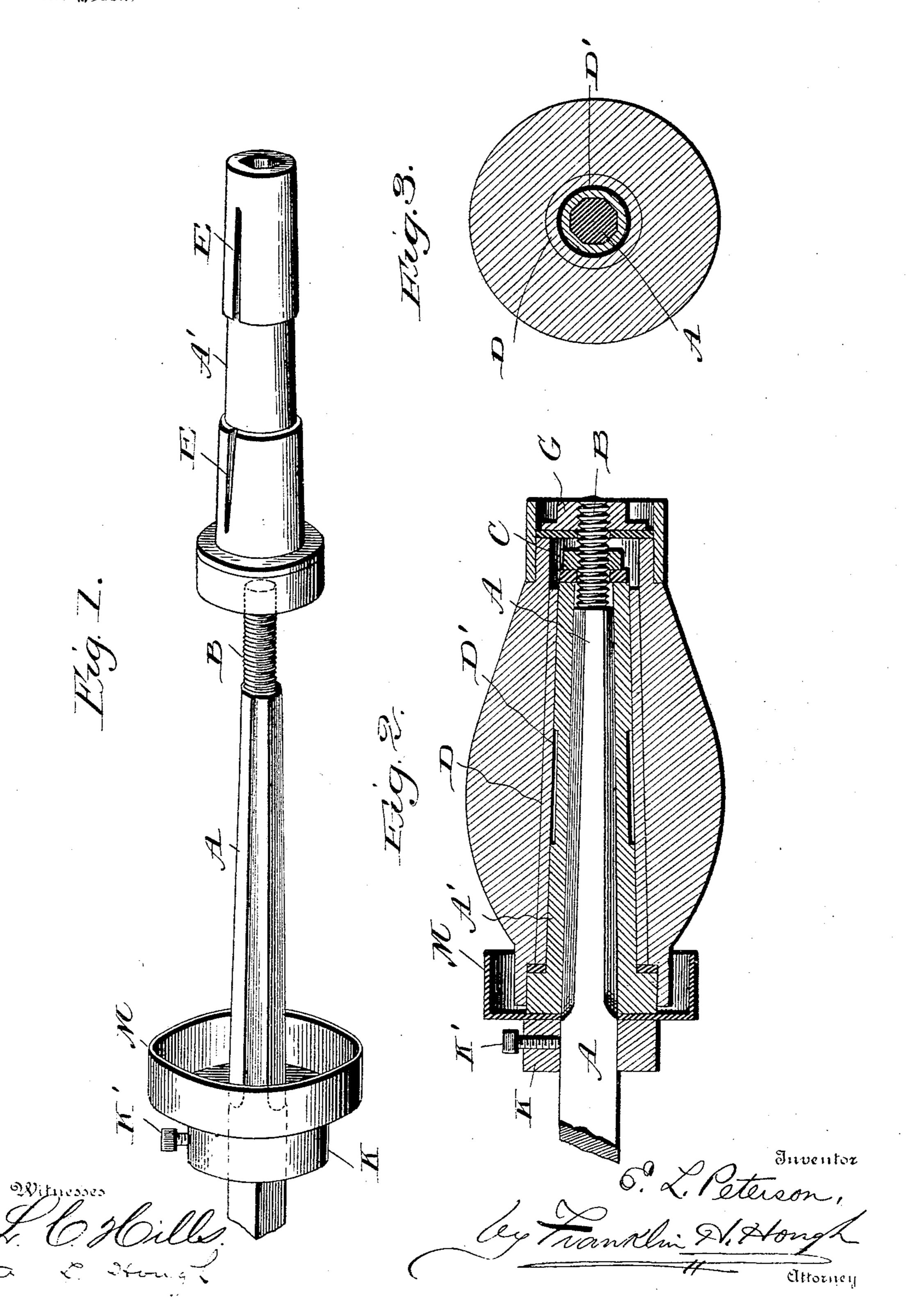
## E. L. PETERSON. VEHICLE AXLE.

(Application filed June 22, 1898.)

(No Model.)



## United States Patent Office.

EMMETT L. PETERSON, OF WILLACOOCHEE, GEORGIA.

## VEHICLE-AXLE.

SPECIFICATION forming part of Letters Patent No. 616,686, dated December 27, 1898.

Application filed June 22, 1898. Serial No. 684,180. (No model.)

To all whom it may concern:

Be it known that I, EMMETT L. PETERSON, a citizen of the United States, residing at Willacoochee, in the county of Coffee and State of Georgia, have invented certain new and useful Improvements in a Combined Axle and Skein; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in axles and axle-skeins and means for utilizing old worn-out axles, whereby their usefulness may be prolonged by drawing out and forming an octagonal or other sided end on which a skein may be secured, and when the latter becomes worn its part which may have become somewhat flattened may be turned on the axle, thus presenting a new surface to receive the weight which necessarily comes on the under side of the skein and box of the hub.

In connection with the foregoing I provide means for adjusting the skein and taking up any looseness between the skein and hub-box and apply a sand-band which is adjustable on the axle and may be held securely to the same adjacent to the hub.

To these ends and to such others as the invention may pertain the same consists, further, in the novel construction, combination, and adaptation of the parts, as will be hereinafter more fully described and then specifically defined in the appended claim.

My invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings similar letters of reference indicate like parts throughout the several views, in which—

Figure 1 is a view showing the axle with the skein partially removed. Fig. 2 is a central longitudinal sectional view through the axle, box, and skein. Fig. 3 is a cross-sectional view through the axle and skein.

Reference now being had to the details of

the drawings by letter, A designates the axle, the end of which is adapted to be drawn out and made with angled faces, as shown in the drawings, in which I have shown an octagonal-faced axle with its extreme end threaded, 55 as seen at B. Fitted over the angled faces of the axle is a skein A, which has the periphery of its bore of such a shape as to conform to the axle on which it is carried. A nut C is provided to hold the skein in place. 60 The circumference of the skein, on which the box D has a bearing, is preferably recessed away at D', thus presenting less frictional surface than would be the case if the box had a bearing its entire length. Leading to this re- 65 cessed portion are grooves E, whereby the lubricant may readily pass to various parts of the bearing-surface. In order to hold the box, which is carried in the hub of the wheel, in place on the skein, a nut G is provided, which 70 is also carried on the extreme end of the axle.

On the axle adjacent to the portion thereof where the octagonal surface begins to taper I provide a collar K, which has therein an adjusting-screw K', which is designed to engage with the axle to hold the collar close to the hub and box contained therein, while to the collar is provided a band M, which is designed to fit closely over the inner end of the hub to prevent sand from falling onto the bearing-surface of the skein. By means of this adjustable collar and the adjusting-nuts on the end of the axle any play may be taken up which might be caused from shrinkage or wear of bearing parts.

It will be noted from the foregoing, when taken in connection with the drawings forming a part of this application, that when one portion of the circumference of the skein becomes worn the skein may be turned around 90 a partial revolution, presenting a fresh surface on the under side of the skein, where the strain of the weight of the vehicle comes. In the form of angle surface as shown, the skein can be changed eight times, thus pro- 95 longing the utility of the axle.

Having thus described my invention, what I claim to be new, and desire to secure by Letters Patent, is—

In combination with the axle with tapering 100

hexagonal end, an independent collar provided with a tightening-screw, adjustably held on the axle, a skein fitted over the hexagonal end of said axle, a sand-band interposed between the inner end of said skein and collar, the hub and means for holding the same in place, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

EMMETT L. PETERSON.

Witnesses:

H. Peterson, J. L. Faulkner,