May 30, 1933. A. L. CORADI 1,912,256

THREAD GUIDE AND TRAVERSE BAR BRACKET

Filed June 16, 1931

Fig. 1.

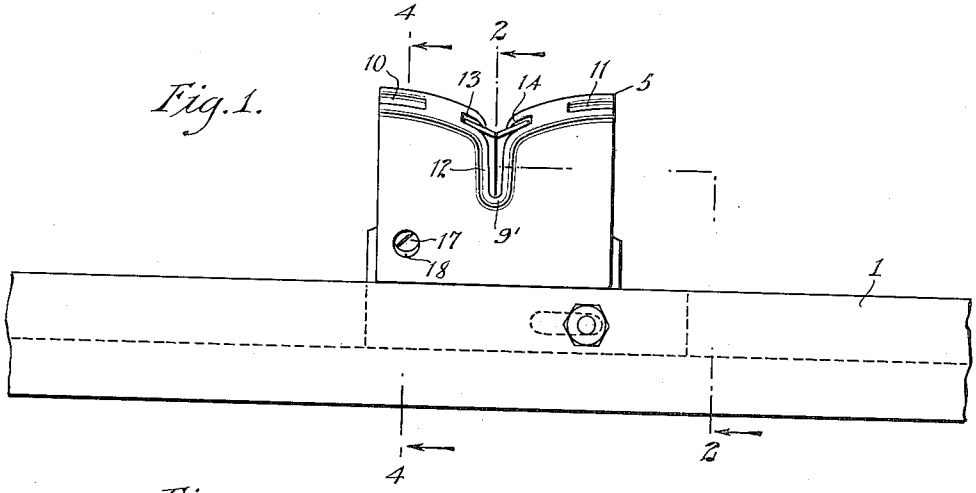


Fig. 2.

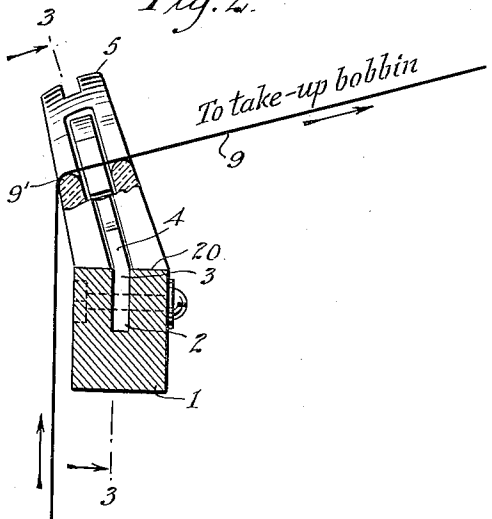


Fig. 3.

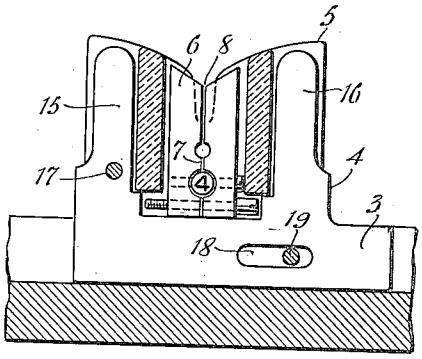


Fig. 4.

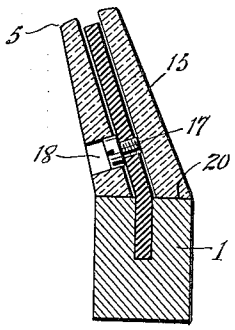
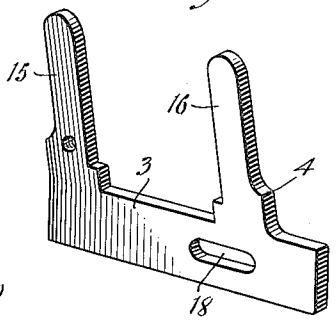


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE

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THREAD GUIDE AND TRAVERSE BAR BRACKET

Application filed June 16, 1931. Serial No. 544,851.

This invention relates to a thread guide and also to a combined thread guide and traverse bar to be used on winding machines or other machines as desired, the object being to present a structure which may be easily adjusted and which will hold a thread cleaner as the thread is guided to a winding bobbin.

Another object of the invention is to provide a thread guide adapted to be removably mounted on a traverse bar with the parts so arranged that the guide will be tilted in order that the thread may move vertically upwardly and engage a rounded guiding groove when contacting with the traverse bar.

A further object of the invention is to provide a thread guide having a guiding porcelain and a bracket, the porcelain having a base or bottom surface at such an angle as to cause the porcelain to be inclined when mounted on a horizontal surface, the bracket being correspondingly formed to firmly hold the porcelain on a traverse bar or other support while permitting the same to be quickly removed at any time.

In the accompanying drawing,

Figure 1 is a front view of a thread guide and traverse bar, the guiding bar disclosing a practical embodiment of the invention.

Figure 2 is a sectional view through Figure 1 on line 2—2, a thread and part of a supply bobbin being shown in connection therewith.

Figure 3 is a sectional view through Figure 2 approximately on line 3—3.

Figure 4 is a sectional view through Figure 1 on line 4—4.

Figure 5 is a detailed perspective view of the bracket shown in Figure 3.

Referring to the accompanying drawing by numerals, 1 indicates a traverse bar provided with a longitudinally positioned slot 2 for receiving the base 3 of the bracket 4. This bracket is adapted to receive a guiding porcelain 5 and hold the same firmly on the traverse bar 1. In cleaning and winding machines, a traverse bar is used similar to traverse bar 1 and a number of guides are arranged thereon so that a number of threads may be cleaned and wound at the same time. In the present invention, the guide is intended particularly for machines of this kind and consequently porcelain 5 carries a cleaner 6 which is, generally speaking, two rectangular pieces of metal clamped together by a suitable clamping screw but held slightly apart by a shim 7 whereby a slot 8 will be presented through which the thread 9 passes. This cleaner is adapted to clean any protuberances or enlargements from the thread so that after the thread passes therethrough it will be of a desired size. The use of cleaners of this kind is old and well known and therefore this cleaner forms no part of the present invention except in combination. Heretofore, various forms of holders have been provided for the cleaners, said holders acting as guides for guiding the thread to the cleaners. It will be evident that a thread even though it may be silk, will wear any surface over which it rubs and consequently in the present invention, the guide has been made from porcelain and provided with a rounded edge 9′ over which the thread passes to the take-up bobbin. Porcelain 5, as illustrated in the drawing, is provided with side grooves 10 and 11 and a central notch 12. Central grooves 13 and 14 are provided for accommodating the cleaner 6 so that the slot or opening 8 will be positioned substantially centrally of the notch 12 as illustrated in Figure 1. The grooves 10 and 11 accommodate the arms 15 and 16 of the bracket 4 and the porcelain 5 is rigidly connected with the bracket through the action of screw 17. This screw is positioned with its head in an aperture 18 in porcelain 5, as shown in Figure 4, while the body of this screw is screwed into a threaded aperture in the arm 15 for positively locking the bracket and porcelain together.

The base 3 of the bracket is provided with a slot 19 through which the clamping screw 19′ extends. Said clamping screw is shown as a bolt and extends through the traverse bar 1 as illustrated in dotted lines on Figure 2, thus clamping the bracket 4 in place. By reason of the slot 19, the bracket may be adjusted longitudinally of the traverse bar. As illustrated in Figure 2, the bottom surface 20 of the porcelain 5 is positioned at

such an angle to the side surface of the porcelain that the entire porcelain will incline sufficiently to cause the thread 9 to be held out of contact with any part of the machine until it passes over the curved surface 9'. It will thus be seen that the device includes the holding bracket 4 and the porcelain guide 5. These members are associated in operative position with the bar 1 and this bar is provided with a groove 2 especially to receive the base 3, but the parts are proportioned so that when the base 3 is in the groove 2, the holding bracket will hold the porcelain 5 in good contact with the top surface of traverse bar 1.

I claim:

1. A device of the character described comprising a traverse bar formed with a longitudinal slot, a metal bracket formed with a base slidably fitted into said slot and a pair of arms extending from the slot, said base having a slot, means for clamping said base to said traverse bar, said means being smaller than the slot in said base and extending through said rail and the slot in said base whereby said base may be adjusted longitudinally of the bar without removal therefrom, a porcelain guide slidably mounted on said arms and positioned so that its base will rest on the top of said traverse bar and means for securing the porcelain guide to the bracket.

2. A thread guide mechanism including a traverse bar having a flat horizontal upper surface, a porcelain guide having a chamfered base arranged at such an angle that when resting on said flat horizontal surface, the upper part of the guide will be at an angle to the vertical, and a bracket for holding the porcelain on the traverse bar, said bracket having a base rigidly secured to said bar and a pair of upwardly extending arms slidingly engaging said porcelain guide.

3. A thread guide mechanism including a porcelain having a thread guiding notch and a pair of spaced openings, a bracket for supporting said porcelain, said bracket being formed with a pair of spaced arms extending into said spaced openings, said porcelain having an aperture, and one of the arms of said bracket having a threaded aperture and a screw positioned with its head in the aperture of said porcelain and the threaded part in the threaded aperture of said arm whereby the bracket and porcelain are locked together.

4. A thread guide mechanism including a traverse bar having a horizontal upper surface and a groove extending downwardly from said upper surface, a metallic bracket having a base fitting into said groove and a pair of arms extending from the base at an angle to the vertical, a porcelain guide carried by said arms provided with a thread guiding notch, the bottom of said porcelain being adapted to fit flatwise against the upper surface of the traverse bar while the porcelain remains at an angle to the vertical, said base having a slot and a bolt extending through said traverse bar in said slot for adjustably clamping the base to the traverse bar.

5. A thread guide mechanism including a traverse bar having a horizontal upper surface and a groove extending downwardly from said upper surface, a metallic bracket having a base fitted into said grove and a pair of arms extending upwardly from the base, a porcelain guide carried by said arms provided with a thread guiding notch, the bottom of said porcelain being adapted to fit flatwise against the surface of the traverse bar, said base having a slot and a bolt extending through said traverse bar through said slot for adjustably clamping the base to the traverse bar.

6. In a device of the character described, a bar having a flat horizontal upper surface, a porcelain guide having a flat bottom fitting flatwise against the upper surface of said bar, said porcelain having an upper part extending at an angle to the vertical, said upper part having a straight guiding notch and a groove at each end and a bracket rigidly secured to said bar formed with means slidingly mounted in said end slots for holding the porcelain guide on said bar.

7. A thread guide mechanism including a traverse bar having a longitudinally positioned slot, a metallic bracket provided with a base engaging said bar and fitting slidingly in said slot, said base having a longitudinally extending slot and a pair of arms extending upwardly and at an angle from said base, a bolt extending through said bar and the slot in said base for adjustably clamping said base to said bar, and a porcelain guide carried by said arms, said guide being formed with slots at each end for accommodating said arms, said guide being formed with a thread receiving notch, said arms being at such an angle that a thread extending vertically may engage said porcelain in said notch without touching said bar.

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