

R. W. SCHREY.

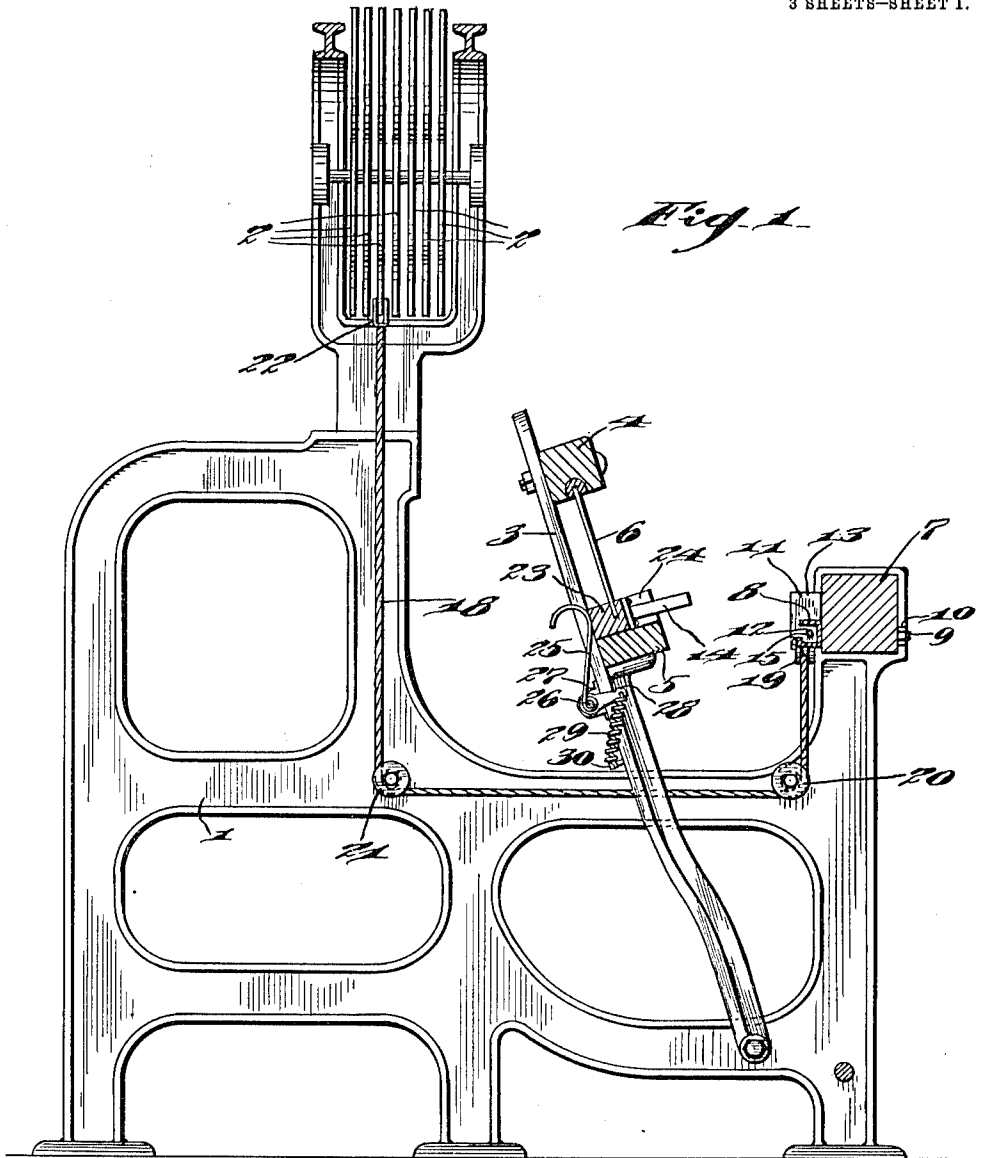
LOOM.

APPLICATION FILED APR. 13, 1911.

1,040,778.

Patented Oct. 8, 1912.

3 SHEETS—SHEET 1.



Inventor

Witnesses

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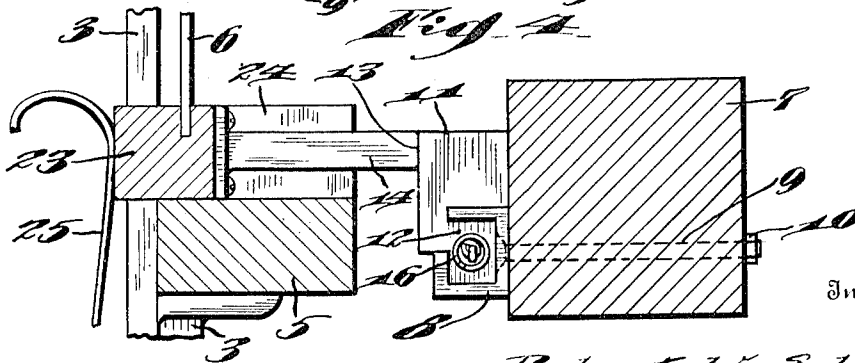
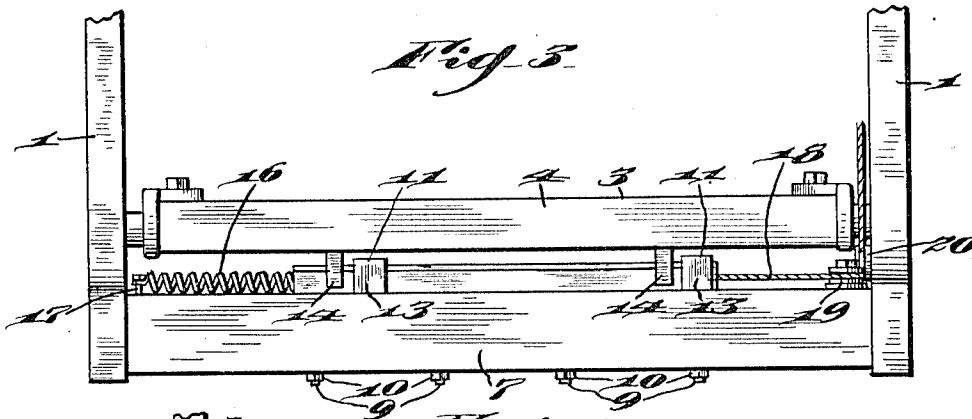
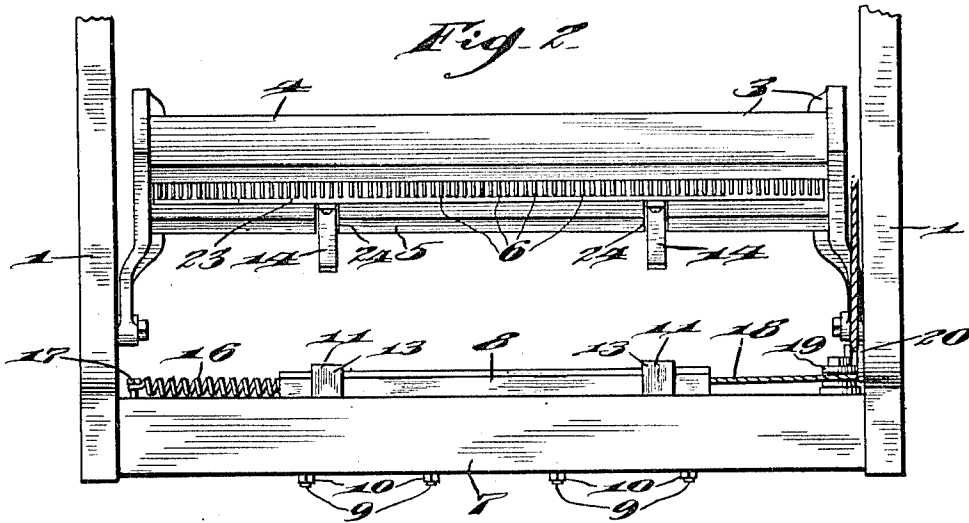
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3 SHEETS-SHEET 2.



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3 SHEETS-SHEET 3.

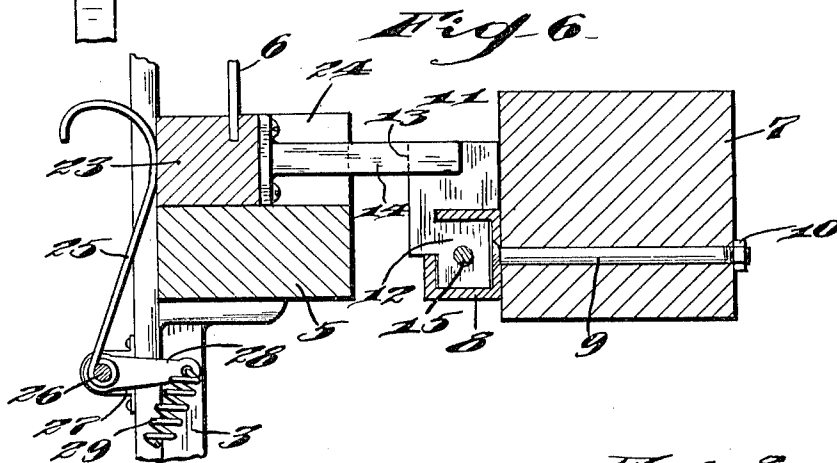
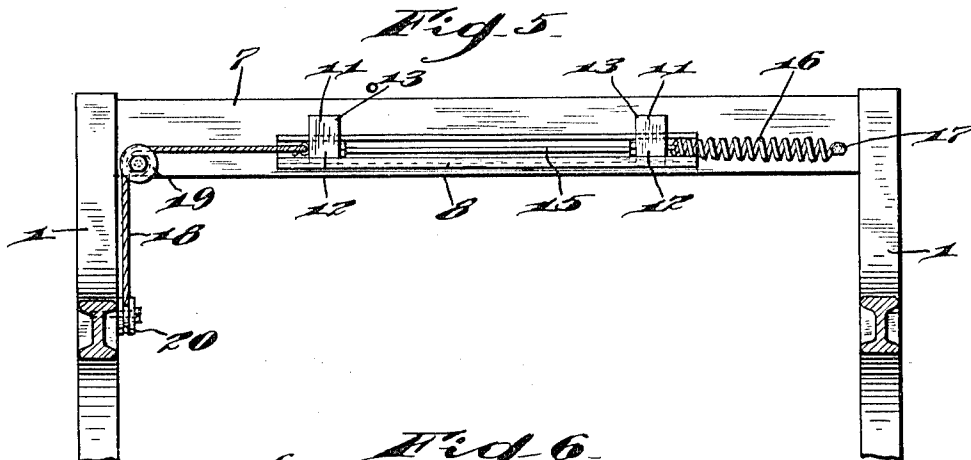


Fig. 7.

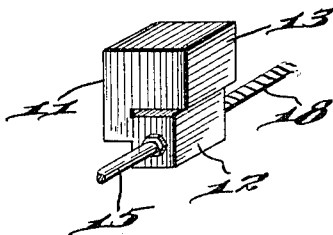
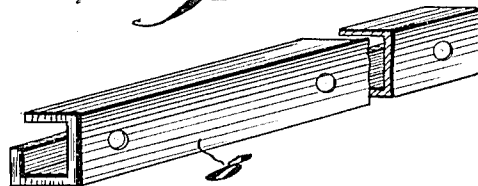


Fig. 8.



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UNITED STATES PATENT OFFICE.

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LOOM.

1,040,778.

Specification of Letters Patent.

Patented Oct. 8, 1912.

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To all whom it may concern:

Be it known that I, ROBERT W. SCHREY, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Looms, of which the following is a specification.

My invention relates to improvements in looms, the object of the invention being to provide improved means for controlling the movement of the reed in accordance with the movement of the vibrators, especially in connection with Terry towel looms.

A further object is to provide improvements of this character which greatly simplify the construction, insure an accurate control of the length of movement of the reed, and relieve the loom of excessive weight and mechanism heretofore necessary.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings: Figure 1, is a vertical section with all parts of the loom removed, except such as are necessary to illustrate my invention. Fig. 2, is a fragmentary view in plan of Fig. 1 showing the lay in one extreme position. Fig. 3, is a similar view showing the lay in another extreme position. Fig. 4, is a view in section showing the position of the reed when limited by my improved blocks 11. Fig. 5, is an inner face view of the transverse supporting bar. Fig. 6, is a view similar to Fig. 4 showing the parts in another position. Fig. 7, is a detail perspective view of one of the blocks 11, and Fig. 8, is a similar view of the guide 8.

1, represents the frame of a loom such as commonly employed in the weaving of towels, wherein the loom utilizes the well known Terry motion.

2, represent the ordinary vibrators, 3 the ordinary pivoted lay having parallel transverse bars 4 and 5, between which reed 6 is located, and 7 is the ordinary transverse supporting bar at the forward end of frame 1.

Various means have been provided on looms to give the Terry motion, but such means have added largely to the weight

of the loom, the cost of manufacture and operation, and have been more or less defective.

My improvements which will now be described, may be applied to any well known form of loom, and are not limited to any particular construction of the parts above enumerated.

On the inner face of batten 7, a guide 8 is secured by bolts 9 and nuts 10, and is of general rectangular form illustrated more clearly in Fig. 8. This guide 8 is adapted to receive two blocks 11, which are of the peculiar shape shown in Fig. 7, that is, they have a rectangular portion 12 which fits in the guide 9, and is locked in the guide against movement except longitudinally of the guide, but the main portions 13 of said blocks project above the guide, and lie in the path of movement of fingers 14, fixed to the lower bar 23 of reed 6.

Blocks 11 are connected by a rod 15, which compels them to move together, and they are normally held in one position by means of a coiled spring 16, which is connected at one end to one of the blocks 11, and at its other end to a pin 17 fixed to bar 8. The other block is secured to a cable 18 or other suitable flexible connecting device, which is passed around pulleys 19, 20, and 21, and at its free end is provided with a link 22 to engage over one of the vibrators 2, so that the motion of the vibrator will cause the blocks 11 to be moved longitudinally of batten 7.

It will be noted that bar 5 is provided with a longitudinal groove at its rear to accommodate the lower bar 23 of reed 6, and said bar 5 is also recessed as shown at 24 to permit the movement of fingers 14.

To hold the reed in its normal position, curved fingers 25 are provided, and are secured to a transverse shaft 26 supported in brackets 27 on the lay. This shaft 26 is provided with a crank arm 28, which is connected by a coiled spring 29 with a pin 30 on the lay, so that the curved fingers 25 bear against the lower bar 23 of the reed, tending to hold the reed in normal position, and returning it to such position.

As is well known in looms of this character, the vibrators move at regular intervals, and this movement of the vibrator causes the blocks 11 to move out of the path of fingers 14, permitting the reed 3 to move

a greater distance than it is permitted to move when the fingers 14 engage blocks 11.

Great variation is permitted in this operation, but the ordinary movement is to hold the blocks 11 in the path of fingers 14 during two movements of the lay, and then move the blocks to one side during one movement of the lay, spring 16 returning the blocks to their former position.

Various slight changes might be made in the general form and arrangement of parts described without departing from my invention, and hence I do not limit myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

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

1. An attachment for looms comprising a four sided rectangular guide adapted to be secured to the batten of a loom, blocks so shaped as to slide in the guide and bear at their upper ends against the batten of the loom, fingers rigidly secured to the reed of the loom and adapted to engage the upper portion of said blocks above the guide, a

spring normally holding said blocks in position to be engaged by the fingers, and means for moving the blocks out of the path of movement of said fingers, substantially as described.

2. An attachment for looms comprising a four sided rectangular guide adapted to be secured to the batten of a loom, blocks so shaped as to slide in the guide and bear at their upper ends against the batten of the loom, fingers rigidly secured to the reed of the loom and adapted to engage the upper portion of said blocks above the guide, a rod connecting said blocks and compelling them to move together, a spring normally engaging one of said blocks and holding the same in the path of movement of said fingers, and means for moving said blocks out of the path of movement of the fingers, substantially as described.

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

ROBERT W. SCHREY.

Witnesses:

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CHAS. E. POTTS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."