

No. 771,152.

PATENTED SEPT. 27, 1904.

H. B. HOYLE.
SPINNING RING.

APPLICATION FILED MAY 25, 1904.

NO MODEL.

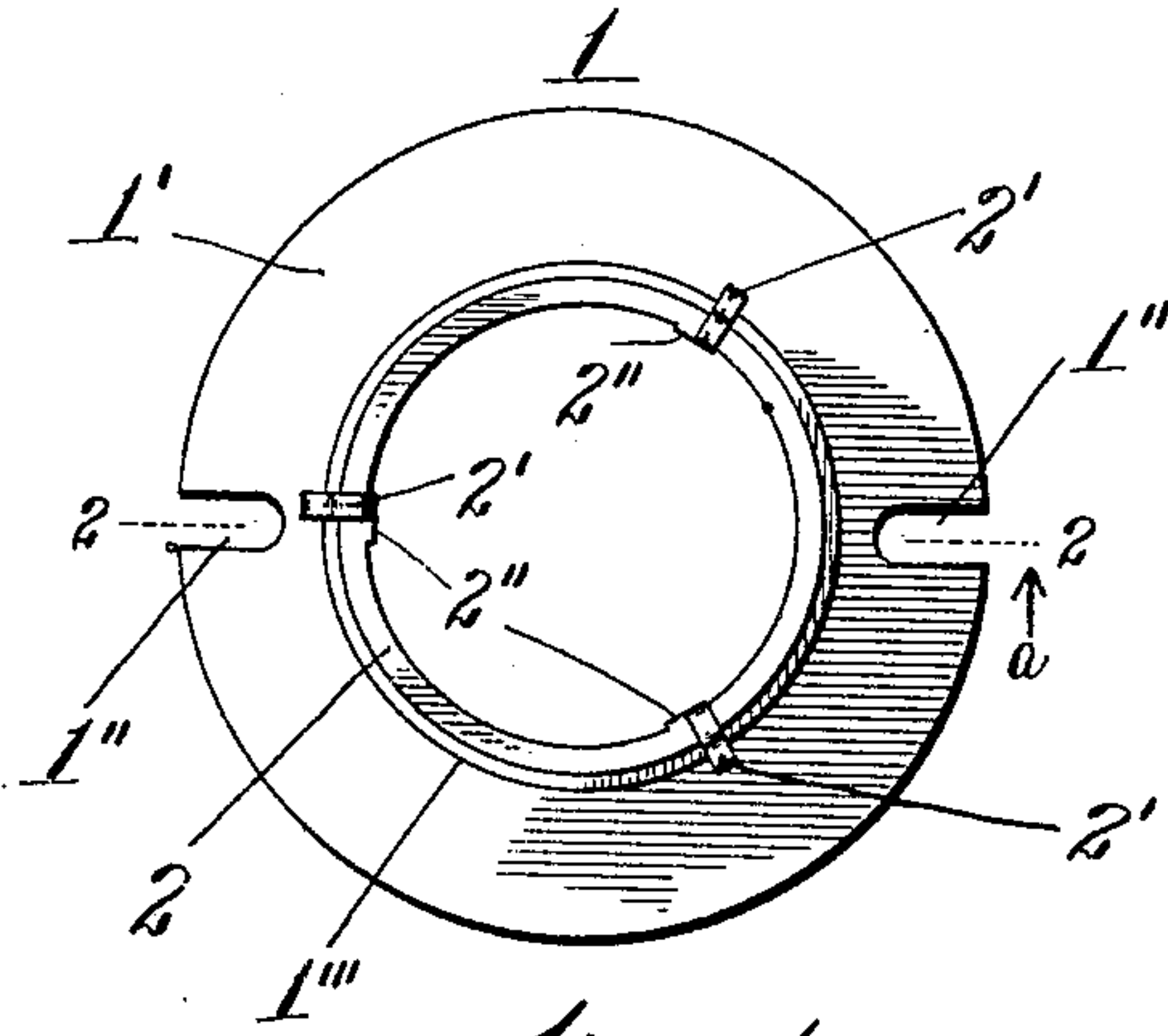


Fig. 1.

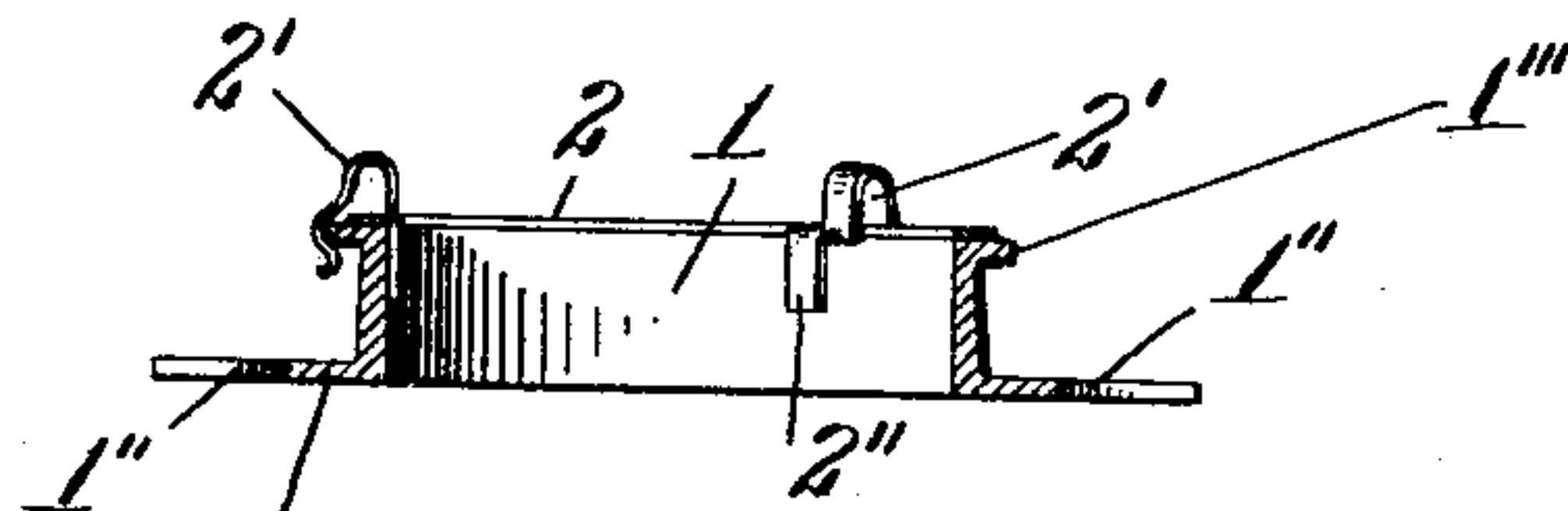


Fig. 2.

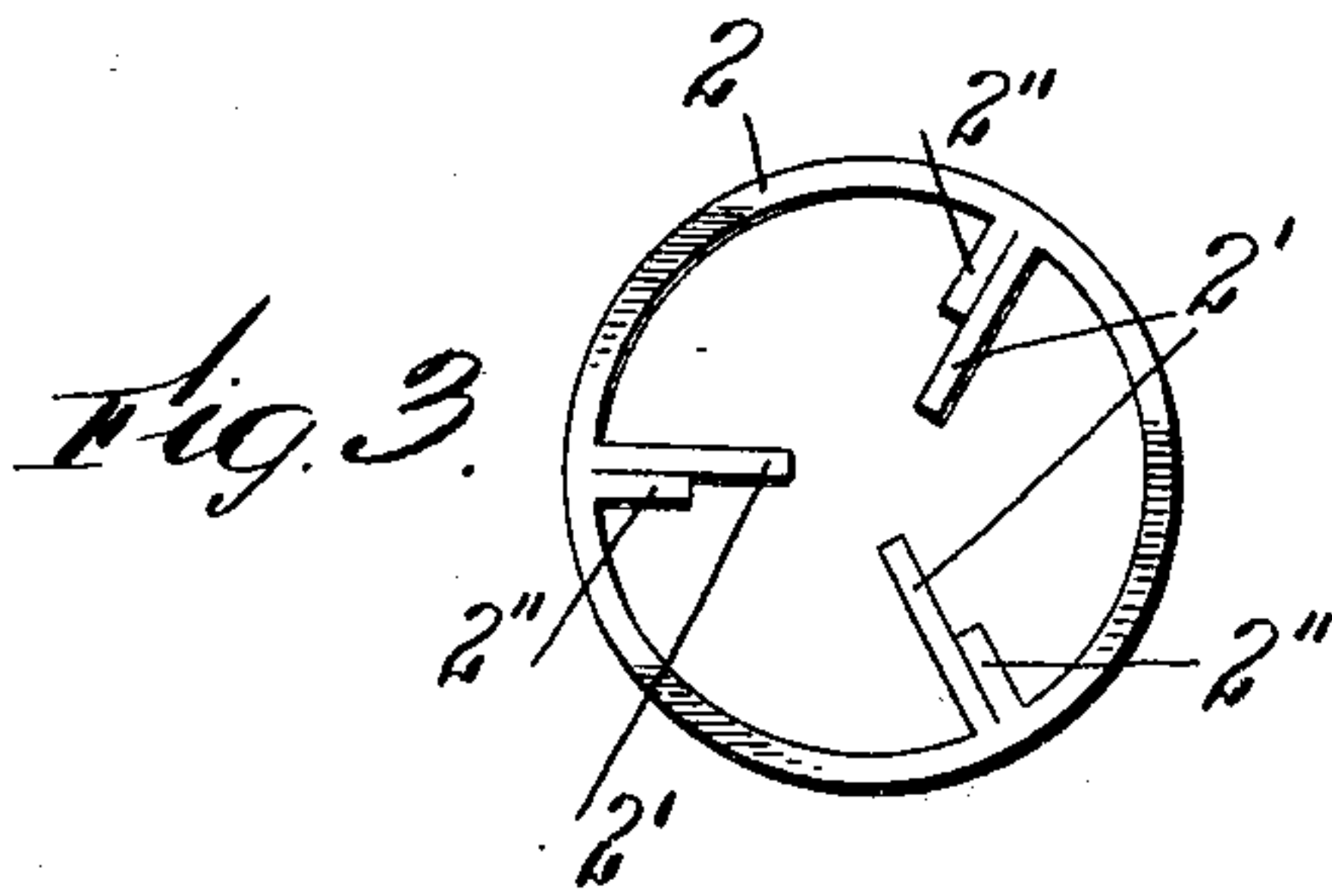


Fig. 3.

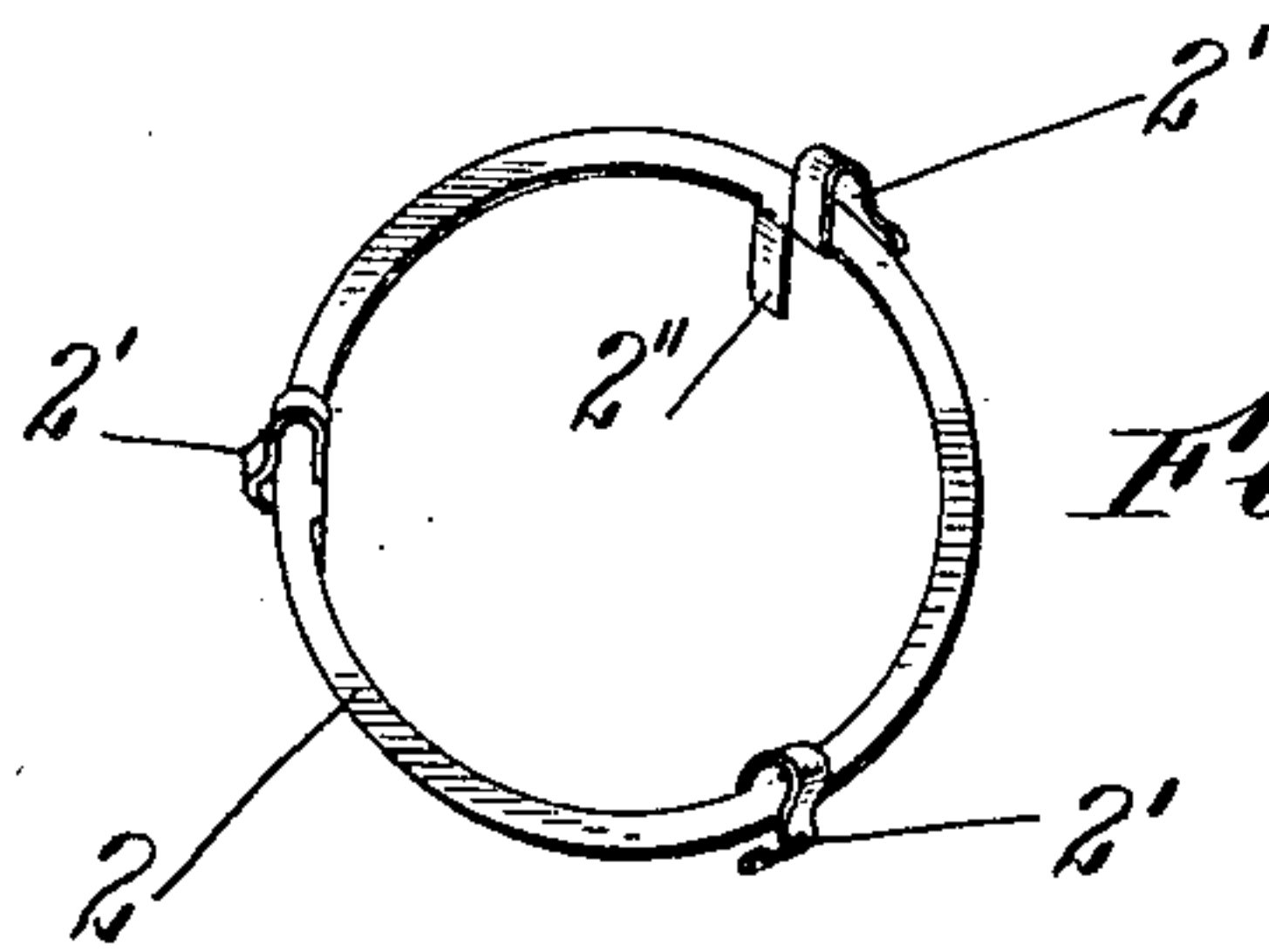


Fig. 4.

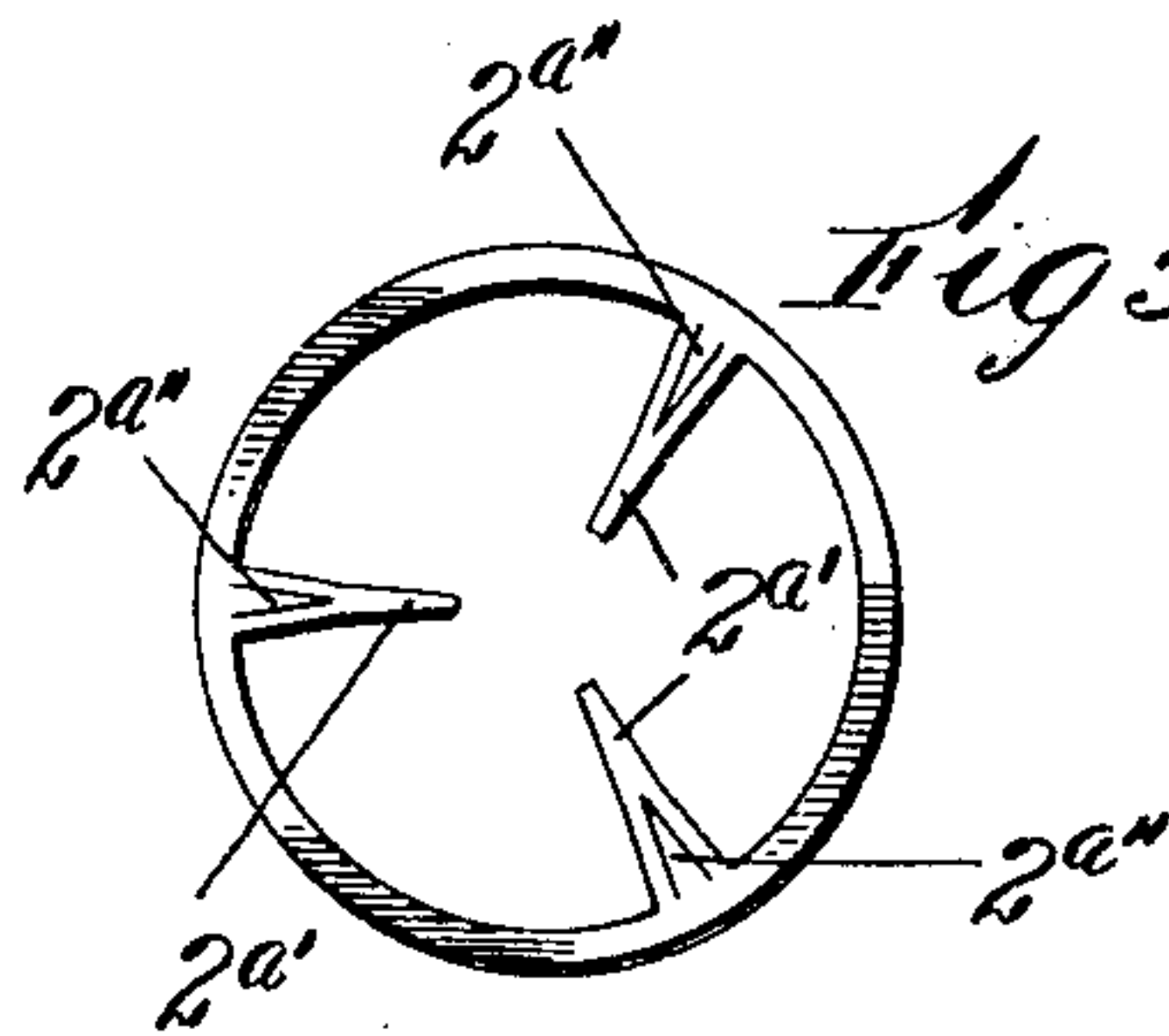


Fig. 5.

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UNITED STATES PATENT OFFICE.

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SPINNING-RING.

SPECIFICATION forming part of Letters Patent No. 771,152, dated September 27, 1904.

Application filed May 25, 1904. Serial No. 209,639. (No model.)

To all whom it may concern:

Be it known that I, HARRISON B. HOYLE, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Spinning-Rings, of which the following is a specification.

My invention relates to spinning-rings, and particularly to that class of spinning-rings in which a traveler-ring is used in connection with the ordinary spinning-ring.

My invention particularly relates to an improvement in the ring-traveler shown and described in my United States Letters Patent No. 757,748. In my said patent I have shown and described the traveler-ring with the attaching lips or arms on its external edge.

I have found in practice in stamping or cutting out the blank traveler-ring with the attaching lips or arms on the external edge of the ring that a large amount of the metal is wasted.

The object of my present invention is more particularly to prevent this waste of material in stamping or cutting out the blank traveler-rings.

In my present improvements I preferably make the traveler-ring with the attaching lips or arms on the internal edge of the blank traveler-ring, or I make them independent of the ring and attach them thereto, as will be hereinafter fully described.

Referring to the drawings, Figure 1 is a plan view of a spinning-ring and traveler-ring embodying my improvements. Fig. 2 is a section on line 2 2, Fig. 1, looking in the direction of arrow *a*, same figure. Fig. 3 is a plan view of a blank traveler-ring before it is finished and ready for use. Fig. 4 is a perspective view of the blank traveler-ring shown in Fig. 3 after it is finished and ready for use. Fig. 5 is a modified construction of the blank traveler-ring shown in Fig. 3.

In the accompanying drawings, 1 is a spinning-ring, made of metal and having in this instance a flat flange 1', adapted to be secured to the spindle-frame (not shown) in the ordi-

nary way by screws (not shown) extending through open-end slots 1'' in the opposite edges of the flange 1'. The spinning-ring 1 has on its upper edge an external flange 1''' in the ordinary way.

I will now describe my improvements in the traveler-ring.

The traveler-ring is preferably made of flat or sheet metal, and the size or diameter of the traveler-ring is substantially the same as the diameter of the upper edge of the spinning-ring 1, on which it travels. The blank traveler-ring 2 is preferably stamped or cut out in the form shown in Fig. 3, with one or more inwardly-extending projections 2' on its inner edge (in this instance three are shown) and one or more inwardly-extending shorter projections 2'' on its inner edge (in this instance three are shown) contiguous to the projections 2'. The projections 2' are bent up from the inner edge, and preferably bent into the loop or hook shape shown in in Figs. 2 and 4, forming attaching lips or arms, the free ends of which extend over or engage the external flange 1''' on the ring 1, as shown in Fig. 2, and act to hold the traveler-ring 2 yieldingly on the upper edge of said ring 1 and allow it to freely rotate thereon. One of the attaching-arms 2' serves as a guide for the strand of yarn or thread. (Not shown.) The projections 2'' on the inner edge of the blank traveler-ring are bent down at right angles to the plane of the traveler-ring to extend upon the inner side of the spinning-ring 1 at the upper edge thereof and form bearing surfaces or guides for the traveler-ring 2 on the inner side of the ring 1, as shown in Fig. 2.

In Fig. 5 I have shown a modified construction of the blank traveler-ring shown in Fig. 3. In said Fig. 5 the projections 2^{av} are of somewhat wedge shape, and from the enlarged base thereof is formed the projection 2^{av}, which extends upon the inner side of the spinning-ring. The projections 2^{av} are formed into attaching-arms of substantially the same shape as shown in Fig. 2.

It will be understood that the details of construction of my improvements may be varied, if desired. One or more attaching-arms may

be used on the traveler-ring and one or more guide-arms.

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

1. The combination with a spinning-ring having an external flange at its upper edge, of a traveler-ring mounted on the upper edge of said ring, and having one or more attaching
10 lips or arms on its internal edge, which extend over and engage the external flange on said ring, substantially as shown and described.

2. The combination with a spinning-ring
15 having an external flange on its upper edge, of a traveler-ring mounted on the upper edge of said ring, and having one or more attaching lips or arms on its internal edge, which extend over and engage the external flange on
20 said ring, and one or more projections on its internal edge which extend within the upper

edge of the ring, substantially as shown and described.

3. A spinning-ring traveler consisting of a ring of flat metal, having one or more attaching lips or arms on its internal edge which are adapted to extend over and engage the traveler-ring, substantially as shown and described.

4. A spinning-ring traveler, consisting of a
30 ring of flat metal, having one or more attaching lips or arms on its internal edge, which are adapted to extend over and engage the traveler-ring, and one or more projections on its internal edge which are adapted to extend
35 within the upper edge of the ring, substantially as shown and described.

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