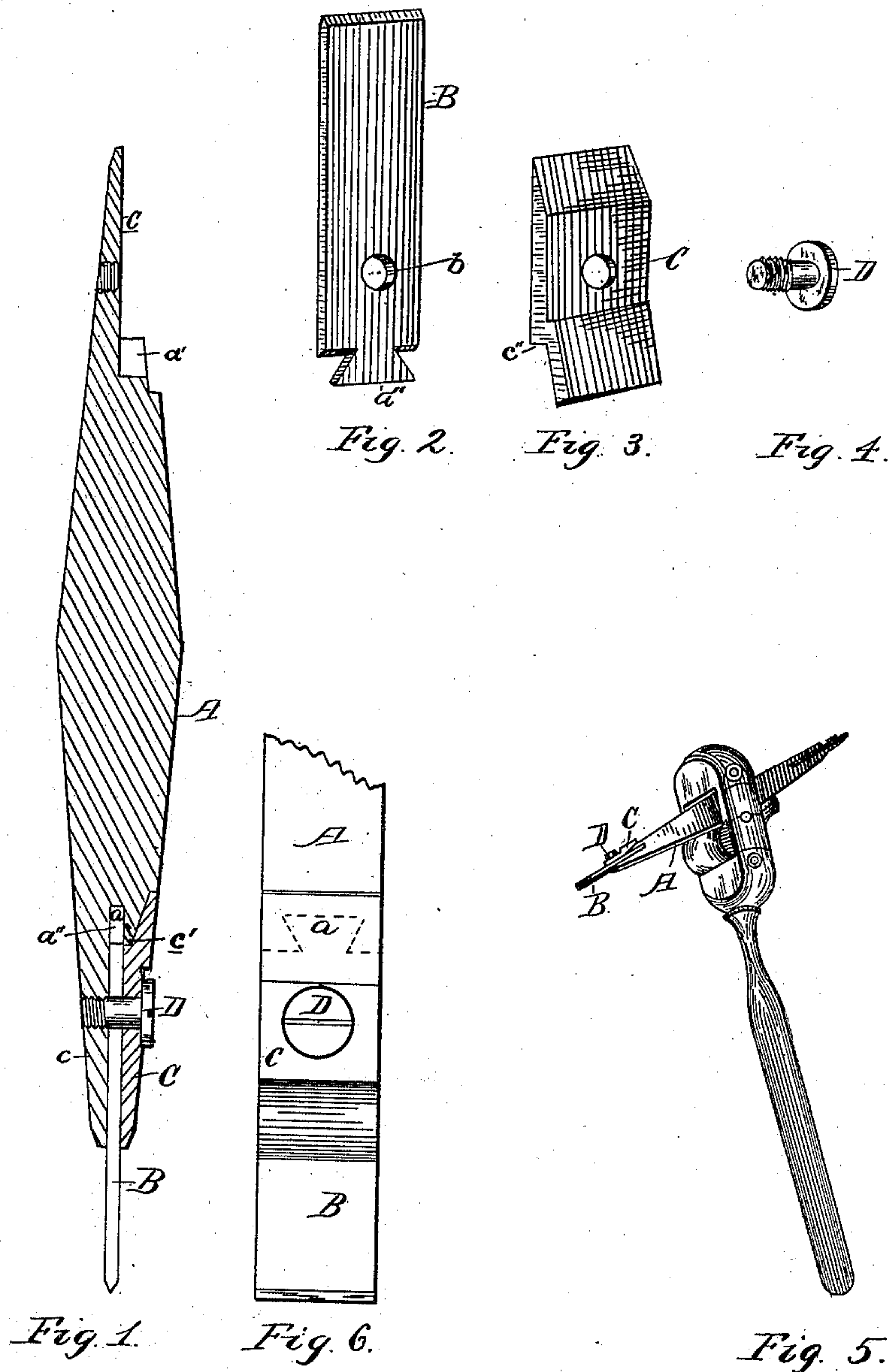


(No Model.)

J. GRANGER.
MILLSTONE PICK.

No. 313,725.

Patented Mar. 10, 1885.



WITNESSES:
W. J. Robertson
E. H. Bond

INVENTOR
John Granger
BY
Donald C. Ridout & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN GRANGER, OF DUNBARTON, ONTARIO, CANADA.

MILLSTONE-PICK.

SPECIFICATION forming part of Letters Patent No. 313,725, dated March 10, 1885.

Application filed June 3, 1884. (No model.) Patented in Canada April 7, 1884, No. 19,073.

To all whom it may concern:

Be it known that I, JOHN GRANGER, of the village of Dunbarton, in the county of Ontario, in the Province of Ontario, Canada, have
5 invented certain new and useful Improvements in Millstone-Picks, of which the following is a specification.

The invention relates to certain new and useful improvements in millstone-picks, as more
10 fully hereinafter set forth, and pointed out in the claim.

Figure 1 is a sectional elevation of my improved millstone-pick, showing the chisel in position at the bottom end of the figure, but
15 removed at the top end, so as to expose the form of the mill-pick body at the point where the chisel is attached to it. Fig. 2 is a perspective detail of one of the chisels. Fig. 3 is a perspective detail of the cap for clamping
20 the chisel in position. Fig. 4 is a perspective detail of the set-screw employed to secure the cap and chisel to the body of the mill-pick. Fig. 5 is a small perspective general view showing the millstone-pick set into its handle.
25 Fig. 6 is a face view of one end of the millstone-pick body and chisel secured to it.

A is the main body of the millstone-pick, which body need not necessarily be made of steel. In fact, I think it will be found preferable to make it of malleable cast-iron, which
30 will be much cheaper and more easily made.

B is the chisel or millstone-pick proper, made of a small piece of flat steel, as indicated, and having a dovetailed end, *a''*, near which
35 is made the bolt-hole *b*. The end *c* of the millstone-pick body A is made of a width corresponding with the width of the chisel B, and forms the offset *c'*, in which is formed a dovetail, *a'*, to receive the dovetail *a''*. It will be
40 noticed that the plane of the seat *c*, made at each end of the body A, runs accurately parallel with the longitudinal center of the millstone-pick body, and the chisel B is made to

fit accurately against the seat, with its dovetail *a''* fitting accurately into a similarly-shaped
45 recess, *a'*, made in the offset *c'* of the body A, so that when the chisel B is fitted into its position against the offset *c'* and is locked therein by the set-screw D clamping the cap C against it, as indicated, the chisel B so secured
50 will be as rigidly held in position as though it were a solid part of the mill-pick body A. On the other hand, when it is necessary to remove the chisel B for the purpose of having it retempered or for the purpose of substituting
55 a new chisel for a chisel worn out, it is merely necessary to unscrew the set-screw D, when the cap C may be taken off and the chisel B removed away from its seat. It will be noticed that the chisel or blade B is of less
60 thickness than the offset *c'*, thus exposing a portion of the latter when the blade is in position. This serves as an abutment for the offset *c''*, formed on the cap C, thereby requiring
65 but one screw to hold the parts in place and prevent the cap turning to the right or left of its fixed position.

I am aware of the Patents Nos. 213,975, 267,788, and 158,074, and make no claim to the construction shown therein as forming a part
70 of my invention.

What I claim as my invention is—

The herein-described millstone-pick, consisting of the head A, end extension, *c*, integral therewith, forming the offset *c'*, dovetailed
75 socket *a'*, formed in said offset, removable blade B, having dovetailed end *a''*, retaining-cap C, having offset *c''*, and the bolt D, passing through the cap, the blade, and the end extension, thereby binding all three parts together, and all constructed and arranged substantially as shown and described.

JOHN GRANGER.

Witnesses:

GEO. W. BADGEROW,
A. W. GRANGER.