L. T. RICHARDSON.

BLANKS FOR SOCKETS FOR HAND TOOLS.

No. 177,959 Patented May 30, 1876.

Fig. 1.

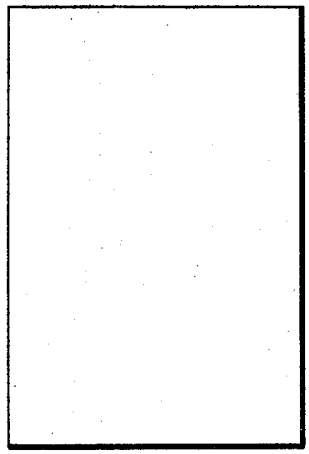


Fig. 2.

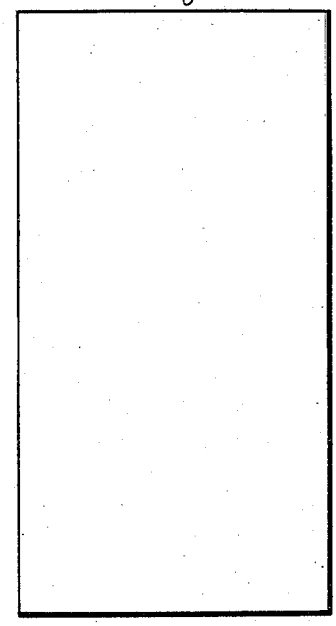
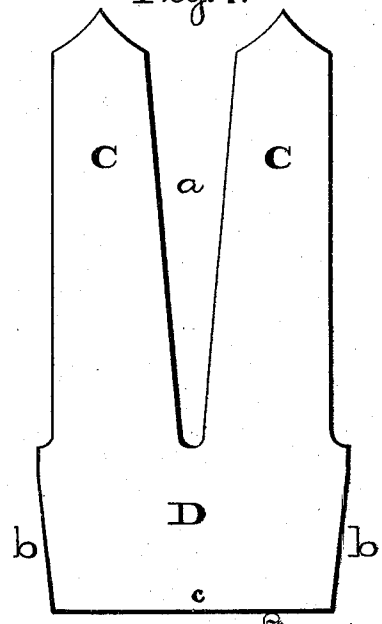


Fig. 3.

Fig. 4.



Witnesses:
Lewis F. Brous,
A. P. Grant.

Inventor:
Lovell T. Richardson,
by Munn & Dieterich
Atty.

2 Sheets—Sheet 2.

L. T. RICHARDSON.

BLANKS FOR SOCKETS FOR HAND TOOLS.

No. 177,959. Patented May 30, 1876

Fig. 5.

Fig. 6.

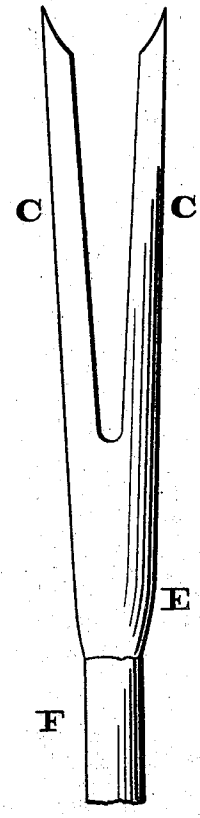


Fig. 7.

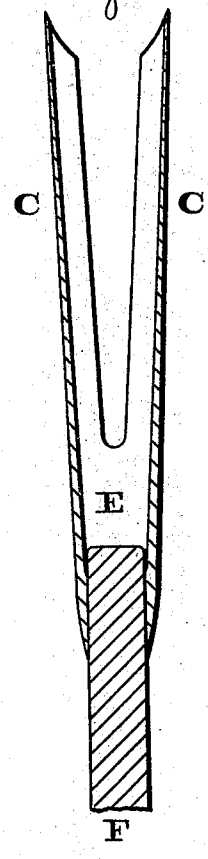
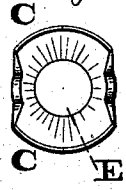


Fig. 8.



Witnesses:
Lewis F. Brous!
A. P. Grant.

Inventor:
Lovell T. Richardson,
by
John A. Diedarheim,
Atty.

UNITED STATES PATENT OFFICE.

LOVELL T. RICHARDSON, OF AUBURN, NEW YORK.

IMPROVEMENT IN BLANKS FOR SOCKETS FOR HAND-TOOLS.

Specification forming part of Letters Patent No. **177,959**, dated May 30, 1876; application filed December 20, 1875.

To all whom it may concern:

Be it known that I, LOVELL T. RICHARDSON, of Auburn, in the county of Cayuga and State of New York, have invented a new and useful Improvement in the Manufacture of Sockets for Hand-Tools; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a face view of the plate from which the blank is formed. Fig. 2 is a face view of the blank. Fig. 3 is a side view thereof. Fig. 4 is a face view of the blank properly shaped for the next operation. Fig. 5 is a face view of the formed socket. Fig. 6 is a face view of the socket, having the shank of the tool attached thereto. Fig. 7 is a longitudinal section of Fig. 6. Fig. 8 is an end view.

Similar letters of reference indicate corresponding parts in the several figures.

My invention relates to sockets for the handles of hoes, steel rakes, straw, hay, and manure forks, shovels, spades, &c.

The invention consists of a blank gradually thinned toward one end to form the straps of the socket, and having at the other end the proper amount of metal, in order to weld the shank of the tool thereto, said shank projecting into the space of the socket, and forming the bottom thereof, against which the handle will come in contact.

Referring to the drawings, A represents a metal plate, which may be of quadrilateral form, and it is rolled out to a taper, or gradually thinned at one end, as shown, Figs. 2 and 3, forming a blank, B. The blank is then punched out, of the shape shown at Fig. 4—that is to say, a wedge-shaped piece, *a*, is removed from the thinned end, so as to form strap-shaped pieces C, and wedge-shaped pieces *b* are removed from the sides of the thick end, so as to form a taper portion, D, the bottom of which is right-lined. The shaped piece is then bent, and the sides of the taper portion D welded together, so that the said portion forms a socket, E, and the pieces C project longitudinally therefrom, the inner faces of the pieces being made concave, and constituting straps which are adapted to fit the handle applied thereto.

It will be seen that the thickest portion of the metal is at the base of the socket, and the thinnest portion of the metal is at the outer or upper termination of the strap C.

The shank F of the tool-handle is now inserted partly in the base of the socket, as shown in Fig. 7, and the latter is welded firmly on the shank, thus securely connecting the socket and tool, and the shaped metal is then subjected to the finishing operations.

It will be seen that there is saving of labor and expense in the manufacture of the socket, and that a superior article is presented. By the employment of the various steps stated, I am enabled to produce a socket with straps in the same time and at the same expense that a socket alone has been heretofore manufactured. It will also be seen that the socket possesses the greatest possible strength at the point of junction with the shank, where the greatest strain exists, and there is no liability of working or wearing loose on the handle, as is usual with socket-tools heretofore produced. It will also be seen that the lower end of the socket is left free for the reception of the shank, and when the latter projects into the socket, and is welded thereto, the upper end of the shank constitutes the base of the socket.

When the handle is fitted to the socket, it will bear against the upper end of the shank.

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

The socket constructed of a plate thinned toward one end, and formed with strap-shaped pieces C, a portion, D, having tapering sides *b*, and a thick bottom edge, *c*, whereby the shank may be welded to the socket forming the base thereof, substantially as and for the purpose set forth.

L. T. RICHARDSON.

Witnesses:

JOHN A. WIEDERSHEIM,

H. E. HINDMARSH.