C. E. TROWBRIDGE.

Holder for Spinning-Rings.

No. 163,550. Patented May 18, 1875.

Fig. 1.

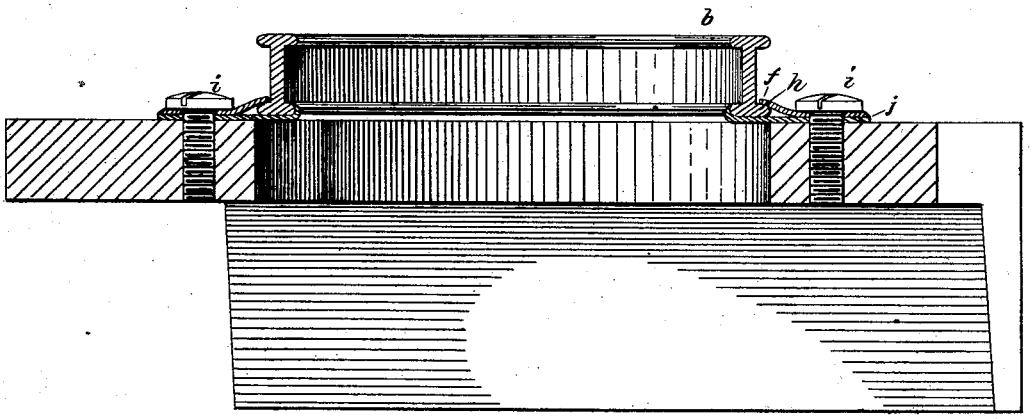
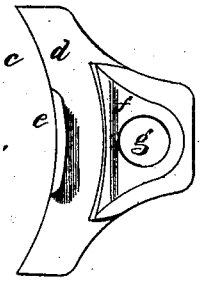


Fig. 2.



Witnesses.

L. H. Gatimer

Wm. Pratt

Inventor.

Chas E Trowbridge

PER Crosby & Gregory Atty's.

UNITED STATES PATENT OFFICE.

CHARLES E. TROWBRIDGE, OF WHITINSVILLE, MASSACHUSETTS.

IMPROVEMENT IN HOLDERS FOR SPINNING-RINGS.

Specification forming part of Letters Patent No. **163,550**, dated May 18, 1875; application filed April 7, 1875.

To all whom it may concern:

Be it known that I, CHARLES E. TROWBRIDGE, of Whitinsville, in the county of Worcester and State of Massachusetts, have invented an Improved Spinning-Ring-Holding Clamp, of which the following is a specification:

This invention relates to devices for holding a ring of a ring-spinning frame in position on the ring-rail, and so that the ring may be adjusted centrally with relation to the spindle-opening in the rail.

The ring shown in the drawing is of the class known as double-raced rings, and adapted to be reversed when one race becomes worn, so as to bring the other race in position. Such rings have heretofore been held by means of circular metallic holders, with upturned substantially vertical lips, between which the race-part at one end of the ring has been sprung and held, the lips touching only the outside of the edge of the race, and they have also been held by means of a circular holder, provided with a raised flange to fit the outer edge of the race resting on the rail. With the former method, the rings rest on and may be moved by means of the holders, but they at times become detached from their holders, as when struck by the operator, and become unseated. In the latter method, the ring is not supported on and by the ring-holder, and in order to insert the ring, the holder has to be split.

This, my invention, consists in a slotted clamp-like holder, adapted to fit the interior and exterior edges of the unused race, and bear about the edges of the race, thereby holding the ring securely, and so as to be secured to the ring-rail. Two of these clamps are used for each ring.

Figure 1 represents a section of a ring-rail, double-raced ring, and holders shown as confining the ring in position. Fig. 2 is a view of one of the clamp-like holders removed from the ring and ring-rail.

In the drawing, *a* is the ring-rail of ordinary construction, *b* the double-raced ring, and *c* the clamp-like holder, composed of a base, *d*, having an upturned flange, *e*, bent in an arc of a circle to fit the interior curved part of the race of the ring *b* and a top plate, *f*. The flange *e* may be hooked, as shown, to fit the rounded edge of the race, or it may be left straight, merely to fit the interior of the race, and the top plate *f* rises at its forward end from the base *d* far enough to receive under it the edge *h* of the race of the ring *b*. These clamp-like holders grasp the interior and exterior portions of the race, and the portion *f*, by bearing on the race-edge in toward the body of the ring, holds the race and ring firmly against lateral and vertical movement, when the clamp-like holders are secured to the rail by screws *i* passing through holes *g* in the holders. The holder *c* may be formed from a single piece of metal, fashioned and bent at *j*, or parts *d f* may be of separate pieces, brazed or otherwise united together. By loosening the screws, the ring may be moved over the opening in the ring-rail, and may be made to occupy a concentric position with reference to the spindle, and then the screws may be tightened. Two of these clamp-like holders and two screws are found amply sufficient to properly hold and adjust a ring. These clamps form very cheap and efficient holders for the ring.

I claim—

1. The combination, with the ring and ring-rail of the clamp-like holders for holding and adjusting the ring, substantially as deseribed.

2. The clamp-like spinning-ring holder *c*, composed of the base *d*, flange *e*, and top plate *f*, slotted to receive a holding-screw, and adapted to hold a ring-race, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES E. TROWBRIDGE.

Witnesses:
EDW. WHITIN,
WM. H. WHITIN.