

Feb. 22, 1966

I. O. SANDBERG

3,236,245

TUCKING NEEDLE

Filed April 23, 1964

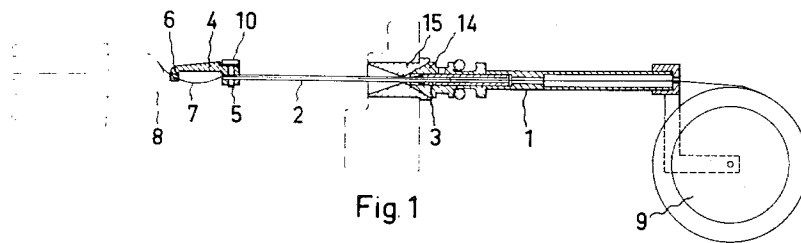


Fig 1

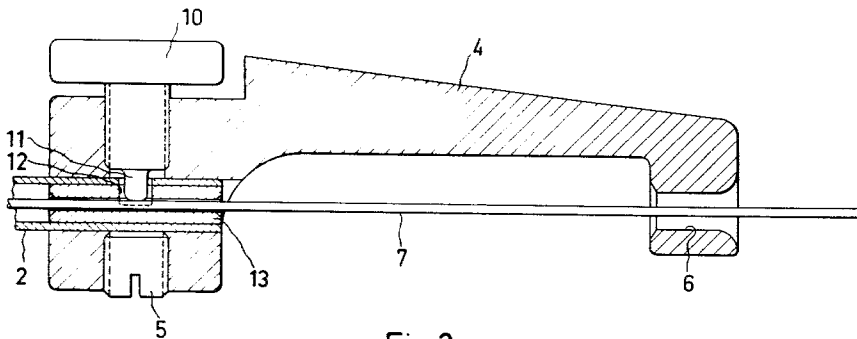


Fig 2

Inventor:
Ivar O. Sandberg
By Weenderoth, Lind and
Ponack
Attorneys

1

3,236,245

TUCKING NEEDLE

Ivar O. Sandberg, Bromma, Sweden, assignor to

Arenco Aktiebolag, Vallingby, Sweden

Filed Apr. 23, 1964, Ser. No. 361,981

Claims priority, application Sweden, May 17, 1963,

5,476/63

1 Claim. (Cl. 131—36)

This invention relates to a device in cigar wrapping machines for applying the tuck end of a wrapper to the end of a cigar bunch, which device comprises a flexible needle attached to a movable holder, the forward end of which needle projecting from the holder being intended to press the tuck end of the wrapper to the end of the bunch. The device is particularly intended to be used for manufacturing cigars of the type having a boll-shaped or conical end against which the tuck end of the wrapper is applied, for example, cigars of the shape called the bolknak-shape.

Owing to the considerable bending of the needle each time the needle is pressed against the end of the bunch it frequently happens that the needle breaks off after a time of use so that it is necessary to insert a new needle and holder in the machine. These frequent changes of needles are time-consuming and expensive and make it necessary to keep tucking needles in store at the machine.

The object of the present invention is to eliminate said disadvantages in a simple and appropriate manner. According to the invention this is achieved by the fact that the needle is slidably journaled in a guiding member in the holder which guiding member is provided with a locking member for locking the needle in a desired position in the guiding member, in addition to which the portion of the needle located in the holder behind the locking member has a length permitting the needle to be drawn out and locked in the desired position after a breakage of the needle or after each of several consecutive breakages.

When a needle is broken it is necessary only to unfasten the residual portion of the needle and pull out the desired length and then lock the needle. In order to facilitate the pulling out of the needle from the guiding member the device is suitably arranged so that the needle is freely accessible between the locking member and the end of the guiding member directed towards the end of the bunch, which details of the guiding member are fixedly joined by means of an arm extending along the needle at a distance from the needle. Advantageously the needle may have such a length that insertion of a new needle in the holder is necessary only after a great number of breakages of the needle. To this end the rear portion of the needle is, according to a preferred embodiment of the invention, wound on a storage bobbin rotatably journaled on the holder or alternatively in the machine stand.

The invention is illustrated in the accompanying drawing in which FIGURE 1, by way of example, shows an embodiment of the invention in section and FIGURE 2 shows an enlarged detail of FIGURE 1.

The device shown in the drawing has a tubular holder 1 in which a thick end portion 3 of a thin tube 2 is fixedly fitted in a boring in the holder. The boring in the holder 1 extends all through the holder and is concentric with the tube 2 the free end of which supports a curved arm 4 secured to the tube by a screw 5 and having an aperture 6 concentric with the tube 2 for guiding the free end of the tucking needle 7. FIGURE 1 shows

2

the position of the holder when the needle is pressed against the end of the bunch, which is designated by 8, and the needle extends from the end 8 of the bunch through the aperture 6, the tube 2 and the boring in the holder 1 to a storage bobbin 9 rotatably journaled on the holder on which bobbin the residual portion of the needle is wound. For locking the needle 7 in any desired position in the guiding member 2, 6 the arm 4 is provided with a locking screw 10 having a stud 11 (FIGURE 2) penetrating an aperture 12 in the walls of the tube 2 and a bushing 13, which latter is fitted in the free end of the tube 2, by means of which stud the needle 7 is pressed against the wall of the bushing 13. The distance between the arm 4 and the needle 7 is great enough to prevent the bent portion of the needle 7 from touching the arm 4 when the end 8 of the bunch is rotated.

When the needle 7 is broken the point of breakage is as a rule located at the aperture 6 or close inside the aperture. The locking screw 10 is then unfastened and the necessary portion of the needle 7 is pulled out simultaneously as a corresponding length is unwound from the storage bobbin 9, and then the locking screw 10 is tightened again.

In the embodiment shown the holder 1 is not rotatably journaled round its longitudinal axis but only swingable and movable to and fro between a rear position and a fore position in a conventional manner, in which latter position the conical sleeve 14 is forced against a conical bushing 15 secured to the machine stand. To this end the needle 7 has a circular cross section. The invention is, however, also applicable in connection with other types of needle-holders and the needle may in some cases consist of a wire having rectangular cross section.

What is claimed is:

1. In a cigar wrapping machine, a mechanism for applying the tuck end of a wrapper to the end of a cigar bunch, particularly a bunch having a boll-shaped or conical end, comprising a frame having a swinging holder slidably mounted therein, an essentially tubular guiding member fixedly attached to said holder and having a free end directed towards the end of the bunch, a flexible tucking needle slidably journaled in said guiding member and having a free end protruding from the free end of said guiding member, means on said guiding member for locking said needle in a predetermined position, said needle having a length permitting the needle to be pulled out and locked in said predetermined position after a breakage of said needle or after each of a number of consecutive breakages, the end portion of said guiding member directed towards the end of the bunch consisting of an arm rigidly fixed at one end to a portion of said tubular guiding member and a guiding sleeve secured to the other end of said arm, said arm extending along and at one side only of said needle and at a distance from said needle.

References Cited by the Examiner

UNITED STATES PATENTS

808,745	1/1906	Herrington et al.	131—36
1,128,989	2/1915	Lacroix	131—35 X
2,161,540	6/1939	Tager	242—103
2,486,247	10/1949	Berlin et al.	131—245
2,501,201	3/1950	Wilcox	242—129 X

SAMUEL KOREN, *Primary Examiner*.

H. P. DEELEY, JR., *Assistant Examiner*.