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CLEANER FOR SPINNING RING TRAVELERS

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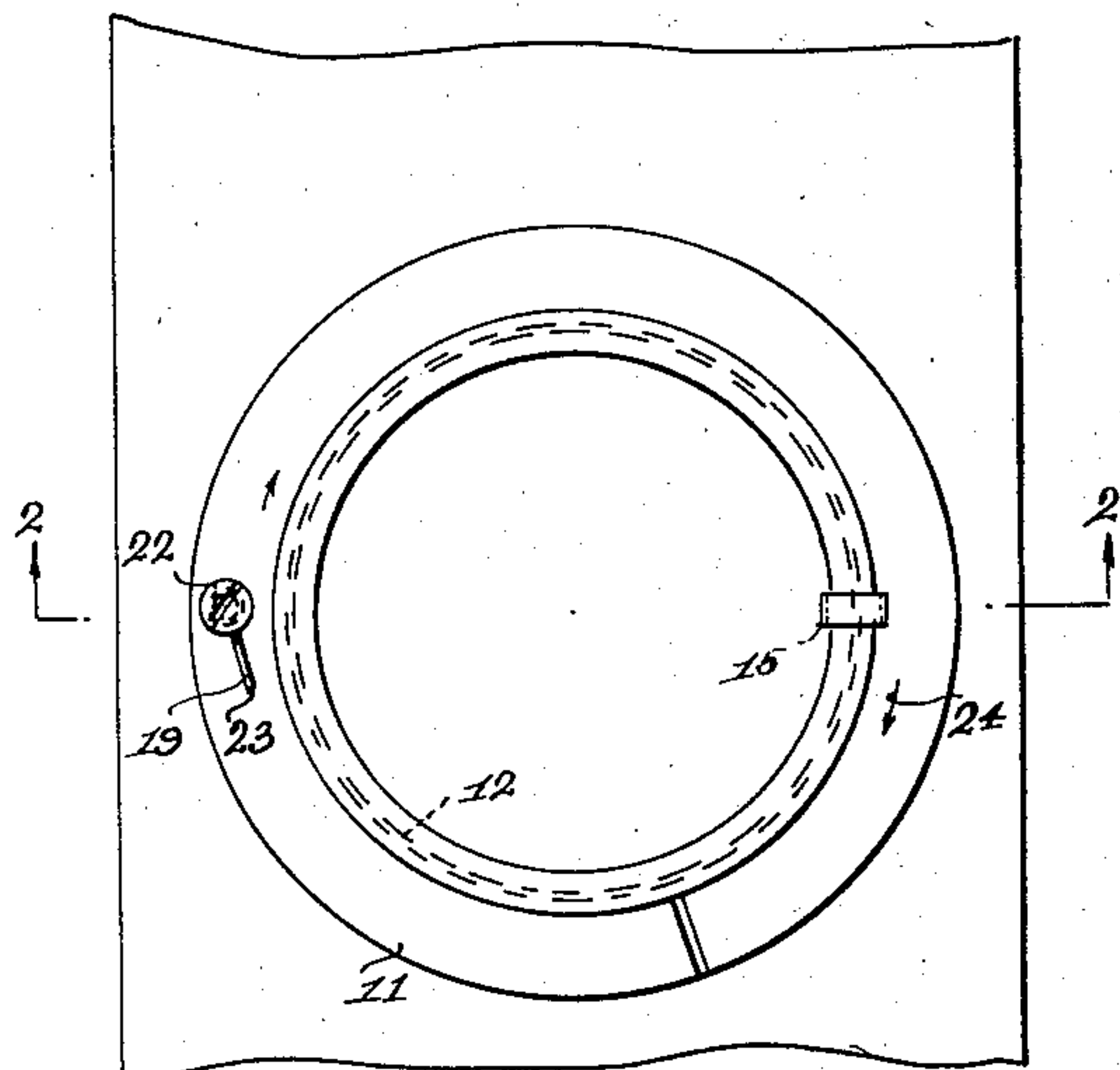


Fig. 1.

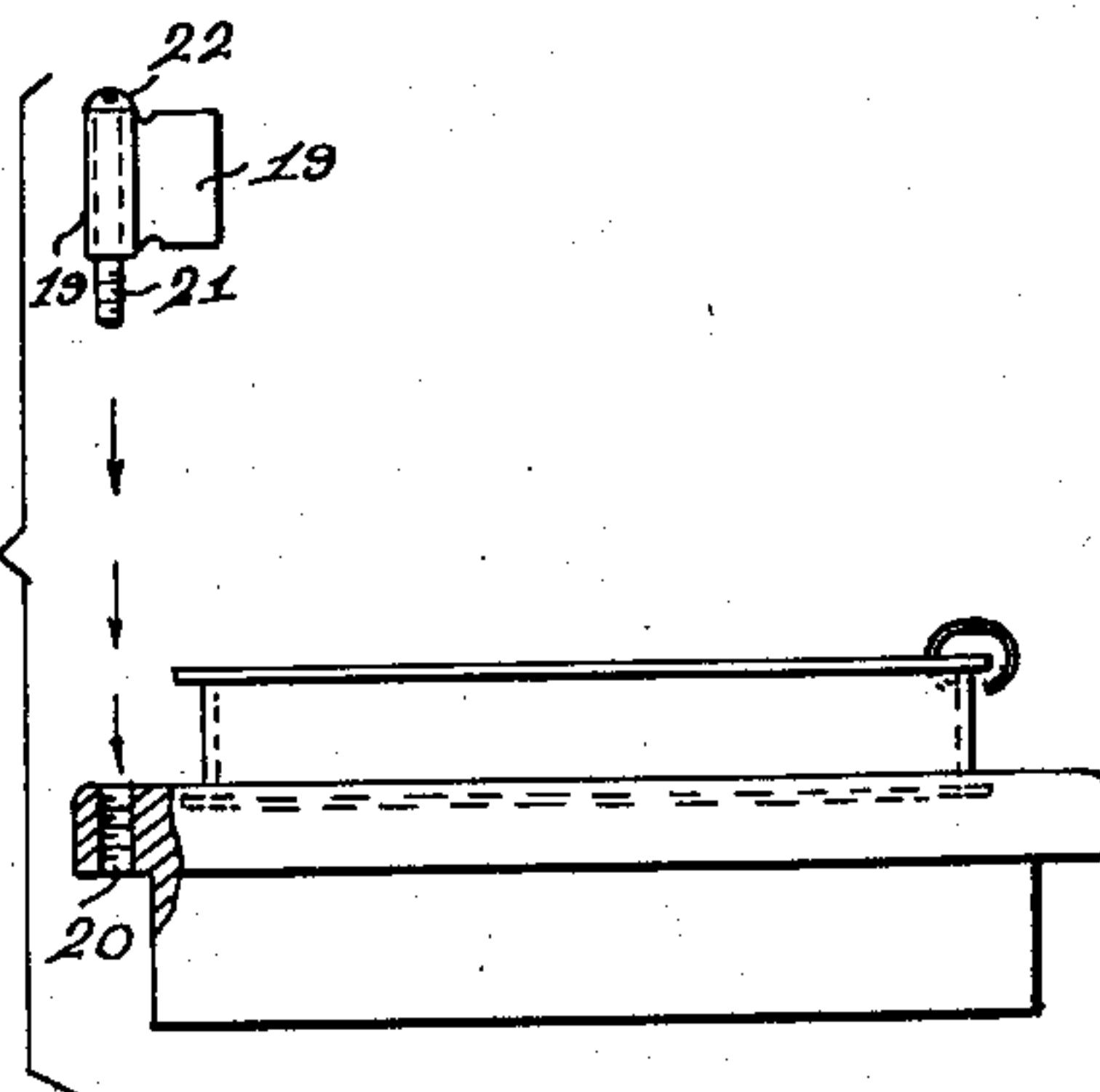


Fig. 3

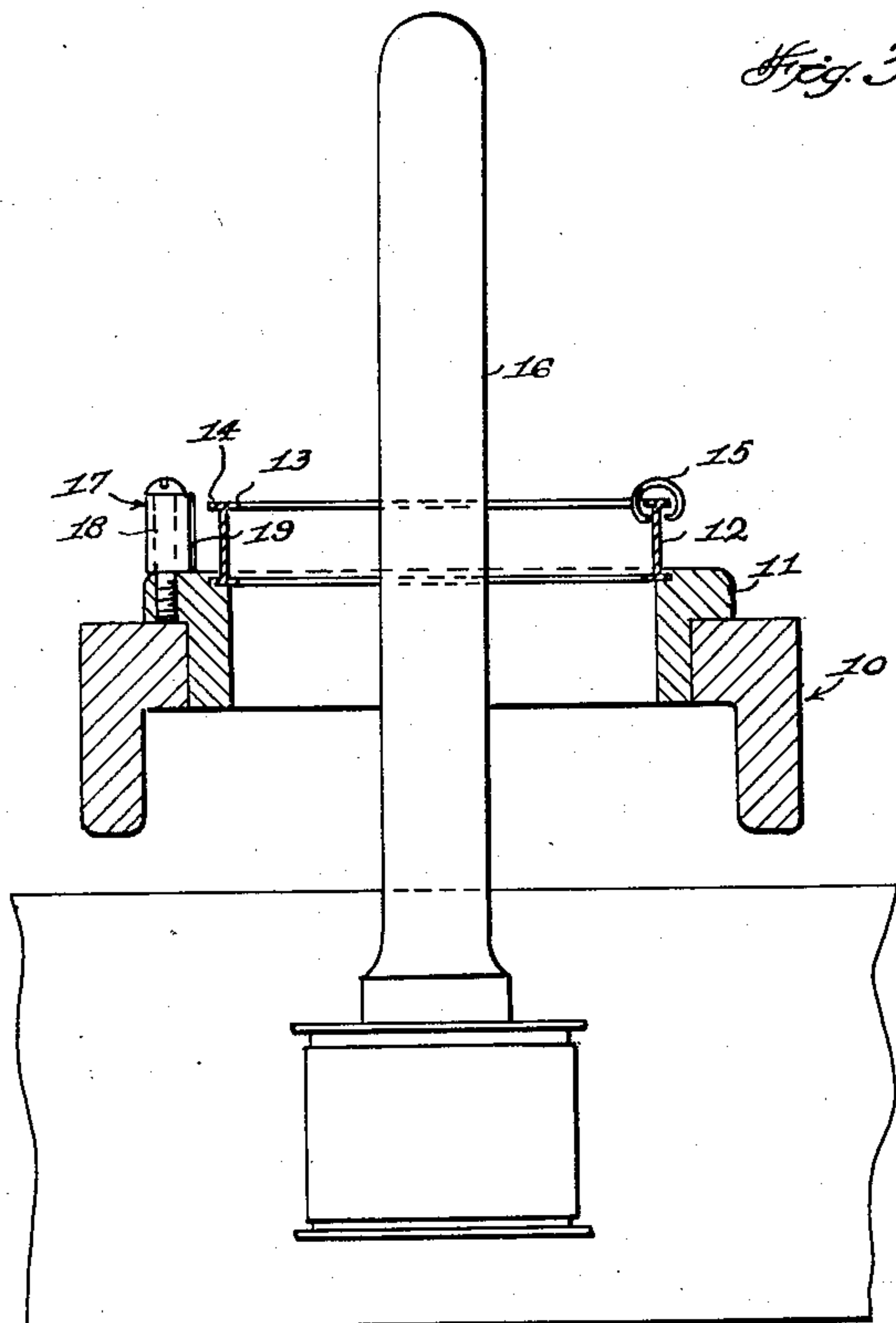


Fig. 2.

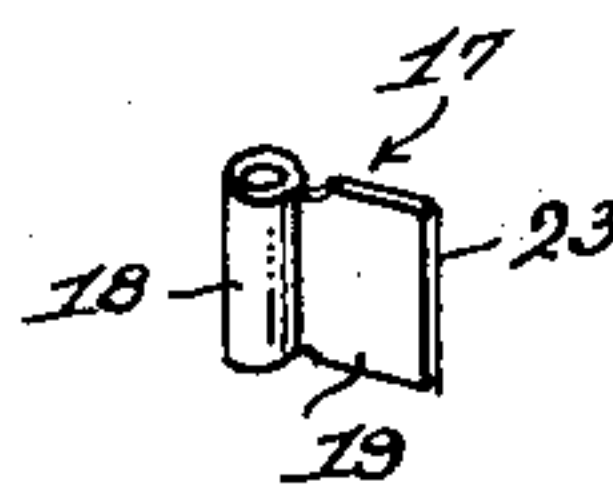


Fig. 4.

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## CLEANER FOR SPINNING RING TRAVELERS

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3 Claims. (Cl. 57—57)

This invention relates to spinning apparatus in which yarn is wound on a bobbin and more especially to an improved traveler cleaner.

An object of this invention is to provide in a spinning ring having a traveler, means whereby lint or the like which tends to cling to the traveler will be removed from the traveler during the course of the movement of the traveler about the ring.

Another object of this invention is to provide a cleaning means for a traveler which can be easily and quickly mounted on the present construction of spinning ring holders.

A further object of this invention is to provide a cleaning means for a traveler which is adjustable relative to the outer edge of the ring so that the cleaner may be used with travelers of various sizes.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts, hereinafter more fully described and pointed out in the claims, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

Referring to the drawing:

Figure 1 is a plan view of a spinning ring and traveler having the cleaner constructed according to an embodiment of this invention mounted thereon.

Fig. 2 is a sectional view taken on line 2—2 of Fig. 1.

Fig. 3 is an exploded side elevation partly in section showing the spinning ring and cleaner.

Fig. 4 is a perspective view of the cleaner.

Referring to the drawing, the numeral 10 designates generally a ring rail of a spinning frame which has mounted therein, a spinning ring structure including a lower ring or holder 11 and an upper ring 12. The ring 12 is provided with inner and outer flanges 13 and 14 at the upper edge thereof and a traveler 15 is adapted to encompass the flanges 13 and 14 and to freely rotate about the upper edge of the ring member 12 during spinning.

In order to provide a means whereby the traveler will be maintained in a clean condition as the yarn is being wound upon a bobbin mounted on a centrally disposed spindle 16, I have provided a cleaner generally indicated at 17. The cleaner 17 is formed of a cylindrical barrel or looped portion 18 with a flat blade 19 extending therefrom. The cleaner 17 is mounted in an upright position on the base ring 11 at a point laterally of the spinning ring 12. A threaded opening 20 is formed in the holder 11 and a screw 21 having a head 22 is extended through the bore of the looped element 18 and is threaded into the opening 20. The blade 19 is preferably mounted in a position confronting the rotation of the traveler 15 so that any lint or the like which is caught by the traveler 15, will strike the forward vertical edge 23 of the blade 19. In the mounting of the blade 19 this blade is dis-

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posed directed inwardly toward the periphery of the upper flange 14 and is spaced therefrom a sufficient distance so that the traveler 15 may freely rotate about the flanges 13 and 14 of ring 12. If desired, one or more of these cleaners may be disposed on the ring 12.

The provision of a cleaner which can be easily and quickly adjusted with respect to the traveler, permits the use of travelers of various sizes and also permits the use of multiple cleaners where such multiple cleaners are considered advisable or necessary.

The cleaner 17 may be mounted on the present construction of spinning rings, it only being necessary to provide a threaded opening 20 laterally of the upper ring 12. The cleaner 17 can then be secured by means of the screw 21 at one side of the spinning ring 12 with the blade 19 directed oppositely from the rotation of the traveler 15, as shown by arrows 24 in Fig. 1. The blade 19 is preferably substantially rectangular and vertically disposed. The looped element 18 is shown forming a vertical bore for passage of the screw 21. The blade 19 and looped element 18 are shown constructed of relatively rigid sheet material and are preferably integral with each other, the axis of the bore of the looped element 18 being preferably aligned with the blade 19. The cleaner may be adapted for use with a traveler on yarn of right or left hand twist since the screw 21 may be loosened and the blade 19 turned to present the free edge 23 of the blade always facing a direction substantially opposed to the direction of travel of the traveler 15 so that air currents of relatively great intensity are set up to clean the blade 19 as well as the outer portion of the traveler 15. The screw head 22 is positioned preferably above the ring 12, so as to be relatively free from lint deposits and the threaded portion of the screw 21 supports the looped portion 18 through its length. The bore may be formed from a looped portion 18 which is not closed but which serves to engage the screw 21.

What is claimed is:

1. A traveler cleaner for use with a spinning ring having a holder and a screw threadably fixing said cleaner with respect to the ring including, a relatively thin blade constructed of relatively rigid sheet material, and a looped portion integral with one of the edges of said blade forming a vertical bore substantially coextensive with said edge of said blade so that the screw passes through the bore of the looped portion so as to adjustably fix the blade with respect to said ring in a position laterally spaced from the path of a traveler so that said looped portion is positioned adjacent the periphery of the holder and the free edge of the blade is positioned adjacent the ring whereby, the blade is disposed so that the free edge of said blade faces in a direction substantially opposed to the direction of the path of travel of the traveler as the traveler approaches the cleaner.

2. The structure set forth in claim 1, in which the central vertical axis of said bore is in alignment with said blade and in which the looped portion and blade extend above the traveler.

3. A traveler cleaner for use with a spinning ring having a holder including, a screw threadably fixing said cleaner with respect to said ring, a flat substantially rectangular relatively thin blade, and an element having an axial bore therein, said element having fixed connection with one edge of said blade being substantially coextensive therewith so that the bore is aligned with the blade whereby, said screw passes through the bore of said element to adjustably fix the blade with respect to the ring with the blade laterally spaced from the path of a traveler so that the element is positioned adjacent the periphery of the holder and the free edge of the blade is positioned adjacent the ring, whereby the free edge of said blade



faces in a direction opposed to the direction of the path of travel of the traveler as the traveler approaches the cleaner.

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