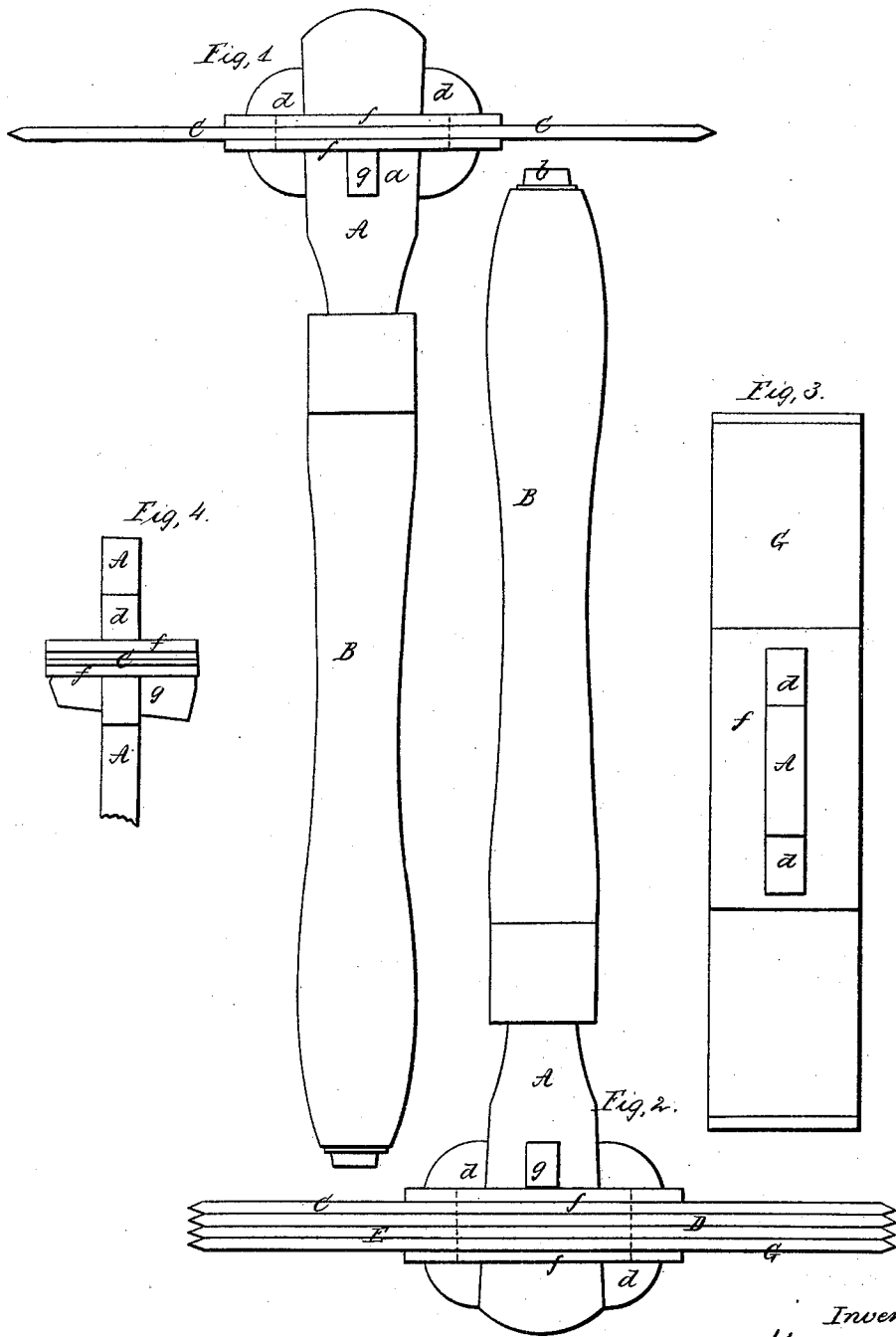


H. J. Brunner,

Millstone Pick.

No. 111,810.

Patented Feb. 14, 1871.



Witnesses,
H. J. Brown
C. A. Howkness

Inventor,
Henry J. Brunner
By his attorney
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United States Patent Office.

HENRY J. BRUNNER, OF NAZARETH, PENNSYLVANIA.

Letters Patent No. 111,810, dated February 14, 1871.

IMPROVEMENT IN MILLSTONE-PICKS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, HENRY J. BRUNNER, of Nazareth, in the county of Northampton and State of Pennsylvania, have invented an Improved Millstone-Pick and Facing-Hammer; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing making part of this specification—

Figure 1 being a side view of the instrument arranged as a pick;

Figure 2, a side view of the instrument arranged as a facer;

Figure 3, a top view of the head of the instrument;

Figure 4, an end view of the head of the pick.

Like letters designate corresponding parts in all of the figures.

The principal feature of my invention consists in the construction, whereby either one blade may be used separately for a pick, or a considerable number of blades may be attached to the handle together, side by side, to form a facing hammer.

Another feature of the invention consists in the device for attaching the blades to the shank or handle.

Let A represent the shaft or shank of the instrument, and to it a wooden handle, B, is secured, so as to be removable by passing the taper end of the shank through the handle and fastening it by a thumb-nut or key-nut, b.

To the head of the shank the single blade C, fig. 1, of the pick, or the several blades C D E G, fig. 2, for the facing hammer, are attached in the following manner:

The thickness of the shank-head is uniform, but the width is somewhat tapering or wedge-shape, substantially as shown; and in the middle of each blade is a slot just wide enough to fit closely over the thickness and considerably longer than the width of the shank. Into the two ends of these slots, respectively, are inserted notched gibs *d d* before the blades are placed on the shank, the gibs being of a shape to fit the taper edges of the shank-head, and of such a width that they will wedge closely against the shank when the blades are driven thereon in the proper position.

A cheek-plate, *f*, shorter than the blades, and having a slot of the same size as those of the blades, is placed on each side of the blade or blades and fits in the gibs.

If one blade is used, as in fig. 1, the notches in the gibs are wide enough only to take in the blade and the two cheek-plates *f f*; but if several blades are used, as in fig. 2, the gibs have notches wide enough to take in all of them and the two cheek-plates.

When the blades are driven upon the shank-head as far as the gibs will permit, a key, *g*, is driven through a slot, *a*, in the thickness of the shank, to hold all in place; or any equivalent means of fastening may be employed. Thus the blades can quickly be put on or removed, as occasion may require.

The blades are all made of equal length, and properly are of equal width and thickness, so that any one of a set for forming a facing-hammer may be used for the pick, whereby all may be used and worn equally.

Among the advantages of this construction one is that the blades composing the facing-hammer can all be tempered and sharpened separately and equally, and will cut and wear alike. Another is that they are very easily sharpened one by one, without going to a blacksmith to take the head apart. Another is that two instruments are formed out of the same parts.

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

1. The notched gibs *d d*, blanks or cheek-plates *f f*, and one or more blades C D E G, in combination with the wedge-shank or head A, substantially as and for the purpose herein specified.

2. The combination of the taper shank or shaft A, slotted blades C D E G, notched gibs *d d*, either with or without the cheek-plates *f f*, and the key *g*, or its equivalent, constructed and arranged substantially as and for the purpose herein set forth.

Specification signed by me this 15th day of May, 1870.

HENRY J. BRUNNER.

Witnesses:

S MOORE,
C. G. BEITEL.