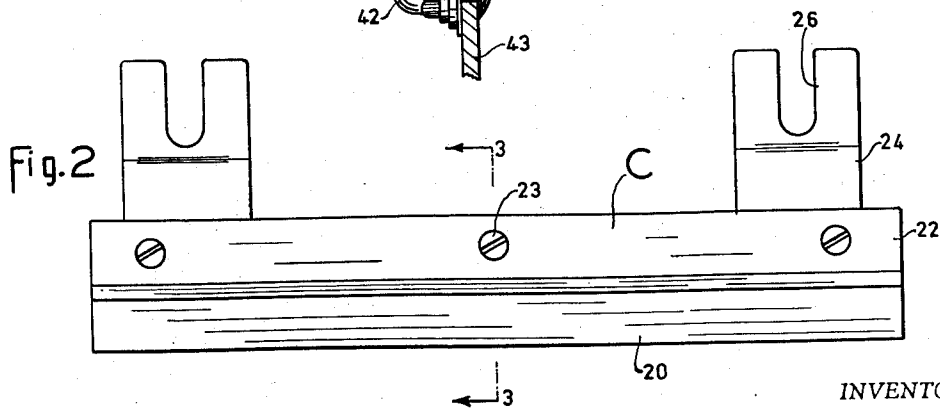
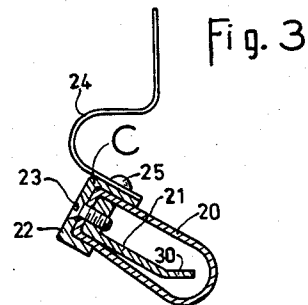
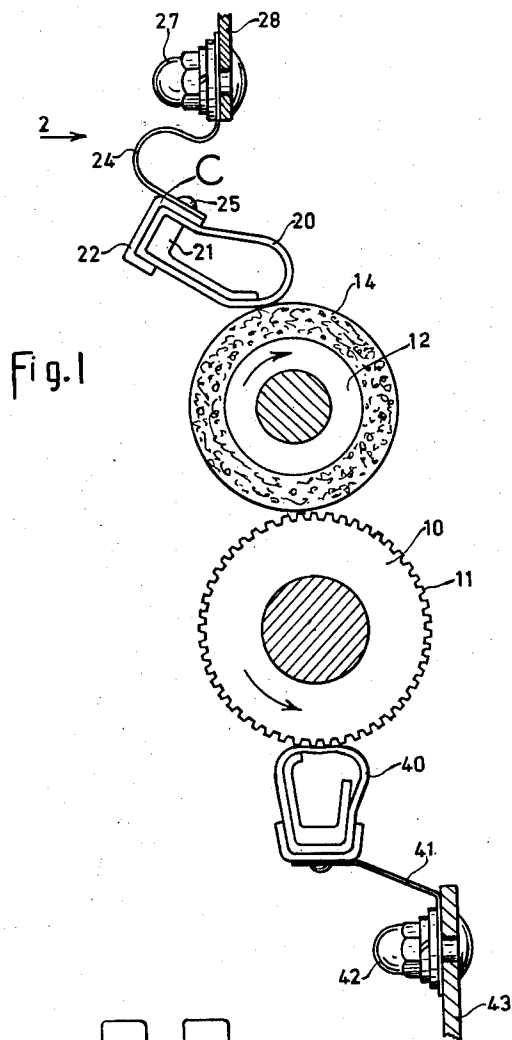


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DRAWING ROLL CLEARER
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2,858,575

DRAWING ROLL CLEARER

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2 Claims. (Cl. 19—139)

This improvement relates to clearers for the rolls of fiber-drafting machines. Such machines comprise pairs of upper and lower rolls, between which ribbons or strands of fibers are drafted.

Both flat and rotary clearers have been commonly used to keep lint or fly from adhering to the working surfaces of such rolls, but such clearers have not been completely successful for high speed operation.

It is the general object of this improvement to provide a clearer of improved and simplified construction and one which is more effective for its intended purpose.

A further object of the invention is to provide a clearer particularly suited for use with a pneumatic lint-removing system, such as is shown in application Serial No. 569,742, filed March 6, 1956.

My invention further relates to arrangements and combinations of parts which will be hereinafter described and more particularly set forth in the appended claims.

A preferred form of the invention is shown in the drawings, in which

Fig. 1 is a sectional end elevation of a pair of drawing rolls having the improved clearer associated therewith;

Fig. 2 is a front elevation of the improved clearer for the upper roll, looking in the direction of the arrow 2 in Fig. 1; and

Fig. 3 is a sectional end elevation, taken along the line 3—3 in Fig. 2.

A conventional pair of drawing rolls 10 and 12 are shown in Fig. 1, the lower roll 10 being provided with flutes or ribs 11 and the upper roll 12 being provided with a rubber or resilient covering 14. The lower roll 10 is driven, and the upper roll 12 is held in engagement with the roll 10 by predetermined pressure applied through suitable weights or springs. The direction of rotation of the rolls is as indicated by the arrows.

The improved clearer C consists of a tube 20 or 40 of rubber or like material, open at its ends and held yieldingly against the working surface of its associated roll.

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The tube 20 for the upper roll is of a length corresponding to the working surface of the roll and is held between an inner clamping member 21 and an outer channel member 22 (Fig. 3). The member 21 is threaded to receive screws 23, and the member 22 is recessed to accommodate the heads of the screws.

Hangers 24 are secured to the member 22, as by rivets 25, and these hangers are provided with openings 26 (Fig. 2) to receive bolts 27 by which the hangers are fastened to a stationary part 28 of the machine. These hangers are preferably made of very thin spring steel. When the clearer is removed from its support 28, the tube 20 assumes the shape shown in Fig. 3.

The inner clamping member 21 is provided with a wide flange 30 which keeps the tube 20 in proper engagement with the roll surface and also keeps it in alignment with the roll axis.

The mounting of the clearer tube 40 for the lower roll is similar to the mounting for the upper clearer tube 20. The hangers or supports 41 for the lower clearer are secured by bolts 42 to a stationary part 43 of the machine.

Machine vibration always exists when the rolls are in operation, and it is found that this vibration is sufficient to produce a pulsatory action on an elastically mounted clearer tube. This action agitates and loosens the fly adhering to the roll surface and thus provides an improved clearing effect. Such action is enhanced if the hangers are highly resilient.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. A clearer adapted to press against a rotated roll which comprises a flexible elongated tubular member, a rigid support for said member and means acting through said support to press said member against said roll and in which the rigid support comprises inner and outer tube-clamping elements and in which the inner element has an offset and longitudinally-extended wide flange which positions and axially aligns said tubular member.

2. The combination in a clearer as set forth in claim 1, in which the inner tube-clamping element engages and presses a portion of the tubular member against the rotated roll.

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