

No. 647,953.

Patented Apr. 24, 1900.

C. L. FERRIOTT.  
TIRE TIGHTENER.

(Application filed Mar. 6, 1900.)

(No Model.)

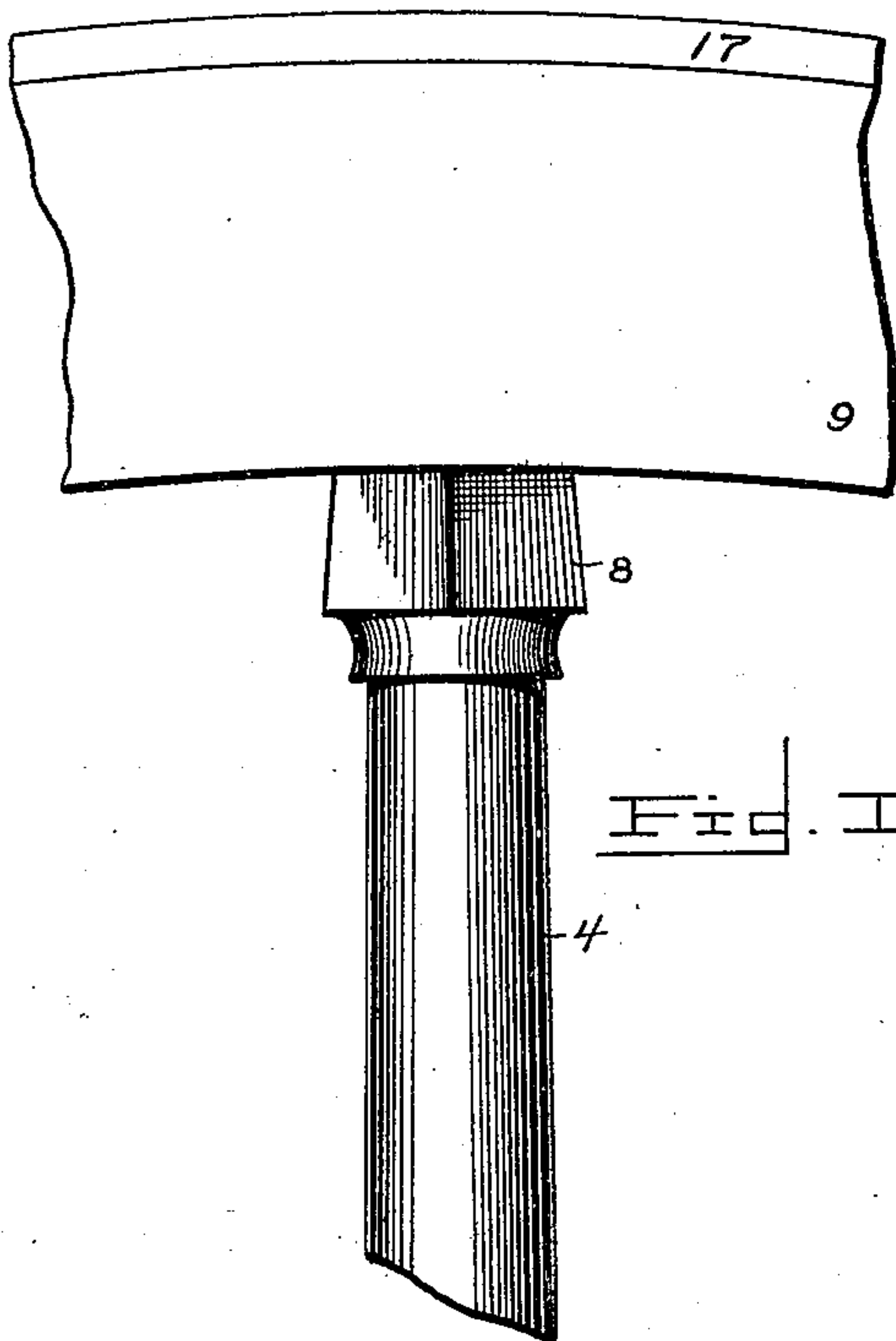


Fig. 1.

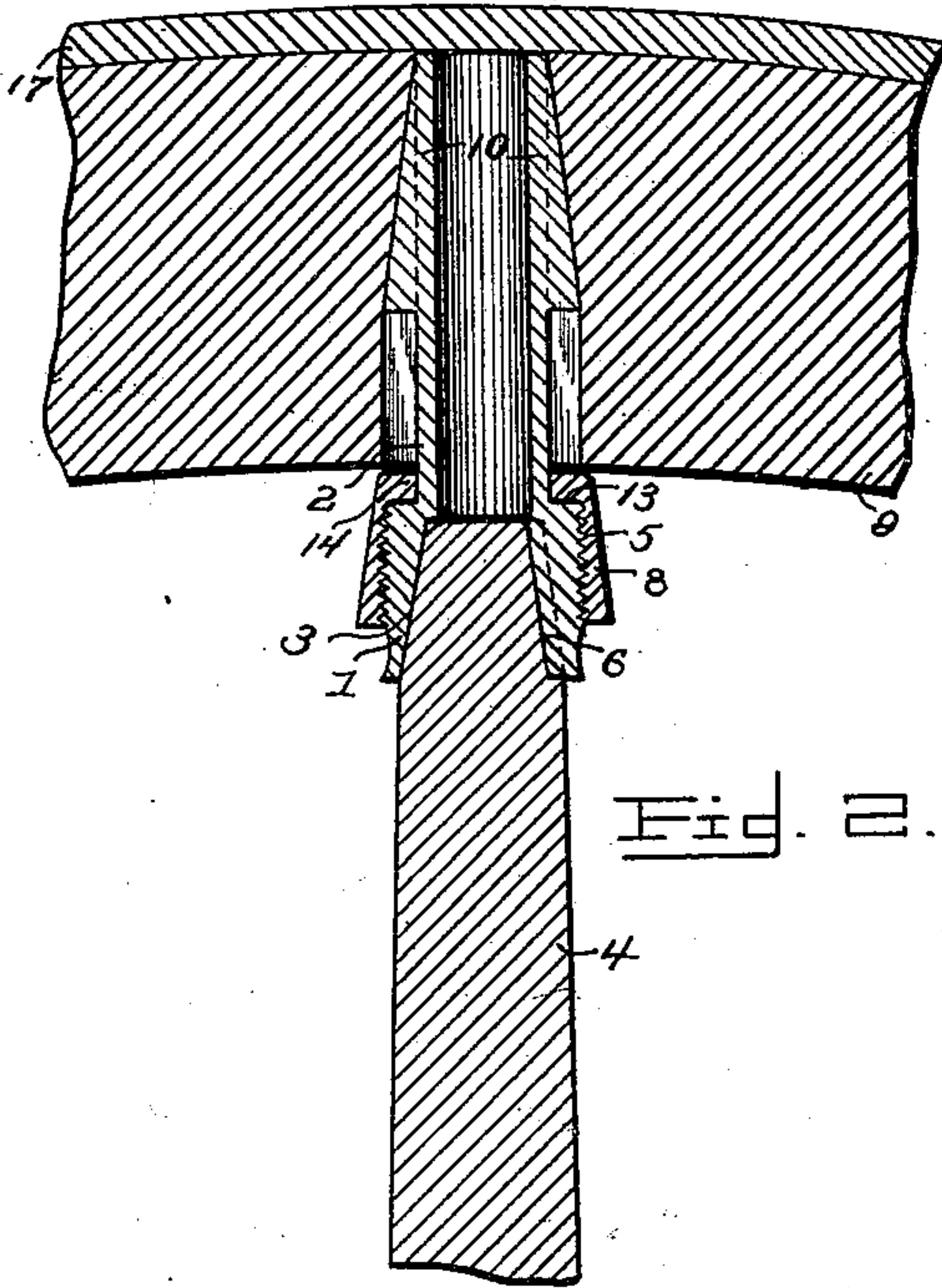


Fig. 2.

Fig. 3.

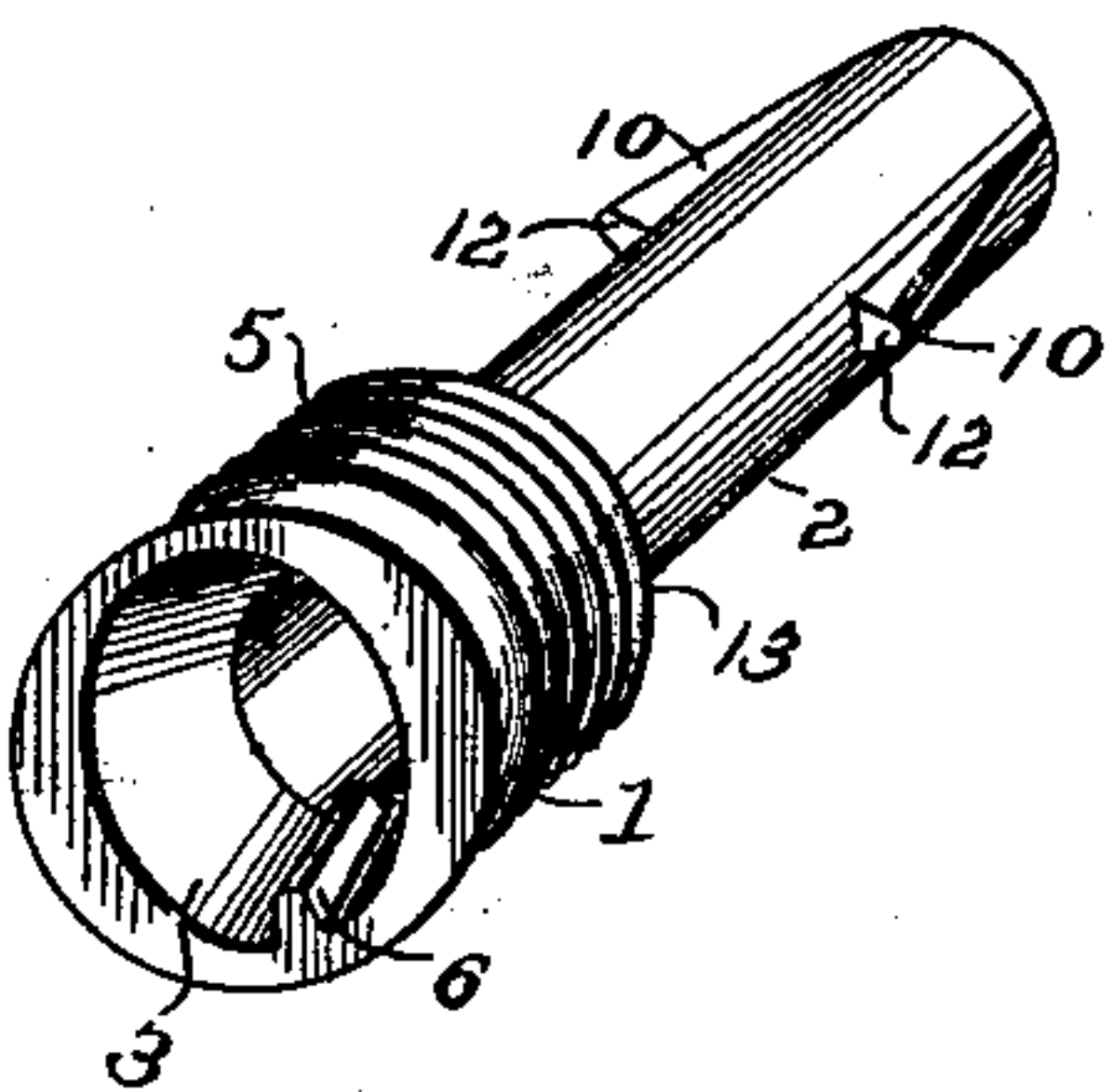
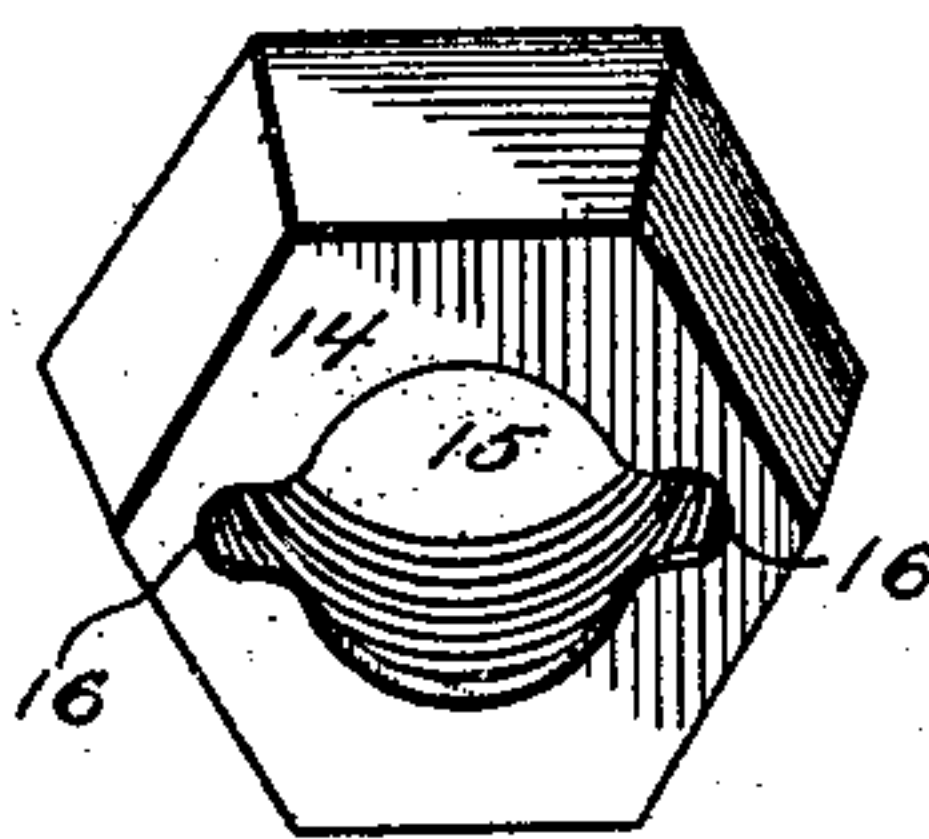


Fig. 4.



Witnesses

F. G. Campbell.

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By His Attorneys.

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# UNITED STATES PATENT OFFICE.

CHARLEY L. FERRIOTT, OF BARTLETT, TEXAS.

## TIRE-TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 647,953, dated April 24, 1900.

Application filed March 6, 1900. Serial No. 7,582. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLEY L. FERRIOTT, a citizen of the United States, residing at Bartlett, in the county of Williamson and State of Texas, have invented a new and useful Tire-Tightener, of which the following is a specification.

The invention relates to improvements in tire-tighteners.

10 The object of the present invention is to improve the construction of tire-tighteners and to provide a simple, inexpensive, and efficient device capable of firmly engaging a felly and a spoke and adapted to be readily adjusted to tighten a tire.

15 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

20 In the drawings, Figure 1 is an elevation of a tire-tightener constructed in accordance with this invention and shown applied to a portion of a wheel. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a detail perspective view of the thimble. Fig. 4 is a similar view of the nut.

25 Like numerals of reference designate corresponding parts in all the figures of the drawings.

30 1 designates a thimble having a tubular tenon or extension 2 and provided with a socket 3, oval in cross-section to conform to the configuration of the outer end of a spoke 4 and fitting on the same, as clearly shown in Fig. 2 of the drawings. The thimble, which has exterior screw-threads 5, is provided on its interior with a rib 6, disposed longitudinally of the spoke and embedded in the latter, as clearly illustrated in Fig. 2, whereby the thimble is held against rotation on the spoke when a nut 8 is being screwed against the felly 9. The felly 9 is provided with an opening extending entirely through it from its inner to its outer periphery to receive the hollow or tubular tenon 2, which is driven into the felly and which is firmly held in the opening by means of tapering wedge-shaped flanges 10, located at opposite sides of the

tubular tenon and formed integral with the same. The tapering wings or flanges 10, which are located at the outer portion of the tubular tenon, as clearly shown in Figs. 2 and 3, taper toward their outer ends and form inner shoulders 12, and they effectually prevent the tenon from rotating in the opening of the felly. The tenon is of less diameter than the thimble, which forms a shoulder 13 adjacent to the inner periphery of the felly, and the nut 8, which engages the threads 5 of the thimble, extends inward over the shoulder, being provided with a top or flange 14. The top or flange 14, which is interposed between the shoulder 13 and the inner periphery of the felly, is provided with a circular opening 15 to receive the tenon, and it has opposite notches or recesses 16 to enable it to pass the flanges or wings of the tenon in placing the nut on the same. The top or flange 14 of the nut forms a broad bearing for engaging the felly and also serves to exclude dust from the screw-threads.

When the parts are assembled, the nut fits tightly against the felly and the shoulder of the thimble, and when it becomes necessary to tighten the tire 17 the nut is screwed against the felly, forcing the same outward, and the rib and the flanges effectually prevent the thimble and the reduced hollow tenon from rotating.

It will be seen that the tire-tightener is exceedingly simple and inexpensive in construction, that it is strong and durable and forms a firm connection between the felly and the spoke, and that it is readily adjusted to tighten the tire.

What is claimed is—

1. A device of the class described comprising a thimble provided with a tenon having tapering wings or flanges adapted to engage a felly, and a nut engaging the thimble and provided at its top or outer portion with a circular opening and having opposite notches or recesses, substantially as and for the purpose described.

2. A device of the class described comprising a thimble having an oval socket and provided with exterior screw-threads, a hollow

tenon rigid with the thimble and provided  
with opposite wings or flanges, tapering to-  
ward their outer ends and forming inner  
shoulders, and a nut engaging the screw-  
5 threads of the thimble and provided with a  
circular opening and having opposite notches  
or recesses, substantially as described.

In testimony that I claim the foregoing as  
my own I have hereto affixed my signature in  
the presence of two witnesses.

CHARLEY L. FERRIOTT.

Witnesses:

E. G. ARMSTRONG,  
BEN SMITH.