Jan. 12, 1926. 1,569,074

A. F. COLLINS ET AL

SHUTTLE

Filed Sept. 10, 1923

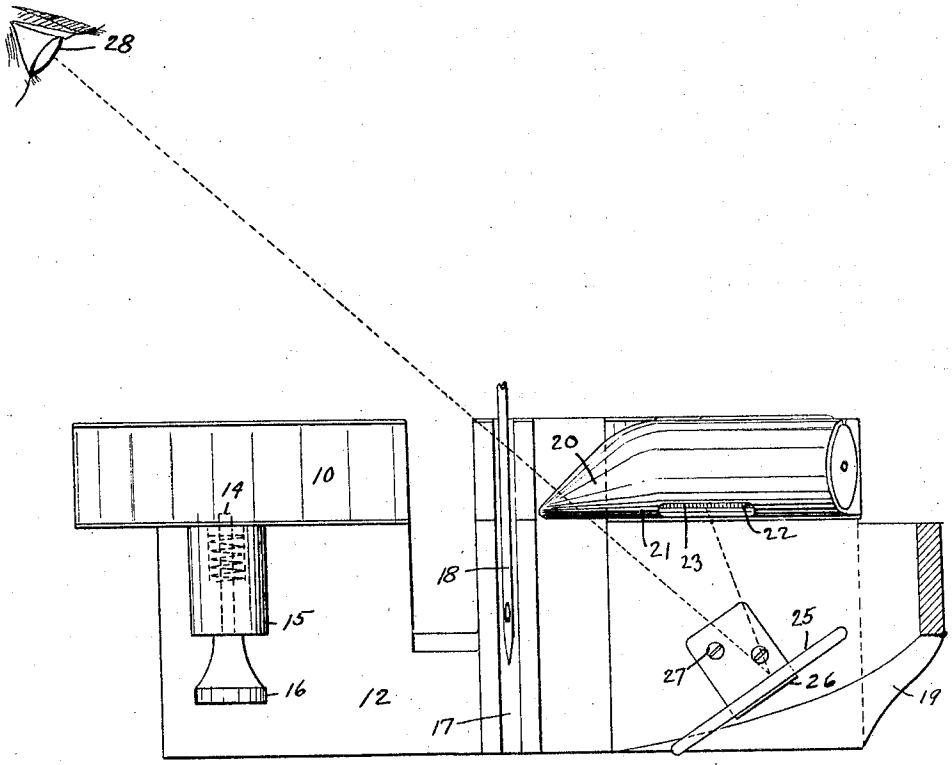


FIG. 2

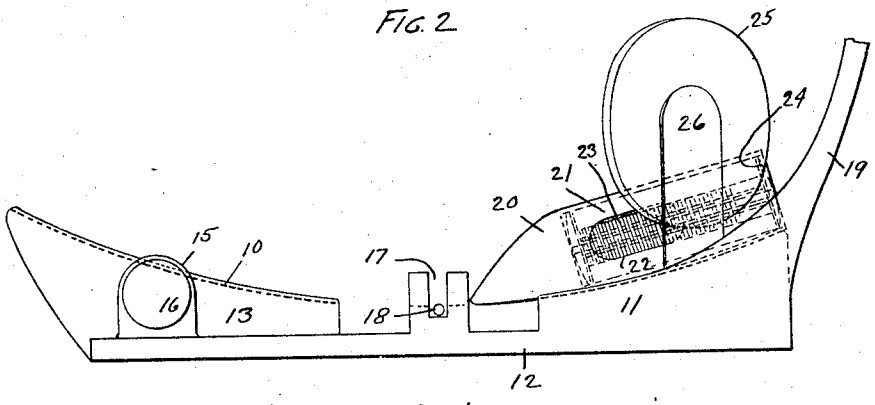


FIG. 1

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UNITED STATES PATENT OFFICE.

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SHUTTLE.

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To all whom it may concern:

Be it hereby known that we, ALFRED F. COLLINS and CHARLES McGINLEY, citizens of the United States, and residents, respectively, of Portland, county of Multnomah, and State of Oregon, and Oswego, county of Clackamas, State of Oregon, have invented a new and useful Shuttle, of which the following is a specification.

This invention relates more particularly to roll edge mattress machines.

The objects of our invention are to provide an exceedingly simple and efficient means for keeping the operator of a roll edge mattress machine informed as to the amount of thread remaining on the bobbin within the shuttle.

A further object is to eliminate thread waste, usually caused by the operator not discovering that a bobbin is empty until he has sewed past the end of the thread, which forces him to back up his machine and rip enough of his sewing to give him an end which can be tied, as well as the reduction of time lost in this operation.

Another object is to improve the appearance of the mattress by eliminating the over-lapping of stitches and also perforations caused by the machine while not sewing and where stitches have been ripped out.

We attain these results in the manner set forth in the following specification and illustrated in the accompanying drawing, in which:-

Figure 1 is a rear elevation of the shuttle-carrying portion of a roll edge mattress machine, and Figure 2 is a plan of Figure 1, showing the position of the operator's eye in relation to the machine.

Similar numbers refer to the same parts throughout the views.

Referring in detail to the drawing, we have illustrated only the shuttle-holding portion of a roll edge mattress machine which has a curved shuttle race 10 consisting of the stationary portion 11 on the base 12 and the removable portion 13 which is locked in place by the pin 14 in the standard 15, which pin is withdrawn after pulling the knob 16 outwardly. A needle race 17 is provided for the needle 18 whose operating parts are not shown. The bracket 19 supports the base 12 and its attached parts from the machine proper.

Referring more particularly to our improvement, attention is drawn to the shuttle 20 in whose rear side 21 we have formed an opening 22 through which the thread 23 may be seen on the bobbin 24. On the upper side of the bracket 19 we have mounted a mirror 25 on a pedestal 26 by means of the screws 27. The location of the operator's eye in an approximate working position is indicated to illustrate the advantage of placing the mirror 25 behind the shuttle 20. The movement of the shuttle 20 in this class of sewing machines is relatively slow and the operator needs only to look into the mirror 25 to find out how much thread remains on the bobbin.

It was formerly the practice when bobbins were rewound by the operator himself, to mark the first thread wound on the bobbin, which would be the last to come off from same, with a colored chalk to assist him in stopping his machine in time to have a tying end exposed to view. The practice now is to wind this thread upon cardboard spools or tubes, which are furnished to the operator, and he merely inserts the removable metal ends which bear on the central pivot within the shuttle.

While we have illustrated our device in connection with particular form of roll edge mattress machines, it will be understood that its use is applicable to any machine employing a shuttle from which thread ls taken on the side toward the operator.

It will also be understood that the exact shape and location of the hole 22 is unimportant, and in some machines the mirror itself may often be dispensed with when the opening can be placed on the side toward the operator.

What we claim as new is:

1. The combination of a longitudinal shuttle member having an aperture in its rear side with a longitudinal bobbin member in said shuttle having its open side visible through said aperture and a stationary mirror behind said shuttle arranged to reflect the image of said shuttle to the eye of the operator in a manner to disclose the

amount of thread on said bobbin within the shuttle while in motion.

2. A shuttle for mattress sewing machines having an opening cut in its rear wall; a bobbin in said shuttle having its open side facing said rear wall; and having a mirror mounted behind said shuttle arranged to reflect the image of said shuttle to the eye of the operator in a manner to disclose the amount of thread on said bobbin within the shuttle while in motion.

ALFRED F. COLLINS.
CHARLES McGINLEY.