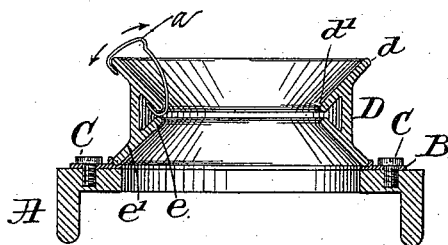


(No Model.)

E. S. DRAPER.
SPINNING RING.

No. 491,962.

Patented Feb. 14, 1893.



Witnesses.
Edward F. Allen.
Louis N. Howell

Inventor.
Eben S. Draper
by Crosby & Morgan
attys.

UNITED STATES PATENT OFFICE.

EBEN S. DRAPER, OF HOPEDALE, MASSACHUSETTS, ASSIGNOR TO THE SAW-YER SPINDLE COMPANY, OF SAME PLACE.

SPINNING-RING.

SPECIFICATION forming part of Letters Patent No. 491,962, dated February 14, 1893.

Application filed September 16, 1892. Serial No. 446,089. (No model.)

To all whom it may concern:

Be it known that I, EBEN S. DRAPER, of Hopedale, county of Worcester, State of Massachusetts, have invented an Improvement in Spinning-Rings, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like parts.

Very considerable study has been given to the shape and weight of the travelers used in connection with spinning rings, and for some classes of spinning a tipping traveler has been used or one adapted to hang at its upper end on the yarn, and to use this traveler it has been found that it works better on a ring having an inclined flange for the race-way rather than a horizontal flange as in ordinary rings, but this class of traveler when used on a ring having an inclined race-way has been found to jump and wobble badly to the injury of the yarn. In my experiments to overcome this jumping and wobbling of the traveler, I have devised a stop to co-operate with the inner lower edge of the inclined race on which the traveler runs, so that the lower end of the traveler is prevented from leaving that edge of the race or jumping up and down unduly thereon. Having conceived the necessity of this stop, I have so shaped the same that while it acts as a stop, it may, by making it broader, serve also the purpose of a second race-way when the ring is inverted.

The drawing, in vertical section, shows a spinning ring embodying my invention.

In the drawing, A represents part of a ring rail; B, a ring-holder thereon; and C screws to confine the holder in position on the rail.

The traveler *a* is one of a class desirable for use in some classes of work, it hanging at its

upper end on the yarn and in its run about the race-way of the ring its upper end slides back and forth in the direction of the arrows at the upper edge *d* of the inclined race-way or flange at the upper end of the ring D. 45 With only the inclined race-way uppermost in the drawing, the lower hooked end of the traveler embracing the inner lower edge of the race-way is apt to jump and wobble, and to obviate this, I have added to the interior of the ring a stop *e*, it lying quite close to the inner edge *d'* of the race-way occupied by the traveler *a*. Finding this stop desirable and efficient, I prolonged the same diagonally downwardly and outwardly at *e'* to constitute the bottom edge of the ring outside its main body, and I so pitched the parts *e*, *e'*, as to constitute a second inclined race-way, so that the ring was thereby given the capacity of being reversed and thus constitute a double 60 ring.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A spinning ring provided at each end with inwardly inclined race-ways, the inner ends of the race-ways coming sufficiently close to enable the inner end of one race-way to act as a stop for the traveler running on the other race-way and reduce its tendency to jump and wobble to the injury of the yarn, substantially as described. 70

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

EBEN S. DRAPER.

Witnesses:

C. E. LONGFELLOW,
H. F. SEARLES.