

J. H. BRINSLEY.
ATTACHMENT FOR KNITTING MACHINES.
APPLICATION FILED FEB. 2, 1910.

982,238.

Patented Jan. 24, 1911.

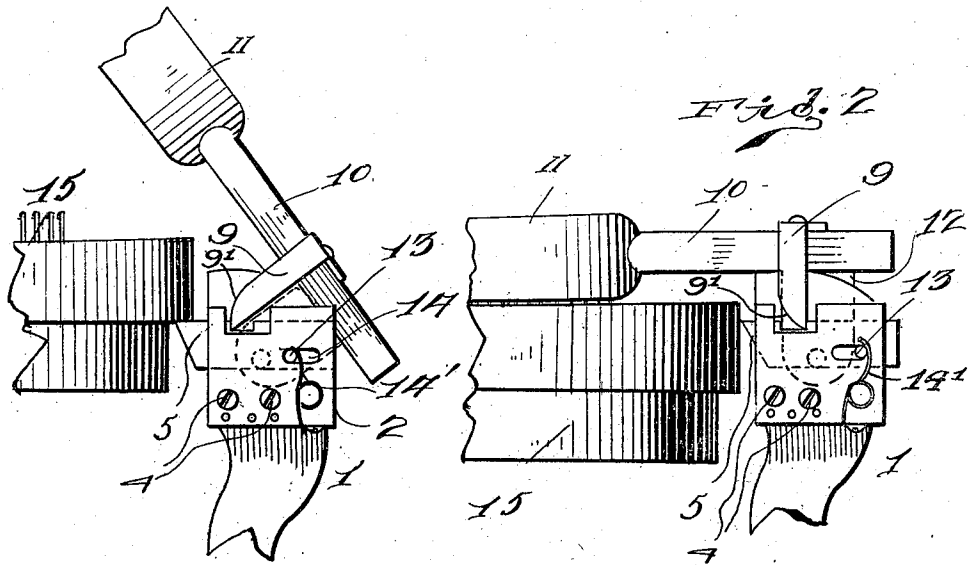


Fig. 1.

Fig. 2.

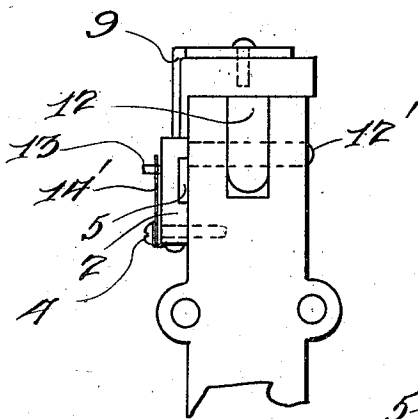


Fig. 3.

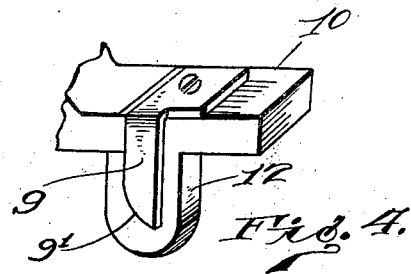


Fig. 4.

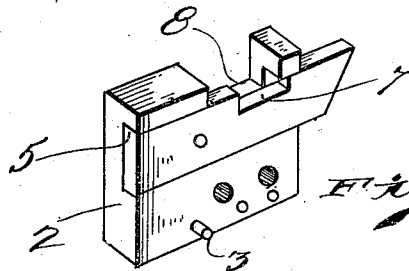


Fig. 5.

Witnesses
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UNITED STATES PATENT OFFICE.

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ATTACHMENT FOR KNITTING-MACHINES.

982,238.

Specification of Letters Patent.

Patented Jan. 24, 1911.

Application filed February 2, 1910. Serial No. 541,464.

To all whom it may concern:

Be it known that I, JAMES H. BRINSLEY, a citizen of the United States of America, residing at Mankato, in the county of Blue Earth and State of Minnesota, have invented certain new and useful Improvements in Attachments for Knitting-Machines, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to circular knitting machines, and has for its object to provide an attachment therefor by means of which when the needle cylinder is raised and the transferring takes place the cylinder will be held up, thus keeping the stitch over the needle latch.

Referring to the accompanying drawing, Figure 1 is a side view, partly broken away, showing a portion of the needle cylinder of a circular knitting machine with the attachment constructed in accordance with this invention mounted on the upper end of a post of a machine with the hinged arm of the latch ring in raised position. Fig. 2 is a similar view, showing the latch ring and needle cylinder in a lowered position. Fig. 3 is a detail view, partly broken away, of the upper rear end of the post. Fig. 4 is an enlarged detail view, partly broken away, of the rear end of the arm of the latch ring. Fig. 5 is an enlarged detail view in perspective of the latch and its mounting detached from the post.

In the accompanying drawing, 1 indicates the upper end of a post of a circular knitting machine, of the type shown in U. S. Patent No. 726,178 granted to G. D. Mayo, April 21, 1903, on the upper end of which is detachably secured the attachment constructed in accordance with this invention, and consisting of a small rectangular plate 2 secured to the upper end of the post 1 by means of a pin 3 and screws 4. Mounted in a longitudinal recess 5 in the side of the plate 2 is a slidable latch 5 having an oblong slot 7 in its upper edge which is in alignment with a slot or cut-away portion 8 in the upper edge of the plate 2. A depending lever 9 is secured to an arm 10 of the latch ring 11, the arm 10 being pivoted to the plate 2 by means of a depending projection 12 engaging the pivot pin 12' mounted in the upper end of the post 1. The latch 6 is provided with a pin 13 which projects through a slot 14, in the side of

the plate 2 and has engaged therewith a spring 14' which serves to move the latch forward. The lower end of the tripping lever 9 projects into the notch 7 of the latch 6, and normally holds it in retracted position against the tension of the spring 14' as shown in Fig. 2. The lower end of the lever 9 is curved at the point 9' in order to permit the necessary play of the lower end 65 of lever 9 in the slot 7.

15 indicates a needle cylinder. It will be seen that by means of this attachment constructed as herein described, when the needle cylinder is raised and work is to be transferred, the latch ring 11 being also raised will cause the lower end of the tripping lever 9 to be moved forward in the slot 7, thereby releasing the latch 5 from locked position and permitting the spring 14' which is normally held under tension to move the latch 5 forward beneath the sinker guide ring on the needle cylinder and hold the needle cylinder in raised position, as shown in Fig. 1. When the latch ring 11 is lowered, the lower end of the tripping lever 9 will be moved back in the slot 7 and engaging the rear end of said slot will move the latch 5 back out of engagement with the sinker guide ring on the needle cylinder and into its normal retracted position with the spring 14' held under tension.

The attachment, which is shown as placed on the hinged arm of the latch ring, may be changed from the back post to the front post, and vice versa, by detaching the plate 2.

By means of this invention the dropping of stitches will be avoided, as well as loss through the carelessness of the operator of the machine.

What I claim as my invention is:—

1. The combination with the needle cylinder of a circular knitting machine, of a latch mechanism for holding said cylinder in elevated position, consisting of a reciprocating latch mounted on the upper end of the post of a circular knitting machine, means for reciprocating said latch, a latch ring having its arm hinged to said post and provided with a dependent arm adjacent to its hinged connection and in engagement with said latch, said latch being adapted to hold the needle cylinder in elevated position.

2. The combination with the needle cylinder of a circular knitting machine, of a latch mechanism for holding said cylinder in elevated position consisting of a reciprocating

cating latch mounted on the upper end of the post of the circular knitting machine, a latch ring having its arm hinged to said post and provided with a depending arm adjacent to its hinged connection and engaging said latch, and means for automatically moving said latch into engagement with the needle cylinder when the latter is in elevated position.

10 3. An attachment of the character described, for a circular knitting machine, consisting of a slotted plate adapted to be attached to a post of a circular knitting machine, means for reciprocating said latch, a
15 slidable latch in said plate, a locking lever engaging said latch and adapted to reciprocate the same in one direction, and a spring on said plate engaging said latch and adapted to move it in the opposite direction.

20 4. An attachment for a circular knitting machine consisting of a slotted plate mounted on the upper end of a post, a slotted reciprocating latch mounted in said plate having a notch, a latch ring having an arm
25 hinged to the top of the post, a locking lever

mounted on said arm and adapted to move said latch into retracted position and a spring connected to said slotted plate and latch and adapted to move the latch into engagement with the needle cylinder when released by said locking lever. 30

5. In a circular knitting machine, a needle cylinder, a post, a latch ring having an arm hinged to said post, a lever depending from said arm, a detachable plate mounted on the
35 upper end of said picker post, a slidable latch mounted on said plate, and provided with a slot engaging the lower end of said locking lever, and held in retracted position thereby and a spring connected to said plate
40 and engaging said latch under tension and adapted to move the latter into engagement with the needle cylinder when the latch ring and needle cylinder are raised.

In testimony whereof I hereunto affix my
signature in presence of two witnesses. 45

JAMES H. BRINSLEY.

Witnesses:

H. F. LEONARD,

G. W. SHEELEY.