J. W. WATTLES.
Spinning-Ring Holder.

No. 206,155. **Patented July 16, 1878.**

Fig. 1.

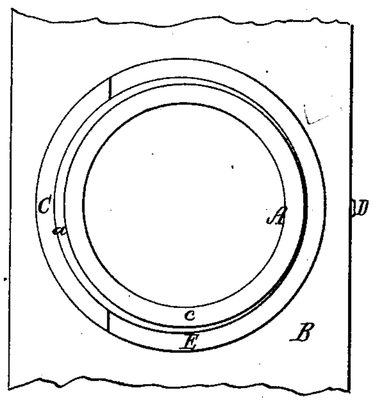


Fig. 3.

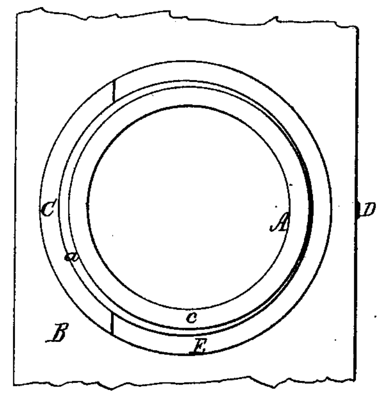


Fig. 2.

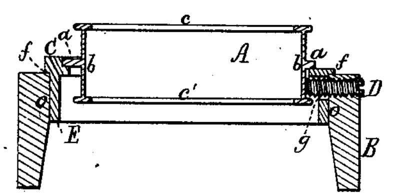


Fig. 4.

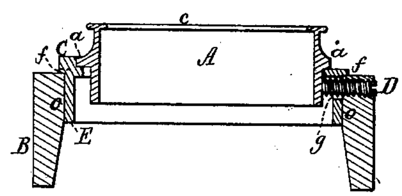
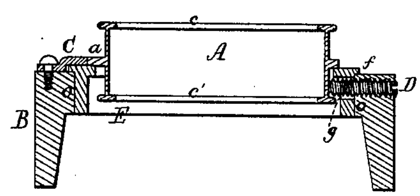


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOSEPH W. WATTLES, OF CANTON, MASSACHUSETTS.

IMPROVEMENT IN SPINNING-RING HOLDERS.

Specification forming part of Letters Patent No. **206,155**, dated July 16, 1878; application filed November 27, 1877.

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 made a new and useful invention having reference to Spinning-Ring Holders; 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, and Fig. 2 a transverse section, of a duplex race-ring and its rail provided with my invention. Fig. 3 is a top view, and Fig. 4 a transverse section, of a single race-ring and its rail provided with such invention.

In such drawings, each spinning-frame ring is shown as having an eccentric-flange to cooperate with an abutment and a clamp-screw in holding the ring in concentricity with the spindle.

When the spinning-frame is specially constructed for such appliances, the abutment is to be fixed to or project upward directly from the top of the rail, the screw being screwed into the rail and against the shank of the ring, extending within a socket or round hole made in the rail, and having a diameter somewhat larger than the neck or shank of the ring, and a little less than that of the eccentric-flange. When, however, the spinning-frame has not been specially constructed for such appliances, but has to its ring-rails circular ring holes or passages larger in diameter than the eccentric-flange of the ring, there may be employed within each of such holes, and around the shank of the ring, a flanged shank or annulus, which, as represented, is shown as having the abutment fixed to and projecting up from it. It also has a hole transversely in it, for the passage of the clamp-screw to the ring or its shank, such screw being screwed into the rail.

I would remark that although I have shown the abutment as projecting up from the flanged annulus on which the eccentric-flange of the ring rests, such abutment, instead of being so arranged, may extend up directly from the rail, and, if advisable, project or overlap more or less the top of the flanged annulus. I prefer, however, to have the abutment extend up from the said flanged annulus.

The combination of the said ring-supporting annulus with the rail, the spinning-frame ring and its eccentric-flange, and the abutment and clamp-screw constitutes the main principle or part of my present invention.

In the drawings, A denotes the spinning-frame ring, B the ring-rail, and *o* the ring-opening thereof.

The ring is shown in Fig. 2 as having two races, *c* and *c'*, to its shank *b*, while in Fig. 4 it is represented as provided with but one race, *c*.

The ring A has to its shank an eccentric-flange, *a*, its diameter being larger than that of the race, and its periphery, though cylindrical, or about so, is eccentric with reference to the race.

Within the opening *o*, and encompassing the shank of the ring A, is the sustaining-annulus E, which has a flange, *f*, projecting from it, and resting upon the top of the rail. The eccentric-flange of the ring bears directly upon the top of the annulus E, from which the abutment C extends upward, in manner as shown.

The hole for the passage of the clamp-screw D is represented at *g* as made in the annulus E. This clamp-screw, screwed into the rail, extends through the said hole and abuts against the ring A, and, when set up, not only forces the ring against the abutment, but causes the ring, by means of such abutment, to crowd the annulus E hard against one side of the rail-opening *o*. Thus, by having the abutment fixed to the annulus, the latter, through the action of the screw and the abutment, is caused to be clamped to the hole *o*. When, however, the abutment is fastened to the rail and projects up over the annulus in manner as shown in Fig. 5, such annulus E simply rests on the rail without, when the screw is set up, being forced against the side of the opening *o*.

Should the ring require to be adjusted into concentricity with the spindle, a centralizer is to be placed on the latter and dropped within the ring, which by it will be brought concentric with the spindle. Next, the ring should be turned around until it may bear against the abutment, after which the screw should be set up closely against the ring, so as, with the abutment, to hold the ring firmly in place.

I do not herein claim the combination of a

spinning-frame ring and its rail with an eccentric-flange applied to the ring, and with an abutment and clamp-screw applied to the rail, such being the subject of an application for a patent recently made by me.

What I claim as of my present invention is as follows:

1. In combination with the ring-rail B and the clamp-screw D screwed therein, and with the adjustable ring A, provided with the eccentric-flange *a*, the sustaining-annulus E, having the screw passage or hole *g*, and also having the abutment C arranged with it, and the screw D and the flange *a*, substantially as specified.

2. A shank or annulus, E, adapted to extend into the rail-opening, and provided with an abutment, C, projecting from it, and to aid in sustaining the ring, substantially as described.

3. The supporting-annulus E, provided with the abutment C, projecting from its upper edge, and also having the screw-passage *g* arranged in it, (the said annulus,) and with respect to such abutment, substantially as set forth.

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Witnesses:
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