(No Model.)

G. P. MORRILL.

AX OR TOOL WEDGE.

No. 477,262. Patented June 21, 1892.

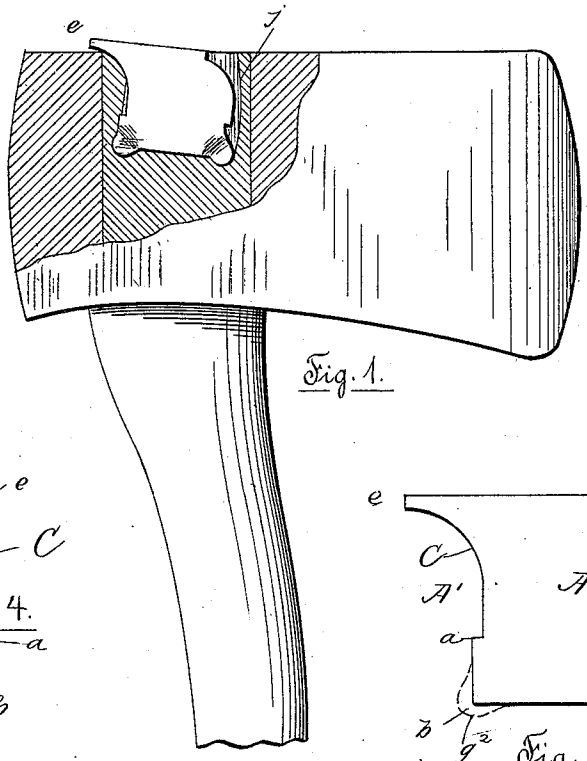


Fig. 1.

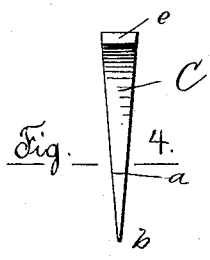
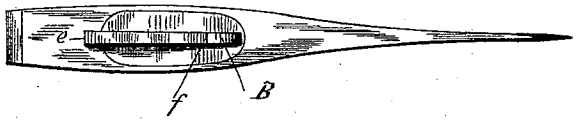


Fig. 4.

Fig. 3

Fig. 2.



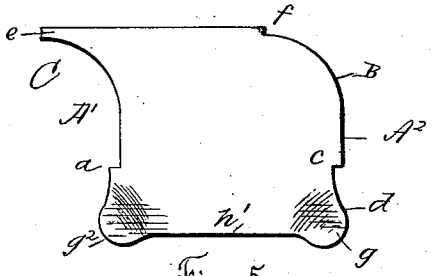


Fig. 5.

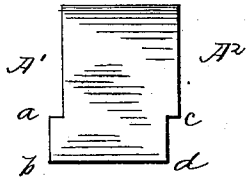


Fig. 6.

Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE P. MORRILL, OF CANTERBURY, NEW HAMPSHIRE.

AX OR TOOL WEDGE.

SPECIFICATION forming part of Letters Patent No. 477,262, dated June 21, 1892.

Application filed July 5, 1888. Serial No. 279,134. (No model.)

To all whom it may concern:

Be it known that I, GEORGE P. MORRILL, a citizen of the United States, residing at Canterbury, in the county of Merrimac and State of New Hampshire, have invented a new and useful Improvement in Ax or Tool Wedges, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of an ax, partly in section, taken vertically through the center for the purpose of showing the wedge inserted in the ax-helve. Fig. 2 is an end view of an ax with one of my improved wedges inserted. Fig. 3 is a view of one of my improved wedges in the form in which it is stamped or punched from a wedge-shaped piece of steel. Fig. 4 is an end view of the wedge shown in Fig. 3. Fig. 5 is a view of the completed wedge, and Fig. 6 shows a modified form of wedge.

Similar letters refer to similar parts in the several views.

My invention relates to a wedge for retaining axes, hammers, and other tools upon their handles; and it consists in the form and the construction of the wedge, as hereinafter set forth, and claimed in the accompanying claims.

A, Fig. 3, denotes a side view of the wedge, which I preferably stamp or punch from a wedge-shaped bar of steel. The opposite sides A′ and A^2 are made to correspond, the convex portion B fitting the concave portion C and the projecting portion *a b* fitting the indented portion *c d* on the opposite side of a second wedge contiguous to the first, the end *e* corresponding with the notch *f*. I am thereby able to make the wedges by cutting them successively from a wedge-shaped bar without loss of material. The lower corners *g* g^2 are then drawn out, as shown by the broken lines *g′* g^2 and in solid lines in Fig. 5, forming thinner or sharp points, which project beyond the line *h′*, Fig. 5, causing the wedge to enter the wood readily and in advance of the edge *h′*, which may be somewhat thicker. As the wedge is driven into the end of the helve, as shown in Fig. 1, the projecting horn or end *e* overlaps the head of the ax, causing the point *g* to be driven into the wood farther than the point g^2 and carrying the curved convex portion B into the wood, so that the fibers will tend to close over the convex part B and retain the wedge in the wood, preventing it from being jarred out by the use of the ax in the operation of cutting or splitting. The projecting portion *a b* also is held in place by becoming hooked under or beneath the fibers of the wood, caused by the point *g* being advanced beyond the point g^2 in the process of driving the wedge into the handle. By drawing out the point *g* in the form shown in Figs. 3 and 5 it is made to project laterally beneath the overhanging corner *c*, and as the wedge is driven it serves to sever the fibers of the wood and form a path for the corner *c*, the motion of the point *g* describing the curved line *j*, Fig. 1, as the wedge is driven into the handle, carrying the point into the wood and bringing the notch *f* under the wood, as shown in Fig 1.

In Fig. 6 I have shown a form of wedge with the opposite sides A′ A^2 corresponding with each other or with the projecting corners of one side having a corresponding re-entering angle upon the opposite side, so that when the wedges are punched from a continuous strip of wedge-shaped steel the side of one wedge shall be coincident with the opposite side of the next or adjacent wedge.

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

1. An ax-wedge provided with a projecting horn *e* and a concave curved section C and having the outline of the opposite end an exact reversal in form of said horn and said concave section, substantially as described.

2. An ax-wedge provided with the projecting horn *e*, the concave curved section C, the angular projection *a*, and having the outline of the opposite end an exact reversal, substantially as described.

GEO. P. MORRILL.

Witnesses:
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