(No Model.)

J. MEERS.

CLOTH GUIDING DEVICE.

No. 561,121. Patented June 2, 1896.

Fig. 1.

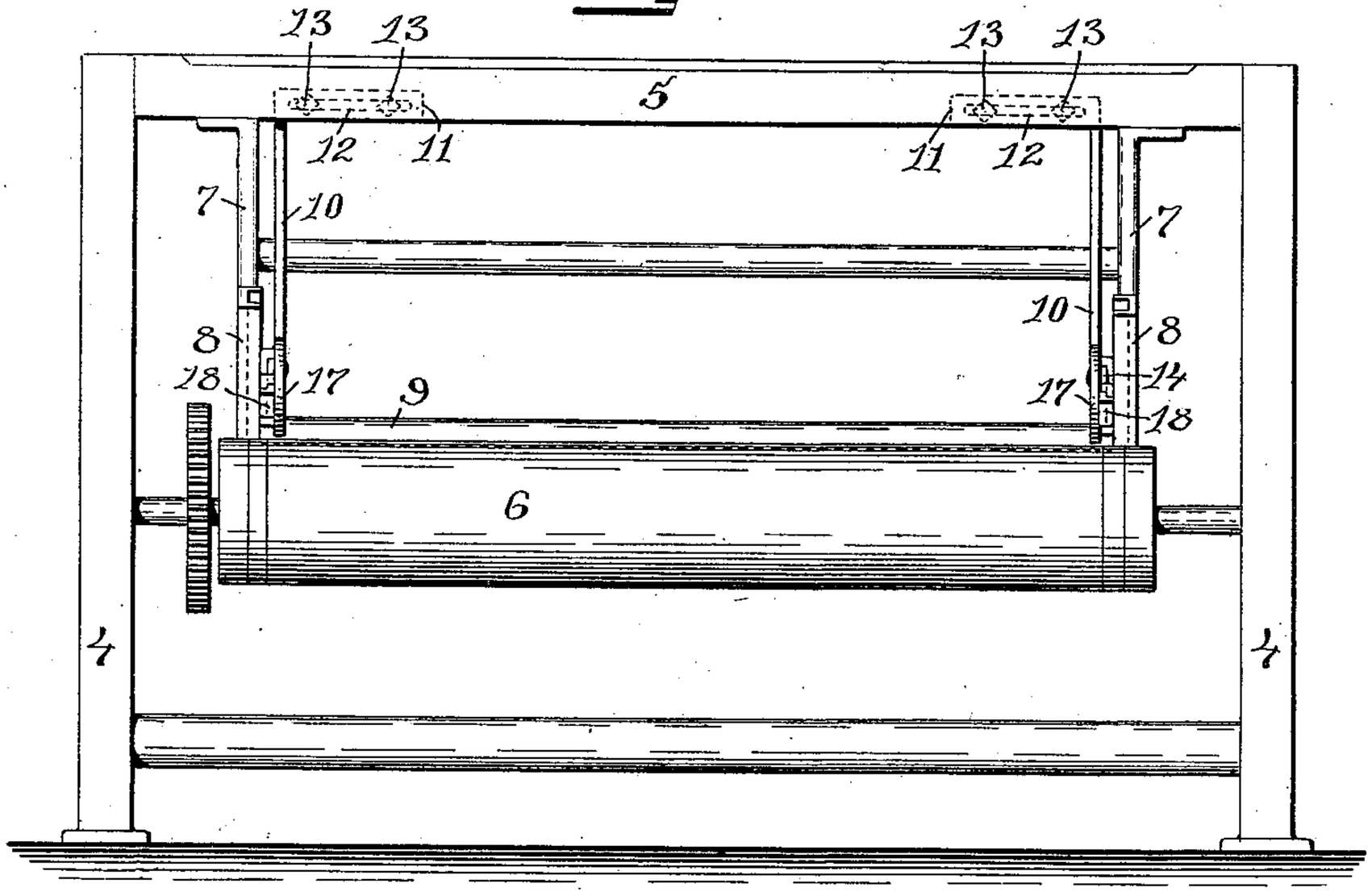


Fig. 2.

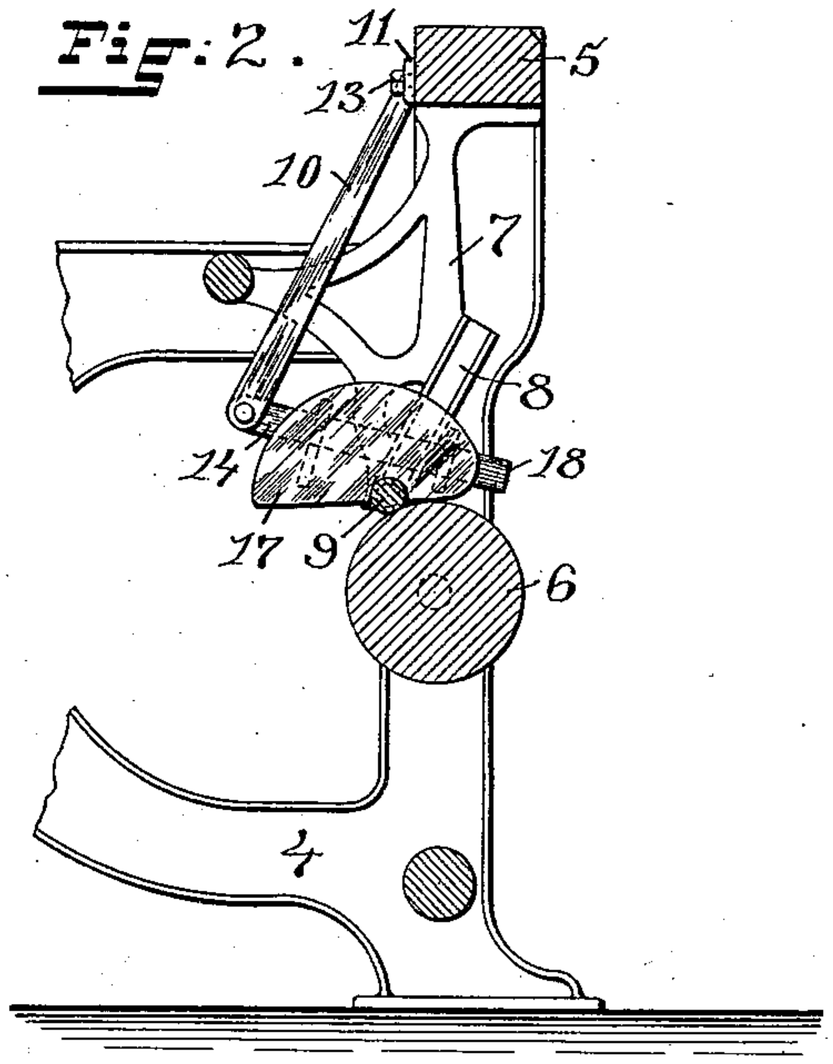
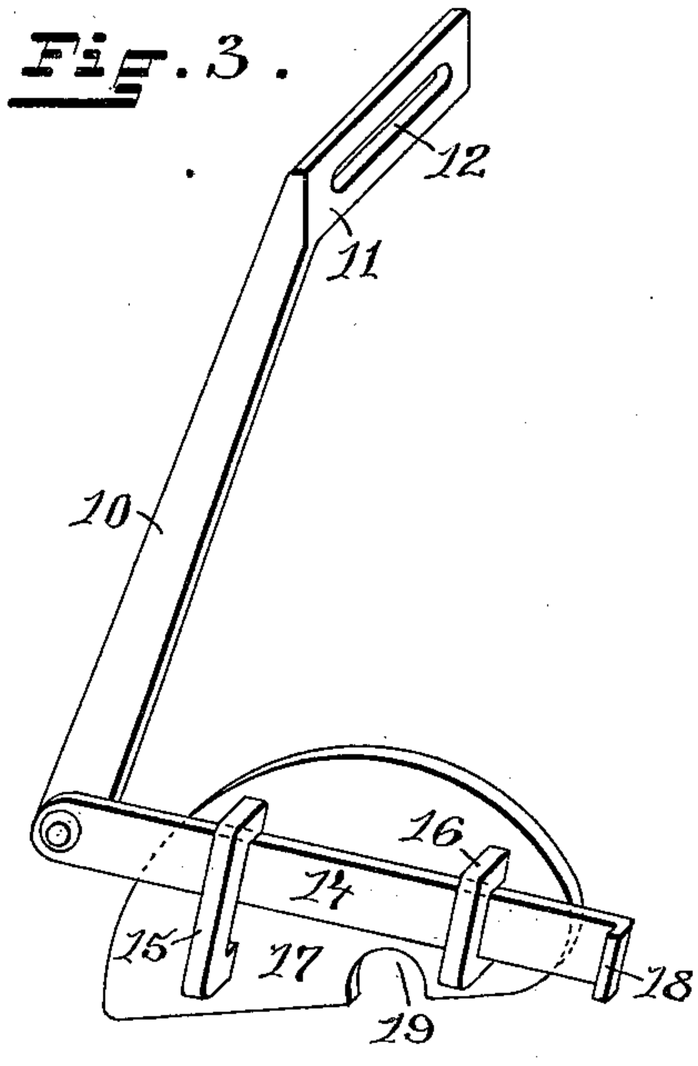


Fig. 3.



WITNESSES:

M. F. Bligh.

Chas. H. Luchin Jr

INVENTOR:

James Meers,

by Joseph A. Miller & Co.,

Attys.

UNITED STATES PATENT OFFICE.

JAMES MEERS, OF CUMBERLAND, RHODE ISLAND.

CLOTH-GUIDING DEVICE.

SPECIFICATION forming part of Letters Patent No. 561,121, dated June 2, 1896.

Application filed January 27, 1896. Serial No. 577,014. (No model.)

To all whom it may concern:

Be it known that I, JAMES MEERS, of Cumberland, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Cloth-Guiding Devices; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in cloth-guides for cloth-rolls of looms.

The object of the invention is to more perfectly guide the cloth as it is wound on the roll and to protect its edges.

The invention consists in certain novel features of construction and combination of parts to effect the object sought to be accomplished, as will hereinafter be more fully described, and pointed out in the claims.

Figure 1 represents an elevation of parts of a loom, showing the improved guiding devices in position. Fig. 2 represents a vertical section of part of the loom with one of the guiding devices in position. Fig. 3 represents an enlarged view of the sliding guide-plate, the arm on which the plate is free to slide, and the rigid supporting-arm.

Similar numerals of reference designate corresponding parts throughout.

Cloth-rolls in looms are usually rotatably mounted in inclined slotted ways, and are driven by the frictional contact of the roll or of the cloth on the roll with the laying-on roll, the slotted ways in which the ends of the cloth-roll are mounted allowing the free movement of the cloth-roll away from the laying-on roll as the layers of cloth between the same increase in number.

In carrying my invention into practice I provide the loom with guide-plates mounted to be adjusted to the width of the cloth and free to move with the cloth-roll as the diameter of the roll of cloth is increased by the successive layers of cloth, the guide-plates having broad vertical surfaces, between which layer after layer of cloth is directed to prevent spiral winding thereof.

In the drawings, 4 4 indicate the usual end frames of a loom having the beam 5 and the laying-on roll 6. From the beam 5 depend brackets 7 7, to the lower portion of which the inclined ways 8 8 are secured, and by which the lower ends of these ways are supported adjacent to the laying-on roll 6, the cloth-roll 9 being journaled at its ends in the ways and being free to move upward.

The rigid arms 10 10 are provided with the members 11 11, having the slots 12 12. The arms 10 10 are adjustably secured to the inner side of the beam 5 by means of the bolts 13 13, which pass through the slots in the members 11 11 and securely hold the arms to the beam. To the lower end of the arms 10 10 are pivotally secured the arms 14 14, which pass through the guides 15 16, formed on the back of the plates 17. The free end of the pivoted arms 14 14 are bent over to form the stops 18 18.

The guide-plates 17 17 are reciprocally mounted on the pivoted arms 14 14, and have a vertical width sufficient to accommodate one-half the diameter of the cloth wound on the cloth-roll. In the lower portion of each of the guide-plates 17 is a bearing 19, which partially embraces the cloth-roll and serves to locate the plates thereon.

The separation of the guide-plates 17 to correspond with the width of the cloth to be wound is effected by the adjustment of the arms 10 10. The bolts 13 13 being loosened, the arms are moved to the desired position by reason of the slots in the members 11 11, the bolts upon being tightened holding the arms rigidly in the desired position.

The cloth being wound on the cloth-roll is guided by the inner surfaces of the guide-plates 17 17, which also serve to prevent the contact of the edges of the cloth with the inclined ways 8 8 or with either of them. As the diameter of the roll of cloth increases and the cloth-roll is raised, the guide-plates 17 17 move along the arms 14 14, and at the same time lift them.

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

1. In a loom, a cloth-guiding device consisting of adjustable arms, arms pivotally supported by the adjustable arms, and guide-plates reciprocally mounted on said pivoted arms.

2. In a loom, the combination with the breast-beam and arms adjustably secured thereto, of arms pivotally supported by the

adjustable arms, and guide-plates reciprocally mounted on said pivoted arms and provided with bearings adapted to be engaged by the cloth-roll.

3. The combination, in a cloth-guiding device for looms, of the arm 10 having the member 11 provided with the slot 12, the pivoted arm 14 provided with the stop 18, and a guide-plate 17 reciprocally mounted on the arm 14 and provided with the guides 15 16 and bearing 19, substantially as herein shown and described.

In witness whereof I have hereunto set my hand.

JAMES MEERS.

Witnesses:
JOSEPH A. MILLER, Jr.,
M. F. BLIGH.