

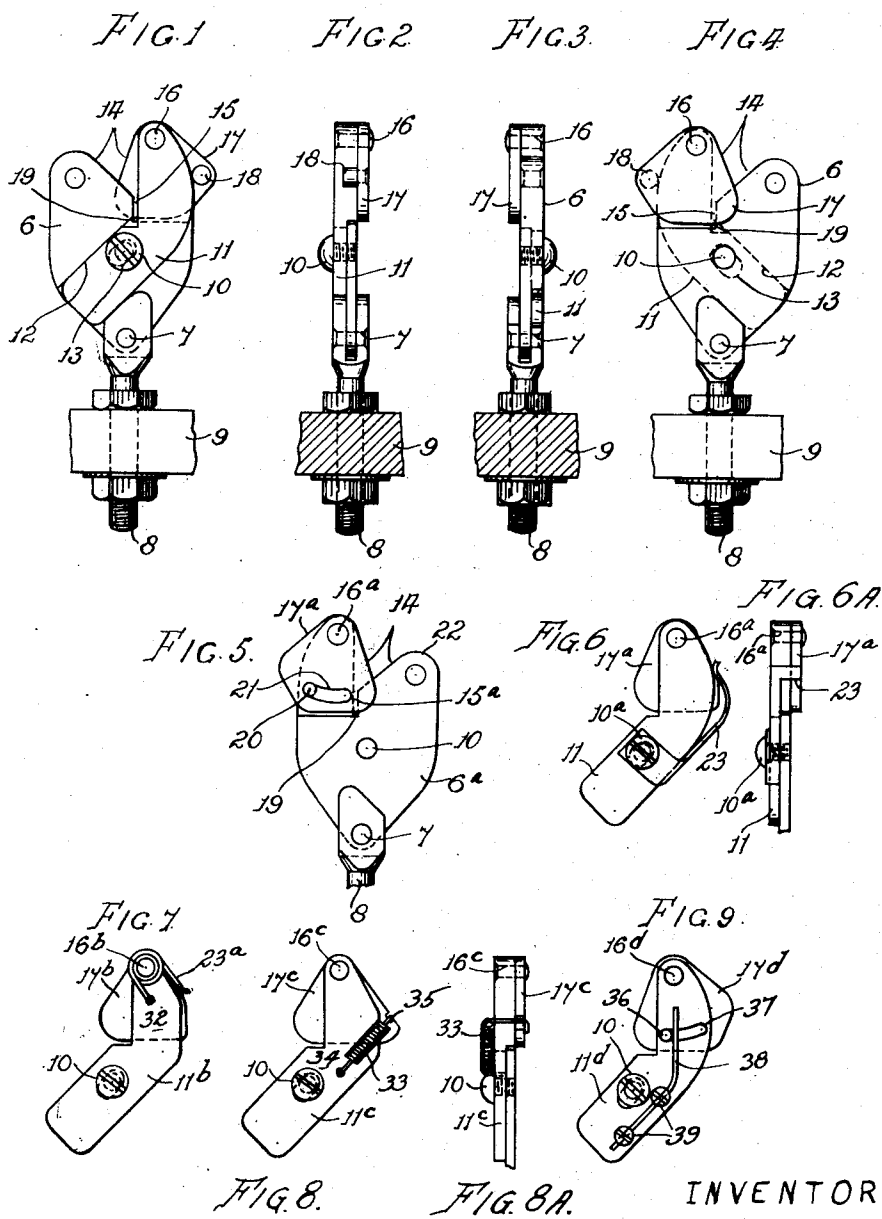
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SLUB CATCHER FOR USE ON TEXTILE MACHINERY

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SLUB CATCHER FOR USE ON TEXTILE MACHINERY

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1 Claim. (Cl. 28—64)

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This invention has reference to slub catchers for use on textile machinery and has for its object to provide a slub catcher which will be effective in catching both long and short slubs, some of which, especially the long ones are not always caught by the existing slub catchers owing to their becoming compressed and slipping through.

The invention is more particularly set forth with reference to the accompanying drawings in which

Fig. 1 is an elevation of the slub catcher looking from the front.

Fig. 2 is an end view from the right of Fig. 1.

Fig. 3 is an end view from the left of Fig. 1.

Fig. 4 is a rear elevational view, and

Fig. 5 shows an alternative construction in rear elevation.

Fig. 6 is a side view and Fig. 6^A an edge view of a modified arrangement of the adjustable member.

Fig. 7 is a rear view of a further embodiment.

Figs. 8 and 8^A are views similar to Figs. 6 and 6^A respectively, but showing another modification of the adjustable member.

Fig. 9 is a rear view of a still further embodiment.

As shown in the drawings and referring first to Figs. 1, 2, 3 and 4, the slub catcher is made with a metal plate 6 mounted at 7 on a screw 8 by which it can be mounted on the frame 9 of the textile machine on which it is to be used. Mounted on the plate 6 by means of a lock screw 10 is a diagonally disposed member 11 adapted to slide in a groove 12 in the metal plate.

This member is formed with a short slot 13 through which the lock screw 10 passes so that its position may be varied within the limits of the slot and when the desired adjustment had been made, it may be locked in place by tightening the screw.

It will be seen from the drawings that the plate and adjustable member form at the top of the device a substantially V-shaped slot 14 which terminates in a narrow slit 15 for the yarn to pass through when the machine is running.

Pivoted to the adjustable member 11 at 16 is a gravity catch 17 adapted to be pushed back by the operation of sliding the yarn down into the slit which will, when the yarn is in the slit, fall back to its normal position i. e. that shown in the drawings. To ensure that the gravity catch comes to rest in this position it is provided with a peg 18 adapted to encounter the adjustable member as shown when the catch swings downwards to close the top of the slit 15 and leaves

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only a small hole 19 through which the yarn can pass, but which will catch the slubs.

The adjustable member 11 may be set in various positions in relation to the plate 6, as hereinafore described, to accommodate various thicknesses of yarn, and it will be appreciated from the drawings that this member is so shaped that the hole 19 remains substantially square no matter what the setting.

Illustrated in Fig. 5 is an alternative construction wherein rotary movement of the gravity catch 17^a about its pivot 16^a is limited in either direction, and for this purpose there is provided on the adjustable member 11^a, a peg 20 adapted to engage in an arcuate slot 21 formed in the gravity catch 17^a circumferential to its pivot 16^a. Thus, when the gravity catch is in its normal working position the peg 20 is situated at one end of the slot 21 as shown, and when the yarn is to be inserted the catch 17^a can be pushed back far enough for complete insertion of the yarn but no further. This ensures that the catch could not, as in the foregoing construction, inadvertently swing right round its pivot to lodge on the top edge 22 of the plate 6^a, in which case it would fail to fall back and cover the top of the slit 15^a when the yarn was fully inserted.

Although the lock screw shown in the drawings is of the ball headed type turned by a screw driver, it is preferable to use a grub screw formed with a specially shaped cavity in the head whereby it may be turned by a special key only, so that the setting of the adjustable member cannot be altered by persons not qualified to do so.

If desired, in order to protect the gravity catch from being handicapped in its movement by fluff or dirt, it may be covered by a protecting cowl particularly at and near the pivot, and in order to prevent it from sticking if dirt or fluff should be deposited on it a spring may be used to assist the downward gravitational movement. Arrangements in which springs are so employed are shown in Figs. 6 to 9 inclusive; as below described.

Figs. 6 and 6^A show a leaf spring 23 mounted on the lock screw 10^a and engaging the side of the catch 17^a, urging it into the working position. In Fig. 7 a coiled spring 23^a is shown mounted on a boss surrounding the catch pivot 16^a, one end of the spring being anchored to the adjustable member 11^b at 32 and the other end of the spring pressing the catch 17^b inwardly.

Figs. 8 and 8^A show another form of spring 33, one end of which is anchored at 34 to the adjustable member 11^c, the other end extending

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over the edge of said member and engaging in a notch 35 in the catch 17^c, which is itself pivoted on the pin 16^c secured in the adjustable member.

A further construction is shown in Fig. 9 wherein the catch 17^d pivoted on a pin 16^d secured in the adjustable member 11^d, said catch having a peg 36 which projects through an arcuate slot 37 in the adjustable member, the peg being engaged by a plain wire spring 38 secured by screws 39 to said adjustable member, so that the spring presses the catch towards the lowermost end of the slot, and hence urges the catch into the working position.

We claim:

A slub catcher for use on textile machinery, comprising a fixed member mounted on the machine, an adjustable member slidable on said fixed member, closely adjacent parallel vertical edges on said fixed member and on said adjustable member to form a slot of adjustable width to catch slubs on yarn passing through said slot, a pivoted gravity catch on said adjustable member and a peg on said gravity catch, said peg pro-

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jecting through a curved slot in said adjustable member to limit the swing of said catch, and a spring fixed at one end on said adjustable member and bearing on said peg to assist the gravity movement of said catch and to prevent any tendency of it to stick.

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