

939,490.

Fig. 1.

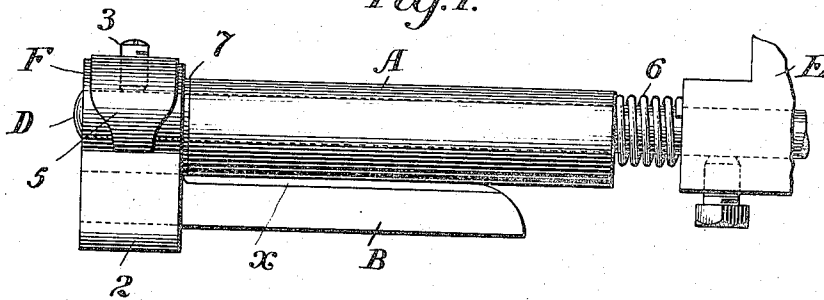


Fig. 2.

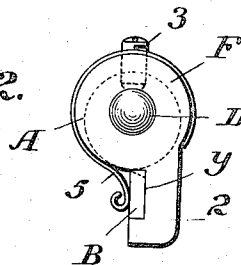
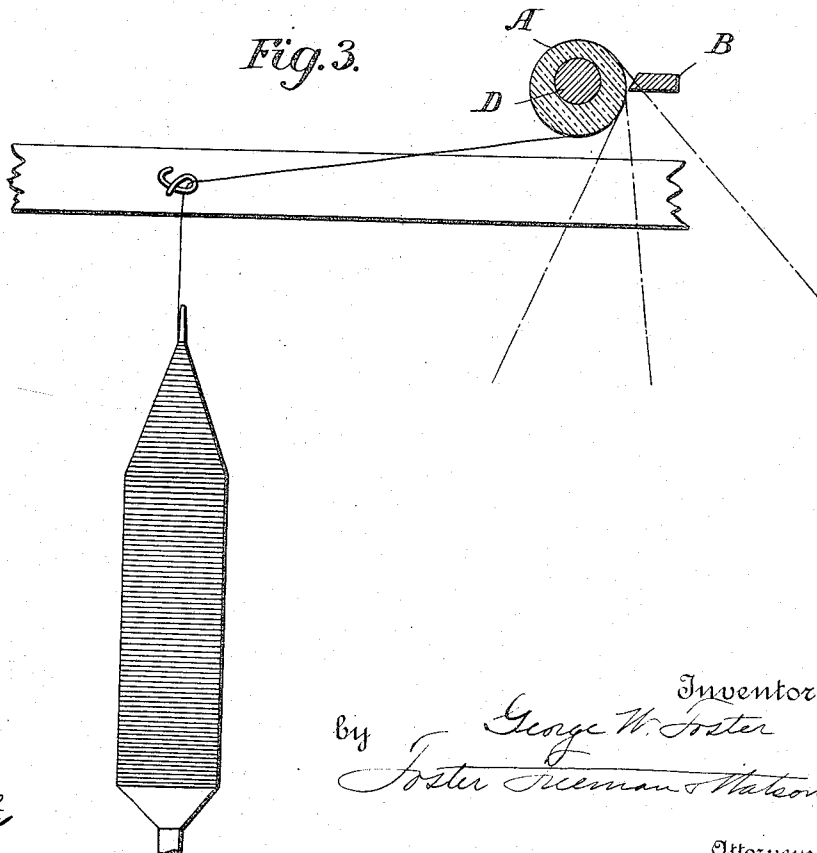


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE WILLMARTH FOSTER, OF LOWELL, MASSACHUSETTS.

YARN-CLEARER OR SLUB-CATCHER.

939,490.

Specification of Letters Patent.

Patented Nov. 9, 1909.

Application filed December 7, 1906. Serial No. 346,799.

To all whom it may concern:

Be it known that I, GEORGE WILLMARTH FOSTER, a citizen of the United States, residing at Lowell, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Yarn-Clearers or Slub-Catchers, of which the following is a specification.

My invention relates to slubbing devices and consists in a slubbing device having two members, one rounded and the other a blade, adjustable in respect to each other, as fully set forth hereinafter and as illustrated in the accompanying drawing, in which—

Figure 1 is a side view of my improved slubbing device; Fig. 2, an end view; and Fig. 3, a cross section illustrating the arrangement in respect to a cop in a slubbing machine.

The device consists essentially of a smooth practically cylindrical member or jaw A and a parallel blade or blade-shaped jaw B preferably having a sharpened or beveled edge *a* with means for adjusting the blade to different positions about the member A, while maintaining it at all times parallel thereto, and means for adjusting one member or the other so as to increase or decrease the distance between the two so that a thread which is carried between the members and resting upon the smooth surface of the member A will have any slubs or enlargements removed by contact with the edge of the member B. These parts may be constructed and arranged so as to secure the necessary relations and adjustments in different ways.

As shown, the member A is a cylinder of any suitable material with a smooth surface. It may be of metal, but preferably it is of glass or porcelain and has an eccentric opening receiving the stud D connected to any suitable support E, and the blade B is carried by the arm 2 of a sleeve or bushing F, which is socketed to receive the end of the stud D, and which may be secured in any suitable position thereon by means of a set screw 3.

The arm 2 has a socket *y* to receive one end of the blade B, which preferably is pressed into the socket by a spring 5 encircling the bushing F.

The sleeve or bushing F constitutes a head which supports the knife or blade member B in fixed relation to the eccentric roller member A, the latter being shown

positioned above the knife upon the stud D, which is secured to the head.

A spring 6 encircling the stud D and bearing against the support E and the adjacent end of the member A forces the latter longitudinally against a washer 7, bearing on the bushing F.

The parts being thus arranged, the spring 6 exerts sufficient force to hold the eccentrically pivoted roller or member A in frictional contact with the washer 7, so that the member A will not turn under the operations in slubbing, but the operator can readily grasp the end of the member A beyond the blade B and turn the said member so as to increase the distance between it and the blade B, as may be required when operating upon threads of different thicknesses and characters. It will thus be seen that the spring 6 constitutes means for retaining the roller or member A in spaced relation with the knife or blade B.

Of course, the blade B might be adjustable to and from the member A, but in any event the face of the member A and the edge of the blade B are always equidistant and parallel so that the thread is properly operated upon, whatever its position, and in consequence of the length of the members A, B, the thread can move back and forth from one position to the other, and thus avoid grooving the face of the member A while the round smooth surface of the member A permits the yarn to pass at any angle to the clearer without abrasion. As the bushing F is rotatably adjustable upon the stud D, this permits the blade B to be set at any desired position radially. The advantage of this is illustrated in Fig. 3, from which it will be seen that if the thread is carried to the slubbing device along any of the dotted lines, shown in said figure, the blade B can always be arranged substantially at right angles to the line of feed of the thread or yarn, so that the latter will take its bearing on the member A, and will not be drawn across the edge of the member B.

While the member B may be secured rigidly to the bushing, I prefer to hold it in contact therewith by a spring so that the operator, by pressing on the end of the blade, may clean the parts from flock, and the blade will then resume its proper position in relation to the member A.

110

Without limiting myself to the construction and arrangement of parts shown, I claim:

1. The combination in a slubbing device
5 of a stud upon a fixed support, a cylinder A having an eccentric opening receiving said stud, means for holding the cylinder frictionally upon the stud, and a member B
10 having a beveled edge and supported radially in respect to the cylinder with its sharp edge adjacent thereto.
2. The combination of a stud, a member A
15 supported thereby, a member B, and a bushing adjustable upon the stud and supporting the member B.
3. The combination with a member A and the rotatable bushing having an arm with a socket, a member B fitting at one end of
20 said socket, and a spring retaining the said member in its socket.
4. In a device for the purpose set forth, a head, a knife blade upon the head, an eccentrically pivoted roller positioned upon
25 the head above the knife, means for retaining the roller in spaced relation with the knife, substantially as described.
5. In a device for the purpose set forth, in combination, a suitable head or support,
30 a blade-shaped jaw mounted on said support, a rotatable eccentrically-mounted jaw arranged on said support parallel with the blade-shaped jaw, and means for holding the rotatable jaw at any point of rotation, whereby the width of the opening between

the jaws is adjusted, the said rotatable jaw 35 being constructed to present in its various adjustments curved surfaces to the thread passing between the jaws.

6. In a device for the purpose set forth, in combination, a suitable support, a blade- 40 shaped jaw mounted on said support, a cylindrical rotatable eccentrically-mounted jaw arranged parallel with the blade-shaped jaw, and means for holding the eccentrically mounted jaw at any point of its rotation, 45 whereby the width of the slit between the jaws is adjusted.

7. In a device for the purpose set forth, in combination, a suitable support, a cylindrical rotatable eccentrically mounted jaw 50 carried by said support, a parallel blade-shaped jaw also carried by said support, and means for holding the rotatable jaw in any desired position, the blade-shaped jaw being movably connected to the support. 55

8. In a device for the purpose set forth, in combination, a suitable support, a cylindrical rotatable eccentrically mounted jaw, and a blade-shaped jaw coacting therewith, said jaws being relatively adjustable on said 60 support whereby the width of the slit between the jaws is adjusted.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE WILLMARTH FOSTER.

Witnesses:

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ARTHUR L. BRYANT.