J. W. WATTLES.
Spinning-Ring.

No. 206,988. Patented Aug. 13, 1878.

Fig. 1.

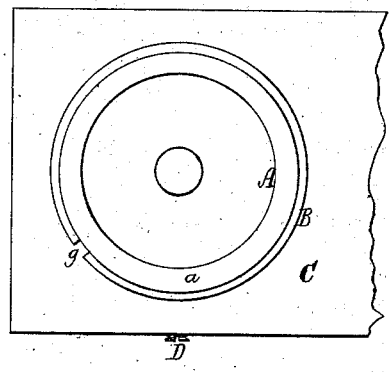


Fig. 2.

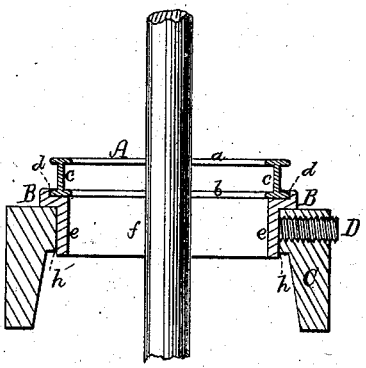


Fig. 3.

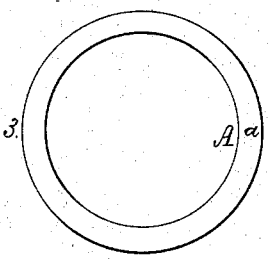


Fig. 4.

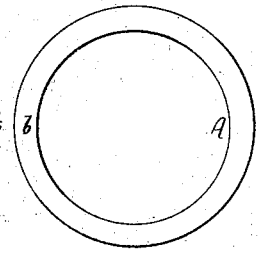


Fig. 5.

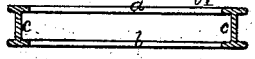


Fig. 6.

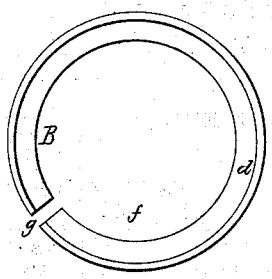


Fig. 7.

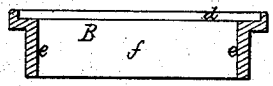


Fig. 8.

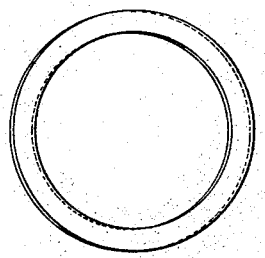
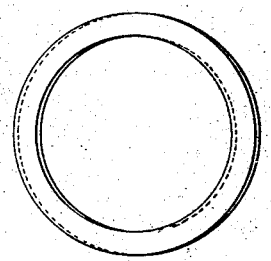


Fig. 9.

Fig. 10.



Witnesses.
S. N. Piper
L. M. Miller

Inventor
Joseph W. Wattles.
by his attorney:
R. H. Eddy

UNITED STATES PATENT OFFICE.

JOSEPH W. WATTLES, OF CANTON, MASSACHUSETTS.

IMPROVEMENT IN SPINNING-RINGS.

Specification forming part of Letters Patent No. **206,988**, dated August 13, 1878; application filed February 15, 1878.

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 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 of part of a spinning-frame rail with a ring of my improved kind and its holder. Fig. 2 is a transverse section thereof. Fig. 3 is a top view, Fig. 4 a bottom view, and Fig. 5 a transverse section, of the ring. Fig. 6 is a top view, and Fig. 7 a transverse section, of the ring-holder. Fig. 8 is a top view, Fig. 9 a transverse section, and Fig. 10 a bottom view, of a somewhat different construction of a ring embodying my invention.

My invention relates to a spinning-frame ring having two traveler-races; and consists in a spinning-frame duplex-race ring having the outer periphery of each race arranged eccentrically with respect to the inner periphery of the other race, the said races having their inner peripheries either concentric or eccentric relatively to each other, as represented.

In the drawings, A denotes the ring; B, the receiver; and C, the ring-rail. The ring has two races, *a b*, connected by a short tube, *c*. Each race has its outer edge or periphery circular and eccentric with reference to the inner periphery of the other race, such being as represented.

The ring holder or receiver B has a circular rabbet, *d*, in its upper part, such rabbet being for reception of either of the races of the ring. This rabbet has its outer or vertical edge eccentric with reference to the shank *e* or spindle-passage *f* thereof.

The ring is reversible, so that either race may be inserted in the socket of the holder. As the wear of the ring by a traveler is mostly, if not entirely, on the inner periphery of the race, it will be seen that, when one race may have become worn so as to be unserviceable with the traveler, such race will still be useful as a means of adjusting the other race relatively to the spindle.

The holder is an annulus, having a saw-kerf, *g*, made through it, as represented, in order that, when inserted in the opening *h* of the ring-rail, the said holder may, by a clamp-screw, D, screwed into the rail, be secured in the rail and contracted upon the ring, so as to firmly hold it in place.

On turning the ring around in the holder, such ring may be moved into concentricity with the spindle when extending through the holder; so, on revolving the holder, the ring may be moved more or less toward or out of concentricity with the spindle.

I am aware that a duplex-race ring has been provided with a flange arranged between the races and eccentric thereto; therefore I do not herein claim such; nor do I claim a two-race ring as heretofore made, having the peripheries of both races concentric with the axis of the ring.

What I claim as my invention is as follows, viz:

A spinning-frame duplex-race ring having the outer periphery of each race arranged eccentrically with respect to the inner periphery of the other race, the said races having their inner peripheries either concentric or eccentric relatively to each other, as represented.

JOSEPH W. WATTLES.

Witnesses:

R. H. EDDY,

JOHN R. SNOW.