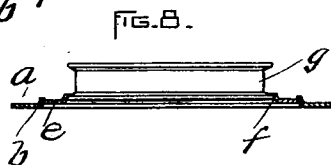
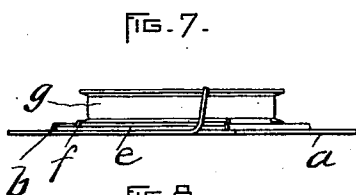
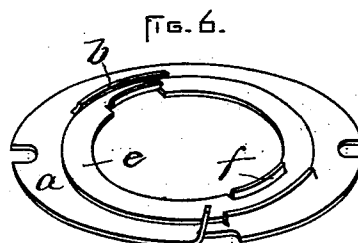
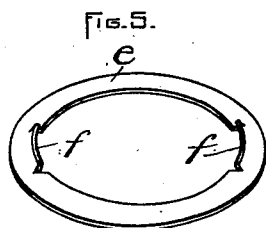
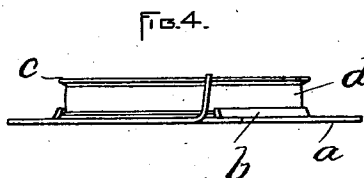
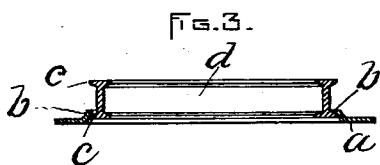
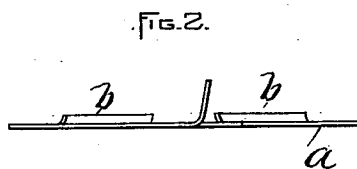
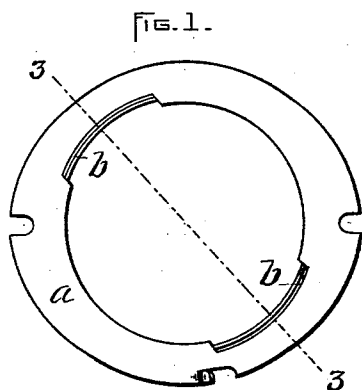


(No Model.)

T. THACKER.
SPINNING RING HOLDER.

No. 562,986.

Patented June 30, 1896.



WITNESSES:

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UNITED STATES PATENT OFFICE.

THOMAS THACKER, OF FALL RIVER, MASSACHUSETTS.

SPINNING-RING HOLDER.

SPECIFICATION forming part of Letters Patent No. 562,986, dated June 30, 1896.

Application filed August 30, 1894. Serial No. 521,685. (No model.)

To all whom it may concern:

Be it known that I, THOMAS THACKER, of Fall River, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Spinning-Ring Holders, of which the following is a specification.

This invention has relation to means for holding spinning-rings in place on the ring-rail; and it has for its object the provision of means whereby it may not be necessary to change the holder when changing the sizes of the rings.

To these ends the invention consists in providing a regular ring-holder with a supplemental holder, adapted to be engaged and held by the regular holder and to itself engage and hold a ring without material alteration of the elevation of the smaller ring above the plane of position of the larger ring, all as I will now proceed to describe and claim.

Reference is to be had to the annexed drawings, and to the letters marked thereon, forming a part of this specification, the same letters designating the same parts or features, as the case may be, wherever they occur.

Of the drawings, Figure 1 is a plan view of a regular ring-holder. Fig. 2 is a side elevation of Fig. 1. Fig. 3 is a sectional view taken on the line 3 3 of Fig. 1, showing a ring in place in the holder. Fig. 4 is a side elevation of Fig. 3. Fig. 5 is a perspective view of the supplemental holder. Fig. 6 is a perspective view of a regular ring-holder having the supplemental holder shown in Fig. 5 in place therein. Fig. 7 is a side elevation of Fig. 6 with a ring in place held by the supplemental holder. Fig. 8 is a central sectional view of Fig. 7, the ring being shown in elevation.

In the drawings, *a* designates the regular ring-holder provided with the flanges *b* for engaging one of the flanges *c* of the ring *d* and holding the latter in place, as shown in Figs. 3 and 4. The construction thus far described is old and commonly known.

e designates my supplemental holder, which is constructed as a flat ring adapted to be en-

gaged and held by the flanges *b* of the ring of the holder *a* as it engages the flange *c* of the ring *d*, as is represented in Fig. 6.

The supplemental holder *e* is provided on its inner edge with flanges *f* like in character to the flanges *b* of the holder *a*, so that the said holder may engage and hold a smaller ring *g*, as shown in Figs. 7 and 8. In this way the rings on a ring-frame may be changed without changing the holders, effecting a very material saving of time and consequently of expense.

I am aware that it has been proposed to superimpose one ring upon another and hold it in place by means of a coupling, but this raises the upper ring to an undesirable height and increases the joints to such a number that there is a liability of one or more of such joints becoming loose. In my invention the holder *e* is flat, and is so constructed that its use elevates the smaller ring above the usual position of the larger ring only so much as the thickness of the metal, and it adds but one joint.

Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, it is declared that what is claimed is—

The combination with the ring-holder, of a supplemental holder consisting of a flat ring *e* having flanges *f* on its upper side, and having a plain flat under side whereby its outer edge is adapted to be engaged by the ring-holder, and a ring adapted to be engaged by the flanges *f*, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 21st day of August, A. D. 1894.

THOMAS THACKER.

Witnesses:

ANDREW J. JENNINGS,
GEORGE H. BUSH.