Dec. 25, 1951 W. FENTON 2,579,484

SHOVEL HANDLE

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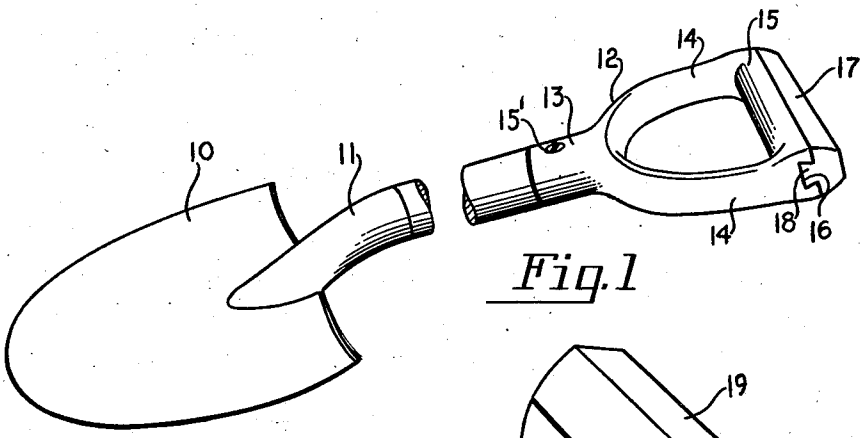

Fig. 1

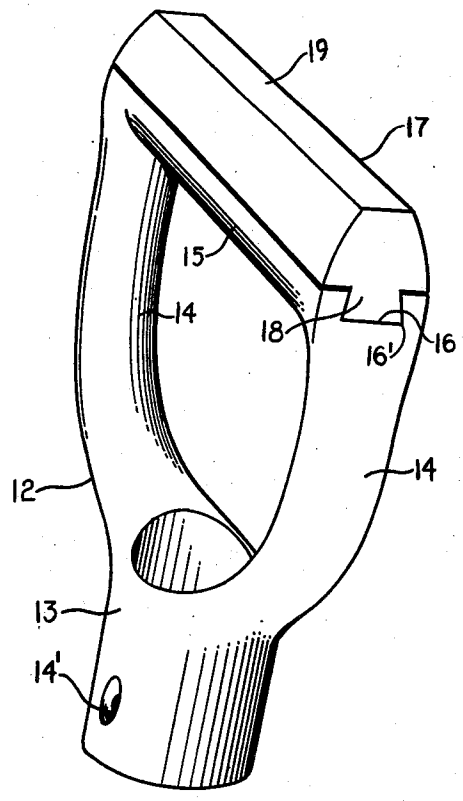

Fig. 2

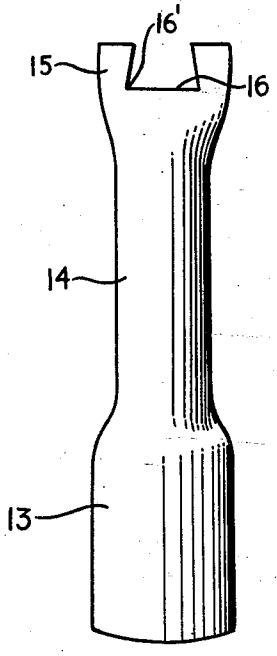

Fig. 3

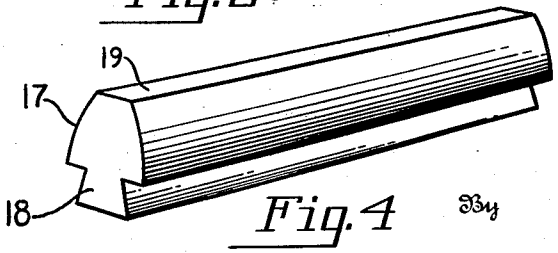

Fig. 4

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SHOVEL HANDLE

William Fenton, deceased, late of Dayton, Ohio, by Elizabeth P. Fenton, executrix, Dayton, Ohio, assignor to The Fenton Foundry Supply Company, Dayton, Ohio, a corporation of Ohio

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2 Claims. (Cl. 294—57)

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This invention relates to tool handles, and more particularly to a detachable grip for the handles of molders' shovels or the like which are likely to be inverted for use as tampers.

The present handle grip is particularly intended for use on molders' shovels, in which case it is common practice for the user to invert the shovel, using the handle portion for a tamping tool to tamp the sand solidly around the pattern. It has, however, been found advantageous and has been accepted in other fields, since the resilient handle portion absorbs to a considerable extent the shock normally transferred to the user's hand.

The object of the invention is to improve upon such tool handles with respect to their efficiency, durability and simplicity by providing an easily assembled and cheaply produced two-part grip structure comprising a cast metal body and a rubber or rubber-like pad mounted on the body in interlocking relation therewith.

Another object of the invention is to obtain an improved connection between the grip body and pad thereon, facilitating assembly of the parts into a sturdy, separation resistant unit, but permitting easy replacement of the pad when worn.

A further object of the invention is to make available a grip which may be applied to new and existing tool handles as a means of reducing shock in the use of the tool and as a tamping implement supplementing the normal use of the tool.

In carrying out these objects, there has been provided a tool handle grip comprising a unitary cast metal body forming a shank for attachment to the tool handle, and further forming spaced arms extending from the shank and terminating in a cross bar lying at right angles to the longitudinal axis of the shank, the handle grip additionally comprising a rubber peen superimposed upon the cross bar, the cross bar and peen being formed with interengaging tongue and groove portions interlocked by reason of complementary angular formations.

A further object of the invention is to provide an assembly of the character described possessing the advantageous structural features, the inherent meritorious characteristics and the mode of use herein described, or their equivalents.

With the above primary and other incidental objects in view as will more fully appear in the specification, the invention intended to be protected by Letters Patent consists of the features of construction, the parts and combinations thereof, and the mode of operation as hereinafter

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described or illustrated in the accompanying drawings, or their equivalents.

In the accompanying drawing, wherein is shown the preferred but obviously not the only embodiment of the invention,

Fig. 1 is a view in perspective of a molder's shovel equipped with a grip according to the present invention;

Fig. 2 is a view in perspective of the grip portion of the handle of Fig. 1;

Fig. 3 is a view in side elevation of the body of the tool handle grip, the rubber tamping peen being omitted; and

Fig. 4 is a view in perspective of the rubber tamping peen forming a part of the handle grip.

Like parts are indicated by similar characters of reference throughout the several views.

Referring to the drawings, there is illustrated in Fig. 1 a shovel having a handle grip constructed and arranged in accordance with the present invention. The shovel may be one of general utility, but in the illustrated embodiment is particularly adapted for use by foundry molding workers, one end of the device being a conventional shovel portion and the other or grip end being adapted for tamping in and around patterns, the tool being inverted when used as a tamper.

The device comprises a shovel portion 10 secured to one end of an elongated handle 11. The opposite end of the handle is reduced in diameter for a telescopic fit with a detachable grip 12.

The handle grip 12 is of unitary cast metal construction, being preferably made of aluminum for lightness of weight. The grip comprises a shank portion 13, made hollow to receive the reduced outer end of handle 11. An opening 14' in the shank 13 (see Fig. 2) is provided for the passage therethrough of a screw 15' or other connection means extending into the handle 11. Extending upward from the shank 13 are spaced arms 14 terminating at their outer ends in a cross bar 15 interconnecting the arms and lying at right angles to the longitudinal axis of the shank 13. The arms 14 and cross bar 15 define a substantially D-shaped enclosure.

The sides and under surface of the cross bar 15 are curved while the outer surface of the bar is flat. Within the flat outer surface of the cross bar 15, and extending through the opposite ends thereof, is a longitudinal groove 16 (Fig. 3). The bottom of groove 16 lies in a plane parallel to the flat outer surface of cross bar 15, while the side walls of the groove are inclined in planes

convergent at a point above the cross bar 15, thereby forming reentrant angles 16' intermediate the side walls and bottom of the groove.

Superimposed upon the flat outer surface of cross bar 15, and in a position overlying groove 16, is a peen 17 made of a relatively soft rubber or rubber-like material. The peen is coincident in length with the length of cross bar 15 and is formed on its underside with a longitudinal tongue 18 received in groove 16. The tongue 18 has a broad, flat base from which the side walls taper inward and upward, the resultant shape of the tongue being complementary to the formation of groove 16. The peen 17 is mounted on the cross bar 15 by a longitudinal sliding motion of tongue 18 within groove 16, and when so interengaged the peen and cross bar are interlocked against accidental removal or dislodgment during tamping. To inhibit axial displacement of the peen upon the cross bar, a suitable cement or other adhesive may be applied to the contacting surfaces of the peen and cross bar prior to assembly.

That portion of the peen 17 lying outside groove 16 is in registry with the outside edge of the top surface of cross bar 15 and the sides thereof are externally curved to form continuations of the curved under surface of bar 15. The curved side surfaces of the peen terminate in a blunt end surface 19 to give the peen a wedge-like shape effective in tamping. It will be understood that the grip portion 12 normally is used as a grip, with the rubber peen 17 serving merely to complete the formation of the grip and to reduce the amount of shock imparted to the hand of the user. When it is desired to use the tool for tamping, however, it is inverted and the grip 12 then becomes the working end of the tool, with the wedge shaped peen 17 being applied to the sand or other material being tamped.

From the above description it will be apparent that there is thus provided a device of the character described possessing the particular features of advantage before enumerated as desirable, but which obviously is susceptible of modification in its form, proportions, detail construction and arrangement of parts without departing from the principle involved or sacrificing any of its advantages.

While in order to comply with the statute the invention has been described in language more or less specific as to structural features, it is to be understood that the invention is not limited to the specific features shown, but that the means and construction herein disclosed comprise the preferred form of several modes of putting the invention into effect, and the invention is therefore claimed in any of its forms or modifications within the legitimate and valid scope of the appended claims.

What is claimed is:

1. A grip for a tool handle, comprising a one-piece cast metal portion forming a shank for attachment to the tool handle and further forming spaced arms extending upwardly from the shank and terminating in a cross bar interconnecting said arms and lying at right angles to the longitudinal axis of the shank, said cross bar being formed with a curved under surface and a flat outer surface, a longitudinal groove in the flat outer surface of said cross bar and opening through the ends thereof, a resilient member mounted on the outer surface of said cross bar in overlying relation to said groove and having a longitudinal tongue received in said groove, said groove and said tongue having complementary inclined side walls constituting an interlock between said member and said cross bar, and that portion of said member outside said groove being externally curved in conformity with the curved surface of said cross bar, the curved surfaces of said member terminating at their upper ends in a longitudinal flat area whereby said member has in cross section a wedge-like shape useful in tamping upon inversion of the tool handle.

2. A grip for a tool handle, comprising a one-piece cast metal portion forming a shank for attachment to the tool handle and further forming spaced arms extending upwardly from the shank and terminating in a cross bar interconnecting said arms and lying at right angles to the longitudinal axis of the shank, said cross bar being formed with a curved under surface and a flat outer surface, a longitudinal groove in the flat outer surface of said cross bar and opening through the ends thereof, a resilient member mounted on the outer surface of said cross bar in overlying relation to said groove and having a longitudinal tongue received in said groove, said groove and said tongue having complementary inclined side walls constituting an interlock between said member and said cross bar when the tongue of said member is inserted in the longitudinal groove of the cross bar by a sliding motion at right angles to the longitudinal axis of the shank, and that portion of said member outside said groove being externally curved in conformity with the curved surface of said cross bar, the curved surfaces of said member terminating at their upper ends in a longitudinal flat area whereby said member has in cross section a wedge-like shape useful in tamping upon inversion of the tool handle.

ELIZABETH P. FENTON,
Executrix of the Estate of William Fenton, Deceased.

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