

E. F. HERRINGTON.

Journal-Bearings for Harvesters.

No. 159,758.

Patented Feb. 16, 1875

Fig 1.

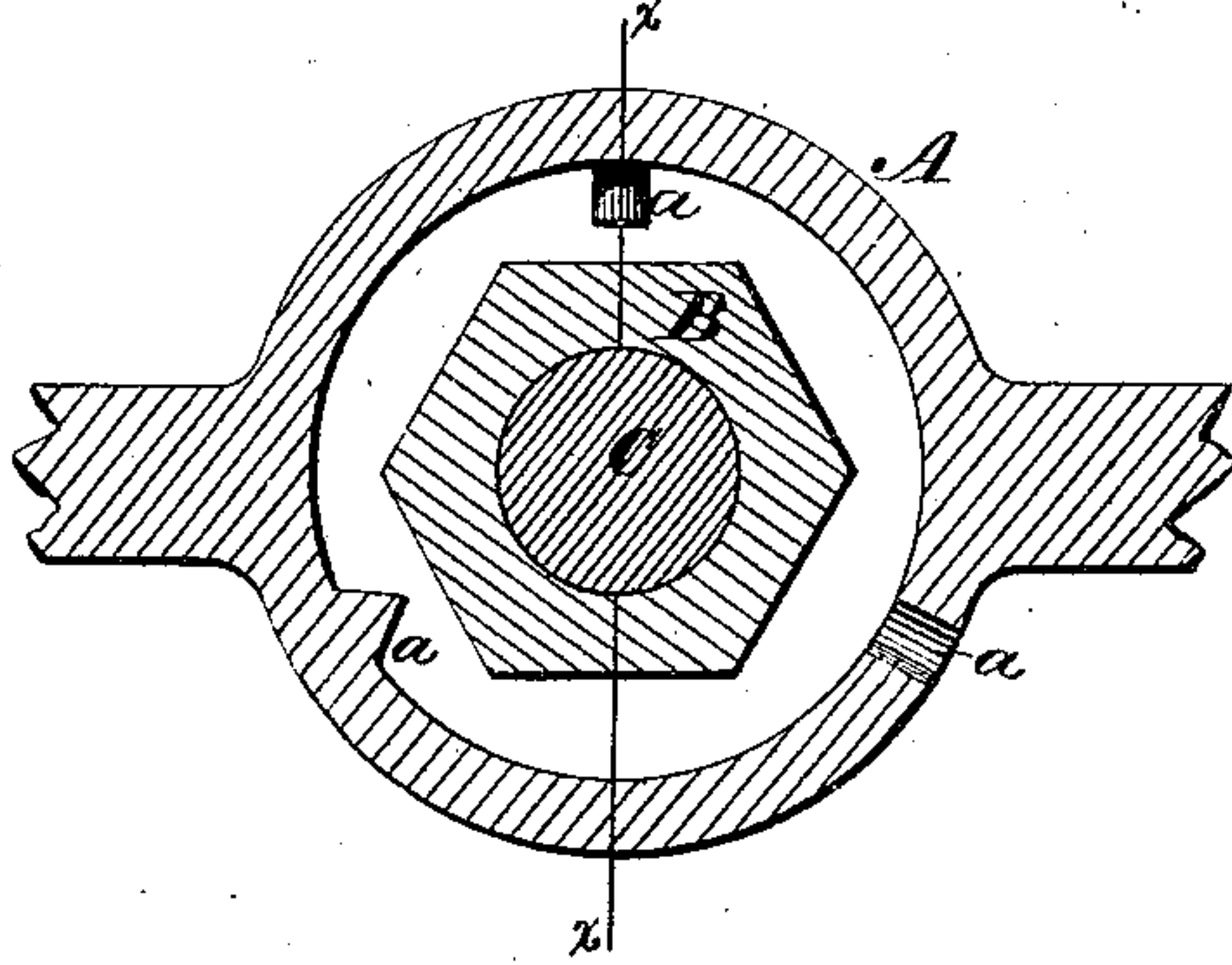


Fig 2.

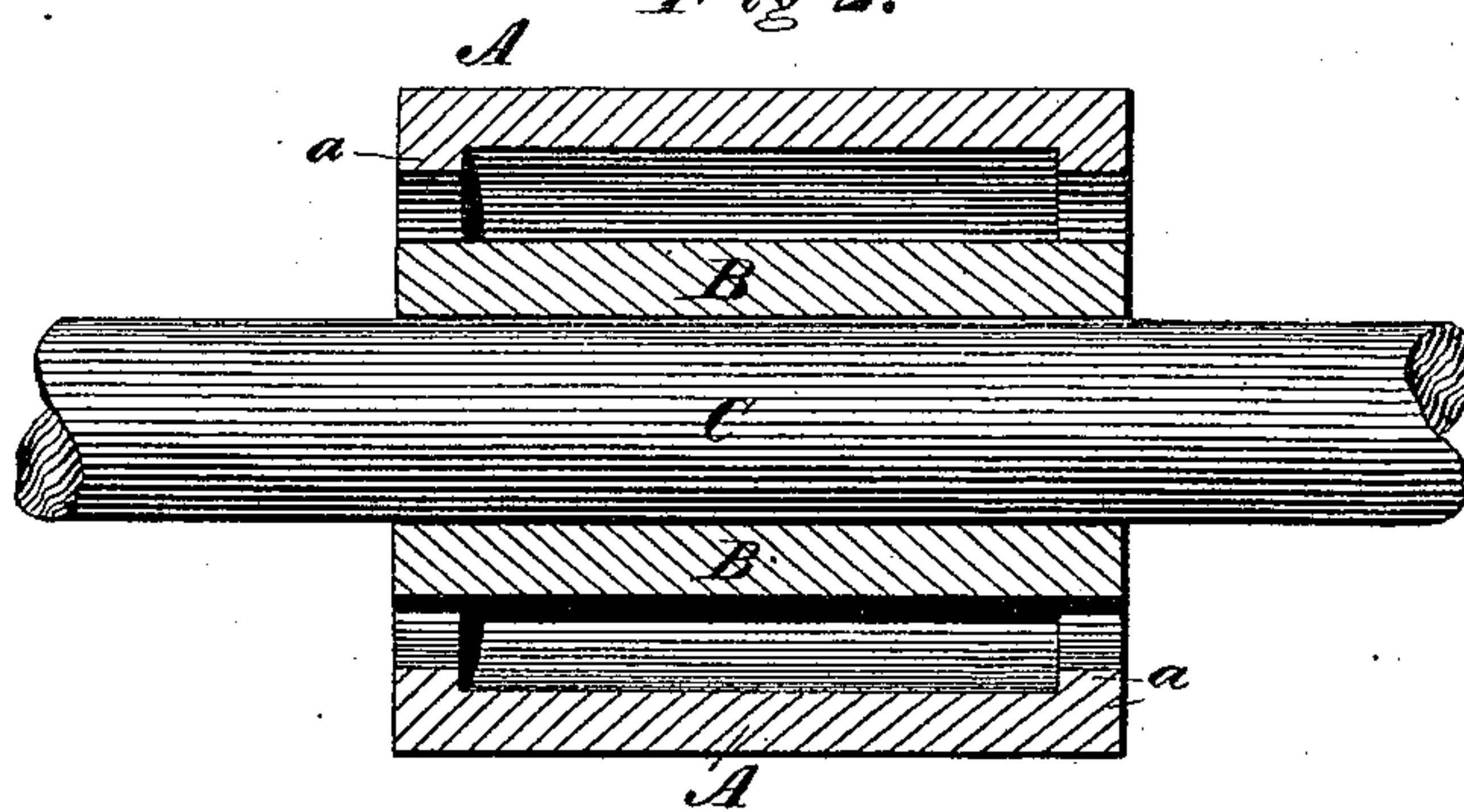


Fig 3.

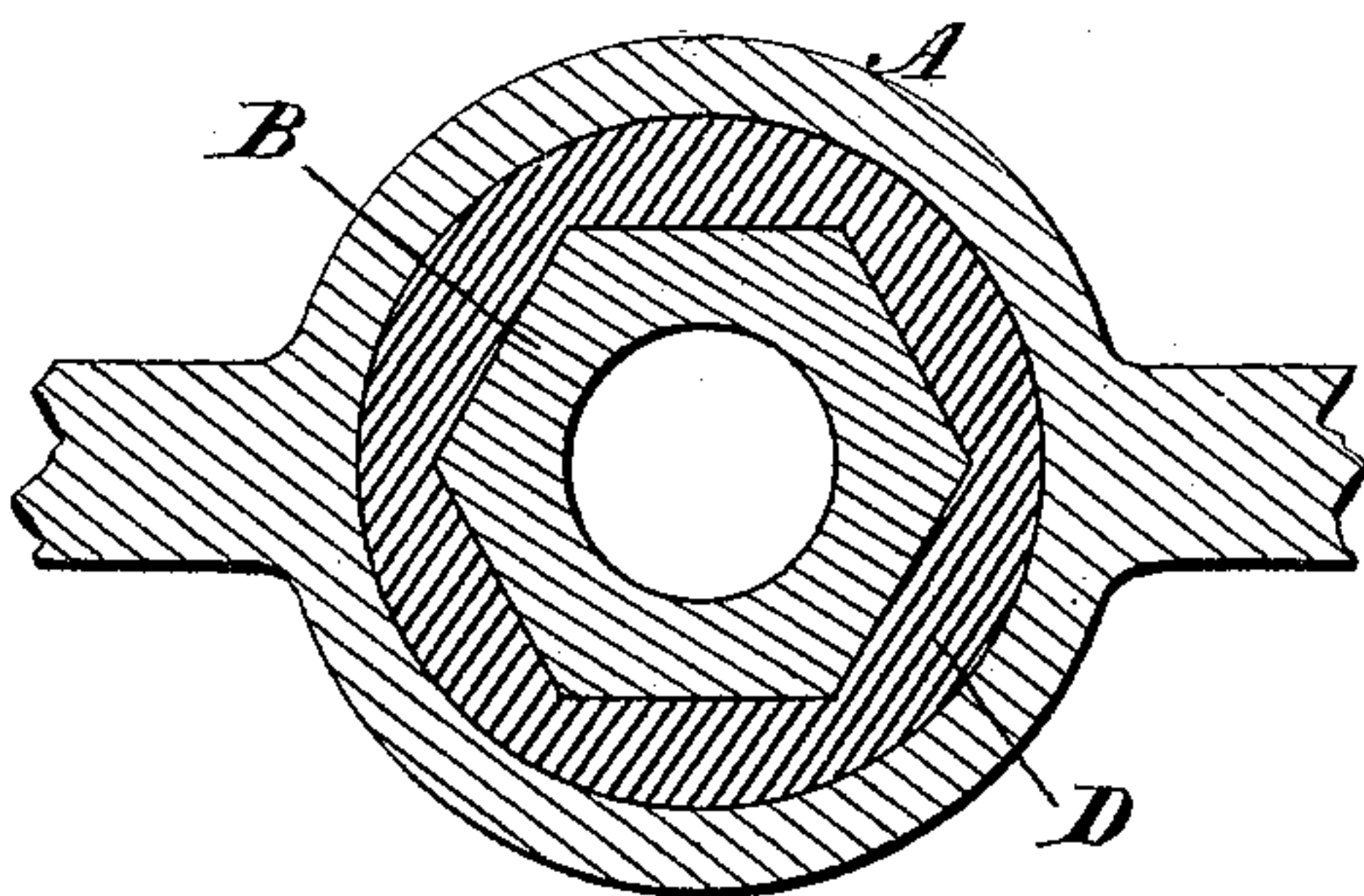
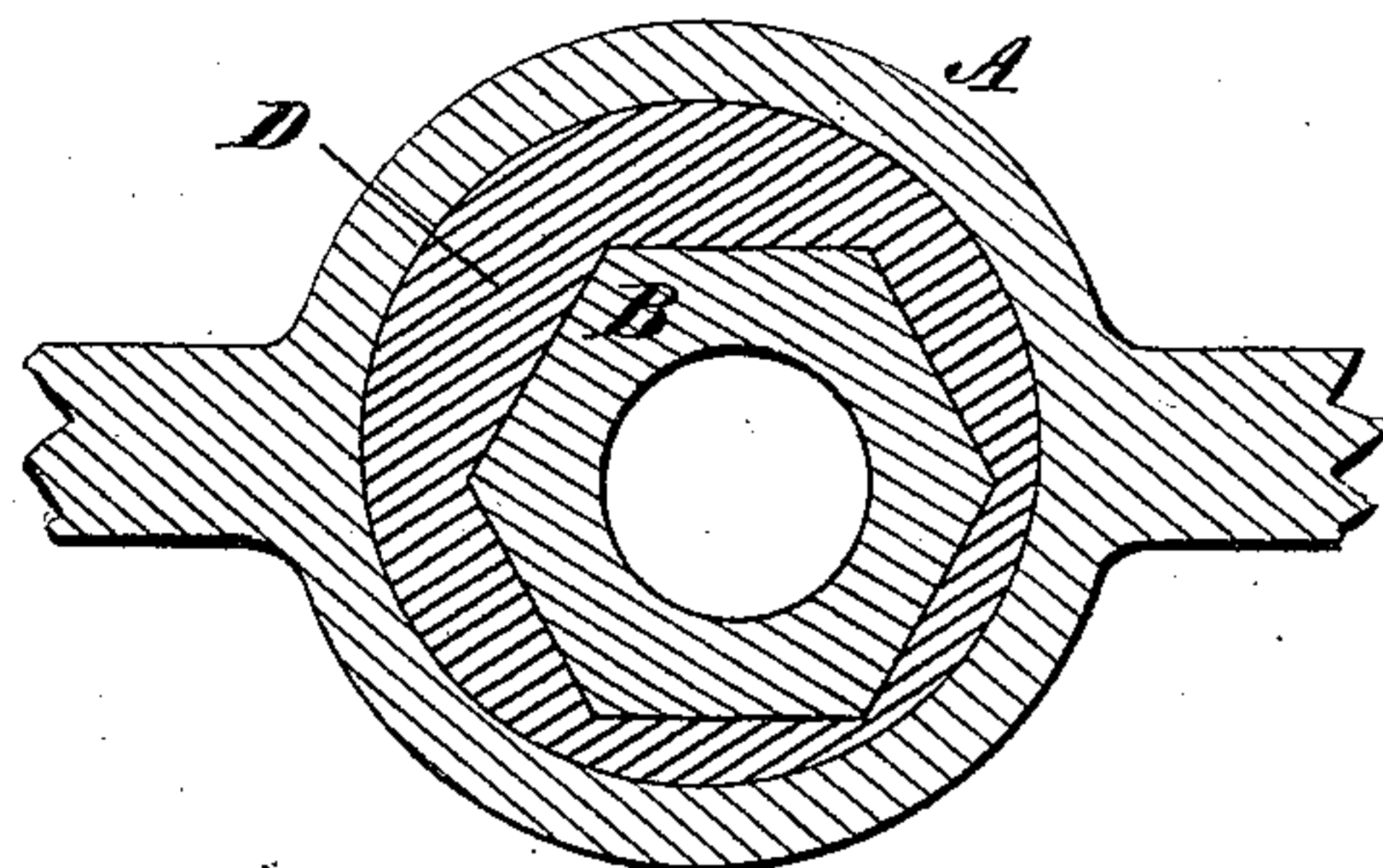


Fig 4.



WITNESSES

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# UNITED STATES PATENT OFFICE.

EPHRAIM F. HERRINGTON, OF WEST HOOSICK, NEW YORK.

## IMPROVEMENT IN JOURNAL-BEARINGS FOR HARVESTERS.

Specification forming part of Letters Patent No. **159,758**, dated February 16, 1875; application filed August 12, 1874.

*To all whom it may concern:*

Be it known that I, EPHRAIM F. HERRINGTON, of West Hoosick, in the county of Rensselaer and State of New York, have invented a new and Improved Method of Securing the Journal-Bearings of Harvesters, of which the following is a specification:

My invention relates more especially to what are known as iron-frame harvesters. In such machines one customary way of securing journal-bearings is to turn a thimble accurately to receive the shaft, and to drive this thimble into a hole in the frame, the hole also having to be bored out to receive the thimble. This troublesome and expensive process is necessary in order to secure the proper alignment of the shaft and the correct meshing of the gears.

Now, it is the object of my invention to obviate the objection incident to the above-described method, and to secure the correct engagement of the gears by a cheap, simple, and expeditious process; to which ends my improvement consists in a novel method of adjusting the journal-bearing in its proper position in the frame, and securing it there by pouring in a readily-fusible metal or alloy, which can readily be melted out should the removal or replacement of the shaft become necessary.

The accompanying drawings illustrate my improved process.

Figure 1 represents a transverse section through a portion of the frame, journal-box, and shaft, placed in position for casting in the fusible alloy or metal; Fig. 2, a longitudinal section thereof. Figs. 3 and 4 show the journal-box secured in place.

The portions A of the frame, in which the journal-boxes B are to be inserted, are provided with holes or openings considerably larger than the outside diameter of said jour-

nal-boxes. Lips, holes, or studs *a* are also provided to prevent the turning of the alloy in the frame. The journal-box is made polygonal in form, or provided with ridges, pins, or studs for the same purpose. The gears are first mounted on their respective shafts, and made to mesh properly. The boxes B are then slipped on the shafts C, placed in their proper bearings in the holes of the frames, and held by any suitable means. The soft metal or fusible alloy D—such, for instance, as lead or Babbitt metal—is then poured around the boxes, filling the space between the boxes and the frame, thus setting the shaft and gears accurately in position. Should the boxes become worn the alloy can be fused and the box removed and replaced by another, which may be cast in by pouring the alloy in, as before.

Fig. 3 shows the position of the box when the parts are all in line, while Fig. 4 illustrates the manner in which the box may be adjusted to compensate warping of the frame or other distortions.

I do not broadly claim casting a box in place, as cast-iron has been so used; but this sometimes melts the frame or box, or runs together with it, so as to prevent any subsequent removal of the box.

I claim—

The method herein set forth of securing the journal-boxes of harvesters in their frames, which consists in adjusting the position of the box by means of the gears and shafts, and then casting readily-fusible metal or an alloy between the box and frame.

In testimony whereof I have hereunto subscribed my name.

E. F. HERRINGTON.

Witnesses:

JOE I. PEYTON,  
E. C. DAVIDSON.