

M. COLLINS.

Axle Skein.

No. 113,856.

Patented April 18, 1871.

Fig: 3.

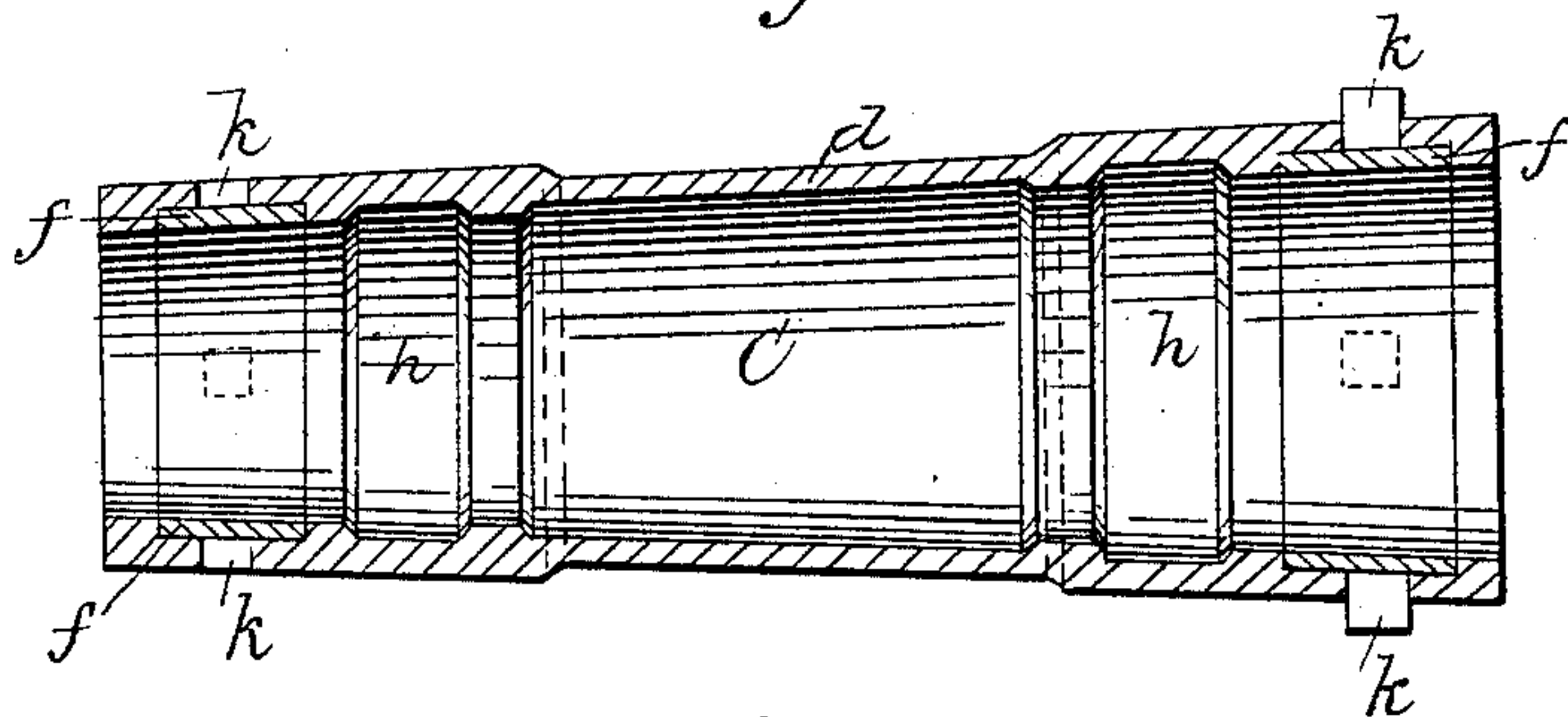


Fig: 1.

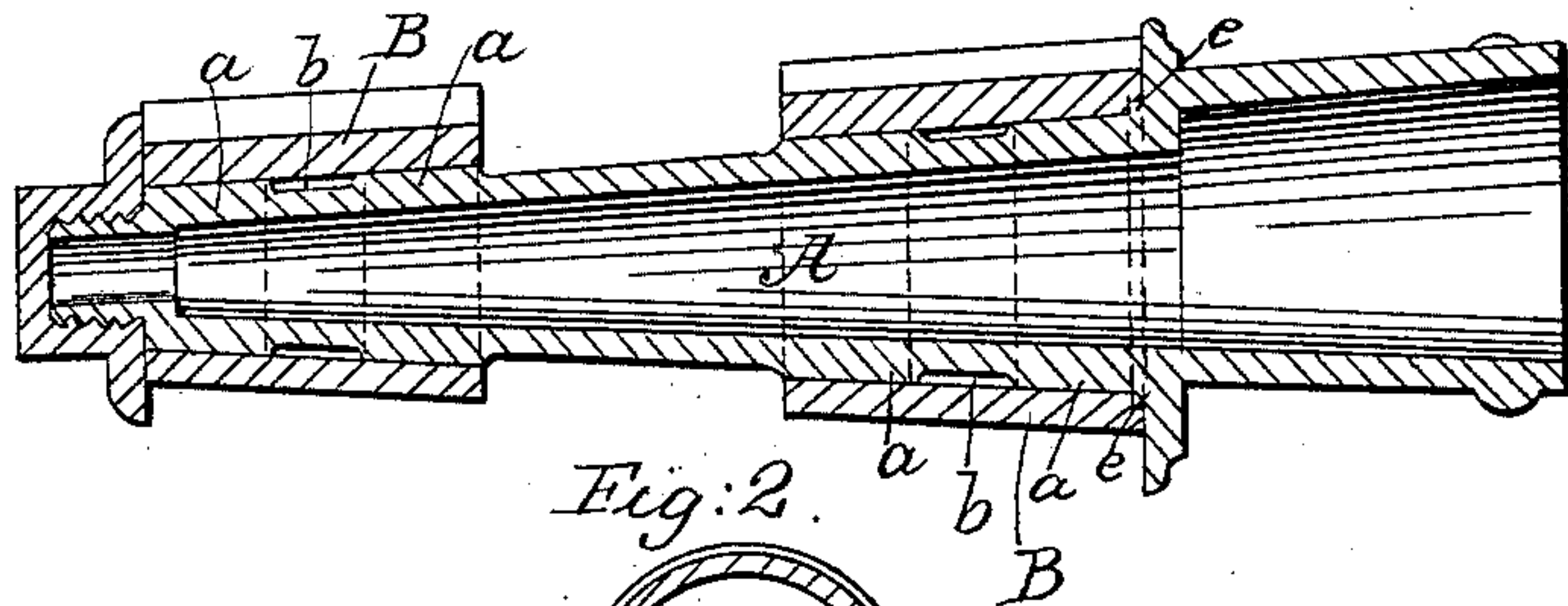
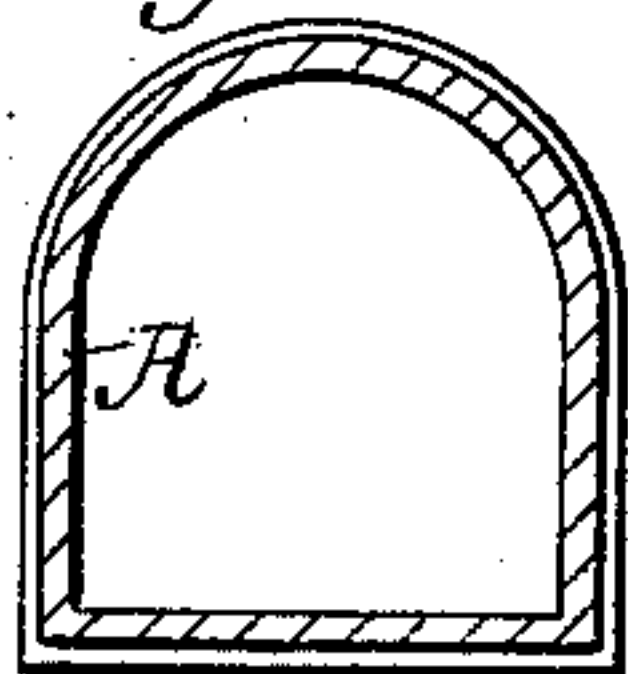


Fig: 2.



Witnesses

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MORIS COLLINS, OF DECATUR, ILLINOIS.

Letters Patent No. 113,856, dated April 18, 1871.

IMPROVEMENT IN THIMBLE-SKEINS AND BOXINGS.

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, MORIS COLLINS, of Decatur, in the county of Macon and in the State of Illinois, have invented certain new and useful Improvements in Thimble-Skein and Boxing; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "thimble-skein and boxing," as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal vertical section of my skein and boxing; and

Figure 2 is an end view of the same.

Figure 3 is a longitudinal vertical section of a whole box, which may be substituted for the one shown in fig. 1.

A represents my thimble-skein, made oval on top and square on the bottom, as shown in fig. 2, the advantage hereof being in not cutting the grain of the wood in the most important part of the axle, whereas in the axles now in use both the upper and lower sides are oval, making a cross-grain of the wood.

At both the point and shoulder of the skein A are two raised bearings, *a a*, which, by presenting less surface to the boxes, produce less friction and retain all the solidity of the old axle.

The space *b*, between the raised bearings at each

end of the skein, is designed to hold oil-packing for greasing the axle.

At the shoulder there is a small flange, *c*, to prevent dirt from getting between the axle and boxing.

B B represent two half boxes of brass or cast iron, which allow the spokes to enter solidly into the hub without bearing on the boxing; or I may use a whole box, C, with a recess, *d*, on the outside, so as to let the loose spokes in the hub enter the recess on the box.

At each end of the box C is a brass bearing, *f*, and oil-chamber *h*.

The brass bearings *f f* are provided with lugs *k k* on the outside, and placed at the desired points in the mold when the box is cast, thus fastening the bearings firmly in their place.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The brass bearings *f f*, provided with lugs *k k*, and placed in the mold, and the box cast around the same, substantially as herein set forth.

2. The combination of the skein A, as described, with raised bearings *a a*, recesses *b b*, box or boxes B with recess *d* between them, flange *c*, and oil-chambers *h h*, all substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of December, 1870.

MORIS COLLINS.

Witnesses:

JOHN McEVoy,
THOMAS LEE.