

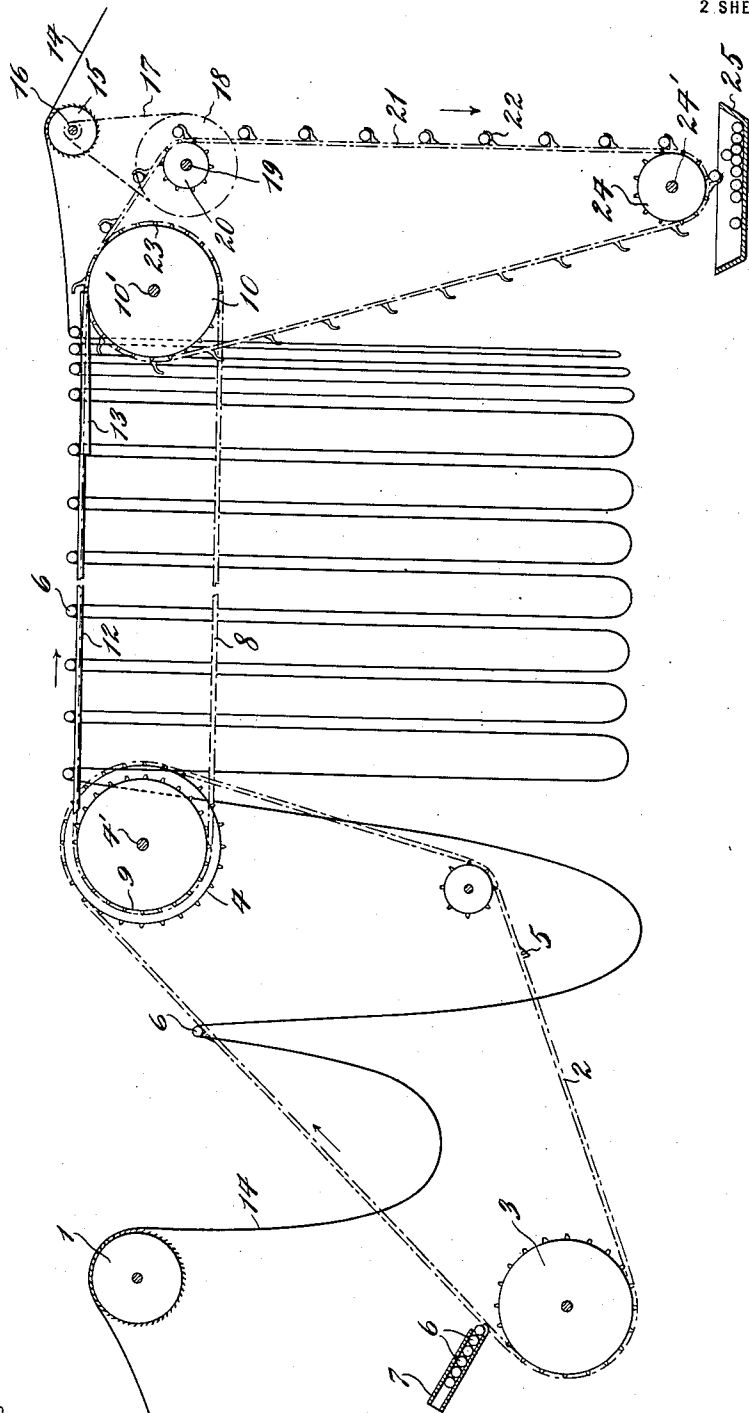
1,290,955.

S. M. FORD.
FABRIC HANGING MACHINE.
APPLICATION FILED MAY 2, 1918.

Patented Jan. 14, 1919.

2 SHEETS—SHEET 1.

Fig. 1.



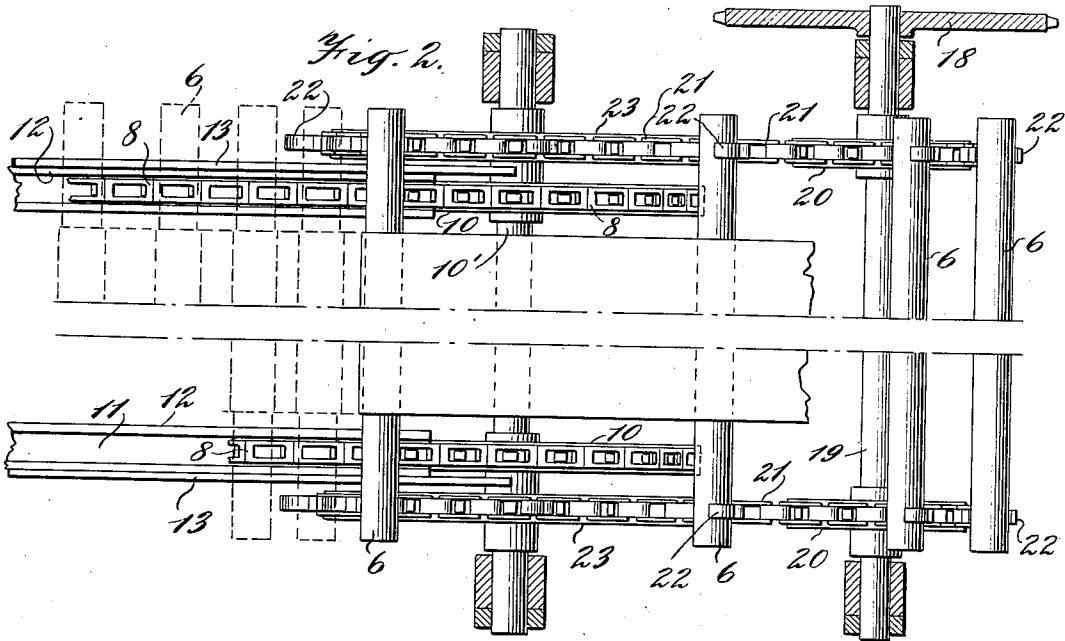
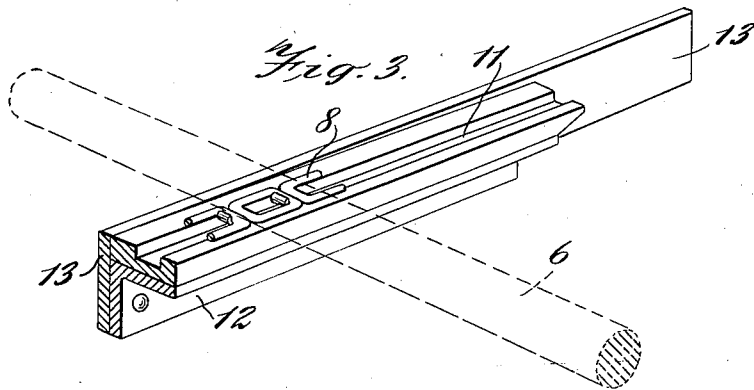
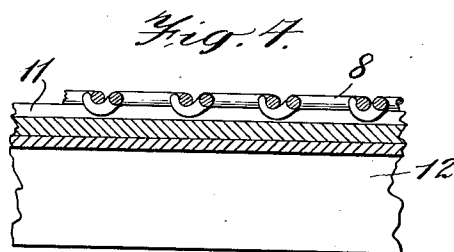
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UNITED STATES PATENT OFFICE.

STUART M. FORD, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE DURATEX COMPANY, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

FABRIC-HANGING MACHINE.

1,290,955.

Specification of Letters Patent.

Patented Jan. 14, 1919.

Application filed May 2, 1918. Serial No. 232,188.

To all whom it may concern:

Be it known that I, STUART M. FORD, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Fabric-Hanging Machines, of which the following is a specification.

My invention relates to a fabric-hanging machine, and more particularly to an attachment therefor by which the rods may be lowered to a receptacle on the floor after the fabric has been withdrawn from the rods, and will be understood by reference to the accompanying drawings in which Figure 1 is a diagrammatic side elevation; Fig. 2 a plan view of a part of the machine, and Figs. 3 and 4 enlarged details. Similar reference numerals indicate similar parts in the several views.

Heretofore the general practice has been to permit the rods supporting the fabric festoons to drop over the ends of the rails to the floor as the fabric was drawn from the rods. This dropping of the rods from a considerable height not only endangered the operators, but frequently resulted in the bending or breaking of the rods. To overcome these objections to such practice, I have designed the present attachment by which the rods, as soon as the fabric is withdrawn from them, are lowered by means of a chain to a receptacle which may rest on the floor of the room.

Referring to the drawings the numeral 1 designates a driven roll over which the fabric is drawn and allowed to fall into a loop between two endless chains 2, traveling in the direction indicated by the arrows around sprocket wheels 3 and 4, the power being applied to the wheels 3. The wheels 4 are loosely mounted on a fixed shaft 4'. The chains 2 are provided at regular intervals with projections 5 adapted to pick up the rods 6 from a magazine 7 so that as the rods travel upward they will catch the fabric and carry it forward as indicated in Fig. 1. From the chains 2 the rods are delivered to two chains 8 which travel around sprocket wheels 9 and 10, the upper runs of the chains 8 traveling in the grooves 11 of rails 12, said rails supporting the weight of the rods and festoons of fabric. The power for driving the chains 8 is applied to the shaft 10' of the wheels 10, the wheels 9 being

loosely mounted on the fixed shaft 4', and the chains 8 are driven at a relatively slower speed than the chains 2 in order to bring the festoons close together. At the rear end of the supporting rails 12 are rails 13 inclined slightly upward from the front to the rear of the machine so that as the rods are moved back they will ride off the chains 8 onto the rails 13 and bunch together, as shown in Fig. 1. This bunching of the rods makes it unnecessary to time together the feeding into and the drawing off of the fabric from the machine, and by reason of this it is possible to use the present attachment which is independent of the driving mechanism of the hanging machine.

The fabric 14 is taken from the rods 6 over a pin roll 15 fast on its shaft, the latter also having a pulley or sprocket wheel 16 around which passes a belt or chain 17, the latter also passing around a pulley or sprocket wheel 18 fast on its shaft 19. Also fast on shaft 19, as shown in Fig. 2, are two sprocket wheels 20 adapted to drive chains 21 which chains pass around sprocket wheels 23 loose on shaft 10', and two lower wheels 24 loose on their shaft 24'. The chains 21 constitute a rod-lowering means and for that purpose are provided at regular intervals with hooks 22 adapted to receive the rods 6 as they are drawn by the fabric from the rails 13. The sprocket wheels 20 and 23 are so related that the chains 21 have a short inclined run away from the rails and then a vertical run to the lower wheels 24, the rods dropping from the hooks into a receptacle 25 as the chains pass under the wheels 24. By inclining the chains 21 downward from the sprocket wheels 23 to the wheels 20 prevents a sudden jerk on the fabric from throwing the rods 6 over the hooks 22 as might happen if the chains pass vertically down from the wheels 23. This inclined run of the chains 21 also insures the rods being in contact with a hook at both its ends before it makes the turn to the vertical run of the chains, otherwise the rods would be apt to bounce off the hooks in making the turn.

From the foregoing description it will be noted that the power for driving the rod-lowering attachment is derived from the shaft of pin roll 15 by drawing the fabric over said roll, so that the attachment is operated independently of the driving mechanism of the hanging machine. One ad-

vantage in operating the attachment by the pulling off of the cloth is that as the forward rod 6 is advancing toward the end of the rails 13, the pulling of the cloth will roll the rod so that both ends simultaneously engage the corresponding hooks 22 on the chains 21, the cloth advancing the rod faster than the movement of said chains so that the proper engagement of the rod with the hooks is always insured.

Another advantage is that the attachment is operated only while the fabric is being drawn from the machine so that there are no constantly moving hooks on the chains 21 to catch one end of the rod at a time and thereby cause it to fall to the floor. This falling of the rod cannot happen while the fabric is being pulled from the machine as the moving fabric rolls the rod along the rails 13 until it engages hooks on both chains 21.

Still another advantage in the present attachment is that no power is required to remove the fabric from the machine, as the weight of the rods 6 on chains 21 overcomes the friction of the moving parts of the mechanism.

What I claim and desire to secure by Letters Patent of the United States is:—

1. A fabric hanging machine having an attachment at its drawing-off end comprising a rod receiving and conveying mechanism, and means for moving said mechanism independently of the driving mechanism of the machine.

2. A fabric hanging machine having an attachment at its drawing-off end comprising rod-receiving members, chains to which

said members are attached, and means for moving said chains independently of the driving mechanism of the machine.

3. A fabric hanging machine having an attachment at its drawing-off end comprising chains having means thereon to receive the rods, and a driving mechanism for said chains controlled by the fabric.

4. A fabric hanging machine having an attachment at its drawing-off end comprising members adapted to receive the rods as they are drawn forward by the fabric, and a driving mechanism for said members controlled by the movement of the fabric.

5. A fabric hanging machine having an attachment at its drawing-off end comprising members adapted to receive the rods as they are drawn forward by the fabric, chains to which said members are attached, and means controlled by the fabric for moving said chains.

6. A fabric hanging machine having an attachment at its drawing-off end comprising members adapted to receive the rods as they are drawn off by the fabric, chains to which said members are attached, sprocket wheels around which said chains pass, said sprocket wheels being so arranged as to provide an inclined run for the chains, and mechanism controlled by the fabric for driving said chains.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

STUART M. FORD.

Witnesses:

EDWIN P. FORD,
CHARLES F. BROWN.