J. C. Mills,

Auger Bit.

No. 112,063. Patented Feb. 21. 1871.

fig: 1

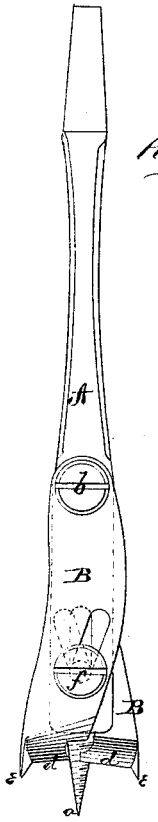
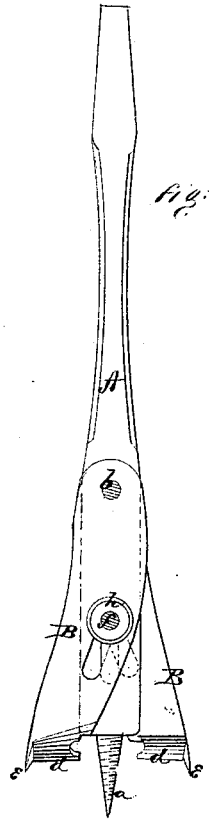


fig: 3

fig: 2



Witnesses.

C. L. Everts.

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UNITED STATES PATENT OFFICE.

JOHN C. MILLS, OF ROCHESTER, NEW YORK, ASSIGNOR TO HIMSELF AND RICHARD LEAKE, OF SAME PLACE.

IMPROVEMENT IN AUGER-BITS.

Specification forming part of Letters Patent No. **112,063**, dated February 21, 1871.

To all whom it may concern:

Be it known that I, JOHN C. MILLS, of Rochester, in the county of Monroe, and in the State of New York, have invented certain new and useful Improvements in Auger-Bits; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of an adjustable "auger-bit," as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side view of my auger-bit contracted to its narrowest limit. Fig. 2 is a view of the opposite side thereof, showing the auger-bit expanded to its utmost limit; and Fig. 3 is a section of the same.

A represents the shaft, provided at its lower end with the usual screw or auger, *a*. For a suitable distance above this lower end the shaft A is flattened, and on each side thereof is placed a plate or bar, B, pivoted at their upper ends by means of a screw, *b*. The lower ends of the bars B B are formed, as shown, with a beveled cutter, *d*, having at its outer edge a downward-projecting knife, *e*. The flattened portion of the shaft A is slotted longitudinally for a suitable distance, and through the same is passed a headed screw-bolt, *f*, which also passes through inclined slots in the two bars B B, and upon the end of said bolt is placed a nut, *h*, provided with projections *i* on its under side. These projections are inserted in the slot on the bar B on that side, and prevent the nut from turning.

The operation of this bit is readily seen. By loosening the bolt *f* and sliding the same up or down in the slot on the shaft A, the jaws of the bit are expanded or contracted, so that the bit may be set for any-sized hole desired to be made.

Having thus fully described my invention, I disclaim an extension-bit with the adjusting-screw passing longitudinally through the cutters and the shaft; but

What I claim as new, and desire to secure by Letters Patent, is—

The combination of the slotted shaft A, with its screw or auger *a*, the slotted plates or bars B B, with their cutters *d d* and *e e*, the screw *b*, and the bolt *f*, all constructed and arranged as described, and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 16th day of December, 1870.

JOHN C. MILLS. [L. S.]

Witnesses:

C. L. EVERT,

CHRIS GAFFIN.