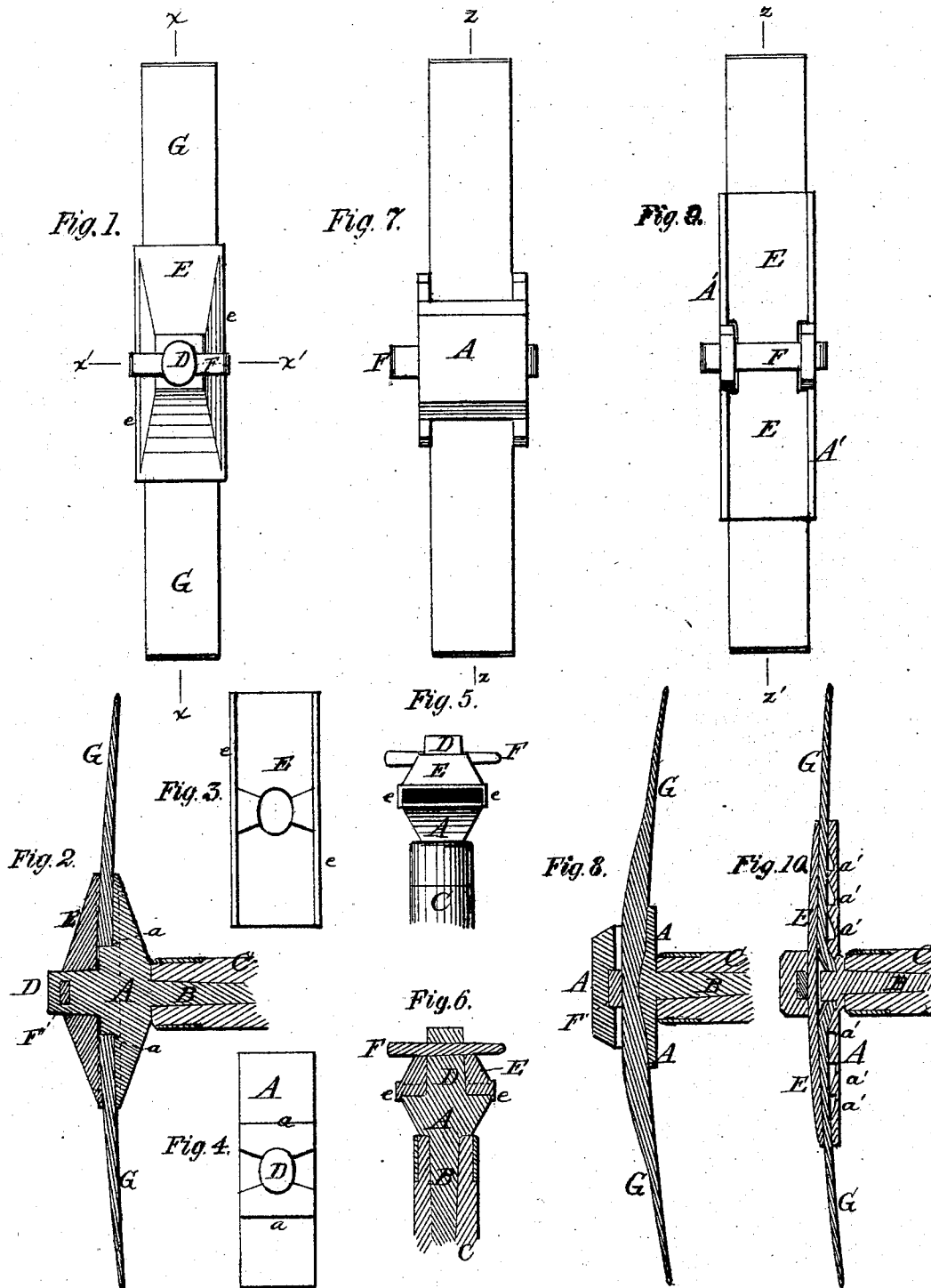


ALBERT RASNER. Improvement in Mill Picks.

No. 120,536.

Patented Oct. 31, 1871.



Witnesses.

Adm. Clerk
John B. Young

Inventor.

Albert Rasner, by
Prindle and Oyer, his
Attys.

UNITED STATES PATENT OFFICE.

ALBERT RASNER, OF DAYTON, OHIO.

IMPROVEMENT ON MILL-PICKS.

Specification forming part of Letters Patent No. 120,536, dated October 31, 1871.

To all whom it may concern:

Be it known that I, ALBERT RASNER, of Dayton, in the county of Montgomery and in the State of Ohio, have invented certain new and useful Improvements in Mill-Picks; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a plan view of the upper side of my device. Fig. 2 is a longitudinal central section of the same on the line xx of Fig. 1. Figs. 3 and 4 are plan views, respectively, of the inner sides of the cap and head for containing the picks. Fig. 5 is a front elevation of said head with the picks removed. Fig. 6 is a cross-section of the same on the line $x'x'$ of Fig. 1. Figs. 7 and 9 are plan views of the upper sides of two modifications of my device, and Figs. 8 and 10 are central longitudinal sections of the same on the lines i and i' , respectively, of Figs. 7 and 9.

Letters of like name and kind refer to like parts in each of the figures.

The object of my invention is the production of a hand-tool for dressing mill-stones in which the cutters or picks shall be separate and easily detachable for the purpose of repairs or of renewal; and it consists in the peculiar construction of the head, within which, by means of a wedge, the picks or cutters are held, substantially as and for the purpose hereinafter specified.

In the annexed drawing, A represents the head, having a general rectangular form in plan view, the lower side of which is provided with a shank, B, for insertion within a handle, C, while from its upper side extends outward a stud or pin, D, having preferably an elliptical form transversely. The upper face of said head has a slight downward curve from its center toward either end, and is provided immediately outside of the stud D with two shoulders, a , which extend vertically upward and in a line horizontally at a right angle to that of the sides of said head. Fitted over or upon the head A and pin D is a cap, E, which corresponds in general size and shape to said head, and is provided upon each side with a flange, e , which extends downward and incloses the sides of the same. The cap thus formed is secured to or upon the head by means of a wedge,

F, which passes transversely across the upper side of the same and through a suitable slot in the pin D, and, when driven inward, presses said cap downward toward the upper face of said head so as to clamp between the same and the lower face of said cap the picks G, which picks correspond in transverse size with the space between the flanges e , and are each provided with a square end, which bears against the shoulders a and sustains the shock of the blows received upon or by said picks. When it is desired to remove a pick the wedge is driven out of its slot and the cap released and raised so as to increase vertically the size of the opening between the same and the head.

In Figs. 7 and 8 are shown a modification of the device just described, in which modification the cap is dispensed with, or, rather, is made to form a part of said head, while the pick is constructed of one piece and provided upon or within its lower side, at its longitudinal center, with a transverse depression, which fits over a corresponding elevation upon said head and serves to insure the relative positions of said parts when the former is pressed downward against the latter by means of the wedge F. A further modification is illustrated in Figs. 9 and 10, in which the head A is provided with side flanges A' , which extend upward sufficiently to inclose the picks G and cap E, and at their longitudinal centers are extended still further upward, so as to contain slots for the reception of the wedge F. The cap E, constructed from a piece of metal, corresponds in general form and size transversely with the picks, and has a sufficient curve to cause it to conform to and fit upon the upper sides of the same. In order that the picks may be firmly held in longitudinal position, and at the same time be held when worn to less than their original length, their inner ends are bent downward at an angle of about thirty degrees, and each fits into a corresponding notch, a' , cut within the face of the head. By providing a series of said notches between the outer ends and center of the head the picks can be caused to project to a greater or less distance from the same.

The especial advantages obtained by this construction of a mill-pick are that it enables the operator to readily remove and dress his cutters, and also to make use of several sets of the same

at a comparatively small cost, so as to render it necessary to have them dressed but seldom, instead, as has heretofore been necessary, of having each pick-head and its cutters formed of one piece, at a large expense and great inconvenience.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

The head A provided with the shoulders *a* and slotted stud D, the perforated cap E, and the

wedge F, in combination with each other, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of July, 1871.

ALBERT RASNER.

Witnesses:

GEO. S. PRINDLE,

WM. ALTICK.

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