GEORGE C. TAFT.

Improvement in Wrenhes.

No. 121,685. Patented Dec. 5, 1871.

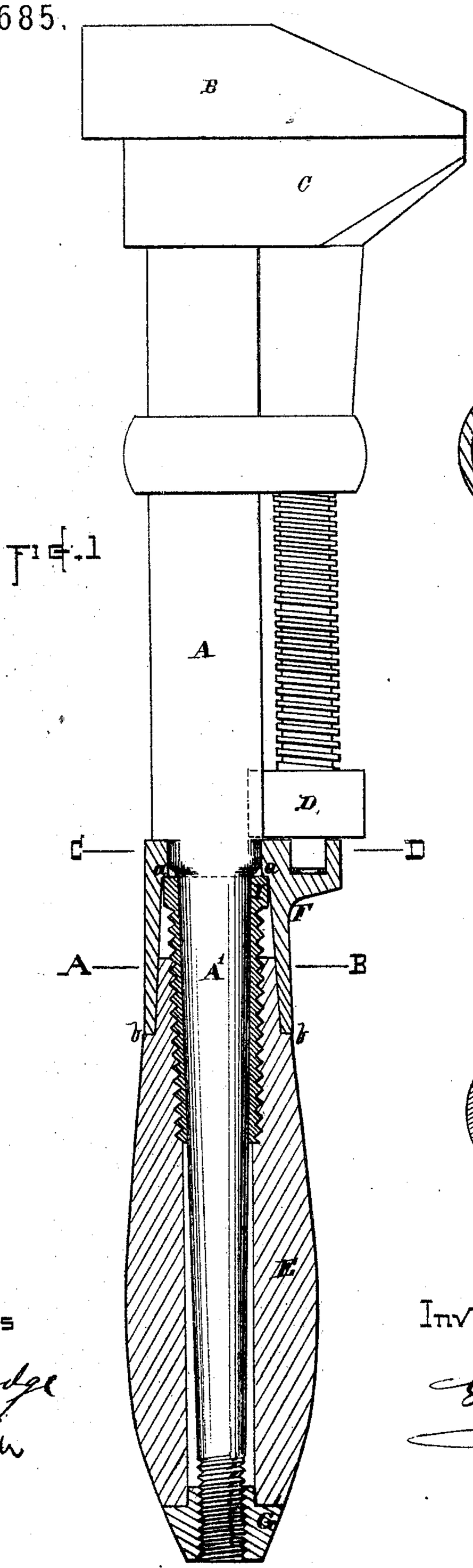

FIG. 1

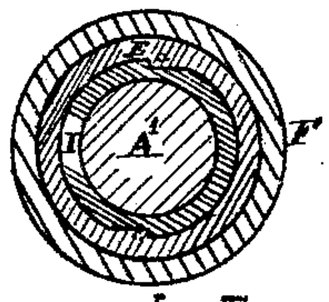

FIG. 3

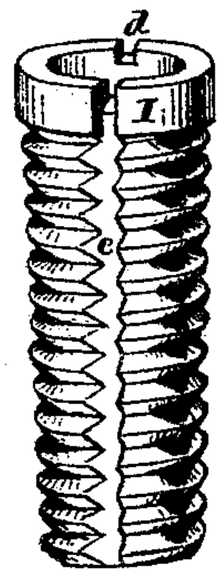

FIG. 2

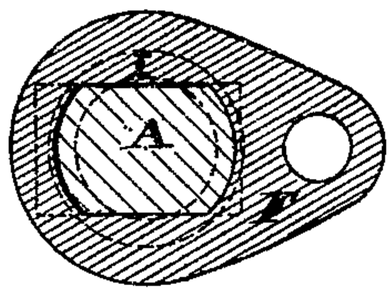

FIG. 4

Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE C. TAFT, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO JOHN H. COES, OF SAME PLACE.

IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. 121,685, dated December 5, 1871.

To all whom it may concern:

Be it known that I, GEORGE C. TAFT, of the city and county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Screw-Wrenches; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing which forms a part of this specification, and in which—

Figure 1 represents a view of a screw-wrench with my improvements applied thereto. The handle is shown in section to illustrate the internal construction thereof. Fig. 2 represents a perspective view of the screw-thimble. Fig. 3 represents a transverse section of the wrench-handle at the position indicated by line A B, Fig. 1. Fig. 4 represents a section of the ferrule near its upper end at line C D, Fig. 1, showing the relative positions of the ferrule, thimble, and bar.

The nature of my invention consists in the combination, with the handle and ferrule in a screw-wrench, of a screw-thimble or nut, as and for the purposes hereinafter described.

To enable others skilled in the art to which my invention belongs to make and use the same, I will now proceed to describe it in detail.

In the drawing, the parts marked A represent the bar. B indicates the head; C, the movable jaw; D, the rosette and screw; E, the wood handle; F, the ferrule; and G, the tip-nut. I indicates a hollow metallic thimble or nut, provided with a screw-thread upon its exterior and formed of the proper size to fit around the shank A′ of the wrench-bar A. The thimble I is screwed into the upper end of the wood handle E in such a manner that when the parts of the wrench are put together the top end of the thimble I will rest against the shoulder *a* at the interior of the ferrule F and thereby prevent the ferrule from being pressed back by the rosette-screw D when the wrench is in use. The thimble I is screwed into the handle E far enough to permit the shoulder *b* on the wood to strike the lower end of the ferrule at the same time the end of the thimble I comes in contact with the shoulder *a* at the top of the ferrule. The thimble I may be screwed into the handle-blocks before the handles are turned and the ends of the thimbles and handles squared up at the same time. Grooves *c* are formed at the sides of the thimble, as shown in Figs. 2 and 3, so that the screw-threads will more readily cut into the wood of the handle, and notches *d* are formed in its upper end to receive the tool, whereby it may conveniently be turned to place.

From the foregoing description it will be seen that the backward strain of the rosette D upon the ferrule F will be borne by the inner surface of the handle E instead of upon the shoulder *b* at the lower end of the ferrule, and that the said strain is distributed by the screw-thread of the thimble over a comparatively large surface, while, at the same time, the upper end of the handle is sustained and prevented from splitting by being closely incased within the lower part of the ferrule F. The wood handle E can be extended into the ferrule F to a greater or less distance, as desired.

In making the screw-thimble or nut I, I prefer to make it slightly tapering toward the lower end, and also to make the inner surface correspond nearly with the form of the shank A′, on which it is fitted.

In case the parts should become loosened by use the handle can be removed and the thimble or nut I adjusted so that the parts will again fit close and firm.

Having described my improvements in screw-wrenches, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

1. The combination, with the handle E, ferrule F, and bar-shank A′, of a screw-thimble or nut I, substantially as and for the purposes set forth.

2. The combination, with a wood handle in a screw-wrench, of an adjustable screw-thimble or nut, for the purposes stated.

GEO. C. TAFT.

Witnesses:

THOS. H. DODGE,

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