814,189. PATENTED MAR. 6, 1906.

J. P. CRANE.

SPINNING OR TWISTING RING.

APPLICATION FILED OCT. 19, 1905.

Fig. 1.

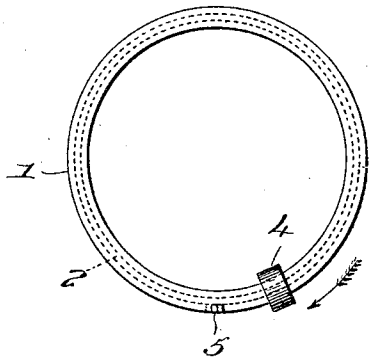


Fig. 2.

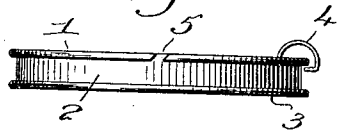
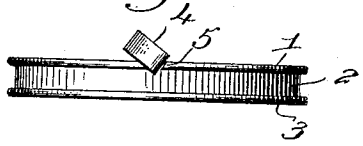


Fig. 3.



Witnesses,
Edward G. Allen
John V Macdonald

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UNITED STATES PATENT OFFICE.

JOHN P. CRANE, OF MILLBURY, MASSACHUSETTS, ASSIGNOR TO DRAPER COMPANY, OF HOPEDALE, MASSACHUSETTS, A CORPORATION OF MAINE.

SPINNING OR TWISTING RING.

No. 814,189. Specification of Letters Patent. Patented March 6, 1906.

Application filed October 19, 1905. Serial No. 283,454.

To all whom it may concern:

Be it known that I, JOHN P. CRANE, a citizen of the United States, and a resident of Millbury, county of Worcester, State of Massachusetts, have invented an Improvement in Spinning or Twisting Rings, of which the following description, in connection with the accompanying drawings, is a specification, like figures on the drawings representing like parts.

This invention has for its object the production of a novel ring for spinning or twisting machines, the ring being so constructed that a traveler can be readily applied thereto without bending or springing the traveler over the flange of the ring.

In actual practice the traveler is thrown outward by centrifugal force to such an extent that when in use it has very little contact with the outer rim or edge of the flange which forms the traveler-raceway. I make use of this fact in my present invention, and to facilitate the application of the traveler to the ring I make a small notch, preferably in the outer rim of the flange, and preferably such notch is made in an oblique direction, so that the traveler is tilted to apply it to the ring.

By means of the notch the width of the flange adjacent thereto is rendered equal to the distance between the inturned ends of the traveler, so that the latter readily slips into place, and owing to the outward tendency of the traveler when in motion it revolves entirely clear of the notch.

I preferably incline the notch in the direction of rotation of the traveler, so that any possible tendency of the latter to slide up into or to catch on the edges of the notch is obviated.

The novel features of my invention will be fully described in the subjoined specification and particularly pointed out in the following claims.

Figure 1 is a top plan view of a ring embodying my invention. Fig. 2 is a side elevation thereof, showing the notch in the outer rim of the flanged head; and Fig. 3 is a similar view showing the manner in which the traveler is applied.

I have herein shown my invention as embodied in a well-known form of ring, the same having a flanged head 1 surmounting the cylindrical web 2, a flanged base 3 providing the usual means for securing the ring in place in a ring-holder of any suitable construction.

The normal width of the flanged head 1 is greater than the distance between the inturned ends of the traveler 4, and it is the usual practice to bend or spring the traveler in order to separate its ends far enough to snap over the head.

In order to obviate such distortion of the traveler, I make a notch 5 in the outer rim of of the flanged head, the notch extending into the outer face of the web 2, so that at the notch the head is reduced in width, as clearly shown in Fig. 1, the reduced width being equal substantially to the distance between the inturned ends of the traveler.

I prefer to make the notch oblique, as shown in Fig. 2, because by so doing the width of the notch is then only sufficient to just permit the passage through it of the outer end of the traveler and also because the narrower the notch the less the interruption to the continuity of the outer rim of the ring-head.

To apply the traveler, the latter is tilted or canted, as shown in Fig. 3, and its outer end is slipped through the notch till it passes beneath the outer rim of the head, and then the traveler is turned into proper position.

I prefer to make the notch incline in the direction of revolution of the traveler, as shown by the arrow, Fig. 1, for by so doing the traveler cannot by any possibility fly up into the notch and off the ring.

The position assumed by the traveler when in operation is such that there is in practice very little liability of its catching on the annularly flanged and notched head.

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

1. As a new article of manufacture, a spinning or twisting ring having a flanged head provided with a narrow, oblique notch in the outer rim thereof, to permit the passage therethrough of the outer end of the traveler when applying the same to the ring.

2. As a new article of manufacture, a spinning or twisting ring having a flanged head provided with a narrow, oblique notch in the outer rim thereof, said notch being inclined

in the direction of revolution of the traveler and permitting the application of the traveler without bending or springing it.

3. As a new article of manufacture, a spinning or twisting ring having a cylindrical web provided with a traveler-raceway consisting of inner and outer annular flanges at its upper end, the outer flange having an inwardly-extended notch therein, the width of the raceway being reduced thereat to permit the application of a traveler to the ring without bending or distorting.

4. As a new article of manufacture, a spinning or twisting ring having a flanged head provided with a narrow notch in the rim thereof, to permit the application of the traveler without bending or springing the same.

5. As a new article of manufacture, a spinning or twisting ring having a flanged head provided with a narrow notch in the outer rim thereof, to permit the application of the traveler without bending or springing the same.

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

JOHN P. CRANE.

Witnesses:
JAMES J. DOUGHERTY,
EDWARD J. CRANE.