No. 742,640. PATENTED OCT. 27, 1903.

J. A. HAROLD.

TOOL HANDLE.

APPLICATION FILED APR. 13, 1903.

NO MODEL.

Fig. 1.

Fig. 2.

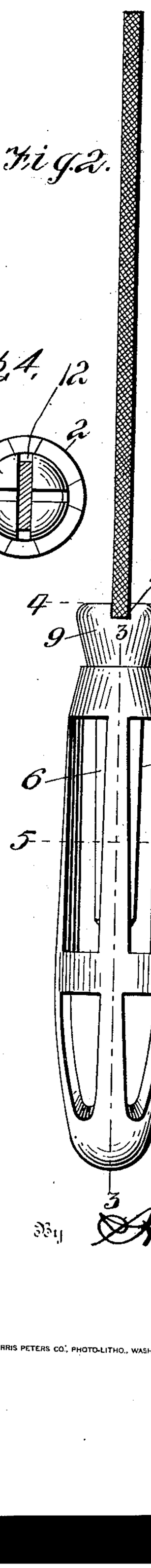


Fig. 3.

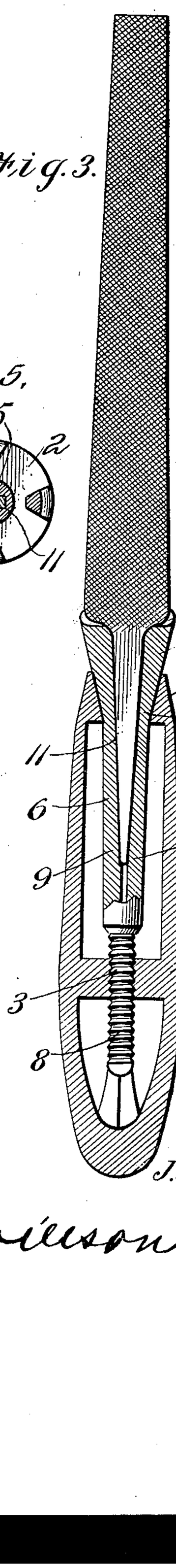
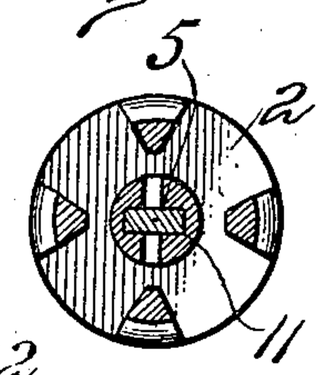


Fig. 4.

Fig. 5.



Witnesses

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No. 742,640. Patented October 27, 1903.

UNITED STATES PATENT OFFICE.

JAMES ALBERT HAROLD, OF COWEN, WEST VIRGINIA.

TOOL-HANDLE.

SPECIFICATION forming part of Letters Patent No. 742,640, dated October 27, 1903.

Application filed April 13, 1903. Serial No. 152,403. (No model.)

To all whom it may concern:

Be it known that I, JAMES ALBERT HAROLD, a citizen of the United States, residing at Cowen, in the county of Webster and State of West Virginia, have invented certain new and useful Improvements in Tool-Handles; and I do 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.

This invention relates to certain new and useful improvements in tool-handles.

The object of the invention is to provide a handle which is of simple, durable, and comparatively inexpensive construction and which may be readily attached to and detached from tools of various kinds.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended claim.

In the drawings, Figure 1 is a front elevation of my improved handle applied to a file. Fig. 2 is a side elevation of the same. Fig. 3 is a vertical sectional view taken on the line 3 3 of Fig. 2. Figs. 4 and 5 are horizontal sectional views taken on the lines 4 4 and 5 5 of Fig. 2.

Referring more particularly to the drawings, the numeral 1 denotes the handle or hand-grip, which, as shown, is a web or open-work structure. Adjacent to the lower or outer end of this handle is a solid portion or integral nut 2, which is provided with a central screw-threaded aperture 3. The upper or open end of said handle is formed with an integral contracting or clamping ring 4, the bore of which tapers inwardly.

5 denotes a clamping member or tool-holder which is adapted to be held in said handle. This holder comprises a tubular portion 6, formed at one end with a tapering head or conical portion 7 and at its opposite end with a screw-threaded shank 8, which is adapted to be screwed into the threaded aperture 3 in the nut 2 of the handle. The tubular portion and head are split longitudinally to form the spring-arms 9 and 10 with the clamping-jaws upon their outer ends. These spring-arms and their jaws are recessed longitudinally upon their inner or oppositely-disposed faces, as shown at 11, in order to receive the tang of a tool of any character or description. In the ends of the head or the jaws is a groove or channel 12, which extends at right angles to the slot or split in the tubular or body portion of the holder and which is in line with the recesses 11 in the spring-arms. The lower portion of the tool or the upper end of the tang of the same is adapted to enter this groove 12, as seen in Fig. 3, and thereby prevent turning or twisting of the tool in the holder 5.

As shown in the drawings, the holder is located in the handle, with its tapered or conical outer sides of the jaws engaged by the contracting or clamping ring 4 of the handle. It will be seen that by turning the handle upon the holder and tool the holder will be drawn down into the handle by its threaded shank entering the nut in the handle, and the contracting or clamping ring upon the handle will move up upon the head or jaws of the holder in order to bind them firmly upon the tang of the tool, and thereby clamp the handle to the tool.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and in minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

A tool-holder comprising an open-work cage forming a handle, and consisting of spaced longitudinal bars converging and integrally connected at one end, forming a closed end piece, and connected at the opposite end by an integral clamping-ring having an inwardly-tapering bore, and an integral cross-piece combining and bracing the bars intermediate said ends and provided with a threaded bore to also form a nut, together with a tool-holding device having a screw-threaded shank operating in said nut, a tubular body portion split to form spring-arms, and a conical or

tapering head adapted to be contracted by said clamping-ring through the adjustment of the shank and comprising jaws carried by said arms, the spring-arms being recessed longitudinally to receive the tang of the tool and the jaws of the head having a slot at right angles to the split of the tubular body portion and in line with the recesses in the spring-arms, said slot adapted to engage the upper end of the tang or lower portion of the tool to hold the said tool from turning, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES ALBERT HAROLD.

Witnesses:
W. F. HOLLISTER,
ONEY JONES.