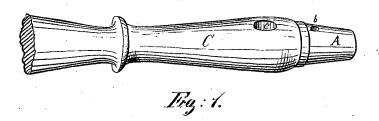
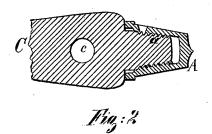
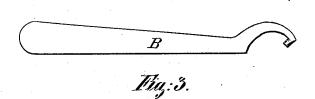
## A. SHOENINGER. Ferules for Tool-Handles.

No. 197,417.

Patented Nov. 20, 1877.







adoeph Shoeninger Inventor

Geo. W. Dzerolo.

Attorneys

## UNITED STATES PATENT OFFICE.

ADOLPH SHOENINGER, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN FERRULES FOR TOOL-HANDLES.

Specification forming part of Letters Patent No. 197,417, dated November 20, 1877; application filed March 9, 1877.

To all whom it may concern:

Be it known that I, ADOLPH SHOENINGER, of Chicago, in the county of Cook and State of Illinois, have invented an Improvement in Handles, of which the following is a true and accurate description, reference being had to the accompanying drawing, in which-

Figure 1 is a perspective view of my tip as attached to the end of a handle. Fig. 2 is a longitudinal section of the same, and Fig. 3 is a view of the wrench employed for screwing

said tip upon the handle end.

The nature of my invention relates to that class of tips which, like ferrules, are secured upon the ends of handles, whiffletrees, thills, &c., to keep the wood from splitting, and which are generally of an ornamental shape.

Heretofore these tips were of sheet-brass, pressed or spun, and were held upon the ends of the handles by a single nail each, driven through it and into the wood, which were eas-

ily damaged or lost.

Now, my invention consists in casting these tips of metal, with a conical exterior form and a similarly-shaped screw-threaded socket, so as to be drawn upon the handle end by rotating it, and to be held from turning loose by driving a nail into the wood through a hole in the tip, which, in the putting on, answers first as a hold for the wrench.

A is the tip, which, for ornamentation, may be nickel plated, tinned, bronzed, or japanned. This tip has a smooth exterior surface, and is in the shape of a truncated cone. The screw-threaded socket a of the tip is of

the same form as the exterior, its side being parallel to the exterior surfaces. A hole, b, is made through the tip to receive the end of the wrench B, Fig. 3, for screwing the tip upon the handle end, and a nail is driven through this hole into the wood to prevent the tip from working loose after being turned to position. C is the handle, and c a hole bored in it, by means of which the handle may be held while screwing on the tip. The tip is adapted to be turned upon the handle by the wrench B, and is intended to cut its own thread.

By having the exterior of the tip made smooth and of conical form, and the screwthreaded socket of similar shape, the tip can be manufactured very cheaply, and is also especially adapted for the purpose described, since it forms an uninterrupted continuation of the handle, is easily and conveniently applied, and does not work loose.

I am aware of the patent granted February 9, 1869, to Thompson, and hereby disclaim the same; but

What I claim as my invention is-

The cast-metal tip A described, having a smooth conical exterior, a similarly-shaped screw-threaded socket, a, and nail-hole b, constructed and arranged substantially as described and shown.

ADOLPH SHOENINGER.

Witnesses:

WM. H. LOTZ. GEO. FROMMANN.