

R. J. WHEATLY.
Millstone-Pick.

No. 213,961.

Patented April 1, 1879.

Fig. 1.

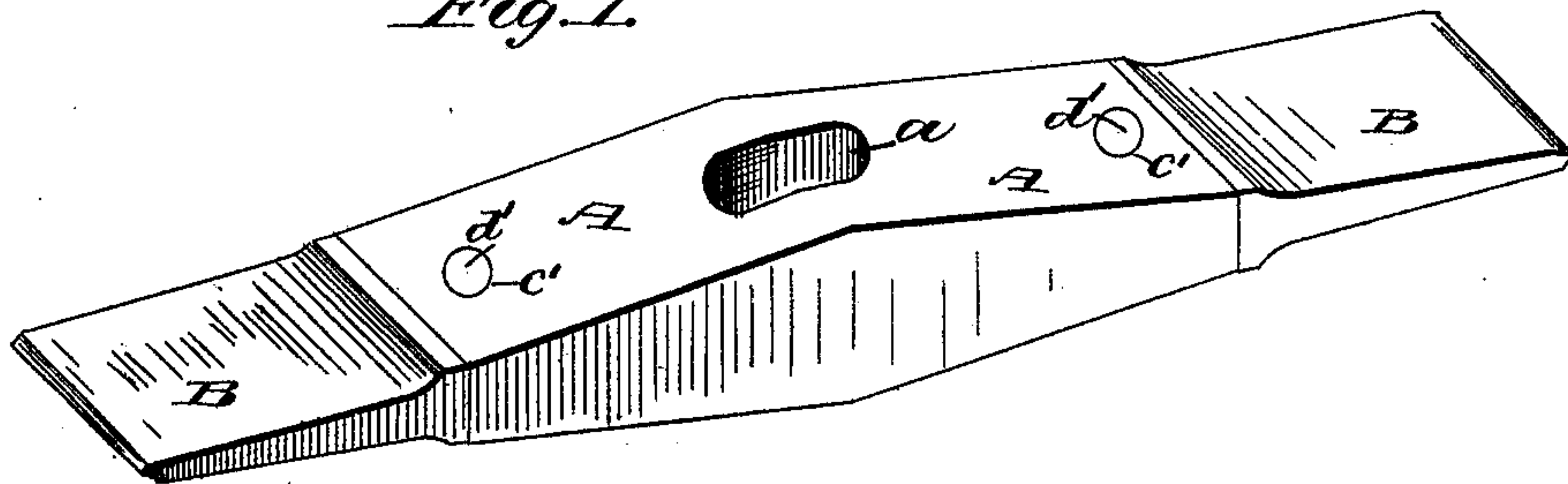


Fig. 2.

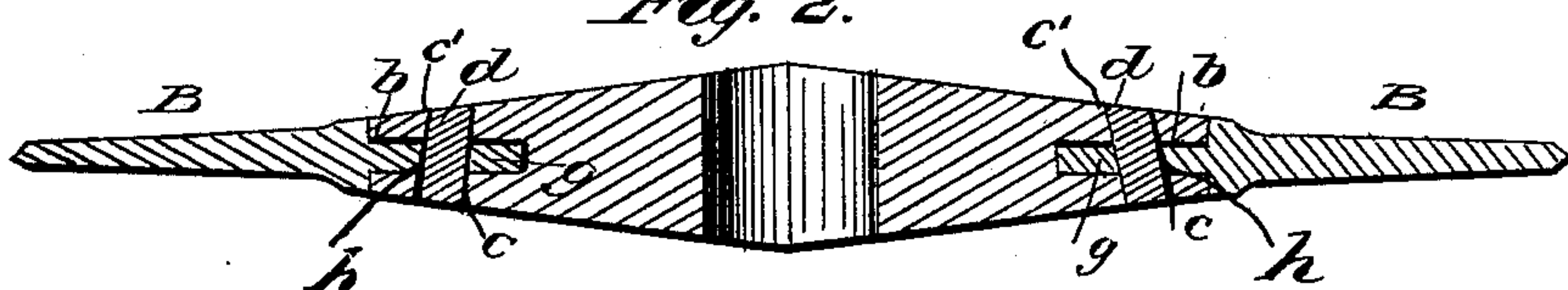
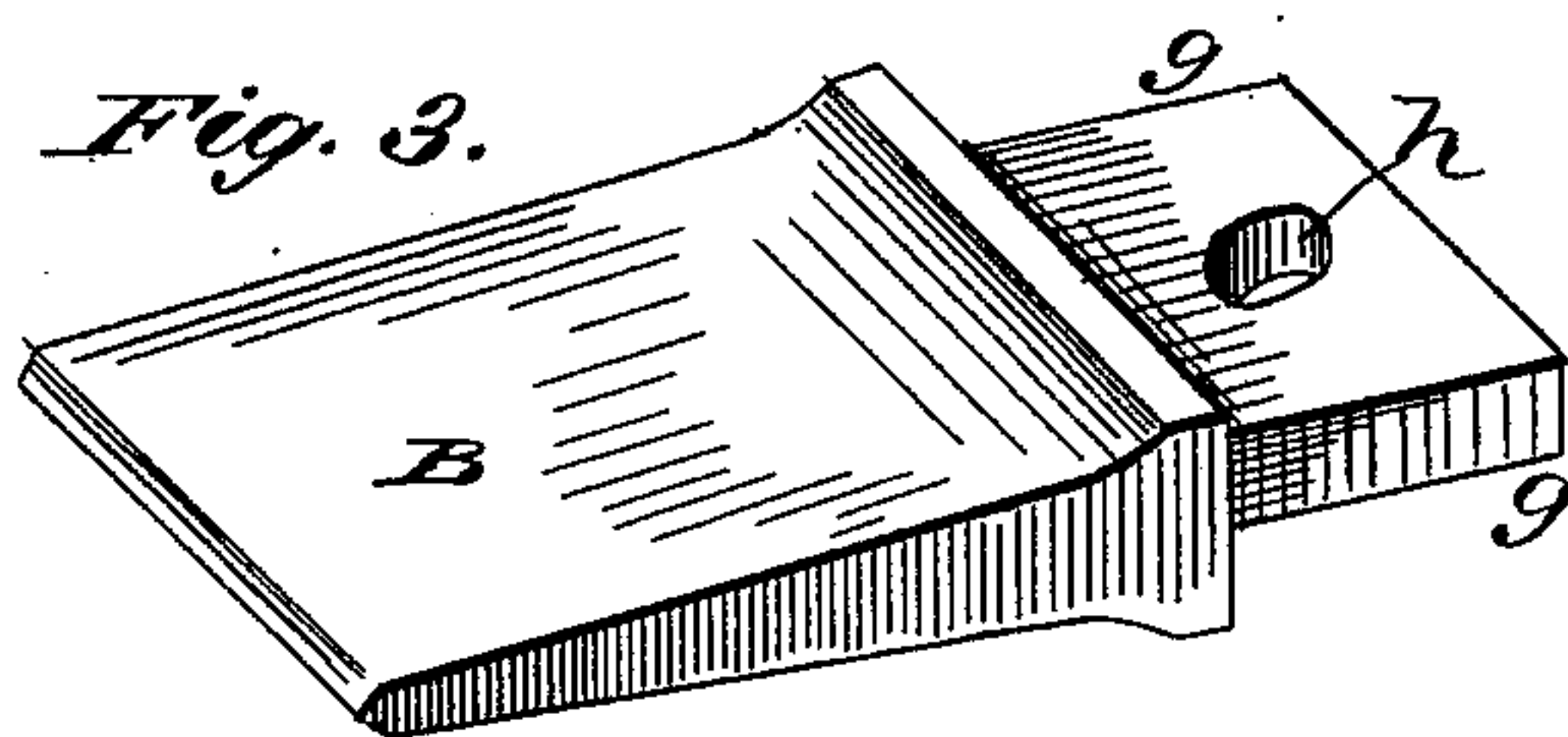


Fig. 3.



Witnesses
Fred G. Dietrich
George Binkentburg

Inventor
Robert J. Wheatly
by Thomas Baggett & Co.
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UNITED STATES PATENT OFFICE.

ROBERT J. WHEATLY, OF DUQUOIN, ILLINOIS.

IMPROVEMENT IN MILLSTONE-PICKS.

Specification forming part of Letters Patent No. **213,961**, dated April 1, 1879; application filed December 28, 1878.

To all whom it may concern:

Be it known that I, ROBERT J. WHEATLY, of Duquoin, in the county of Perry and State of Illinois, have invented certain new and useful Improvements in Millstone-Picks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved millstone-pick. Fig. 2 is a longitudinal section of the same. Fig. 3 is a perspective view of one of the cutters detached from the head; and Fig. 4 is a perspective view of the oblique and slightly tapering pin or bolt for securing the detachable cutters in the head.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to that class of mill-picks in which the cutters or points are detachable from the head; and it consists in providing the tenon of the cutter and that portion of the recessed head into which it is inserted with an oblique and slightly tapering bore, into which is inserted an oblique and slightly tapering bolt, the taper of which, as well as that of the bore into which it is inserted, is in the direction of the inclination or obliquity of said bolt and bore as against the upper end of the orifice in the middle of the head into which the handle is inserted, substantially as and for the purpose hereinafter more fully set forth.

In the drawings, A is the head or body of the pick, made, preferably, of cast-iron, its ends being squared off, and provided, each, with a rectangular recess, *b b*. The middle of the head has an opening, *a*, as usual, for the insertion of a suitable handle. B B are the cutters, made of steel, and provided, each, with a rectangular tenon, *g*, which will fit into the recesses *b b* in head A.

Each of the recessed ends of the head has two perforations, (denoted by *cc'*, respectively,) which will register with each other, and with a perforation, *h*, in the tenon *g* of the cutters B—that is to say, these several openings *c' h*

c are not in a straight line with each other, but slightly tapering and oblique, the taper being in the direction of the obliquity or inclination, which is against the upper end of the central perforation, *a*. Each of the ends or faces of the bolt *d* is slightly beveled, as shown at *d'* in Fig. 4, to correspond to the taper or inclination of the upper and lower sides or faces of the pick-head.

I am aware that detachable cutters have been secured in this class of picks in the head by means of set-screws; but these are apt to work loose by the constant concussion and jarring in using the implement, and require frequent stoppage to tighten up the screws and prevent the head from falling out; but by the arrangement of the bolt *d* and perforations *c h c'*, as herein described, each blow will have a tendency to force the bolt in an upward direction, on account of its inclined or oblique position; and this being in the direction of its taper it cannot come out, but, on the contrary, is, at each successive blow with the pick, wedged more firmly into its place. At the same time it may readily be removed when it is desired to detach the cutters for sharpening or renewal by a blow upon a punch or similar pointed implement, brought to bear upon the beveled head *d'* of its upper or tapering end.

Having thus described my improvement, I claim and desire to secure by Letters Patent of the United States—

As an improvement in millstone-picks, the combination of the recessed head A, having at each of its recessed ends registering inclined and slightly tapering perforations *c c'*, with the tenoned cutters B, the tenons of which are provided with registering and correspondingly-tapering perforations *h*, and tapering bolt *d*, having beveled faces *d'*, substantially as described, for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ROBERT J. WHEATLY.

Witnesses:

B. D. VAN DRUVER,
H. W. BOSTWICK.