No. 865,242. PATENTED SEPT. 3, 1907.

T. DEMOULIN.

RING TRAVELER FOR RING SPINNING AND RING TWISTING FRAMES.

APPLICATION FILED DEC. 8, 1906.

Fig. 1.

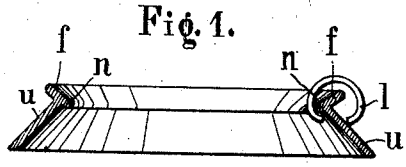


Fig. 2.

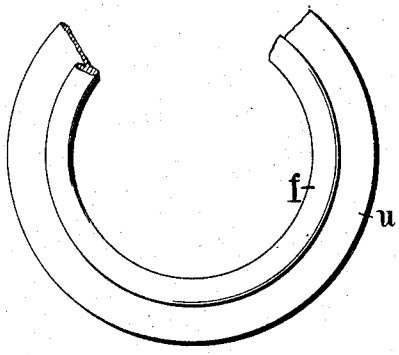
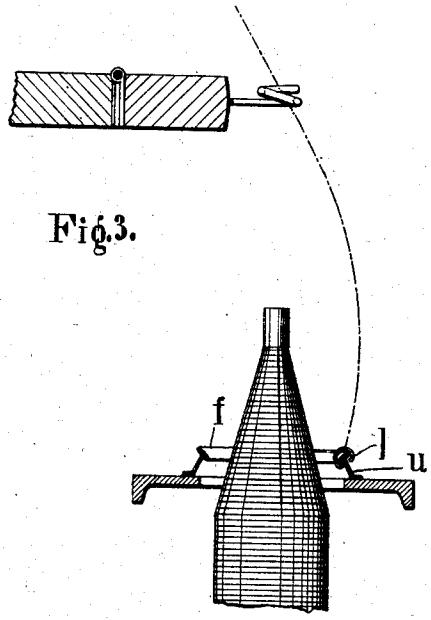


Fig. 3.



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UNITED STATES PATENT OFFICE.

THEODOR DEMOULIN, OF BIELITZ, AUSTRIA-HUNGARY.

RING-TRAVELER FOR RING-SPINNING AND RING-TWISTING FRAMES.

No. 865,242. Specification of Letters Patent. Patented Sept. 3, 1907.

Application filed December 8, 1906. Serial No. 346,972.

To all whom it may concern:

Be it known that I, THEODOR DEMOULIN, of Fabriksgasse 2, Bielitz, Austrian Silesia, in Austria-Hungary, have invented new and useful Improvements in Ring-Travelers for Ring-Spinning and Ring-Twisting Frames, of which the following is a specification.

This invention relates to a ring traveler which runs upon a track that is unsymmetrically mounted in the usual manner upon a base of conical form. The arrangement, however, differs from that heretofore adopted in devices of similar construction in consequence of the fact that the track is mounted on the base in such a manner that it is inclined to the horizontal. By this means not only are the friction surfaces considerably decreased, but the traveler is maintained in such a relation to the track *f* that its path runs always concentric with the ring and that it is carried along smoothly in all phases of the formation of the cop.

The fact that the traveler is so easily carried along when the spindle is set going enables fibrous material of a very low grade to be spun. The easy movement of the traveler on the ring due to the alteration made in the friction surfaces, moreover, secures the still greater advantage that, when very high numbers of yarn are being spun there can be employed travelers that are several degrees stronger than those which could heretofore be made use of under like circumstances; the constructions heretofore usual necessitating the use of very fine travelers which, when the friction surfaces are very large, are of necessity quickly worn out, and thereby injuriously affect the spinning.

By means of apparatus in accordance with this invention yarns of every kind and of any degree of strength can be spun, it being quite immaterial whether it is warp or weft, of long or short staple, which is spun, whether the spindle rotates rapidly, or but little twist is given to the yarn.

Figure 1 of the accompanying drawings illustrates in vertical section a traveler in accordance with this invention; Fig. 2 shows the same in plan and Fig. 3 shows it connected with the bobbin.

The essential novelty of the construction consists, as already stated, in the fact that the track *f* is so mounted upon the conical base *u* as to be inclined to the horizontal, the track being arranged unsymmetrically in relation to the supporting portion *u* in such a manner as to leave on the inner surface of the ring only a very narrow projecting ledge *n*, the remainder of the width of the track being on the outside of the portion *u*.

In consequence of centrifugal force and of the drawing of the thread the traveler *l* slides along the projecting ledge *n* with which it makes contact at one point, while a second point is supported, as shown in the drawing, by the conical supporting portion *u*.

The projecting ledge *n* forms as it were a fulcrum for the traveler, around which it changes its position in relation to the conical portion *u* by means of its second point of contact whenever the tension of the thread is varied, the part *u* serving at the same time to limit its movement when the tension of the thread is slackened and it comes to rest.

Having thus declared the nature of my said invention and in what manner it is to be performed I declare that what I claim is:—

A ring comprising a conical supporting portion and a track at the upper end of and extending inwardly and outwardly from said supporting portion, said track being inclined downwardly and inwardly toward the interior of the supporting portion and the inwardly extending portion being narrower than the outwardly extending portion thereof, combined with a traveler to straddle said track and part of said conical supporting portion, said traveler during normal action engaging two points only of the ring, namely, on the under surface of the narrower portion of the track and the exterior surface of the conical supporting portion.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

THEODOR DEMOULIN.

Witnesses:
FRIED. RUNGE,
ALVESTO S. HOGUE.