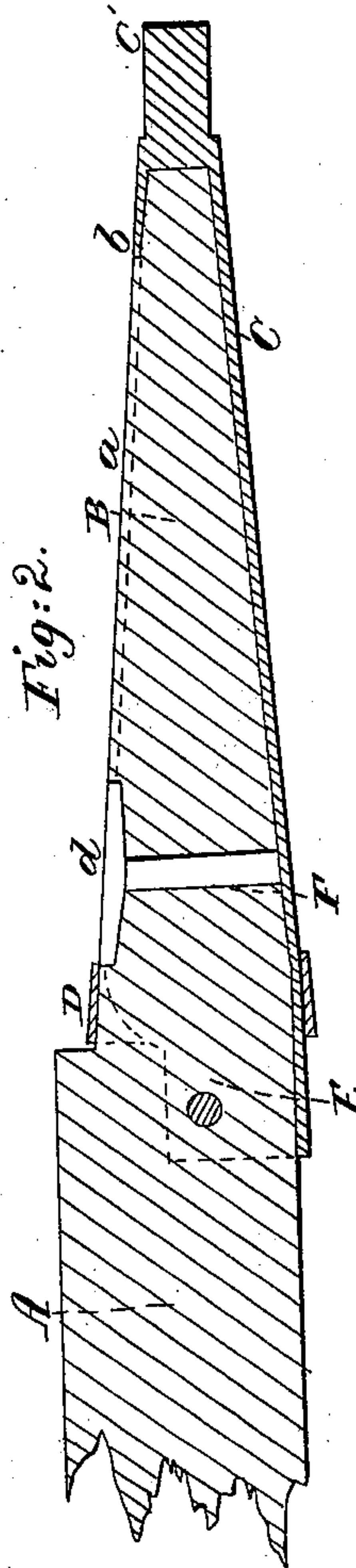
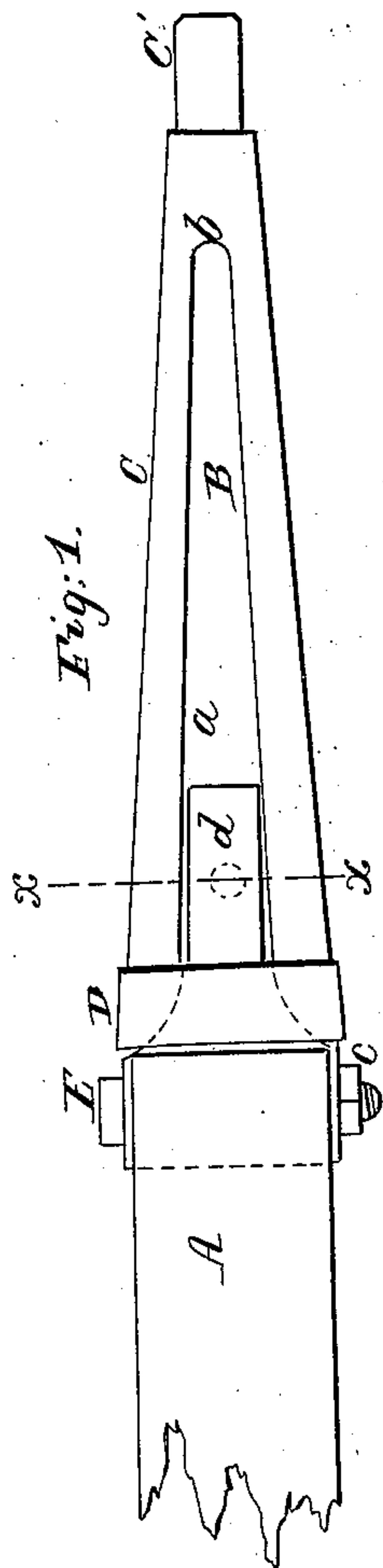
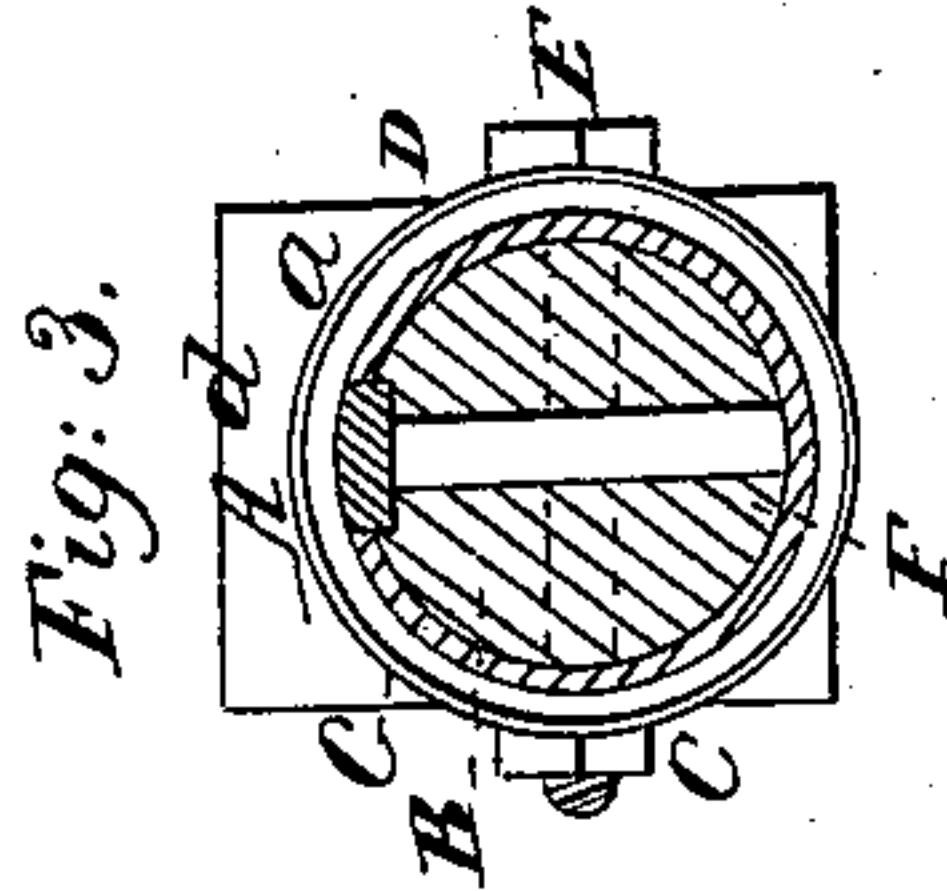


J. M. BURKE.

Axle-Skein.

No. 14,345

Patented Mar. 4, 1856.



# UNITED STATES PATENT OFFICE.

JNO. M. BURKE, OF DANVILLE, NEW YORK.

## SKEIN FOR AXLE-ARMS.

Specification of Letters Patent No. 14,345, dated March 4, 1856.

*To all whom it may concern:*

Be it known that I, JOHN M. BURKE, of Danville, in the county of Livingston and State of New York, have invented a new and Improved Skein for Axle-Arms; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a plan or top view of my improvement applied to the arm of an axle. Fig. 2, is a longitudinal vertical section of the same, the plane of section being through the center. Fig. 3, is a transverse vertical section of the same, (*a*) (*a*) Fig. 1, showing the plane of section.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists in constructing the skein of steel or other metallic plate and in the form of a hollow cone, or frustum of a cone, so that it may fit over and conform to the shape of the arm. The upper surface of the skein having an opening made through it, and the skein bolted to the arm and axle, as will be presently shown and described.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents a portion of an axle of a vehicle, and B, is the arm at the end of the axle. The arm is of wood and formed at the end of the axle and is of the usual conical or taper shape, as shown clearly in Fig. 2.

C, is the skein which is constructed of steel or other metallic plate bent in conical form so as to correspond to the shape of the arm B. The outer or smaller end of the skein has a solid cylindrical plug C', welded to it, on which plug a screw is cut to receive the nut which secures the hub on the arm. The skein C, does not extend entirely around the whole length of the arm B, an opening or space (*a*) is allowed at the upper part of the skein, as shown clearly in Fig. 1, said opening extending from the inner and larger end

of the skein to a point (*b*) which is near the outer end of the skein. The skein is fitted snugly on the arm B, and a shoulder band D, is placed upon the inner end of the skein adjoining the end of the axle.

E, is a bolt which passes horizontally through the inner and larger end of the skein and through the axle A. The lower part of the inner end of the skein extends a short distance upon the under surface of the axle which is rounded to receive it. The bolt E, has a nut (*c*) on one end.

F, is a bolt which passes vertically through the arm B, and through the lower part of the skein. The head (*d*), of the bolt F, is of considerable size and its upper surface is flush or even with the outer surface of the skein, the head (*d*) being in the space or opening (*a*) in the skein and near its inner end. The head (*d*) of the bolt F, prevents the wearing or abrasion of the arm, as the metal box of the hub works around this part of the arm. The bolts E, F, secure firmly the skein upon the arm.

By the above improvement the skein may be snugly adjusted to the arm as the space or opening (*a*) in the skein allows it to yield or give to the arm, and permits the skein to adjust or conform itself in a measure to the arm, besides there is a saving in material and also in labor in constructing the skein, and also a saving in time in applying the skein to the arm.

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

Constructing the skein C, of a metal plate which is bent in conical or taper form with a space or opening (*a*) in its upper part, the skein being secured to the arm B, by means of the bolts E, F, substantially as herein shown and described.

JOHN M. BURKE.

Witnesses:

E. C. PEASE,  
JAMES LINDSAY.