

No. 805,008.

PATENTED NOV. 21, 1905.

W. J. ERTLE.
ROCK DRILL.

APPLICATION FILED APR. 6, 1905.

Fig. 1.

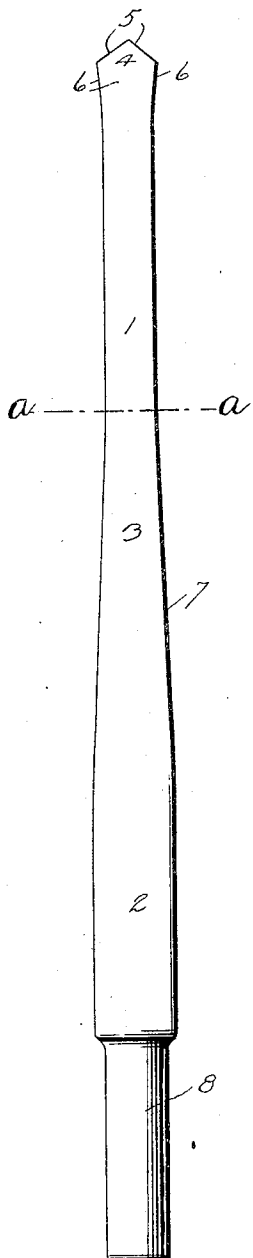


Fig. 2.

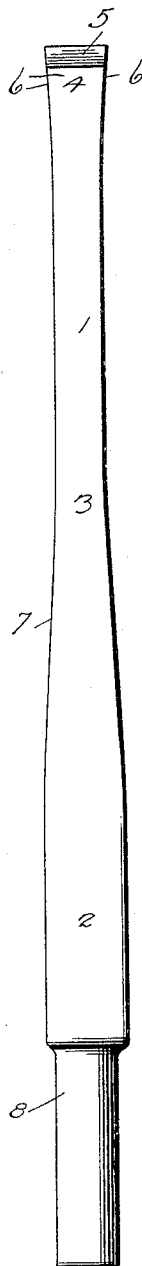
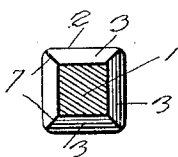


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM JOHN ERTLE, OF KNOWLES, CALIFORNIA.

ROCK-DRILL.

No. 805,008.

Specification of Letters Patent.

Patented Nov. 21, 1905.

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To all whom it may concern:

Be it known that I, WILLIAM JOHN ERTLE, a citizen of the United States, residing at Knowles, in the county of Madera, State of California, have invented a new and useful Rock-Drill to be Used Either by Hand or Air Power, of which the following is a specification.

My invention is an improved rock-drill adapted for use either as a hand-drill or for operation by a drilling-machine, the object of my invention being to effect improvements in the construction of the drill, whereby the same is tapered in form and is angular in cross-section to provide it with angular edges throughout its length, which act to keep the dust made by drilling loose, prevent it from becoming packed around the drill, and cause the dust to be cleaned out as the drill-hole deepens, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a drill embodying my improvements. Fig. 2 is a similar view at right angles to Fig. 1. Fig. 3 is a transverse sectional view taken on the plane indicated by the line *a a* of Fig. 1.

The stock 1 of my improved drill is angular in cross-section, here shown as rectangular, and is provided with the base portion 2, of larger sectional area, and the shank 3, which tapers from the said enlarged portion

to within a suitable distance of the point, the point 4 being widened, as shown, and being formed by converging obtuse-angled cutting edges 5 and outwardly-flared side edges 6, said edges and flared sides being coincident with the sides of the stem. The tapered shank 3 being of rectangular form cross-sectionally provides angular edges 7, which extend from end to end of the drill and which act as the drill is turned when in use to keep the drill-dust in motion, prevent the drill-dust from packing, and to facilitate and cause a clearing-out of the drill-dust as the drill-hole deepens. At the inner end of the drill is the cylindrical shank 8.

Having thus described my invention, I claim—

A drill of the class described, having a base portion angular in cross-section and of larger sectional area, a tapered stem extending outwardly from said enlarged base portion and of angular form cross-sectionally, to provide correspondingly-shaped edges which extend from end to end thereof, and a broadened point having obtuse-angled converging cutting edges and outwardly-flared sides coincident with the sides of the stem, substantially as described.

WILLIAM JOHN ERTLE.

Witnesses:

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