O. A. DOVER.

LUBRICATING MEANS FOR SPINNING RINGS.

APPLICATION FILED JUNE 28, 1920.

1,375,833. Patented Apr. 26, 1921.

Fig. 1.

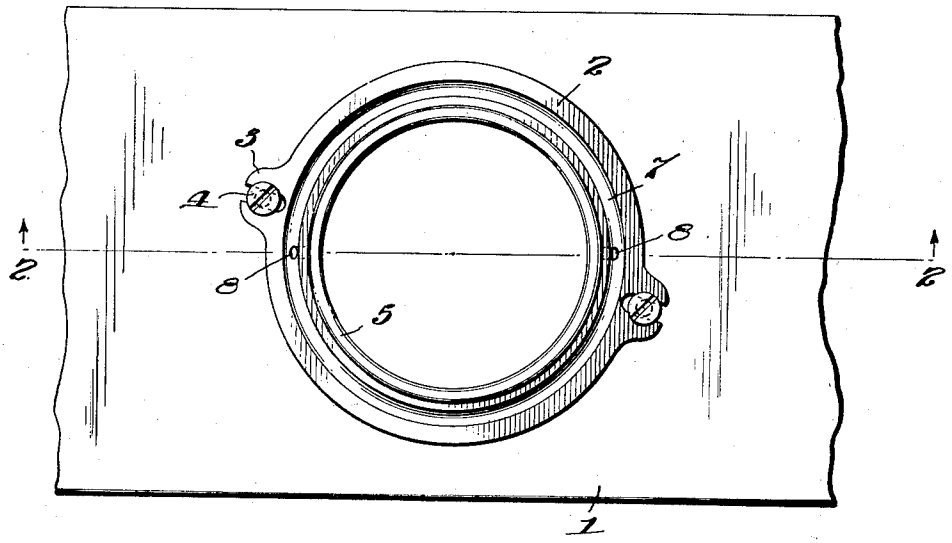


Fig. 2.

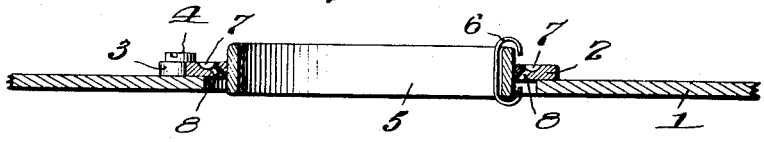
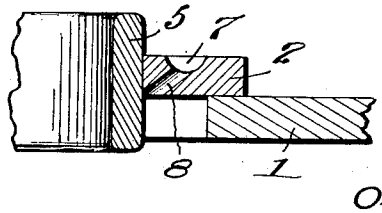


Fig. 3.



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LUBRICATING MEANS FOR SPINNING-RINGS.

1,375,833. Specification of Letters Patent. Patented Apr. 26, 1921.

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To all whom it may concern:

Be it known that I, OSCAR A. DOVER, a citizen of the United States, residing at Gastonia, in the county of Gaston and State of North Carolina, have invented certain new and useful Improvements in Lubricating Means for Spinning-Rings, of which the following is a specification.

My invention relates to the twister frames of spinning machines and more particularly to the construction of an improved spinning ring for use in connection therewith.

The object of the invention is to provide means for conveniently and effectively supplying oil to lubricate such spinning ring, so as to cause the traveler to run freely and smoothly thereon without undue friction.

More specifically, I contemplate providing the rings of existing machines with my improved lubricating means, so that twister frames in common use may be equipped with my invention, without the necessity of buying new rings or parts of any kinds.

In order that my invention may be readily understood, reference is had to the accompanying drawings, forming part of this specification and in which—

Figure 1 is a fragmentary plan view of a portion of a ring rail showing a spinning ring thereon provided with my improved lubricating means;

Fig. 2 is a vertical section substantially on the line 2—2 of Fig. 1, and

Fig. 3 is an enlarged fragmentary section on the same line.

Referring to the drawings in detail, 1 designates the usual ring rail on which the rings are supported. The ring itself, which is smooth and imperforate throughout, and has a vertical outer wall, is designated by the reference numeral 5, and is provided with a peripheral flange 2 constituting a holder. This flange is formed with diametrically opposed slotted lugs 3, through which set screws 4 pass. By means of these set screws the ring and flange may be adjustably secured to the ring rail.

6 designates the traveler which may be of any usual or desired form.

In the upper surface of the holder or flange 2, I form an annular oil receiving groove 7, which surrounds the ring 5, and at one or more points I provide ducts 8 extending downwardly from the groove 7 through the flange 2, to the lower side thereof. As shown in Fig. 3, these ducts 8 are preferably inclined and terminate at their lower end adjacent the outer vertical wall of the ring 5.

By virtue of this construction, it will be apparent that oil placed in the groove 7 will flow downwardly through the ducts 8 from whence it will find its way over and around the outer wall and lower edge of the ring 5. Such oil is uniformly distributed around the ring by the movement of the traveler.

The ring 5 is usually constructed of hardened steel, while the flange or holder 2 may be formed of brass or the like, and it will be noted that with my improved construction, it is not necessary to bore or drill through the ring itself in order to supply oil to the lower edge thereof, as in arrangements heretofore proposed, oil is delivered to the outer surface of the ring and finds its way downwardly along the same.

It will thus be seen that I have provided a simple and effective arrangement for distributing oil to spinning rings, my improvement being such that it can be readily applied to existing rings now in use, and it is thought that the many advantages of my invention will be apparent without further discussion.

What I claim is:

1. The combination with an imperforate spinning ring, of a supporting member therefor, said member having in its upper face an annular oil groove surrounding the ring, and provided with ducts extending through itself so as to conduct oil to the lower edge of said ring.

2. The combination with a spinning ring having a vertical outer wall, of a supporting member for said ring, said member having in its upper face an annular oil groove and provided with ducts extending downwardly through itself and terminating adjacent the vertical wall of said ring, whereby oil is conducted from said groove to said ring, and flows down and over the outer surface thereof.

In testimony whereof I affix my signature.

OSCAR A. DOVER.

Witnesses:
M. F. KIRBY, Jr.,
C. E. HUFFSTETLER.