(No Model.)

J. H. BENNETT.

HOLDER FOR RINGS IN SPINNING AND TWISTING FRAMES.

No. 480,227.

Patented Aug. 2, 1892.

Fig:1

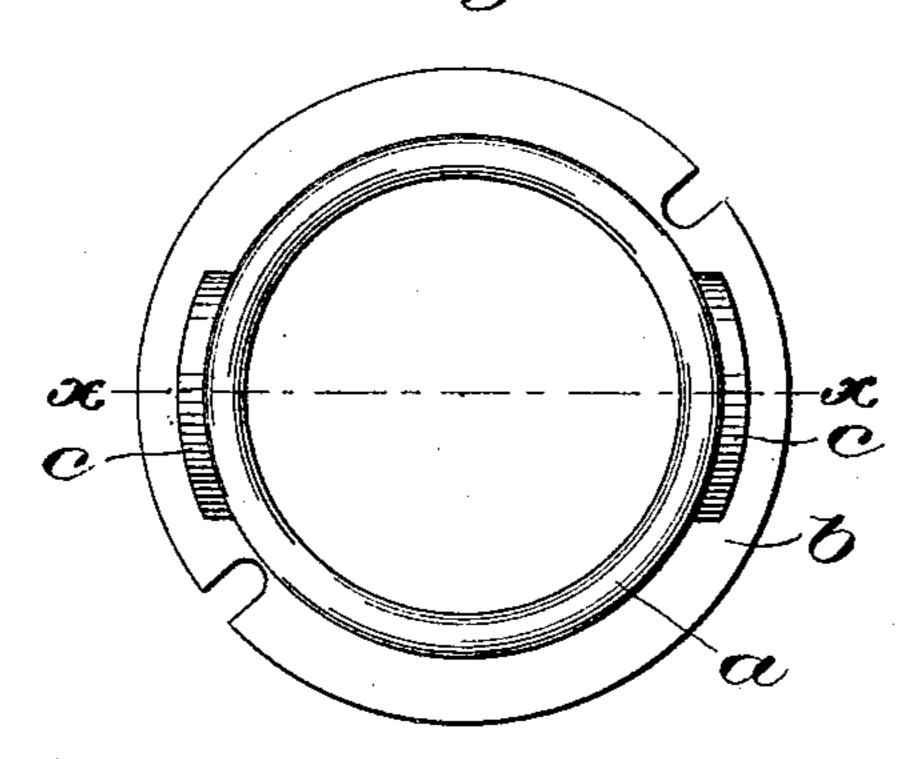


Fig.R.

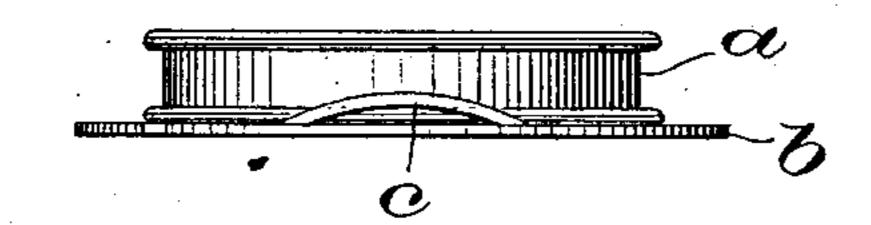
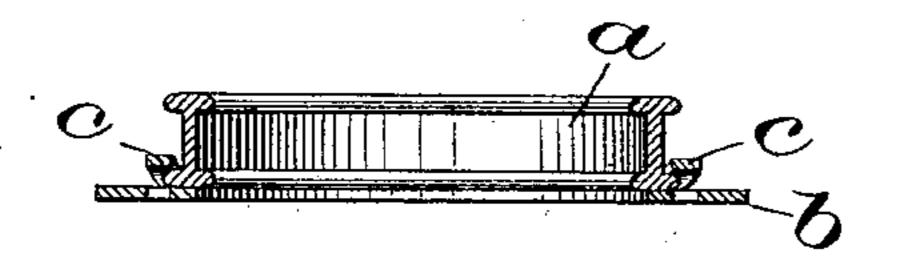


Fig.3



Witnesses, Edward F. Allen Louis Huwell Inventor.
Town H. Bennett.

by Crosby Stregory

United States Patent Office.

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HOLDER FOR RINGS IN SPINNING AND TWISTING FRAMES.

SPECIFICATION forming part of Letters Patent No. 480,227, dated August 2, 1892.

Application filed February 23, 1892. Serial No. 422,423. (No model.)

To all whom it may concern:

Be it known that I, John H. Bennett, of Worcester, county of Worcester, State of Massachusetts, have invented an Improvement in 5 Holders for Rings in Spinning and Twisting Frames, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to improve, simplify, and cheapen the construction of holders for rings of the double-race variety used in connection with spinning and twist-

ing frames.

Prior to this invention a thin metal plate or annulus has been cut through at several points to leave upturned lips, which fit against the outer edge or flange of the raceway, said lips serving to keep the rings firmly seated 20 in the holder, as in United States Patent No. 170,826. The upturned lips referred to present faces against which the circular parts of the flanges of the ring-race bear. As the lips contact with but a portion of the periphery of 25 the ring, very considerable pressure is required to frictionally retain the ring in place, and such pressure on the ring, exerted usually at diametrically-opposite points, springs

30 out of true circular form.

In my experiments to overcome the objectionable corners and the collection of lint, and to also avoid the springing of the ring, I have devised a holder having bridge-like loops 35 struck from the bottom of the holder through to the upper face thereof, which loops may be of any desired shape, being preferably in the arc of a circle of, say, less curvature than the arc of the ring-race, so that a part of the ring-4º race can better get under a portion of the loop. The inner edge of the holder is thus left

the ring, which is made as light as possible,

truly circular and unbroken.

My invention therefore consists in a ringholder composed of a plate or annulus hav-45 ing bridge-loops projecting therefrom between the inner and outer edges of the plate, as will be described.

Figure 1 shows one of my improved ringholders containing a double-raced ring; Fig. 2, a side elevation thereof; and Fig. 3, a sec- 50 tion in the line x, Fig. 1.

The ring a is one of the double-raced va-

riety and of usual form.

The holder b consists of a plate or annulus of metal having bridge-like loops c. In the 55 production of this holder a metal plate having a central opening to embrace the spindle and bobbin is subjected to the action of the die in a suitable press. Two portions of the body of the plate between its inner and outer 60 edges and at substantially diametrically-opposite points are struck partially through, thus forming the said bridge-like loops c c, said loops being preferably curved at their edges and upper sides. These bridge-like 65 loops, by being connected at each end with the body of the holder, leave smooth surfaces for the travel over and past them of lint or dust. The edges of the bridge-loops contact with the race, and at the central part of each 70 bridge-loop, where there is an open horizontal passage, a portion of the periphery of the ringrace may get under the bridge-loop, as best shown in Fig. 3.

The holder shown is cheaper to produce 75 than the usual plate-holder referred to and in use has decided advantages over the old form

of holder.

Having described my invention, what I claim, and desire to secure by Letters Patent, 80

1. A ring-holder composed of a plate and provided with bridge-like ring-holding loops, to operate substantially as described.

2. A ring-holding plate having bridge-like 85 loops, combined with a double-raced ring, sub-

stantially as described.

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

JOHN H. BENNETT.

Witnesses:

RUFUS B. FOWLER, Conrad R. Bennett.