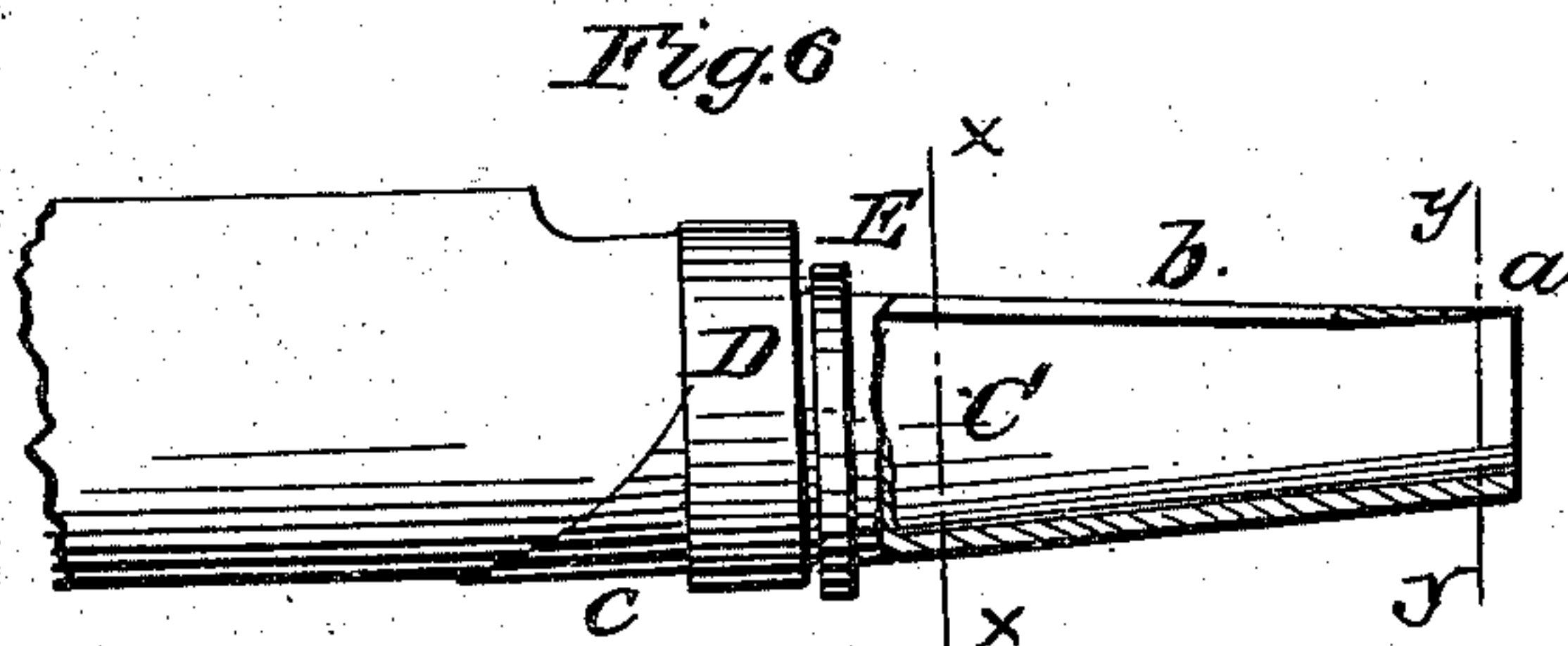
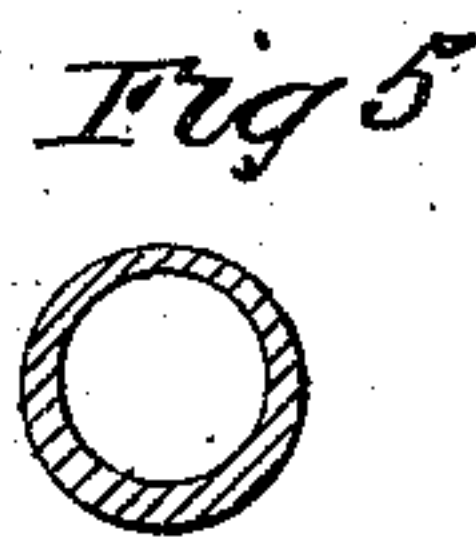
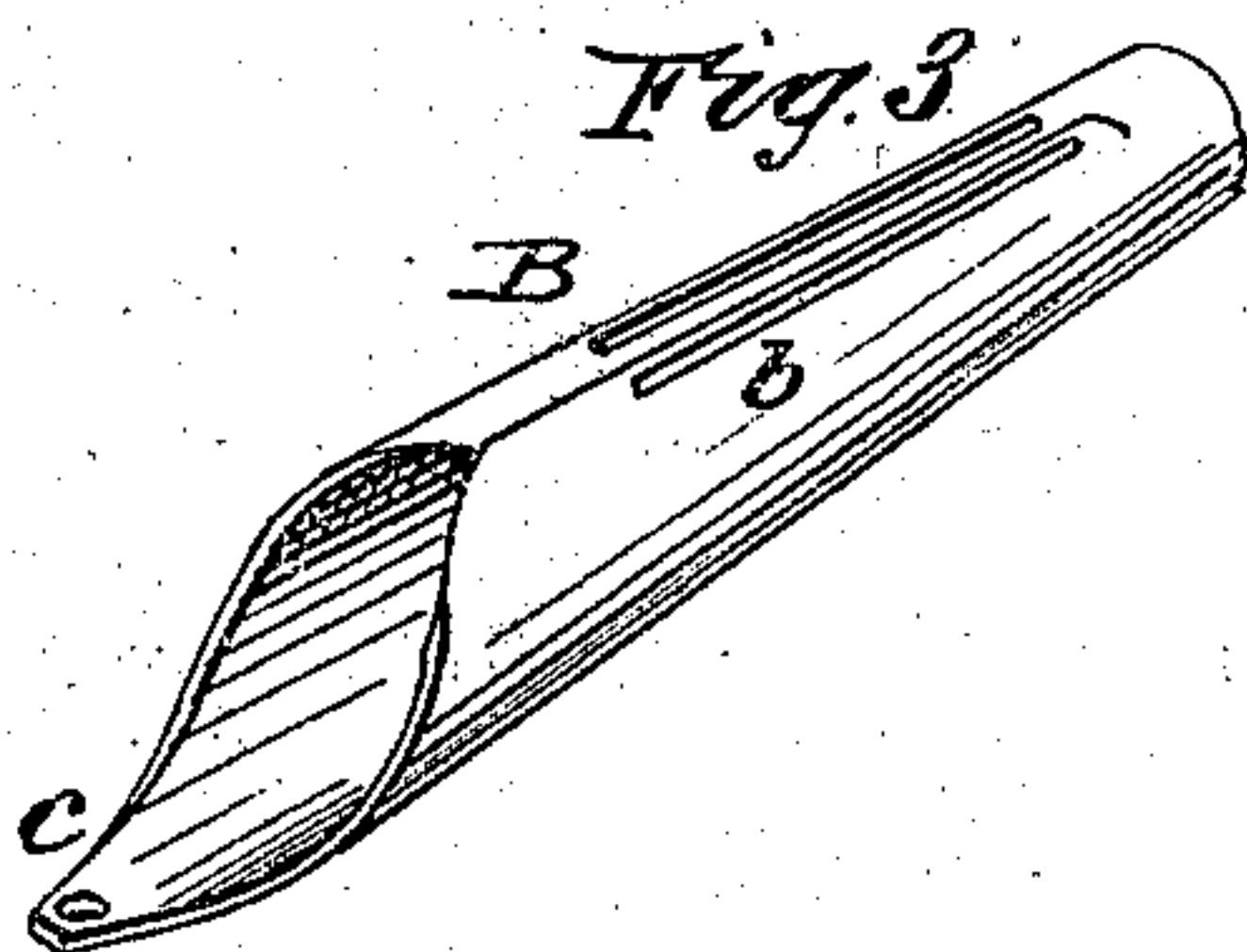
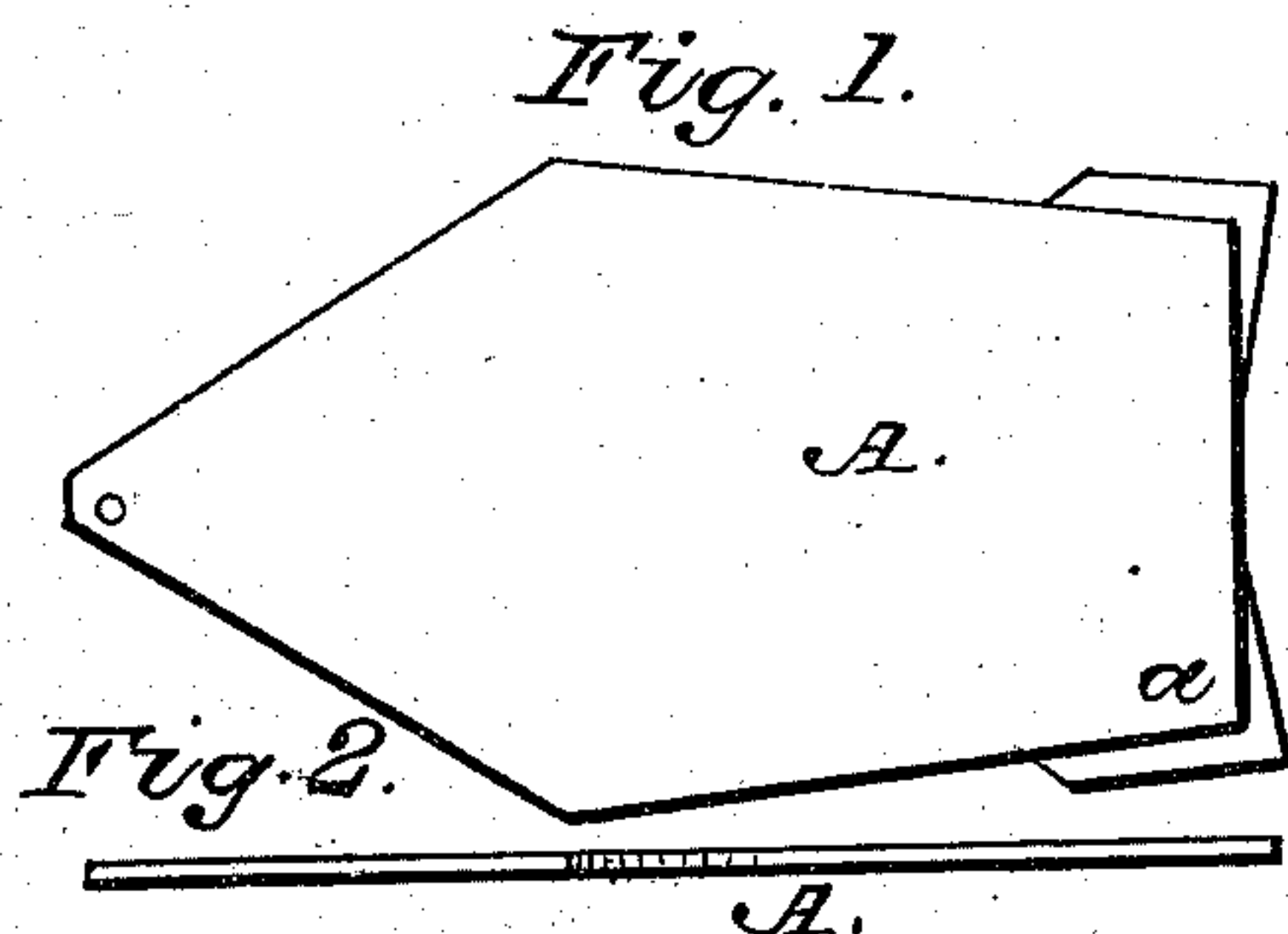


M. EHRGOTT.

Axle Skein.

No. 87,652.

Patented March 9, 1869.



Witnesses
P. J. Dodge
L. Hailer

Inventor.

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UNITED STATES PATENT OFFICE.

M. EHRGOTT, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND
JAMES PARKER, OF SAME PLACE.

IMPROVEMENT IN THIMBLE-SKEINS FOR AXLES.

Specification forming part of Letters Patent No. 87,652, dated March 9, 1869.

To all whom it may concern:

Be it known that I, M. EHRGOTT, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Thimble-Skeins for Axles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

My invention relates to thimble-skeins for the axles of wagons, carriages, and similar vehicles; and it consists in a novel mode of constructing them, so as to produce a new, cheap, and useful article of manufacture for the trade.

In the drawings, Figure 1 is a plan view. Fig. 2 is an edge view. Fig. 3 is a perspective view. Fig. 4 is a cross vertical section on the line *x x* of Fig. 6. Fig. 5 is a cross vertical section on the line *y y* of Fig. 6; and Fig. 6 is a side view, partly in section.

In constructing my thimble-skein I take sheets or plates of steel, wrought-iron, or other suitable metal of uniform and proper thickness for the purpose, and from them cut or stamp pieces A, Fig. 1, of any required size, and of the necessary pattern to form a conical thimble of any desired taper. These pieces A, I then form up into conical thimbles B, as shown in Fig. 3, having first forged out their corners *a* into the form shown by the red lines in Fig. 1, so that they will lap when the piece is formed up, and also so that the end will be square and at right angles to a line passing through the center of the thimble, and where the corners *a* lap I firmly weld them together. Between the point of welding and the shoulder of the thimble, and on each side of the line made by the edges of the piece A in forming up, I cut grooves *b*, as shown in Fig. 3. These grooves *b* may be of any desired depth, or may be made to extend entirely

through the metal, and are for the purpose of receiving oil or any other suitable lubricating material.

The thimble-skein thus constructed I drive upon the arm C of an axle, D, firmly to its place and fasten its inner projecting end securely to the under side of the axle by means of bolts or screws passing through holes *c*, made in it for that purpose, and then fit on a shoulder-band, D, with a collar, E, shrunk tightly over the skein and arm, as shown in Fig. 6.

It is obvious that the arm C may come out flush with the end of the skein, and a pin be inserted, as an ordinary linchpin, for holding on the wheel, or that a screw-thread may be cut on the end of the skein and a nut screwed on for the same purpose, or that the same object may be accomplished by inserting a plug in the end of the skein, fastening it there securely, and cutting a screw-thread on the end of it to receive a nut.

My thimble-skein thus constructed, it will be seen, is strongest next to the shoulder of the arm, for the reason that at that point there is the most metal in it, and that the metal is of the same thickness as seen in Fig. 4. This is necessary, for the reason that it is at this point where the greatest strain comes, and at which fractures always take place. The outer end of the skein I make the lightest, for the reason that the least strain is at this point. With the exception of the point at which the lapping and welding is made, as shown in Fig. 5, my skein is of uniform thickness.

I am aware that thimble-skeins for axles have been made by forging and rolling a plate of rectangular metal into a shape having an outline somewhat similar to that shown in Fig. 7, but with its edge of a gradually-decreasing thickness and its center and end of a uniform thickness so as to form a skein with its under wearing-surface and smallest end of a uniform thickness, and its upper surface of gradually-decreasing thickness; but as the manner of constructing this is expensive, and as it is weak on the upper side next to the

shoulder and liable to break, and is without any grooves for receiving lubricating-oil, this I do not claim; but

What I do claim is—

As a new article of manufacture, a thimble-skein, B, for axles, constructed out of sheets or plates of steel or wrought-iron, in the manner substantially as herein described, so as to

be of uniform thickness, except at the point where the laps are welded, and provided with grooves *b* for receiving lubricating-oil, as set forth.

M. EHRGOTT.

Witnesses:

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