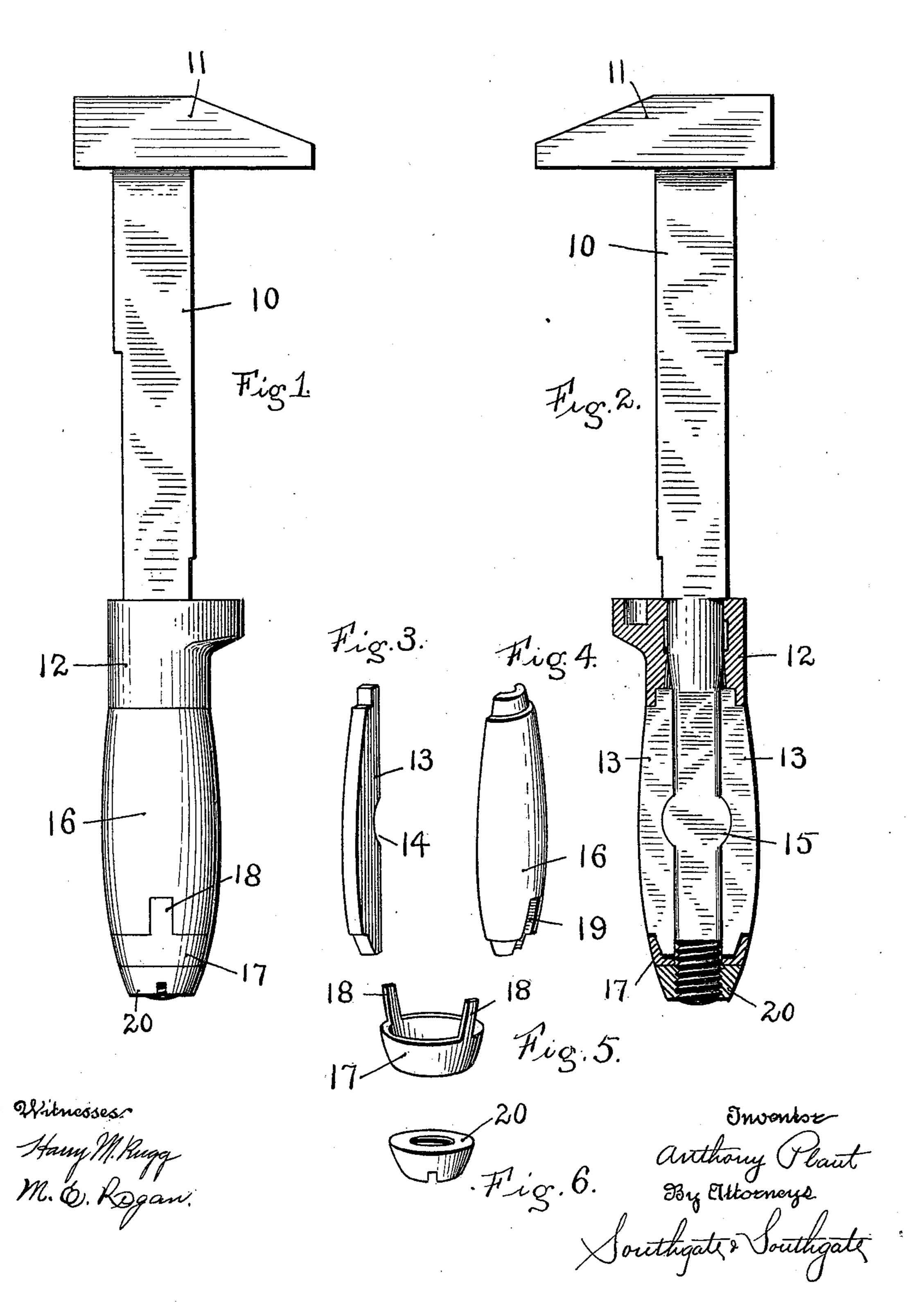
A. PLANT, Dec'd.

P. LAPLANTE, Administrator.

WRENCH HANDLE.

(Application filed, Apr. 17, 1899.)

(No Model.)



## United States Paten's Office.

ANTHONY PLANT, OF WORCESTER, MASSACHUSETTS; PHILIAS LAPLANTE ADMINISTRATOR OF SAID ANTHONY PLANT, DECEASED.

## WRENCH-HANDLE.

SPECIFICATION forming part of Letters Patent No. 637,484, dated November 21, 1899.

Application filed April 17, 1899. Serial No. 713, 269. (No model.)

To all whom it may concern:

Be it known that I, ANTHONY PLANT, a citizen of the United States, residing at Worcester, in the county of Worcester and State of 5 Massachusetts, have invented a new and useful Wrench-Handle, of which the following is a specification.

My invention relates to that class of wrenchhandles having metal edge pieces and wooden to side pieces or panels. This class of wrenchhandles is frequently called the "knife-

handle."

The especial object of my present invention is to provide a strong, attractive, and inex-15 pensive wrench-handle in which the side pieces or wooden panels will be reinforced and supported, so that they will be less liable to become displaced or to crack than in constructions which have heretofore been em-2c ployed. To accomplish this purpose, I have combined the parts of the handle with a securing-ferrule having upwardly-extending tongues engaging sockets in the side pieces or panels, so that said tongues will form a 25 support for the wooden side pieces and will reinforce the same, so that they are less liable to displacement or breakage.

A further object of my present invention is to construct the parts of my wrench-handle 30 so that the working pressure will not be transmitted from the screw-step ferrule to the end

piece or tip on the shank.

To these ends my invention consists of the parts and combinations of parts, as herein-35 after described, and more particularly pointed out in the claims at the end of this specification.

In the accompanying drawings, Figure 1 is a side view of a wrench-shank provided with 4c a handle constructed according to my invention. Fig. 2 is a similar view partially broken away. Fig. 3 is a perspective view of one of the metallic edge pieces. Fig. 4 is a perspective view of one of the wooden side pieces or 45 panels. Fig. 5 is a perspective view of the securing-ferrule having upwardly-extending tongues, and Fig. 6 is a perspective view of the tip or end piece of the wrench.

Referring to the drawings and in detail, 10 50 designates a wrench-shank having a fixed jaw 11 at its upper end. Fitting onto the shank | 10 is a screw-step ferrule 12, forming a support for the operating-screw in the usual manner.

The wrench-handle, as herein illustrated, 55 comprises edge pieces 13, having reduced ends for fitting into the screw-step ferrule and securing-ferrule, hereinafter referred to. The edge pieces 13 are provided near their centers with recesses 14 for engaging an enlargement 60 or boss 15 on the shank, so that the edge pieces will act as struts between the boss 15 and screw-step ferrule 12, preventing the working pressure of the wrench being transmitted to the tip or end of the handle. The 65 securing-ferrule 17 is provided with upwardlyextending tongues 18. The tongues 18 are rabbeted into sockets 19 in the wooden side pieces or panels 16. The wooden side pieces or panels 16 are provided with reduced ends 70 for fitting into the screw-step ferrule 12 and securing-ferrule 17. These reduced ends of the wooden side pieces or panels possess comparatively little strength and are necessarily comparatively short.

In practice I have found that the reduced ends of the wooden side pieces or ferrules do not possess sufficient strength or have sufficiently long bearings to hold the said side pieces securely in place, and on this account 80 I have found that the panels or side pieces of knife-handle wrenches become frequently broken, cracked, or loosened, so as to destroy the value of the wrench.

By providing the securing-ferrule 17 with 85 upwardly-extending tongues 18, engaging corresponding sockets in the side pieces, I have provided a construction by means of which the side pieces will be reinforced and supported, so as to be much less liable to be go broken, because the upwardly-extending tongues not only hold the wooden side pieces against lateral displacement, but also resist any tendency for the side pieces to twist or turn about the shank of the wrench as an 95 axis.

Threaded or otherwise secured on the lower end of the shank is a nut or tip-piece 20 for holding the parts of the handle in place.

I am aware that changes may be made in 100 the construction of wrench-handles without departing from the scope of my invention as

pointed out in the claims. I do not wish, therefore, to be limited to the particular construction which I have herein shown and described; but

What I do claim, and desire to secure by Letters Patent of the United States, is—

1. In a wrench, the combination of the shank, and a handle therefor, comprising edge strips, wooden side pieces or panels, and a securing-ferrule having upwardly-extending tongues engaging corresponding sockets in the wooden side pieces, substantially as described.

2. In a wrench, the combination of the shank, a screw-step ferrule fitting thereon, and a handle comprising edge pieces having sockets for receiving an enlargement of the shank, and a securing-ferrule having upwardly-extending tongues rabbeted into the wooden side pieces so as to be flush with the surfaces thereof, substantially as described.

3. In a wrench, the combination of the shank, the screw-step ferrule fitting thereon, a handle comprising edge strips and wooden side pieces or panels, a securing-ferrule hav-

ing upwardly - extending tongues rabbeted into the side pieces, so as to be flush with the surfaces thereof, and an end piece or tip on the shank, substantially as described.

4. In a wrench, the combination of a shank 30 10 having a fixed jaw 11, a screw-step ferrule 12 fitting thereon, edge pieces 13 having sockets receiving an enlargement 15 of the shank, so that the edge pieces act as struts between the enlargement 15 and screw-step ferrule 35 12, wooden side pieces or panels 16, a securing-ferrule 17 having upwardly-extending tongues 18 rabbeted into the wooden side pieces so as to be flush with the surfaces thereof, and a tip or end piece 20 threaded 40 onto the shank, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

 $\underset{\text{mark}}{\text{ANTHONY}} \overset{\text{his}}{\underset{\text{mark}}{\times}} \text{PLANT}.$ 

Witnesses:
Louis W. Southgate,
M. E. Regan.