

(No Model.)

W. J. ELDER.
TOOL HANDLE.

No. 600,260.

Patented Mar. 8, 1898.

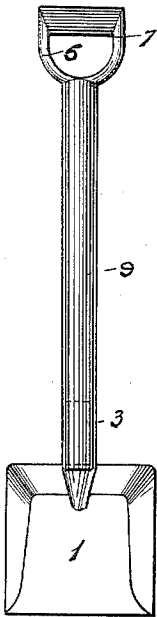


Fig. 1

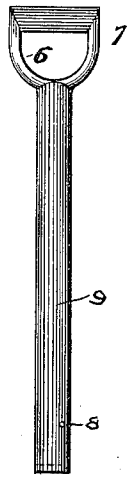


Fig. 2

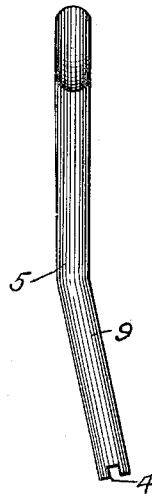


Fig. 3

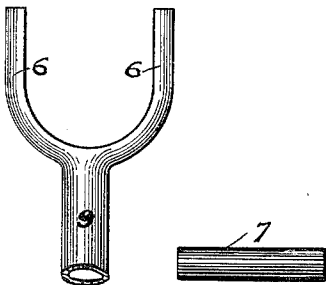


Fig. 4

Fig. 5.

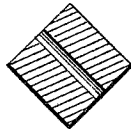
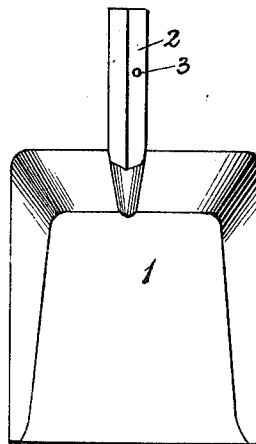


Fig. 6

Witnesses

Edward A. Lawrence.
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UNITED STATES PATENT OFFICE.

WELKER J. ELDER, OF WILKINSBURG, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO NATHAN S. WILLIAMS, OF PITTSBURG, PENNSYLVANIA.

TOOL-HANDLE.

SPECIFICATION forming part of Letters Patent No. 600,260, dated March 8, 1898.

Application filed January 24, 1896. Serial No. 576,689. (No model.)

To all whom it may concern:

Be it known that I, WELKER J. ELDER, a citizen of the United States, residing at Wilkinsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered a new and useful Tool-Holder, of which the following is a specification.

In the accompanying drawings, which make part of this specification, Figure 1 is a plan of my tool-handle applied to a shovel. Fig. 2 is a plan of a tool-handle detached. Fig. 3 is an edge view showing bend in the handle; Fig. 4, a detail view showing portions of hand-grasp. Fig. 5 is a detail of shovel-blade provided with a tang. Fig. 6 is a cross-section through the lower end of the handle.

The purposes of my invention, generally stated, are the construction of an all-metal handle for agricultural and mining implements and other tools, and more particularly shovels, spades, and coke and other forks; also, to make these handles readily removable, so that when the tool is broken or worn out or is to be exchanged for another type of tool the same handle can be used. I accomplish these results, generally speaking, by making the tool-handle hollow and providing means for adjustably attaching the same to the tool.

In the accompanying drawings, which make part of this specification, I have for the purposes of illustration shown the tool-handle as applied to the blade of a spade.

As shown in Fig. 3, 1 is the blade of a spade of the ordinary construction, except that it is provided with a suitable tang 2, which may either be formed integral with the blade of the spade or may be welded or otherwise secured to said blade, as may be found most desirable. Said tang 2 is punched or drilled at 3 for a securing-pin, by which it is attached to the handle.

To form the handle, I take a tubular piece of metal of the required length and preferably slot the same at the lower end, as seen at 4 in Fig. 3, for the purpose of forming lips on each side of the shovel-blade, and which may serve to stiffen and brace the attachment of a handle thereto. The tube of metal is then placed over a former corresponding to the shape of the tang 2 and is hammered to a corresponding outline. Simultaneously the bend 5 is impressed upon the handle by any ordinary bending method. The upper

end of the handle is then split to a sufficient distance to form the sides 6 6 of the hand-grasp, and said halves are then bent outwardly to the shape seen in Fig. 4. A short section of metal 7, and which may be tubular, is then inset between the sides 6 6 and secured thereto by brazing or any other practical manner. The keyhole 8 is then punched on the lower end of the handle to accurately register with the keyhole 3 in the tang.

The parts are assembled by slipping the handle 9 upon the tang 2 and inserting a tapering pin in the keyhole 8 and 3, while the lips 4 4 also reinforce the union between the handle and the blade.

When desired, the handle can be reversed from the position shown in Fig. 3, so that the bend of the handle will be to the right instead of to the left, thus adapting the handle to a different angle, if required.

The handle thus made is almost indestructible, can be made as light or lighter than a wooden handle, is readily attachable and detachable from the tool, and can be used interchangeably with other tools having a similar tang. When used as a coke-fork, it will resist the heat well without communicating the heat to the workman's hands. Moreover, the handle can be rapidly and economically manufactured by a simple method and by machinery well known to the trade. If desired, the original tube may be of the proper size to fit the tang of the tool without requiring formation over a mandrel.

I do not intend to claim, broadly, as novel a tubular metal handle with detachable blade, inasmuch as I am aware that such devices have already been patented; but

What I wish to claim is—

A tubular tool-handle, having its upper end split and spread and a hand-grasp permanently secured between said split end, the lower end of the handle being shaped to conform to and receive the square tang of a tool and provided with a key-seat to key said handle to said tang and also notched to receive the blade of the tool.

In testimony whereof I have hereunto set my hand this 22d day of January, A. D. 1896.

WELKER J. ELDER.

Witnesses:

WM. L. PIERCE,
EDWARD A. LAURENCE.