

(No Model.)

J. L. WENTWORTH.

STOP MECHANISM FOR KNITTING MACHINES.

No. 584,251.

Patented June 8, 1897.

Fig. 1.

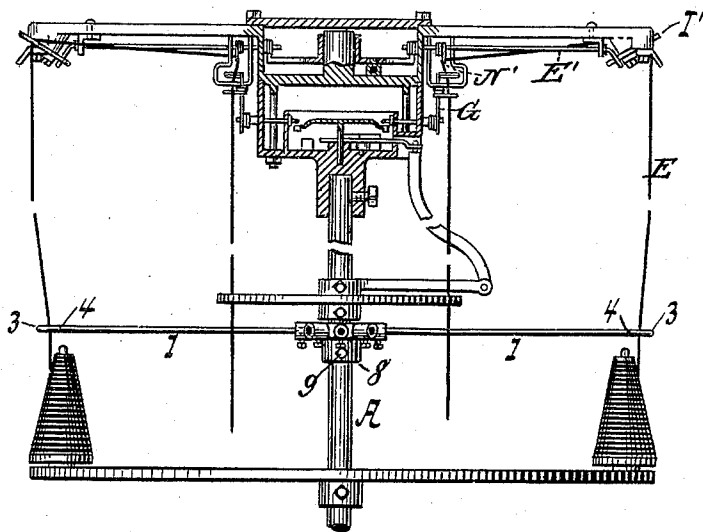


Fig. 2.

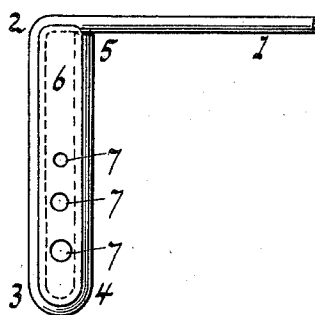
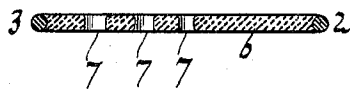


Fig. 3.



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STOP MECHANISM FOR KNITTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 584,251, dated June 8, 1897.

Application filed January 21, 1897. Serial No. 620,071. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. WENTWORTH, a citizen of the United States, residing at Little Falls, in the county of Herkimer and State of New York, have invented new and useful Improvements in Stop Mechanism for Knitting-Machines, of which the following is a specification.

The yarn used in knitting is sometimes found to have bunches which when not detected in time may cause annoyance or interruption or unsatisfactory work.

This invention relates to a thread eye or guide which will catch or arrest a bunched part of the yarn to effect a stoppage of the work; and said invention is set forth in the following specification and claim and illustrated in the annexed drawings, in which—

Figure 1 is an elevation of a stop mechanism with yarn-guide. Fig. 2 is a detail plan view of a thread-guide. Fig. 3 is a section along *x x*, Fig. 1.

Secured to or extending from a suitable part or stem A of a knitting-machine is an arm or holder 1, formed of suitably stout wire and having a portion looped or bent, as seen at 2 3 4 5. In said loop is held or clamped or suitably secured a plate 6, perforated as at 7. By having perforations of different sizes different thicknesses of yarn can be properly guided or led through the respective perforations. If seen fit, the plate 6 may have but one perforation. The eye-plate 6 is made of suitable material, as, for example, porcelain, which has been found to have an advantage, as it is not subject to being cut by the yarn, being hard and smooth. Such eye-plate, located a suitable distance, say about two or more inches, from the nose or stem of the yarn-bobbin, will properly guide the yarn off the bobbin in its passage to the work. The eyes 7 when circular will catch any bunch on the yarn, no matter whether said bunch be flat or of other shape.

One or more arms 1, with guide-plate, can be provided, as may be required. In Fig. 1

the thread guides or catches are shown in connection with a stop mechanism such as described in United States Patent No. 510,839, granted December 12, 1893, for stop mechanism for knitting-machine, the yarn after leaving the bobbin passing through the thread-eye to the feeler or forked arm I', described in said patent.

The eye-plate 6 can be secured to holder 1 by any suitable means, such connection being not confined to the loop shown at 2 3 4 5.

As described in United States Letters Patent No. 445,465, dated January 27, 1891, and No. 510,839, dated December 12, 1893, the releasing-finger G is allowed to drop by the thread E dropping off hook N', and when said finger drops the machine is stopped. An excessive strain, as caused, for example, by a kink or knot of the thread catching in fork I', will swing hook N' to the releasing position for the thread to drop off the hook. It has been found, however, in practice that the fork I' may at times allow the passage of a bunch on the thread or yarn, which bunch would not pass a circular hole, as 7. If the thread or yarn now catches in the perforated plate 6, the strain on the thread will become excessive, just as if the yarn had caught in fork I', such excessive strain, as before stated, causing the hook N' to swing to position for releasing the thread.

The arm 1 is shown held by a collar 8, clamped or adjustably secured to stem A by set-screw 9. The plate 6 is shown laterally projecting from arm 1, so that plate 6 will extend over the bobbin. By loosening screw 9 and turning collar 8 on stem A, as required, the arm 1 will be swung or adjusted to bring one or another of the variously-sized holes over the bobbin or into alinement with the thread or yarn E coming from the bobbin.

What I claim as new, and desire to secure by Letters Patent, is—

A stem or support A, and a bobbin or thread-supply, combined with an arm made to extend from the stem to the bobbin and provided

with a laterally-projecting eye-plate held by
said arm over the bobbin or in the path of
the yarn coming from said bobbin, said plate
having a series of eyes and the arm being ro-
5 tatively secured to the stem and adjustable
for setting one or another of the eyes to the
yarn-path, substantially as described.

In testimony whereof I have hereunto set
my hand in the presence of two subscribing
witnesses.

JOHN L. WENTWORTH.

Witnesses:

S. H. NEWBERRY,
FRANK CRAWFORD.