

(No Model.)

J. W. WATTLES.

SPINNING RING AND HOLDER THEREFOR.

No. 246,646.

Patented Sept. 6, 1881.

Fig. 1.

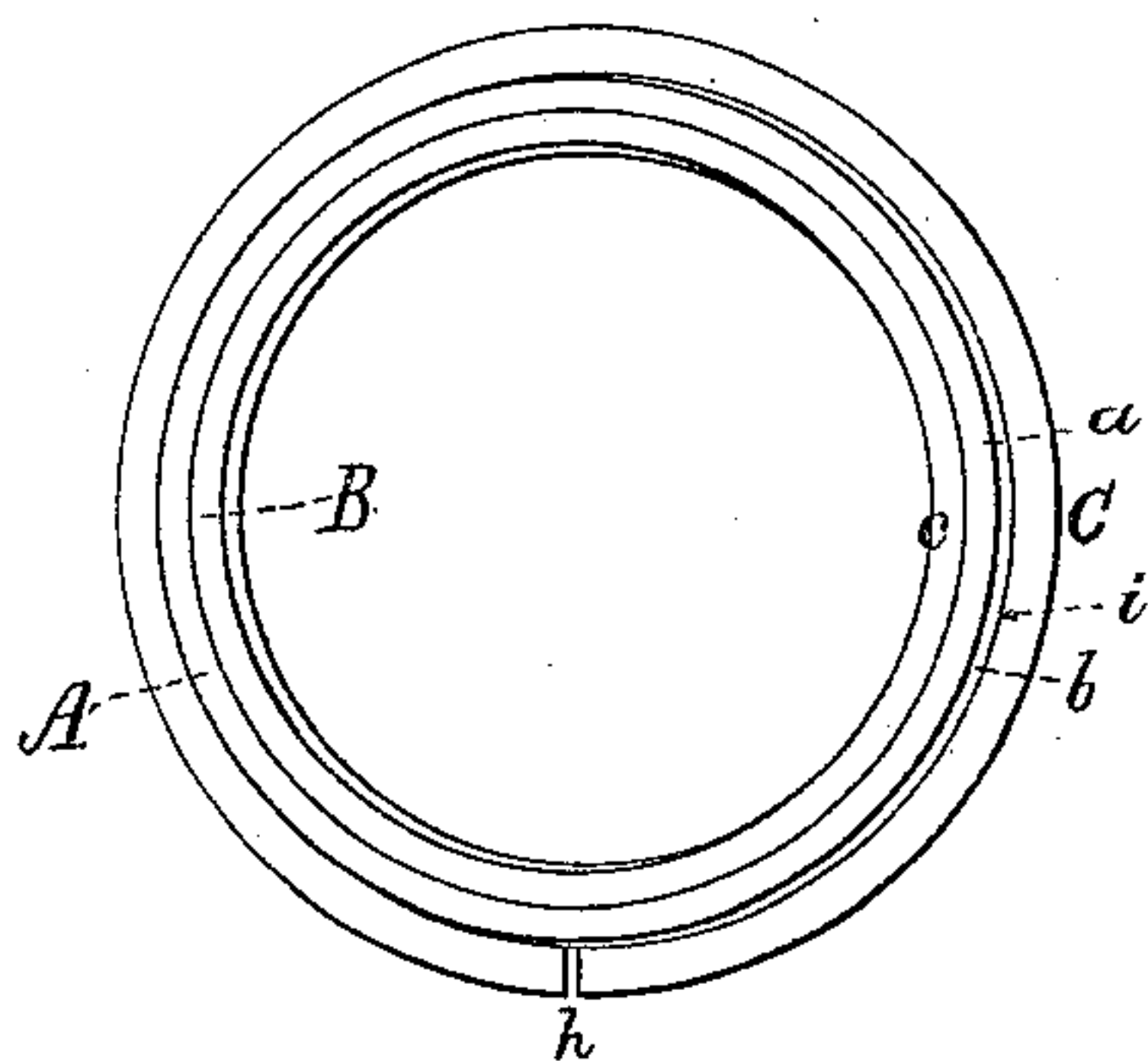


Fig. 2.

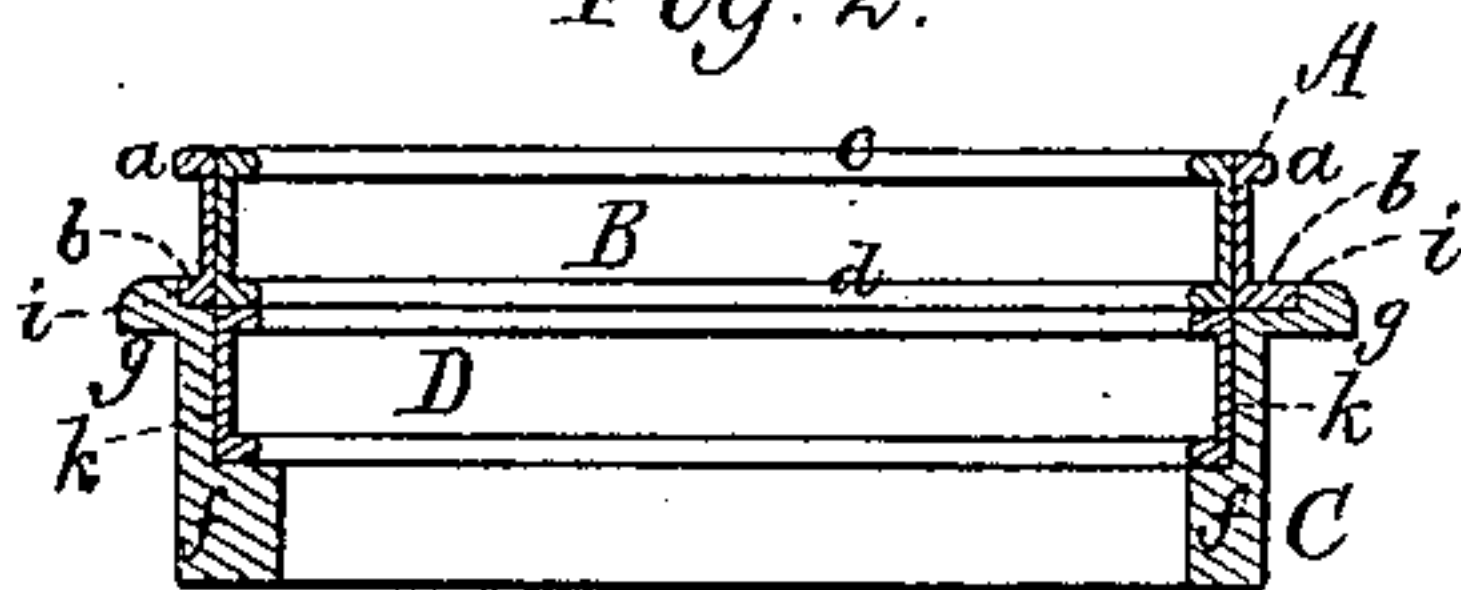


Fig. 4.

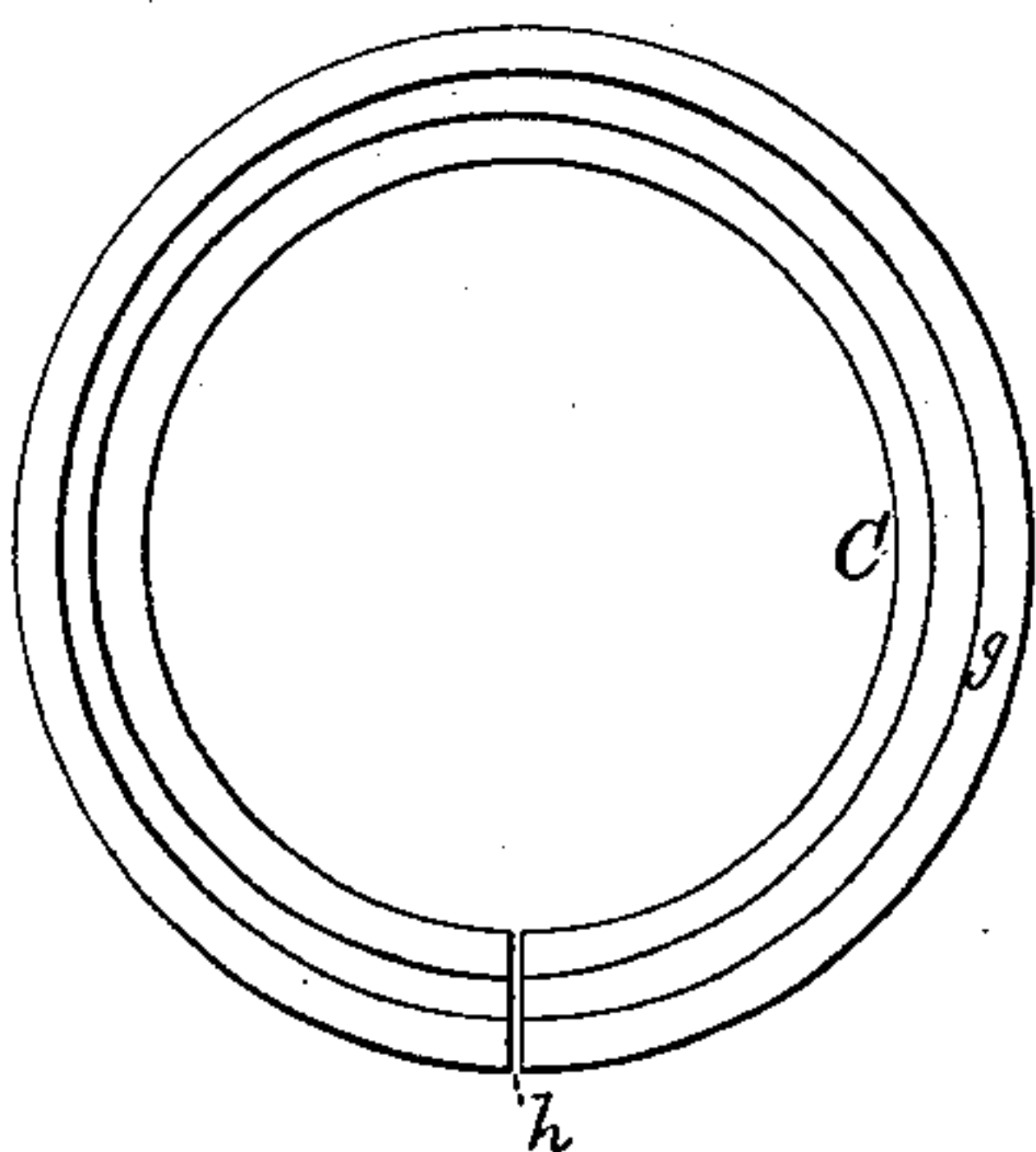


Fig. 3.

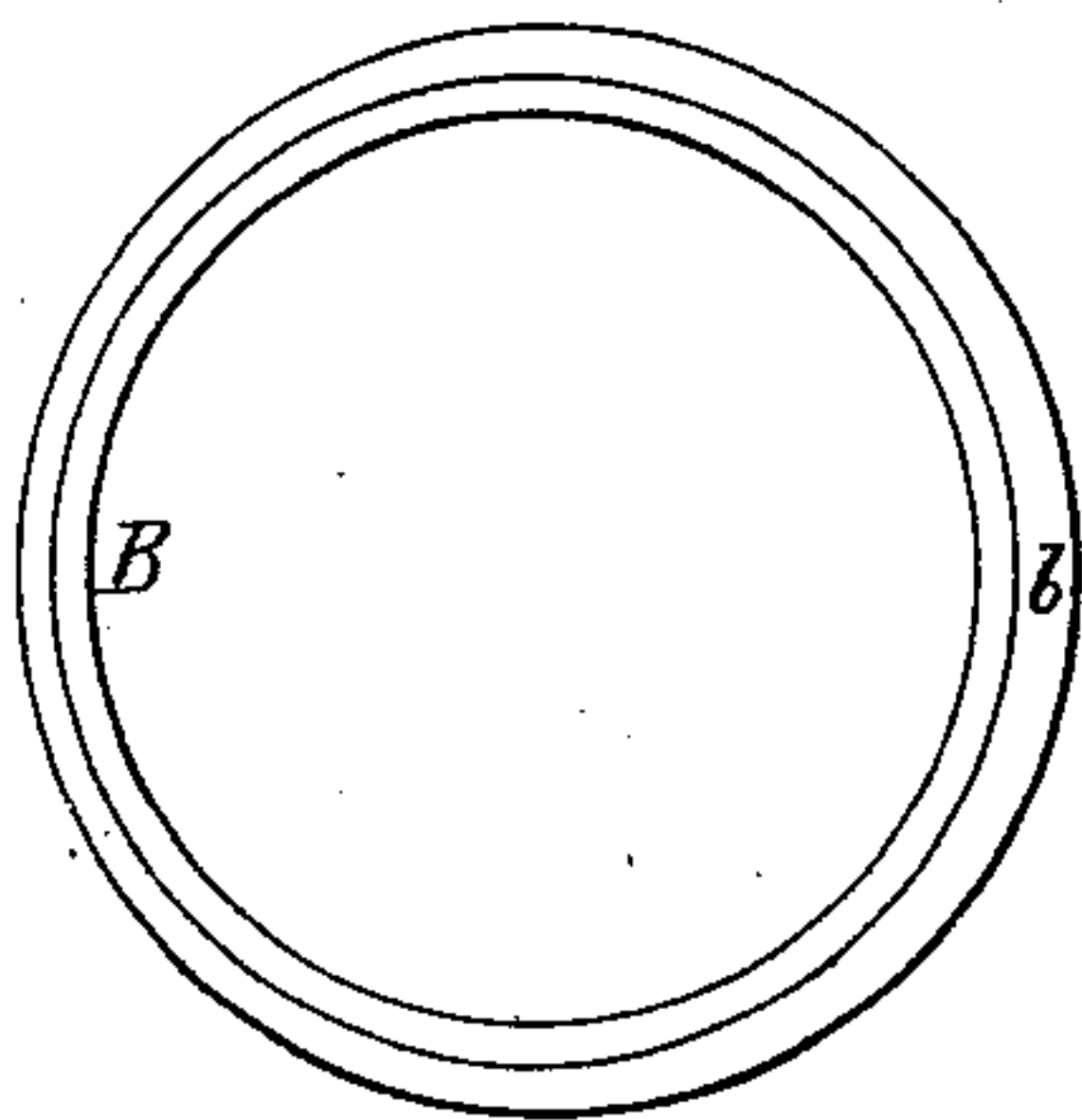


Fig. 5.

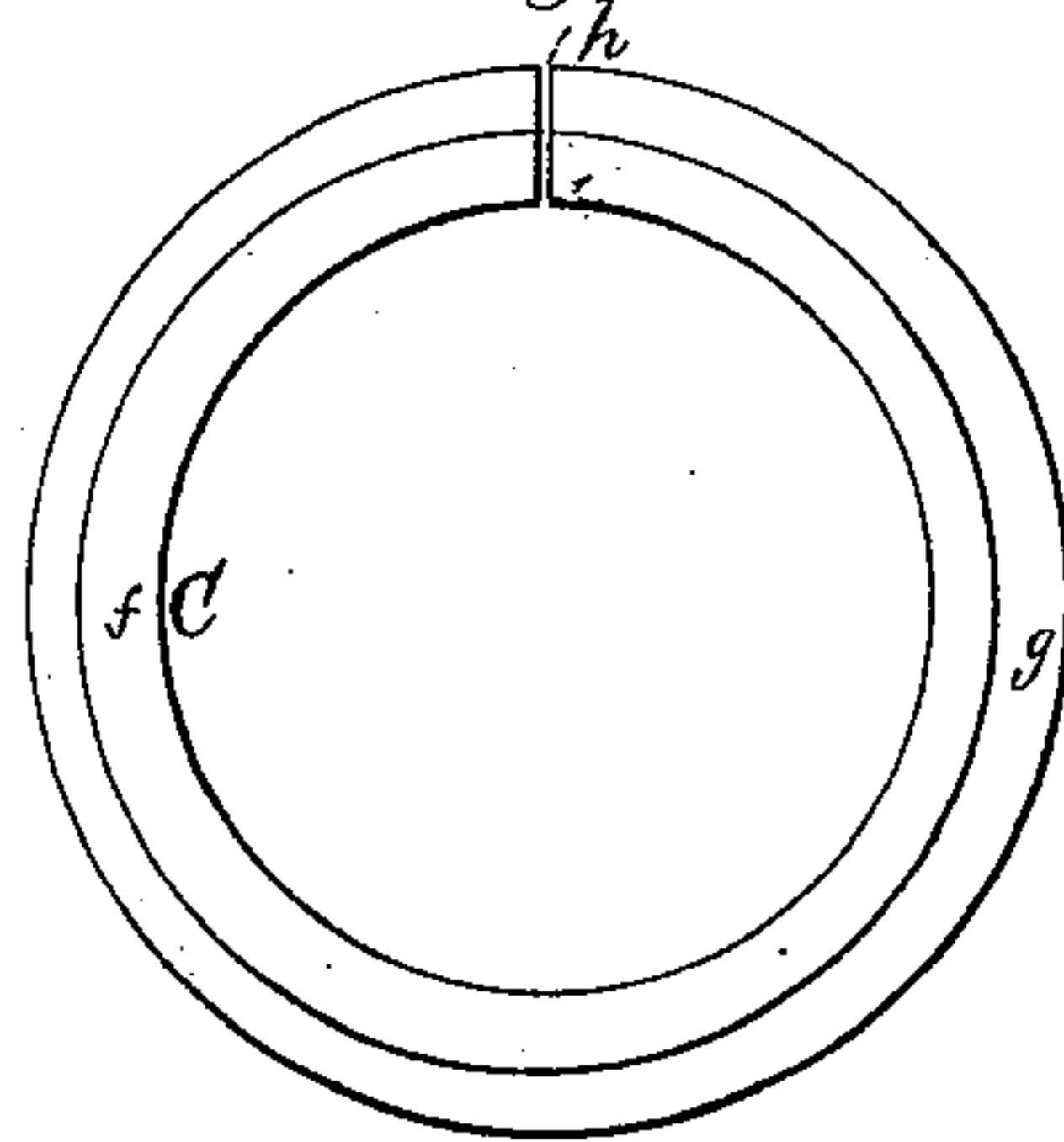


Fig. 6.

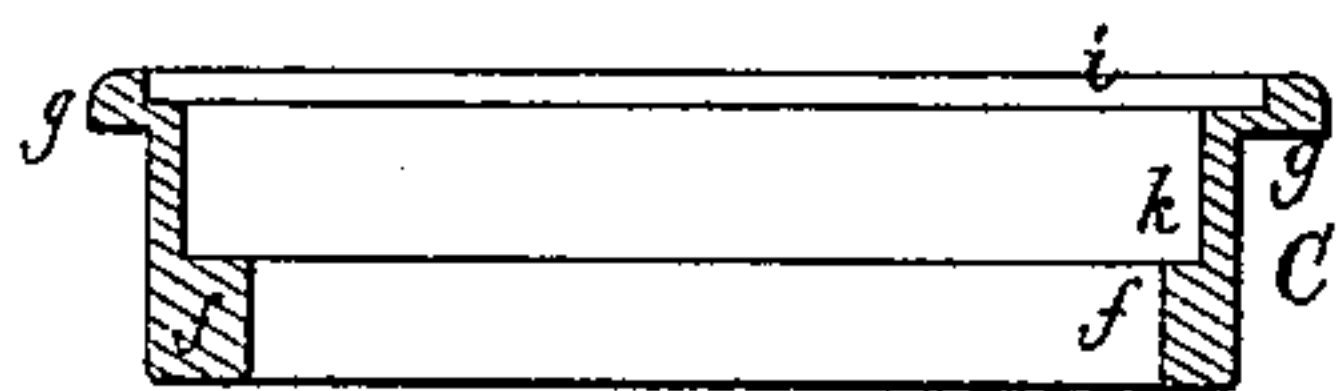
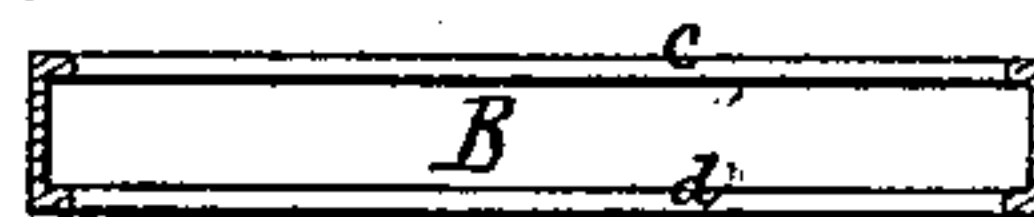


Fig. 7.



Witnesses.

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JOSEPH W. WATTLES, OF CANTON, MASSACHUSETTS.

SPINNING-RING AND HOLDER THEREFOR.

SPECIFICATION forming part of Letters Patent No. 246,646, dated September 6, 1881.

Application filed July 9, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH W. WATTLES, of Canton, of the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Spinning-Rings and Holders Therefor; and I do hereby declare the same to be described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, and Fig. 2 a transverse section, of a ring and its holder provided with my invention. Fig. 3 is a bottom view of the ring and its removable bushing. Fig. 4 is a top view, Fig. 5 a bottom view, and Fig. 6 a transverse section, of the ring-holder. Fig. 7 is a transverse section of the removable bushing.

With spinning-frame rings the wear of the race by the traveler is mostly, if not entirely, confined to the inner flange of the race, such being due to the centrifugal force generated in the traveler while in rapid revolution around the race. A ring after having become too much worn or so reduced was generally considered as useless, or as so much waste material, until I made the invention described in the United States Patent No. 199,604, dated January 22, 1878.

My present improvement has reference to that of the said patent—that is, to a spinning-frame ring constructed with a stationary partial or semi race, and provided with a removable bushing, provided with either one or two partial or semi races, the nature of my invention being duly set forth in the claims herein-after presented.

In the drawings, the ring A is shown as cylindrical on its inner periphery, and provided at top with a partial or semi race, *a*, and at bottom with a flange, *b*, whose outer circumference is circular, but eccentric to the race or to the inner periphery of the ring, such ring having within it a removable bushing, B, provided with either one or two partial or semi races, *c d*, arranged as represented. The bushing B is retained within the ring A by friction, the bushing having a close fit to the ring.

The ring-holder shown at C is a flanged annulus, whose body *f* is cylindrical, and is eccentric with respect to the flange *g*, there being in such body a cross-cut, *h*, to render the holder compressible. Within the body are two rabbets, *i* and *k*, formed as shown, the up-

per of them being to receive the ring A and the lower of them being to receive and hold an auxiliary bushing, D, like the bushing B. After the latter bushing may have become worn, so as to render necessary its removal from the ring, such may be done, and the two bushings may be caused to change places—that is, the auxiliary bushing may be put in the ring and the worn bushing in the holder or the lower rabbet thereof. The upper rabbet is eccentric with respect to the lower one, though of a diameter to correspond to that of the bottom flange of the ring.

By having the ring and its holder constructed in manner as described, adjustment of the ring in the holder, and the latter in the ring-rail to bring the rail into concentricity with the spindle, can easily be effected by sufficiently turning the ring around in the holder, and the latter in its socket in the rail. With the cross-cut in the ring-holder the latter, when acted on by its confining-screw of the ring-rail, will be clamped on the ring, as well as held in place in the rail.

I do not herein claim a spinning-frame ring constructed with a stationary partial or semi race and a socket for reception of a removable bushing having a single partial or semi race, or two of such. Nor do I herein claim such a bushing.

What I claim as my present invention is as follows:

1. The ring A, having the partial or semi race *a* and the eccentric flange *b*, arranged substantially as set forth.

2. The combination of a spinning-frame ring, A, having a partial or semi race, *a*, at top, an eccentric flange, *b*, at bottom, and a cylindrical inner periphery, with a removable bushing, B, made to fit within the ring, and provided with two partial or semi races arranged with it, as represented.

3. The annular compressible ring-holder, provided with the supporting-flange and with the body eccentric on its outer periphery therewith, and with the ring-holding rabbet, as described, in combination with the removable ring-bushing and the ring, having partial or semi races, all being substantially as set forth.

JOSEPH W. WATTLES.

Witnesses:

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E. B. PRATT.