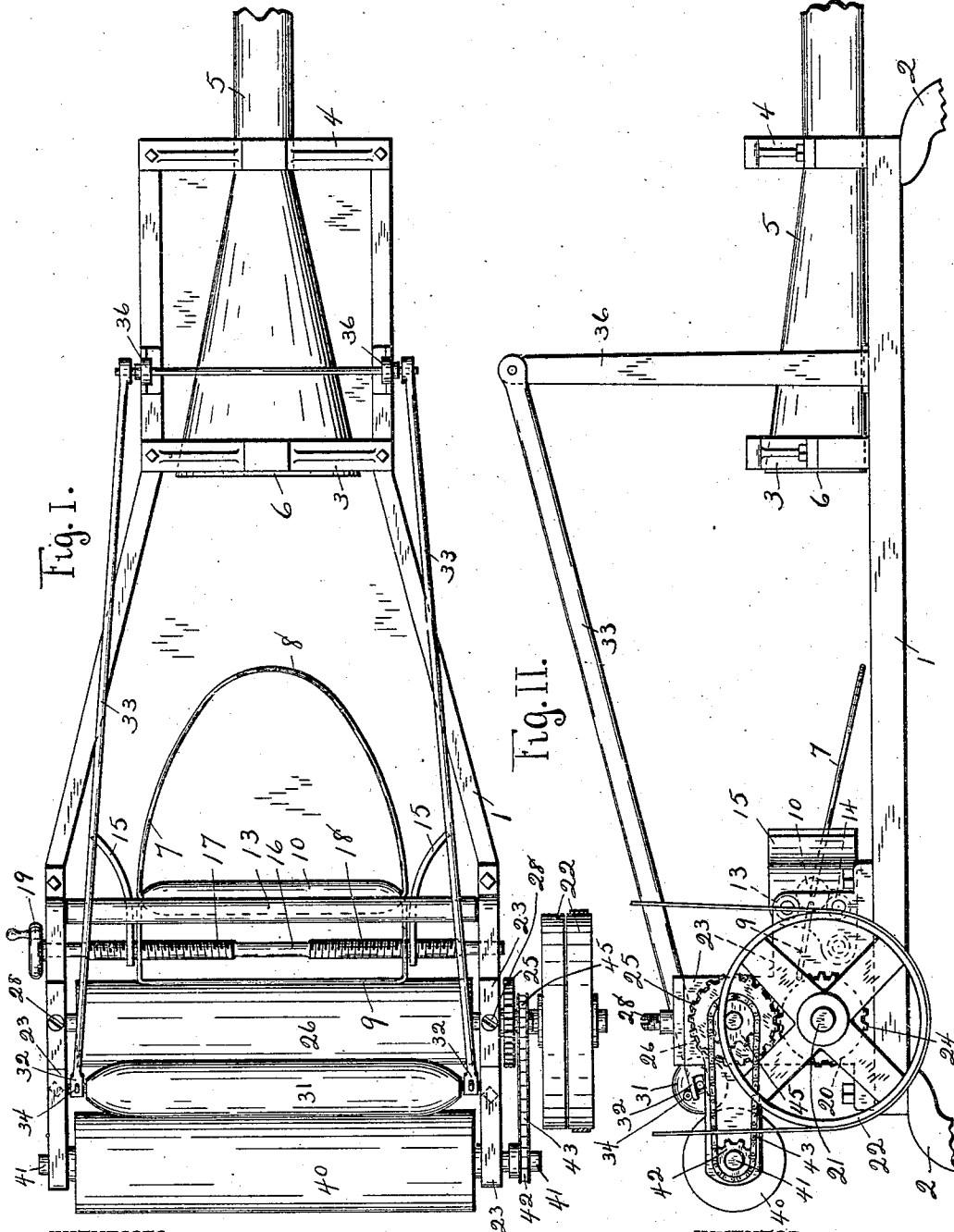


No. 848,981.

PATENTED APR. 2, 1907.

M. J. FISHER.
FABRIC REELING MACHINE.
APPLICATION FILED MAY 2, 1901.



WITNESSES:

W. Schorneck
E. L. Darling.

INVENTOR

Michel J Fisher

BY

BY
Alfred Wilkinson
ATTORNEY.

UNITED STATES PATENT OFFICE.

MICHEL J. FISHER, OF UTICA, NEW YORK.

FABRIC-REELING MACHINE.

No. 848,981.

Specification of Letters Patent.

Patented April 2, 1907.

Application filed May 2, 1901. Serial No. 58,427.

To all whom it may concern:

Be it known that I, MICHEL J. FISHER, of Utica, in the county of Oneida, in the State of New York, have invented new and useful
5 Improvements in Fabric-Reeling Machines, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to a mechanism for
10 spreading and reeling tubular knit fabrics on a reel, and consists, essentially, of a suitable supporting - frame carrying the tube over which the web is drawn, a removable spreader arranged between adjustable guides, draft-
15 rollers, the reel for receiving the fabric, and a presser-roller bearing on the roll to condense it and hold it smooth on the reel as it is wound.

My invention will be understood by reference to the accompanying drawings, in which the reference-numerals of the specification indicate the same parts in both of the figures.

Figures I and II are respectively a top plan and a side elevation of my winding-machine.
25 In the figures, 1 indicates the base of any suitable construction, carried on legs 2 and sustaining in braces 3 4 the reversing-tube 5, over the exterior of which is arranged the tubular fabric to be drawn over the outer end
30 and inwardly through its expanded end 6, over the spreader or stretcher 7, made, preferably, in semi-oval form and constructed of metallic wires or rods of suitable size. It may be formed of two parts, as here shown—
35 the outer expanding end 8 and the inner squared end 9—both secured to the spreading-roller or spacer 10, of which the inner end 9 is set between the upper and lower anti-friction-rollers 13 and 14, suitably journaled
40 to the frame. This spacer is a support for the two parts of the spreader and slightly expands the tube in a vertical direction.

The spreader may be of any suitable width, several of graded sizes being provided for the
45 fabrics of different size.

15 15 are the guides (preferably curved, as here shown) carried on adjusting-screw 16, provided with right-and-left threads 17 18 and a crank 19, by which the guides are adjusted
50 in and out simultaneously to fit the spreaders of different width and guide the fabric thereon.

After passing between the anti-friction-rollers the web is drawn by the draft-rollers, of which the lower, 20, is on the shaft 21 of the driving-pulley 22, journaled in suitable

standards 23 23 on the base and provided with the gear 24, meshing with gear 25 on the upper draft-roller 26, also suitably journaled in the standards 23.
60

28 are screws for adjusting the tension of the draft-rollers.

The fabric having been spread and drawn between the draft-rollers is wound on the reel 31, removably secured on the forked
65 ends 32 of the supporting-arms 33 by pins 34. These arms are pivotally secured on standards 36, so that as the fabric is wound on the reel it adapts itself freely to the other rollers.

40 is a presser-roller carried on the shaft
70 41 and provided with gear 42 and rotated by chain 43 from gear 45, preferably somewhat faster than upper draft-roller. The function of this presser-roller is to bear on the stock as it is wound on the reel to condense it and
75 keep it firm and smooth. This presser-roller should be of larger diameter than the draft-rollers to slip and press on the roll of fabric as it is wound, making it hard and compact.

My machine is strong and simple. The
80 parts are easily adjusted for tubular webs of different sizes. The web is wound regularly and compactly on the reel. By my peculiar arrangement of reel it is held steady and true without danger of tipping, which would tend
85 to wind the web irregularly.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a fabric-reeling machine for tubular
90 fabrics, the combination with a suitable frame, of a pair of draft-rollers supported thereon, means to rotate the rollers, a reel to receive the fabric, a main presser-roller co-operating with the reel, a connection between
95 the main presser-roller and the draft-roller-operating mechanism, a pair of anti-friction-rollers arranged on the frame, a spreader arranged to be supported by said anti-friction-rollers, said spreader having a spacer, a
100 rounded front end and a squared rear end, and adjustable guides adjacent to the spreader on each side.

2. In a reeling-machine for tubular, knit fabrics, the combination of a suitable sup-
105 porting-frame, a spreader having a curved forward end and a squared rear end, means for supporting the spreader on the frame, an adjusting-screw journaled in the frame and formed with reverse threads on its opposite
110 ends, a crank to rotate the screw and adjust the two guides simultaneously with relation

to the spreader, a pair of draft-rollers rotating in opposite directions to draw the fabric over the spreader, a main presser-roller, means to operate said rollers, and a reel to receive the fabric from the draft-rollers.

3. In a reeling-machine for tubular, knit fabrics, the combination of a suitable supporting-frame, a tube to sustain the fabric to be wound, antifriction-rollers journaled on the frame; a spreader having a spreading-roller, a squared inner end attached to the spreading-roller and fitting between the antifriction-rollers and an elongated, curved, expanding end also secured to the spreader-roller; an adjusting-screw journaled in the frame and formed with reverse screw-threads on its opposite ends, guides of greater width than the spreader fitted respectively to the reversely-threaded portions of the adjusting-screw, a crank on the screw to adjust the guides simultaneously with relation to the spreader, draft-rollers to draw the fabric over the spreader, and a reel to receive the fabric.

4. In combination in a reeling mechanism for tubular, knit fabrics, a suitable supporting-frame, a reversing-tube having an expanded rear end for supporting and reversing the fabric to be wound, a pair of antifriction-rollers journaled in the frame; a spreader composed of a spreading-roller, a squared rear end attached to said spreading-roller and extending rearwardly between the antifriction-rollers and an elongated, curved, outer

end attached to the spreader-roller and adapted to expand the fabric, said inner and outer ends being suitably formed of wire; an adjusting-screw journaled in the frame and provided with reverse screw-threads on each side, said guides extending above and below the spreader, a crank on said adjusting-screw for adjusting the guides simultaneously in and out with relation to the spreader; draft-rollers suitably journaled on the frame behind the spreader to draft the fabric, intermeshing gears on the journals of said rollers, a power-pulley on one of said journals; a pair of corresponding standards supported near the front of the frame, a pair of supporting-arms pivotally connected to said standards at their front ends and having forked rear ends, a reel to receive the fabric freely journaled in said forked ends, said reel being arranged behind and above the draft-rollers, suitable pins for retaining the reel in said forked end; a presser-roller journaled in the frame behind the reel, said presser-roller being of larger diameter than a draft-roller, a gear on said presser-roller journal, a corresponding gear on one of said draft-roller journals, and a link chain connecting said corresponding gears.

In testimony whereof I have hereunto signed my name.

MICHEL J. FISHER. [L. s.]

Witnesses:

C. C. SCHOENECK,
E. L. DARLING.