(No Model.)

J. RIDGE.

TOOL HANDLE.

No. 560,546. Patented May 19, 1896.

Fig. 1.

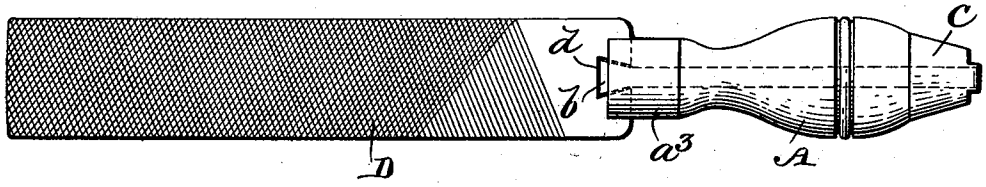


Fig. 2.

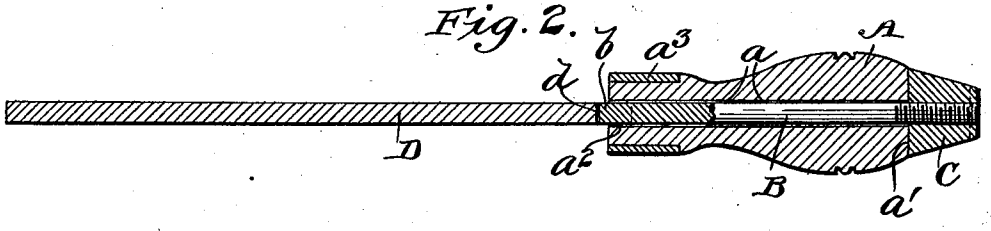


Fig. 3.

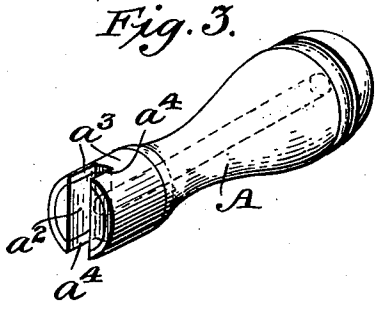


Fig. 4.

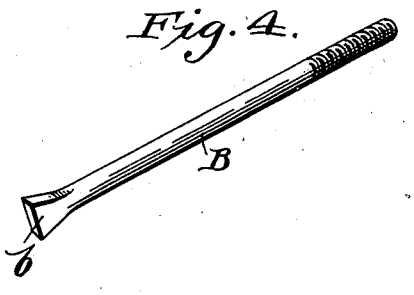
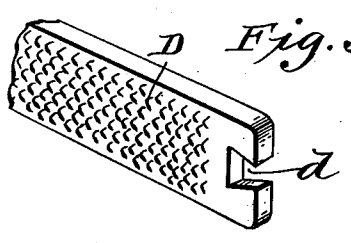


Fig. 5.



WITNESSES

Geverance.

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JOHN RIDGE, OF NASHUA, NEW HAMPSHIRE.

TOOL-HANDLE.

SPECIFICATION forming part of Letters Patent No. 560,546, dated May 19, 1896.

Application filed December 13, 1895. Serial No. 572,039. (No model.)

To all whom it may concern:

Be it known that I, JOHN RIDGE, a citizen of the United States, residing at Nashua, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Tool-Handles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in tools and tool-handles, and is especially designed for separable handles and tools so constructed that one handle can be used in connection with any one of a series of tools.

The invention consists of the combination, with a suitably-shaped handle having a longitudinal passage and a tool-receiving recess, of a shank adapted to be passed through said passage and provided at one end with an enlarged head and at the other with screw-threads, and a nut adapted to engage said threads and the upper end of the handle, the construction and operation being such that when the nut is tightened the shank is drawn longitudinally in the handle, and the tool engaged by the enlarged head of said shank is thereby firmly seated in the recess in the end of the handle.

It also consists of the combination, with a suitably shaped handle having a longitudinal passage and a tool-receiving recess, of a shank adapted to be passed through said passage and provided at one end with an enlarged dovetail head and at the other with screw-threads, a nut adapted to engage said threads and the upper end of the handle, and a tool adapted to be engaged by said dovetail head.

It also consists in the combination, with a handle-shank and nut constructed as above described, of a tool provided with a dovetail recess to receive the dovetail head on the shank.

In the accompanying drawings, forming part of this specification, Figure 1 represents a side elevation of a rasp with my invention applied thereto. Fig. 2 represents a central vertical section through the same. Fig. 3 represents a detail perspective view of the handle. Fig. 4 represents a detail perspective view of the shank; and Fig. 5 represents a detail perspective view of the recessed end of the rasp, showing the dovetail recess therein.

A in the drawings represents the handle; B, the shank; C, the tightening-nut, and D the tool.

The handle A is of any suitable and convenient shape adapted for the work the tools that are to be secured therein are to perform. This handle is provided with a central longitudinal passage a for the passage of the shank B. Said handle is also flattened at one end a' to form a firm seat for the nut C and is provided at the opposite end with a transverse groove or recess a^2, extending diametrically across said end. A ferrule a^3 is applied on this end of the handle, and is so grooved on its opposite sides at a^4 a^4 as to form, when in position in the handle, continuations of the groove a^2 at each end of the same.

One end of the shank B is provided with an enlarged head b, which is preferably dovetail in form. The opposite end of said shank is screw-threaded, so that when the nut D is applied on the same and tightened against the flat end of the handle said shank will be drawn longitudinally through the passage in said handle. The end of each tool that is to be used in the handle is provided with a recess d of a shape corresponding to the head b of the shank. In the drawings the preferred form of a dovetail recess is shown. The nut C is squared at the top or otherwise constructed, so that it may be tightened to the desired degree by means of a wrench.

When the tool is in position on the handle, the tightening of nut C will draw the shank B longitudinally and pull the tool firmly down into the groove a^2. This groove is deep enough to prevent the tool from working from side to side, and also prevents the tool and shank from turning. By the dovetail formation of the head of the shank and the groove in the tool the tightening of the shank tends to draw the two more intimately together and prevents any movement of the tool independent of the handle when in use.

The construction is simple, cheap, and very effective, as it is the work of less than a minute to slip one tool out of the handle and another into its place.

I of course do not limit my invention to any particular tool, as any tool may be formed

with a suitably-shaped recess and applied to the handle.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A rasp, file, or other analogous tool provided with a dovetail recess at one of its ends, and a handle having a central longitudinal passage through it and a transverse notch, intersecting said passage, in its lower end, a shank adapted to be passed through the longitudinal passage and having a dovetail head formed on one end corresponding to the dovetail recess in the file, and screw-threads at the other end upon which a securing-nut is applied; the whole being so constructed that the upper end of the file enters the notch of the handle and the dovetail head wedges in the dovetail recess when the nut is turned to bind the parts together, substantially as described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JOHN RIDGE.

Witnesses:
R. T. SMITH,
S. J. M. SMITH.