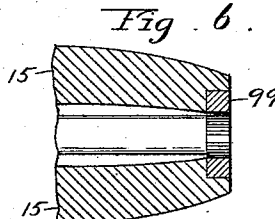
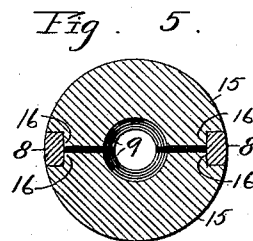
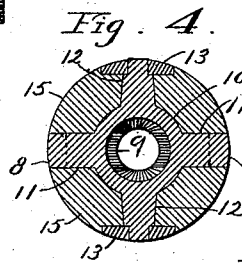
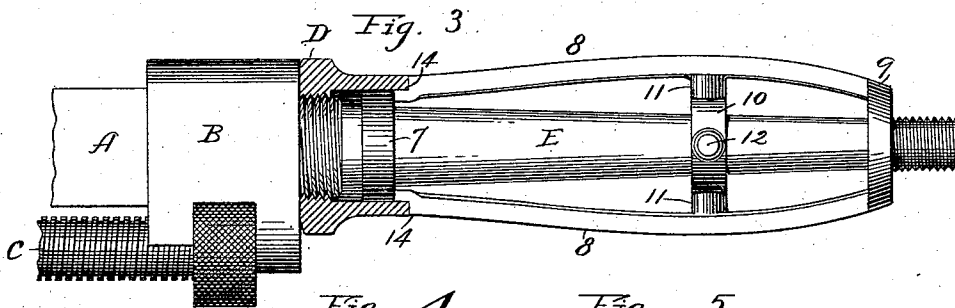
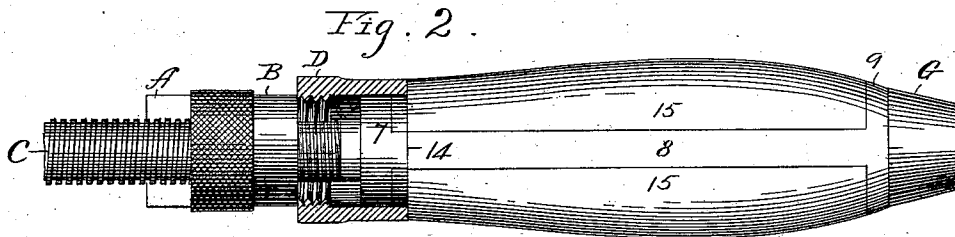
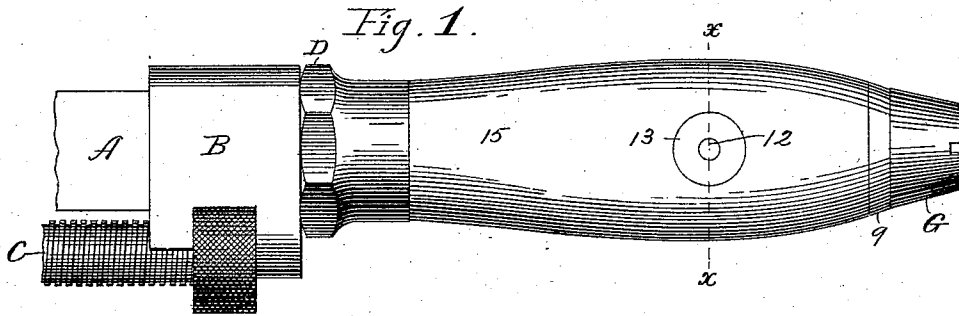


(No Model.)

A. SHEPARD.
WRENCH HANDLE.

No. 537,239.

Patented Apr. 9, 1895.



WITNESSES
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AMOS SHEPARD, OF PLANTSVILLE, ASSIGNOR TO THE PECK, STOW & WILCOX COMPANY, OF SOUTHTON, CONNECTICUT.

WRENCH-HANDLE.

SPECIFICATION forming part of Letters Patent No. 537,239, dated April 9, 1895.

Application filed October 1, 1894. Serial No. 524,565. (No model.)

To all whom it may concern:

Be it known that I, AMOS SHEPARD, a citizen of the United States, residing at Plantsville, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Wrench-Handles, of which the following is a specification.

My invention relates to improvements in wrench handles and the object of my improvement is simplicity and economy in construction and efficiency of the article.

In the accompanying drawings Figure 1 is a side elevation of the handle portion of a wrench with my handle applied thereto. Fig. 2 is an edge view of the same with the ferrule nut in section. Fig. 3 is a side elevation showing the handle frame in its position on the shank of the wrench. Fig. 4 is a transverse section of the handle on the line $x x$ of Fig. 1. Fig. 5 is a transverse section of the handle with a modified form of shell, the plane of section being a little to one side of that of Fig. 4; and Fig. 6 is a longitudinal section of the butt end of the handle with a slightly modified form of handle frame.

The wrench bar A, step B, adjusting screw C, ferrule nut D, shank E and holding nut G, are of ordinary construction.

I form my handle of a frame and two shells. The handle frame is composed of a ring 7, two ribs or longitudinal side bars 8, a perforated end plate 9, and a spider 10. The middle portion of the spider is perforated longitudinally to let the shank E of the wrench bar pass through it and it is connected with the side bars by its two arms 11. It is also provided with shouldered posts or studs 12, for the reception of the washers 13. The side bars are shouldered at 14 to make their forward ends about flush with the ring 7, and their outer edge adjacent to said shoulder about flush with the outer side of the holding nut D as best shown in Fig. 3. The handle frame is of metal and to it I fit the two shells 15 of wood or other light material, which shells are perforated transversely to receive the posts or studs 12 of the spider 10. The perforation in the shells 15 is counter-bored at its outer end for the reception of the washer 13. After placing the shells in position, the washers are placed on and held in place by

riveting down the ends of the posts 12, thereby firmly securing the shells to the handle frame and completing the handle ready to be applied to the wrench bar in the ordinary manner in place of the ordinary wooden handle, the front end of the handle being received into the end of the ferrule nut in the usual way.

The shells 15 may be slabbbed flush with the edges of the side bars 8 of the handle frame as shown in Fig. 4, or they may be made a little thicker and rabbeted at each edge to receive the inner corners of said side bars as shown at 16, in Fig. 5.

In Figs. 1, 2 and 3, I have shown the end plate 9 of the handle frame of the full diameter of the handle at that point, and have abutted the ends of the shells 15 against the inner face of said plate. If desired this end plate may be made of a smaller diameter as at 99, Fig. 6, and the ends of the shells extended over its outer edge and terminating flush with its outer face as shown.

By my improvements I form a very strong and durable handle which is complete in itself before attaching it to the wrench. The surface of the handle is largely composed of wood, or equivalent material for handles, and its weight does not greatly exceed that of an ordinary handle.

I claim as my invention—

1. The herein described handle consisting of the handle frame having the side bars and longitudinally perforated spider and the shells held thereon by the arms of said spider substantially as described and for the purpose specified.

2. The handle frame and shells, secured together independently of the wrench, and forming a complete handle, with a longitudinal perforation from end to end, substantially as described and for the purpose specified.

3. In a handle, the handle frame consisting of the end ring, side bars, spider and end plate, all adapted to receive the shells for forming a handle that is longitudinally perforated from end to end, substantially as described and for the purpose specified.

AMOS SHEPARD.

Witnesses:

STEPHEN WALKLEY,
E. M. STANNARD.