

R. W. SCOTT.
WEB HOLDER FOR RIB KNITTING MACHINES.
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Patented Nov. 14, 1911.

1,008,739.

Fig. 1

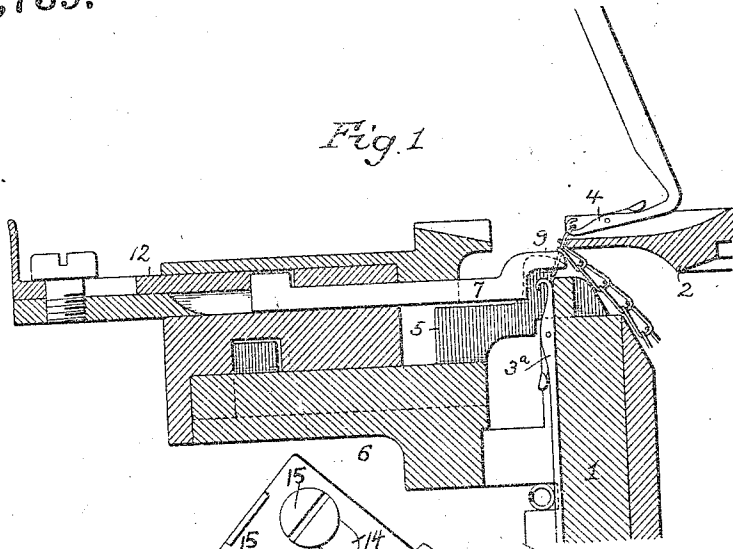
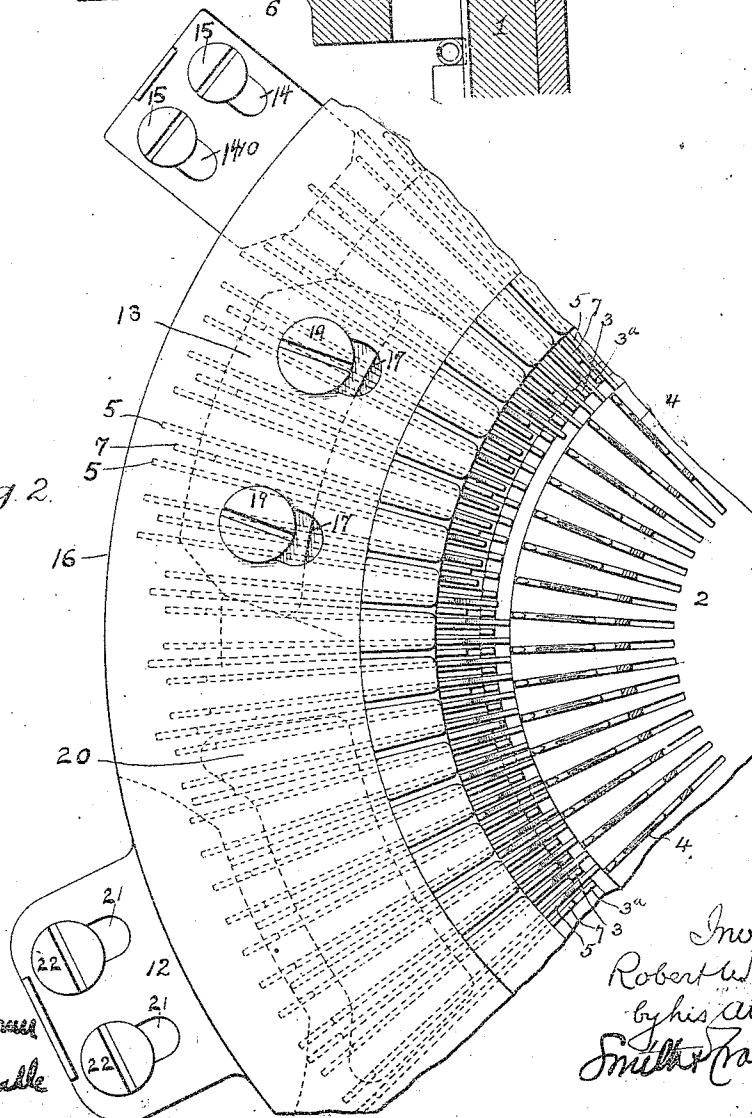


Fig. 2



Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT W. SCOTT, OF LEEDS POINT, NEW JERSEY, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO SCOTT & WILLIAMS, INCORPORATED, OF CAMDEN, NEW JERSEY, A CORPORATION OF NEW JERSEY.

WEB-HOLDER FOR RIB-KNITTING MACHINES.

1,008,739.

Specification of Letters Patent. Patented Nov. 14, 1911.

Application filed July 10, 1906. Serial No. 325,468.

To all whom it may concern:

Be it known that I, ROBERT W. SCOTT, a citizen of the United States, residing in Leeds Point, Atlantic county, New Jersey, have invented certain Improvements in Web-Holders for Rib-Knitting Machines, of which the following is a specification.

The object of my invention is to provide a rib knitting machine with means whereby the "knocking over" of the stitches on the ribbing needles can be effected without the use of weights, draft rolls, or like devices for imparting tension to the knitted web. This object I attain in the manner herein-after set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical sectional view of sufficient of a rib knitting machine to illustrate my invention and Fig. 2 is a plan view of part of the same.

In the drawing, 1 represents the needle cylinder of the machine, 2 a needle dial, 3, 3^a the cylinder needles and 4 the dial needles, which may be operated in order to knit, by any suitable arrangement of cams in a cylinder cam box and dial cam ring. The needle cylinder and dial may be the rotative members of the machine, and may operate in connection with a stationary cylinder cam box and dial cam ring, or the reverse of this arrangement may be adopted, the cam box and the cam ring being the rotative members and the cylinder and dial being stationary.

A set of reciprocating sinkers and web holders 5 operates in conjunction with the cylinder needles in the same manner as in previous machines of this class, these web holders being projected by a cam 10 and retracted by a cam 13, either of which may be moved to operative or inoperative position, the cam 10 having slots 14 for the reception of the clamping screws 15, whereby it is normally retained on the projection of the cam ring 16, and the said cam ring having slots 17 for the reception of the clamping screws 19, whereby the cam 13 is normally retained in position. The carrier 6 in which said sinkers and web holders are mounted is also provided with a set of jacks 7, to which reciprocating movement can be imparted by cams 12 and 20 independent of those which actuate the web holders 5, each of the jacks 7 being provided with a pusher head 9 for acting upon a rib wale of the web which is

being produced upon the needles and imparting inward thrust to said wale, this operation taking place after the knitting yarn has been fed to the dial needles and the latter have been retracted to the knocking over point; and serving to in part such tension to the stitches hanging upon the dial needles as to cause the knocking over of the same without the use of weights or other tension devices acting upon the knitted web which is being fed down through the machine. These pusher jacks 9 during the production of ribbed fabric not only serve to effect the knocking over of the stitches upon the dial needles, but they also perform the function of web holders, hence the use of the web holders 5 during the production of ribbed fabric will not be necessary, and said web holders 5, at such time, may, if desired, be rendered inoperative by retraction of their projecting cam 10, (see Fig. 2.) The cam 12 which projects the pusher jacks 7 also has slots 21 for the reception of its clamping screws 22 so that it is adjustable to operative or inoperative position.

In a machine intended for the production of either ribbed or plain web, however, the web holders 5 coöperate with the cylinder needles when the latter alone are in action in knitting plain web and at such time, the action of the pusher jacks 7 may be discontinued by retraction of their projecting cam 12 (Fig. 2), or the movement of said jacks may be reduced to such an extent as to render them practically inoperative and prevent them from interfering with the movements of the previously inactive cylinder needles 3^a, which are now in action, and which are in the same plane as the pusher jacks.

While I have shown my invention in connection with a circular knitting machine having cylinder and dial, and have selected a particular type of such machine for the purpose of illustrating my invention, it will be evident that it is applicable to circular rib knitting machines of other types, or even to machine having straight needle beds.

I claim:—

1. A rib knitting machine having pusher jacks operating in the same radial planes as the rib needles and acting upon the stitch loops of the rib wales of the web to cause knocking over of the stitches upon the ribbing needles.

2. A rib knitting machine having cylinder needles in line radially with the dial needles, and pusher jacks also in line radially with the dial needles and operating over the tops of the retracted cylinder needles to act upon the stitch loops of the rib wales of the web and cause knocking over of the stitches upon the ribbing needles.
3. A rib knitting machine having pusher jacks for acting upon the rib wales of the web to cause knocking over of the stitches upon the ribbing needles, and means for permitting said pusher jacks to be operative or inoperative as desired.
4. A rib knitting machine having pusher jacks for acting upon the rib wales of the web to cause knocking over of the stitches upon the ribbing needles, and web holders for acting upon the web when the ribbing needles are out of action.
5. A rib knitting machine having pusher jacks for acting upon the rib wales of the web to cause knocking over of the stitches upon the ribbing needles, web holders for acting upon the web when the ribbing needles are out of action, and means for permitting said web holders to be operative or inoperative as desired.
6. A rib knitting machine having pusher jacks for acting upon the rib wales of the web to cause knocking over of the stitches upon the ribbing needles, web holders for acting upon the web when the ribbing needles are out of action, and means for permitting said pusher jacks to be operative or inoperative as desired.
7. A rib knitting machine having pusher jacks for acting upon the rib wales of the web to cause knocking over of the stitches upon the ribbing needles, web holders for acting upon the web when the ribbing needles are out of action, and means for permitting the web holders and pusher jacks to be operative or inoperative.
- In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.
- ROBERT W. SCOTT.
- Witnesses:
HAMILTON D. TURNER,
KATE A. BEADLE.