G. DRAPER.

SPINNING-RING HOLDER.

No. 170,826. Patented Dec. 7, 1875

Fig. 1.

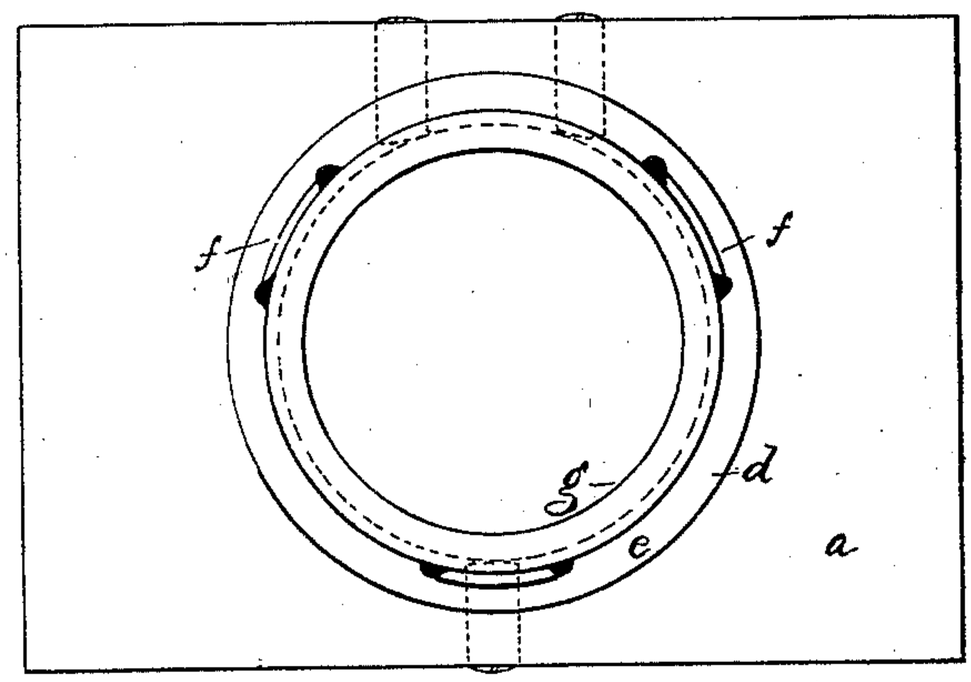


Fig. 2.

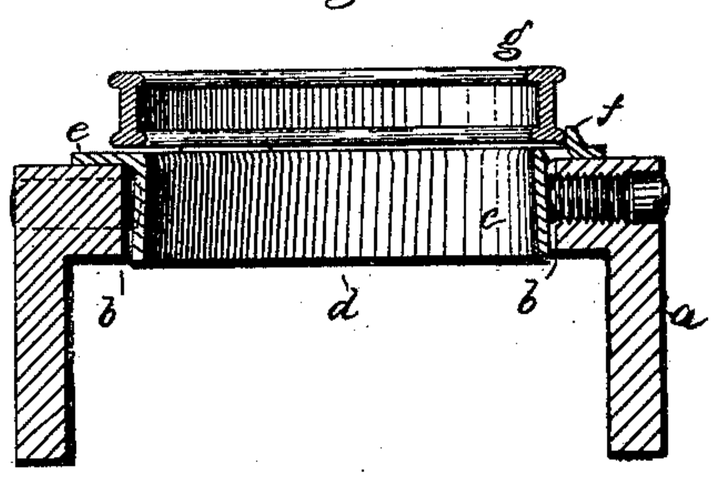
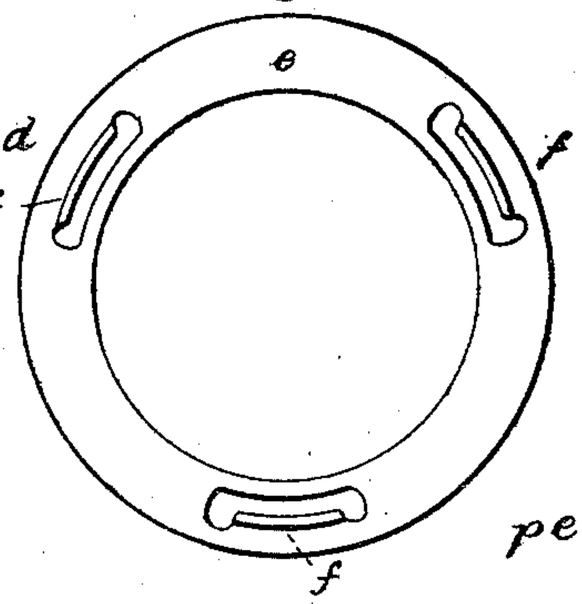


Fig. 3.



Witnesses.

L. H. Latimer.

W. J. Pratt.

Inventor.

George Draper

per Crosby & Gregory Atty's.

UNITED STATES PATENT OFFICE.

GEORGE DRAPER, OF HOPEDALE, MASSACHUSETTS.

IMPROVEMENT IN SPINNING-RING HOLDERS.

Specification forming part of Letters Patent No. **170,826,** dated December 7, 1875; application filed August 5, 1875.

To all whom it may concern:

Be it known that I, GEORGE DRAPER, of Hopedale, in the county of Worcester and State of Massachusetts, have invented an Improved Spinning-Ring Holder, of which the following is a specification:

This invention has reference to holders for rings for use in spinning-frames; and consists in a ring-holder provided with a shank made tapering on its outer surface; also, in the combination, with a ring-rail having an enlarged spindle-passage, of a tapering holder, substantially as described, provided with ring-holding projections to grasp and hold a ring positively, with adjusting devices connected with the ring-rail, to adjust the said holder, and with it the ring, into concentricity with the spindle-passage.

Figure 1 is a top view of a ring-rail, showing the improved holder and ring applied; Fig. 2, a section thereof; and Fig. 3, a top view of the holder.

The ring-rail *a* is of any ordinary construction, and is provided with spindle-passages *b* larger than the shanks *c* of the holder *d*, the latter being composed of a shank, *c*, and a flange, *e*, to rest on the ring-rail and struck or turned-up ring-holding projections *f f f*, forming part of the flange and serving to grasp and hold a ring, *g*, forced between them, without other appliances, such as screws. The spindle-passage, being larger than the shank *c*, allows the latter to be adjusted in the opening, to place it and the ring carried by it in concentricity with the spindle, and the adjusting mechanism for such purpose is shown as consisting of three screws connected with the rail and working against the shank, and in the manner that such screws have been heretofore used to adjust shanks forming integral solid parts of spinning-rings.

By providing a shanked holder with ring-holding projections, as shown and described, I am enabled to positively hold and support a double-raced ring, and, by means of the screws, the holder and ring may be adjusted, and adjusting devices between the ring and holder, as well as adjusting devices working into the top of the ring-rail, are dispensed with.

The shank *c* of the holder is made to increase in size from at or near the flange *e* to its lower end; and this is of importance, as thereby it is unnecessary to screw the adjusting-screws in with such force as heretofore required when used in connection with rings having cylindrical shanks.

In the old way, the screw-threads and ring-shanks were often injured, it being necessary to screw the screws in with much force, to prevent the rings from being lifted from the ring-rail; but, with the outwardly-inclined shank, the screws need to be screwed in only far enough to place the holder in position, and, owing to the enlargement at its lower end, the holder cannot rise from the ring-rail.

This feature of invention enables the holders to be made much thinner and lighter than would be the case were the shanks simply cylindrical, and it was necessary to have a firm, unyielding base, against which the screws might act with enough force to hold the rings down.

The holders, being of less weight, and preferably of sheet metal, lightens the weight to be lifted by the devices for moving the ring-rail.

It is evident this holder might be adjusted by other well-known adjusting mechanism used in connection with rings having shanks projecting through the spindle-passages; and the spring or friction holders *f* might be made separate and be afterward attached to the flange *e;* and it is evident that a ring with a single race, rather than the ring shown, might be held by the friction of the holding devices *f*.

The entire holder is struck up in a die from sheet metal.

A ring of ordinary construction might have its shank made tapering on its outer side, as described for the holder *d*.

I am aware that a double-raced ring has been held in a flanged and shanked holder, of cylindrical but not of tapering formation, as in Patent No. 140,757.

I claim—

1. A ring-holder composed of a flange, provided with ring-holding ears or projections, and a shank, tapered and gradually enlarged from the flange to the lower end of the shank, substantially as described.

2. A ring-holder, composed of a flange pro-

vided with ring-holding projections, and of a shank tapered or enlarged from the flange toward the end of the shank, in combination with a ring-rail and adjusting-screws adapted to place the rings in concentricity with the spindle, all substantially as described.

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

GEORGE DRAPER.

Witnesses:
F. J. DUTCHER,
E. D. BANCROFT.