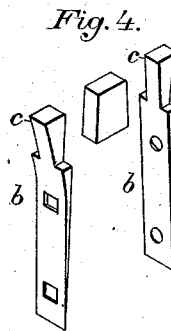
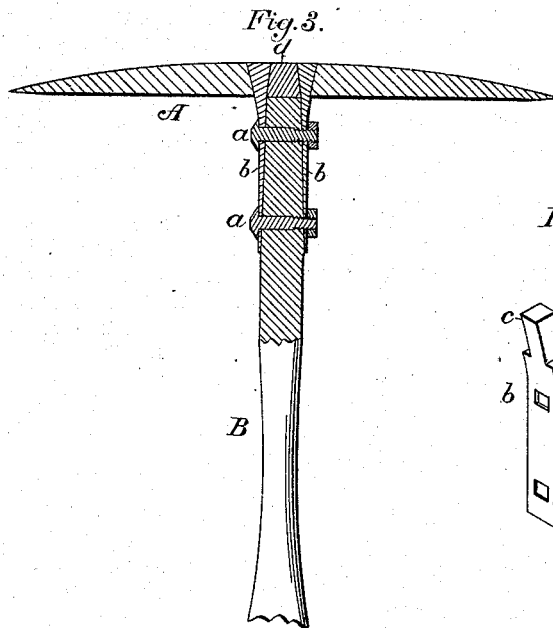
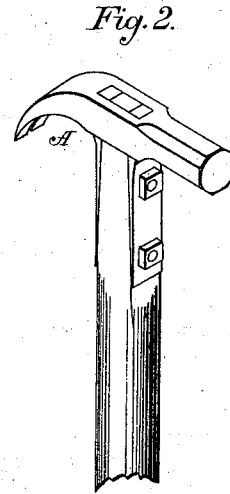
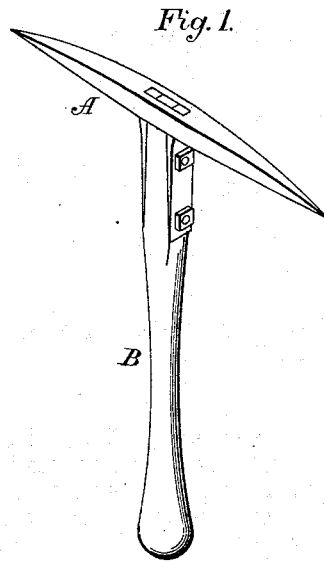


H. STAPLES.
Tool-Handle.

No. 160,725.

Patented March 9, 1875.



Witnesses:
H. A. Schott
Edward Bell

Inventor:
Hiram Staples

UNITED STATES PATENT OFFICE.

HIRAM STAPLES, OF BATTLE CREEK, MICHIGAN.

IMPROVEMENT IN TOOL-HANDLES.

Specification forming part of Letters Patent No. **160,725**, dated March 9, 1875; application filed February 6, 1875.

To all whom it may concern:

Be it known that I, HIRAM STAPLES, of Battle Creek, county of Calhoun, State of Michigan, have invented certain new and useful Improvements in Tool-Handles; and I do hereby declare the following to be such a full, clear, and exact description thereof as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, and to the letters of reference marked thereon, similar letters indicating corresponding parts in the different figures.

This invention relates to that class of tool-handles which are generally used in tools intended for percussive action, such as hammers and picks, but may be used with almost any tool in which it is desired to firmly fix the handle without increasing the dimensions of the part to which it is attached, and at the same time afford a ready means for detaching it when desired; and the invention consists in the construction and arrangement of the parts, as will be hereinafter fully described, and then pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of a miner's pick, having the handle attached in accordance with my invention. Fig. 2 shows a nail-hammer with its handle secured in the same manner. Fig. 3 shows a pick, in section, giving a view of the arrangement of the different parts of the device. Fig. 4 presents perspective views, in detail, of the straps and securing-wedge.

The tool is represented in the different figures by the letter A, and is provided with an oblong mortise in that part to which it is desired to affix the handle. This handle B has secured to it, by the bolts *a* or equivalent

means, two straps, *b b*. These straps have one end formed into a dovetail tenon, *c*. These tenons fill the mortise in the tool transversely, but when inserted leave room between them for the insertion of the wedge *d*, which is driven between them and secures them firmly to the tool.

The mode of putting together the different parts is as follows: The straps *b b* are first inserted in the mortise in the tool and forced to either side. The wedge *d* is then driven between them, and may be of such length as to come flush with the surface of the tool on both sides; or it may be formed a little shorter than the tool's thickness, so as to allow the end of the handle to enter the mortise a short distance. After the parts are fixed the handle is driven in, its end bearing upon the wedge *d*. The bolts *a* are then inserted through the straps and handle, and when they are tightly screwed up the tool and handle will be found firmly united to each other, while the mode of construction offers a ready means for disengaging the handle whenever desired.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent of the United States, the following:

The means for attaching a tool to its handle, consisting of the elongated mortise in the tool, the straps with enlarged ends, to which the handle is secured, and the wedge, all constructed and arranged substantially as specified.

In testimony that I claim the foregoing as my own I hereunto affix my signature in presence of two witnesses.

HIRAM STAPLES.

Witnesses:

EDWARD BELL,
MOSES I. HUFF.