

(No Model.)

J. W. WATTLES.
DUPLEX RACE RING HOLDER.

No. 335,728.

Patented Feb. 9, 1886.

Fig. 1.

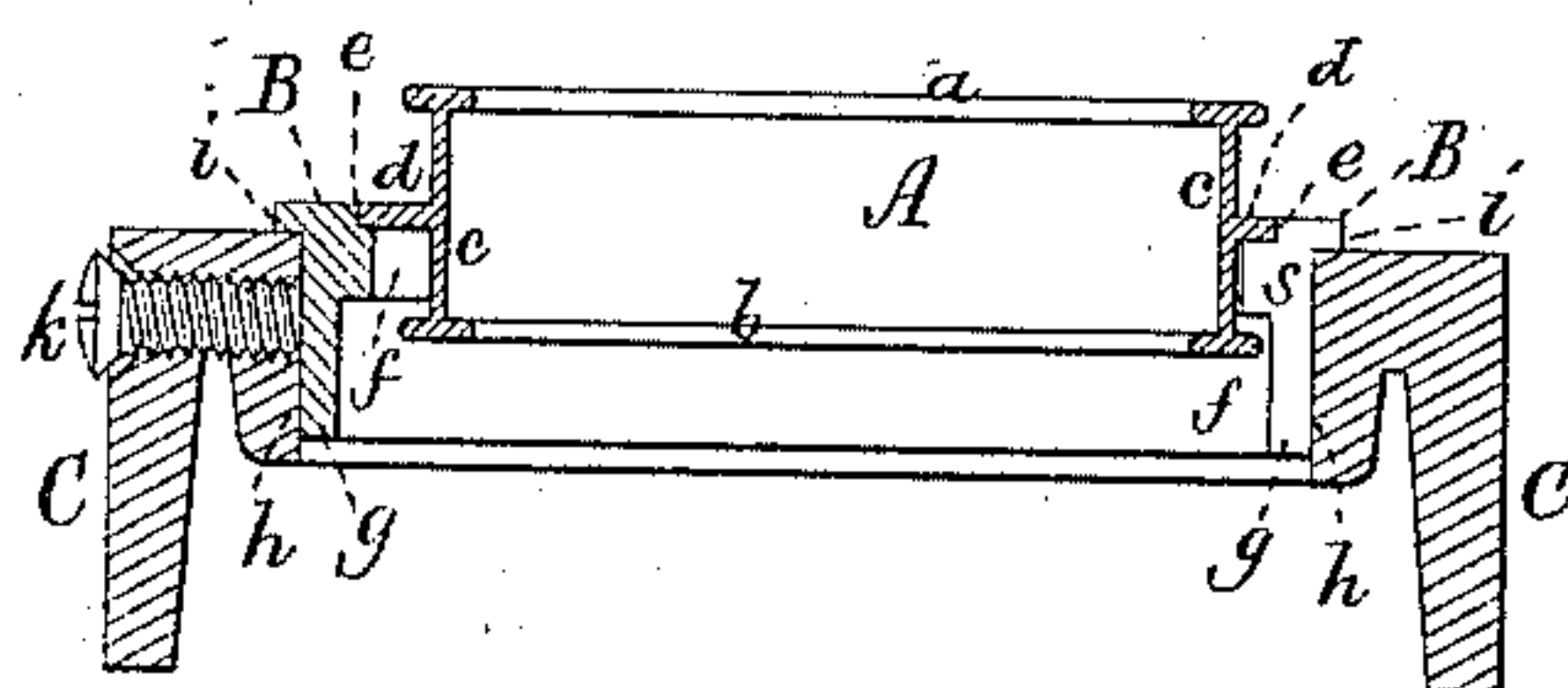


Fig. 2.

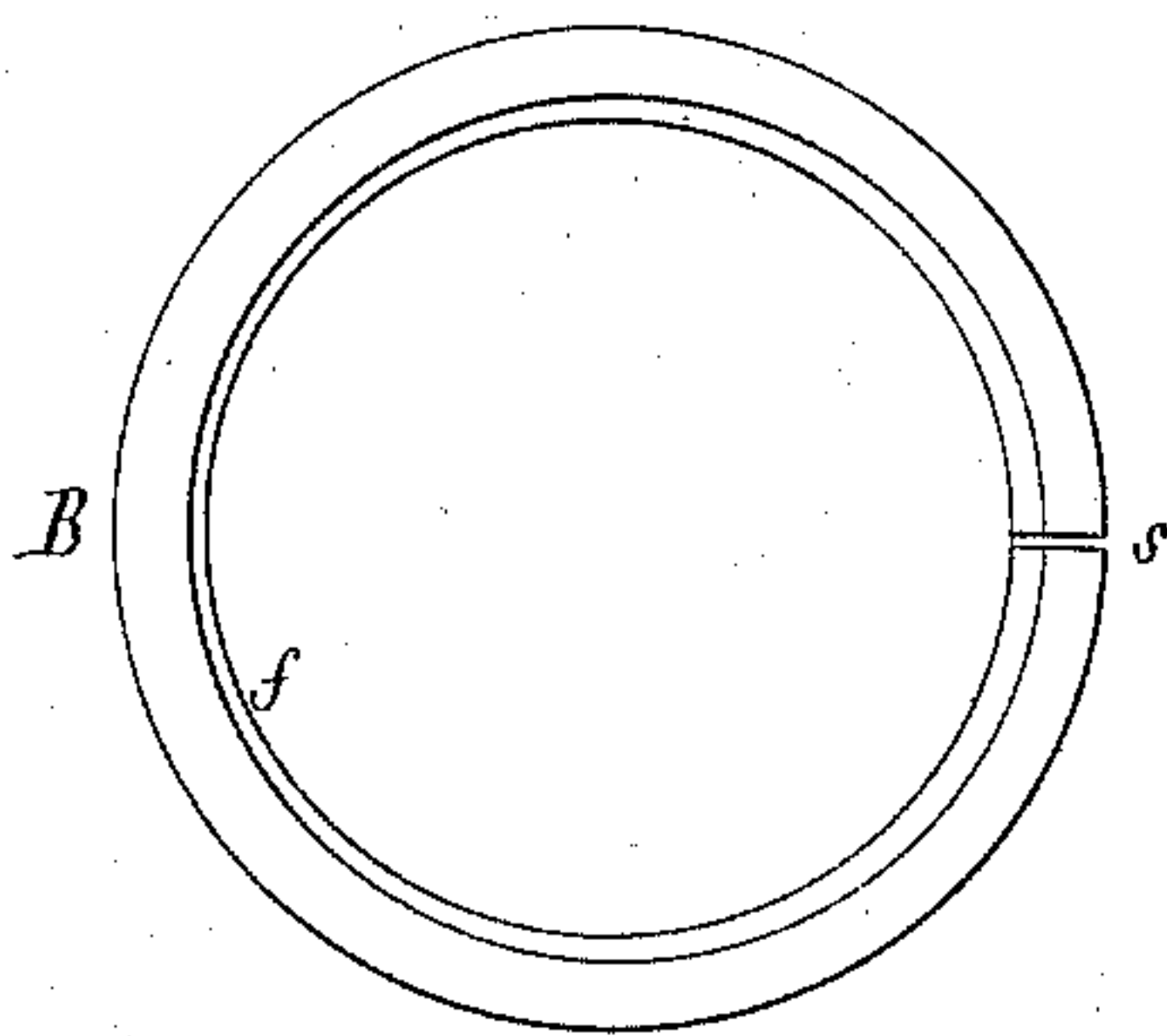
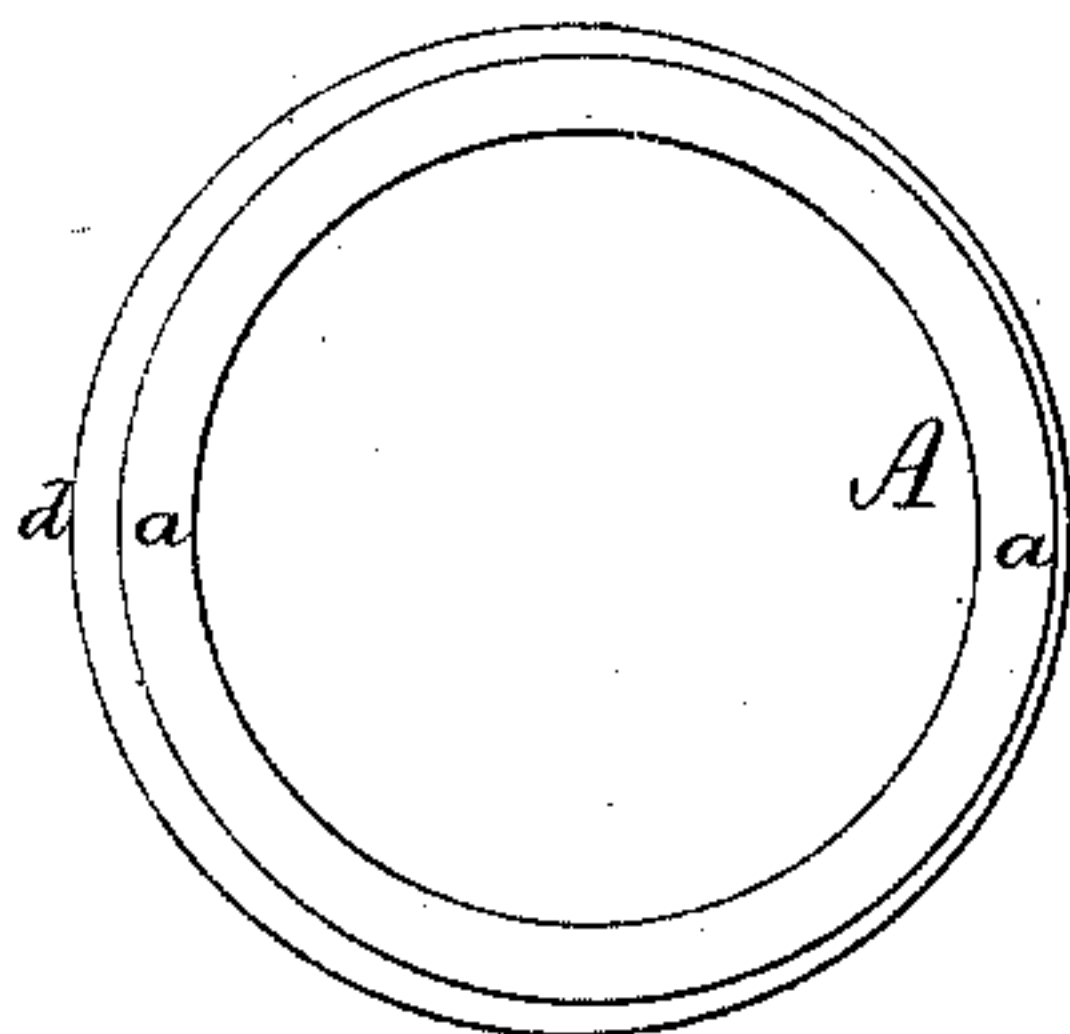


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOSEPH WARREN WATTLES, OF CANTON, MASSACHUSETTS.

DUPLEX RACE-RING HOLDER.

SPECIFICATION forming part of Letters Patent No. 335,728, dated February 9, 1886.

Application filed August 17, 1885. Serial No. 174,611. (No model.) Patented in England March 25, 1878, No. 1,173.

To all whom it may concern:

Be it known that I, JOSEPH WARREN WATTLES, of Canton, in the county of Norfolk, of the Commonwealth of Massachusetts, have invented a new and useful Improvement in Duplex Race-Ring Holders; 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 transverse section of a ring-rail and a double race-ring and its holder, in accordance with my invention, the nature of which is defined in the claims hereinafter presented. Fig. 2 is a top view of the ring-holder. Fig. 3 is a top view of the ring.

In Fig. 1 of such drawings, A denotes the duplex race-ring, it having its two races, *a* and *b*, equal in size, and arranged so that one is directly over and above the other, they being at their middles connected by a cylindrical annulus, *c*. Extending around such annulus, and projecting from it at its middle part, is a flange, *d*, whose periphery is circular and eccentric relatively to the axis of the spinning-ring or each of its races. The ring-holder B has a cylindrical shank, *g*, and projecting from it at its upper end a flange, *i*, to support the said holder in place in its socket *h* of the ring-rail C, the flange being made to rest on the top of the ring-rail. Furthermore, the holder has a bore, *f*, having an internal diameter a little greater than the external diameter of each race of the ring, and in its upper part the holder has an annular rabbet, *e*, whose periphery is circular and corresponds in diameter with that of the flange *d* of the ring, the said periphery of the rabbet being eccentric relatively to the axis of the shank *g* or its bore. The ring-holder has a cross cut or slit, *s*, made in it, and arranged as represented in Fig. 2, such cross-cut being to admit of the ring-holder being contracted upon the ring by means of a screw, *k*, screwed into the ring-rail C and against the shank of the holder, such screw serving also to clamp the ring-holder within the ring-rail. From the above it will be seen that the duplex race-ring when extended within the holder is not sustained therein by either race, but by the eccentric

flange of the ring and the rabbet into which such flange enters, and that the portion of the ring which is below the eccentric flange is within the bore of the shank. By first turning back the screw *k* and next tipping the ring so as to raise the eccentric flange out of the rabbet such ring can easily be withdrawn from the holder without the necessity of removing the holder from the rail or disturbing its adjusted position therein, particularly in case of the ring being required to be inverted or cleansed, or to have a traveler removed from it and another applied to it.

I claim—

1. The combination, with a duplex race-ring provided with an eccentric flange extending from it midway between its two races, and with a ring-rail socketed and having a set-screw screwed laterally into it and to such socket, of the ring-holder, substantially as described, arranged in such socket, and consisting of an annulus cross-cut through one part of its periphery, and having at its upper part a shoulder or flange to sustain it in the rail, and also having in such upper part an annular eccentric rabbet to receive and encircle the eccentric flange of the ring and project underneath and against the bottom thereof, such holder also having a bore of sufficient diameter to receive the lower race and the part of the ring between it and the eccentric flange, as set forth.

2. The combination, with a duplex race-ring, substantially as represented, of a holder therefor, essentially as described, consisting of an annulus cross-cut through one part of its periphery and having at its upper part a shoulder or flange, and within such upper part an annular eccentric rabbet, and also having a bore of sufficient diameter to receive the lower race and part of the ring between such race and the eccentric flange of the ring, when such flange may be resting within and fitting the said eccentric rabbet, all being essentially as set forth.

JOSEPH WARREN WATTLES.

Witnesses:

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