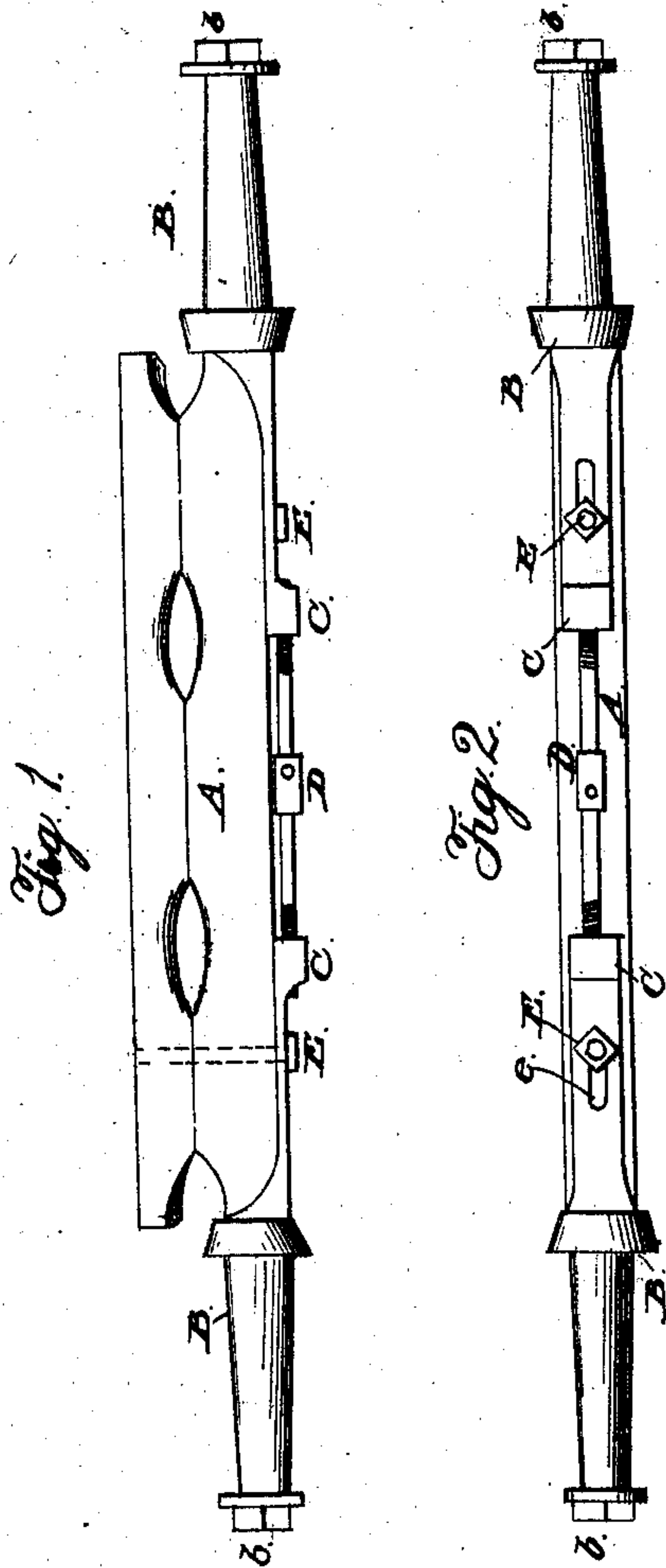


J. A. WILLIAMS.

Axle-Skein.

Patented Oct. 8, 1867.

No. 69,735.



Witnesses:
Thos. Encke
Wm. J. J. J. J.

Inventor:
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United States Patent Office.

JOHN A. WILLIAMS, OF ELIZABETH, ILLINOIS.

Letters Patent No. 69,735, dated October 8, 1867.

IMPROVEMENT IN THIMBLE-SKEIN FOR AXLES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN A. WILLIAMS, of Elizabeth, in the county of Jo Daviess, and State of Illinois, have invented a now and improved Thimble-Skein for Axles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to an improved thimble-skein for axles, and consists in turning the socket on the butt end of the skein, and connecting the skeins by a rod having a right and left-hand thread, furnishing a substantial brace to the axle. The thimble is also open at the extremities, and the butt end of the skein and connecting-rod are adjusted to the under side of the axle. In the accompanying drawings—

Figure 1 is a back, and

Figure 2 a bottom view of my improved thimble-skein.

Similar letters of reference indicate corresponding parts.

A is the axle, B the thimble-skein, open at the extremities *b b*, the axle passing into the thimble, the open extremities whereof give free ventilation, and enable the dampness which collects in damp weather, from the sweating of the iron and other causes, to dry out. The sockets C C are cast or set on the butt end of the skein, and into these work the right and left-handed threads of the connecting-rod D; or the connecting-rod D may be a flat bar, provided with a ratchet at each end, meshing into a similar ratchet on the under side of the butt end of the skein. The skeins are secured to the under side of the axle A by the bolster-bolts E E, which pass through the slots or mortises *e e* in the skeins B, enabling the skeins to be tightened or loosened by the rod D, as desired, thus allowing for shrinkage or swelling of the wood or metal, as may be necessary.

My improved thimble-skeins are lengthened, and, with the connecting-rod, serve also as a brace, strengthening the axle-tree; and, being placed beneath the axle, get rid of the danger of the lower part of the axle striking against obstacles which can be passed over by the hubs of the wheels.

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

1. The elongated skeins B B, furnished with a socket at the butt end thereof, in manner and for the purposes substantially as above set forth and described.
2. Adjusting the thimble-skein beneath the axle by means and manner for the purposes substantially as above set forth and described.
3. Constructing the thimble-skeins B B in one piece, with open extremities *b b*, through which the wooden axle-tree passes, in manner and for the purposes substantially as above set forth and described.
4. The connecting-rod D, furnished with a right and left-hand thread, or any equivalent for the same, and setting into the sockets C C, or their equivalent, on the thimble-skeins B B, in manner as and for the purposes substantially as described.
5. Securing the thimble-skeins to the axle-tree by means of the bolster-bolts E, working in the slots or mortises *e e*, in manner and for the purposes substantially as above set forth and described.

JOHN A. WILLIAMS.

Witnesses:

BENJAMIN TART,

JOHN WEBER.