

No. 622,409.

Patented Apr. 4, 1899.

H. AYLMER.
MINER'S DRILL.
(Application filed Oct. 3, 1898.)

(No Model.)

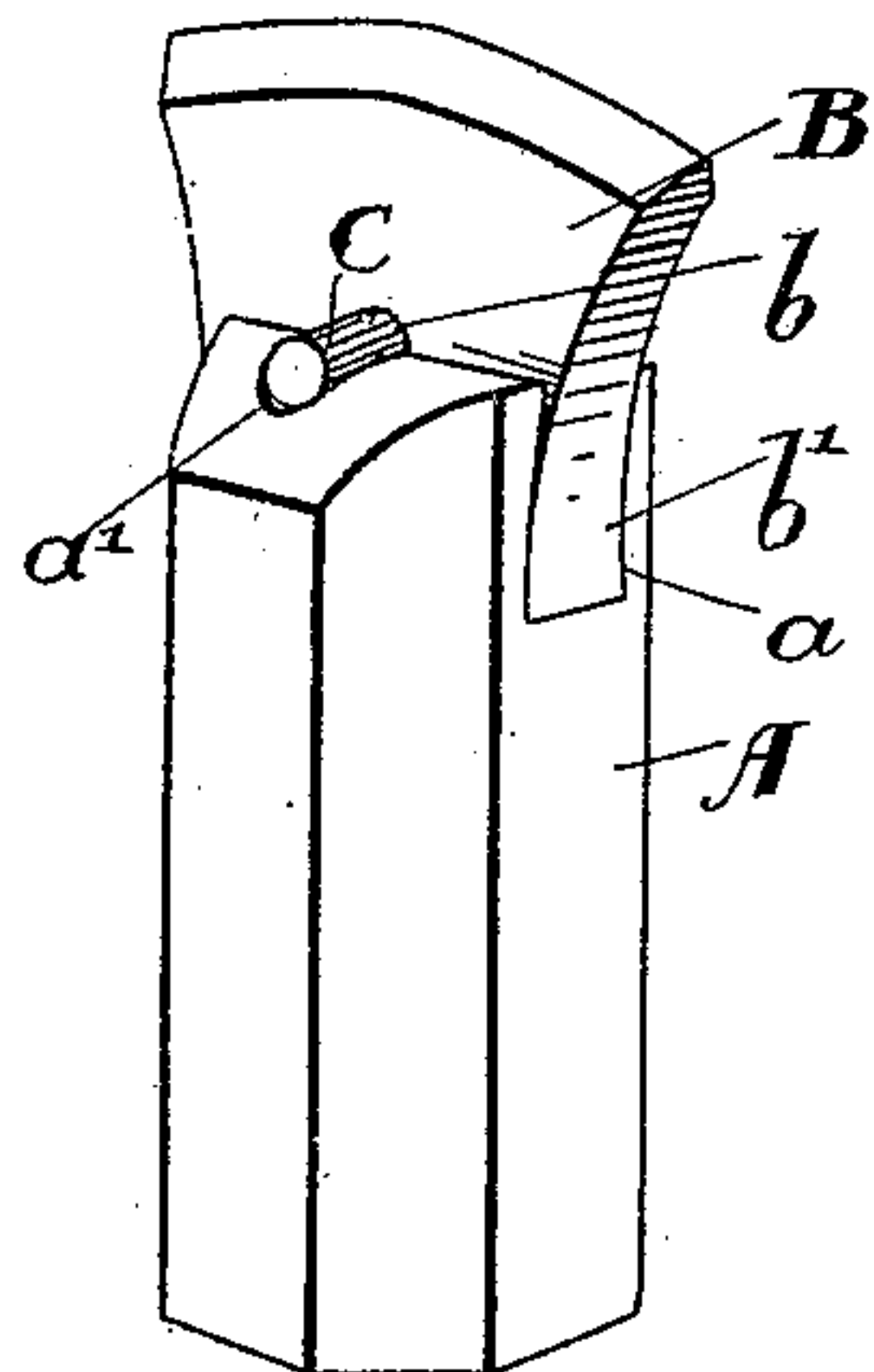


Fig. 1.

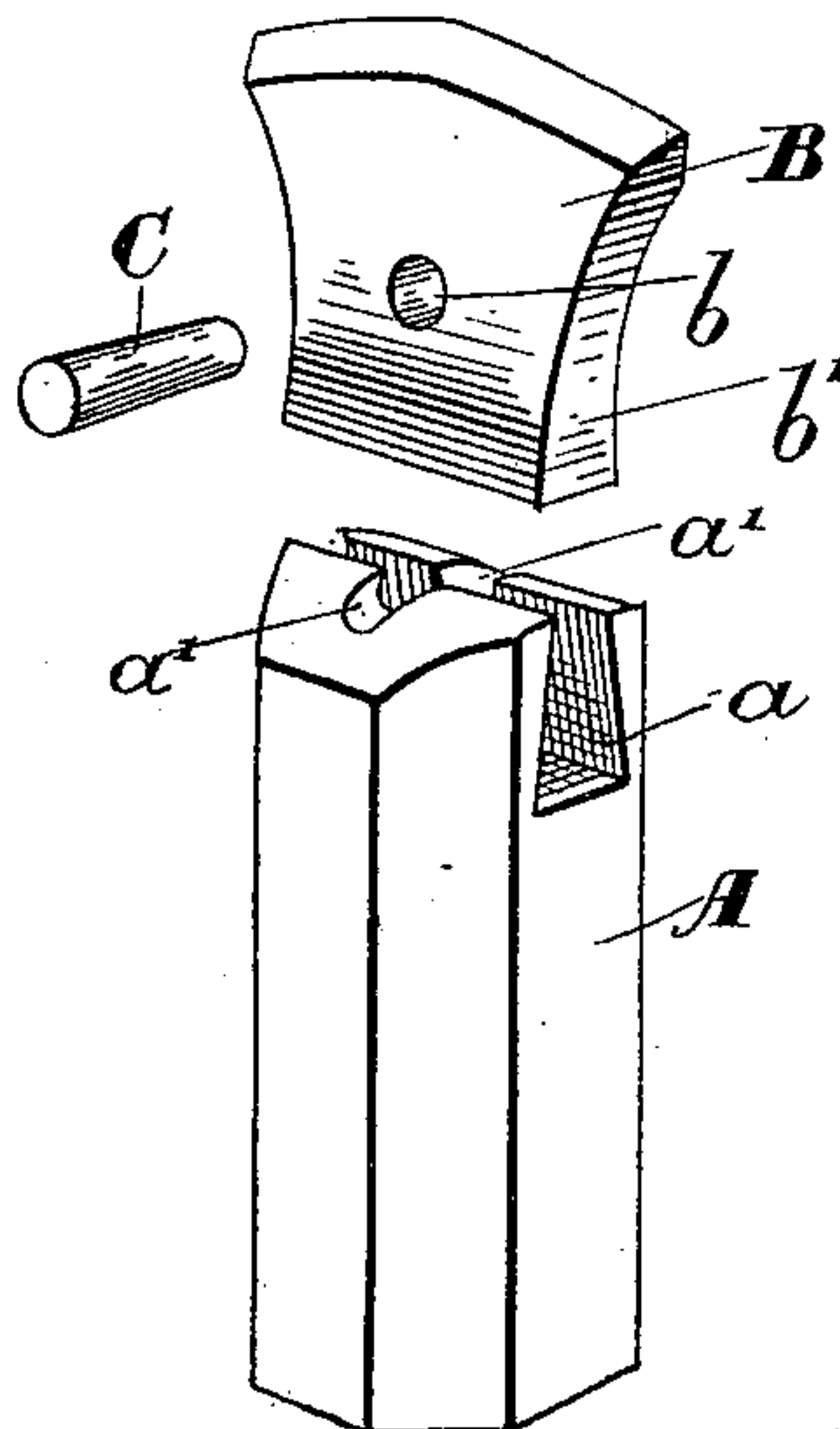


Fig 2

Witnesses.
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UNITED STATES PATENT OFFICE.

HENRY AYLMER, OF RICHMOND, CANADA.

MINER'S DRILL.

SPECIFICATION forming part of Letters Patent No. 622,409, dated April 4, 1899.

Application filed October 3, 1898. Serial No. 692,534. (No model.)

To all whom it may concern:

Be it known that I, HENRY AYLMER, a subject of the Queen of Great Britain, residing at Richmond, in the county of Richmond, in the Province of Quebec, Canada, have invented a new and useful Improvement in Miners' Drills, of which the following is a specification.

My invention relates to improvements in drills; and the object of the invention is to design a convenient form of drill in which the sharpened point may be readily changed when it becomes dull and a new sharpened point substituted, thereby furnishing miners and others with drill-points of a first-class quality and temper and avoiding the necessity of miners and others carrying a heavy weight of metal around to the different work in which they may be employed; also, being very useful as applied to steam-drills; and it consists, essentially, of providing at the point end of the drill proper a dovetailed groove and a drill-point having a dovetail-shaped base, notches being made in the drill at the end, into which fits a pin which extends through the base of the drill-point, and thereby retains the point centrally in position, as hereinafter explained.

Figure 1 is a perspective view of a portion of a drill, showing my improved point. Fig. 2 is a perspective view showing the various parts separated.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the main body of the drill, which is

provided at the point end with a cross dovetail-shaped groove *a* and the oppositely-cut notches *a'* at the center of the end and extending into the groove *a*.

B is the drill-point, which is provided with a central hole *b* of corresponding size to the notches *a'*. The drill-point B has preferably a dovetail-shaped base *b'*.

C is a pin which is designed to be passed through the notches *a'* and hole *b* of the drill-point when such point is inserted in position, as shown in Fig. 1.

Although I show the pin C fitting into the notches *a'*, it will of course be understood that such pin might extend through holes and be riveted in the end of the body A, so as to hold the jaws of the slot securely together and prevent any possibility of their spreading.

What I claim as my invention is—

In a drill, the combination with the body proper provided with a dovetailed groove extending across the end and transverse side notches extending into the groove in the center of the sides, of the drill-point having a dovetailed portion adapted to fit the groove and a central hole adapted to aline with the notches, and a pin extending through the notches and central hole in the point as and for the purpose specified.

Signed at the city of Montreal this 3d day of September, 1898.

HENRY AYLMER.

Witnesses:

C. N. DESAULMIN,
S. WASED.