILLIAM HENRY SILSBY.

Witnesses:

WILLIAM LORD,
PETER S. FERGUSON.