

(No Model.)

T. MOONEY.
LOOM.

No. 580,622.

Patented Apr. 13, 1897.

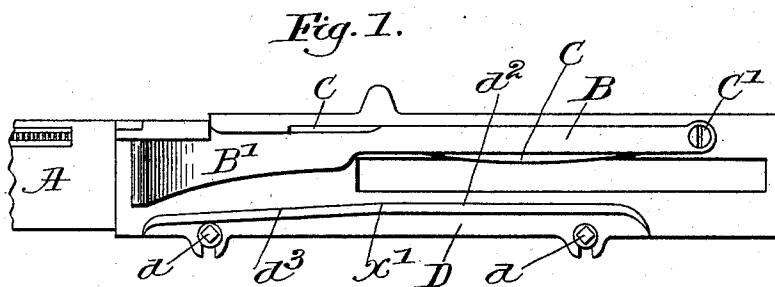


Fig. 2.



Witnesses:

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LOOM.

SPECIFICATION forming part of Letters Patent No. 580,622, dated April 13, 1897.

Application filed October 28, 1896. Serial No. 610,354. (No model.)

To all whom it may concern:

Be it known that I, TIMOTHY MOONEY, of Fall River, county of Bristol, State of Massachusetts, have invented an Improvement in Looms, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to improve the shuttle-box end of the lay, whereby the flight of the shuttle may be started in the proper direction across the raceway of the lay.

In looms as now commonly made having a binder in the back of the shuttle-box and an adjustable front plate said front plate is constructed to present a straight face with short rounded ends. The portion of the front plate next the end of the lay is adjusted and held in place at just the proper distance from the back plate to leave a space just sufficient to receive the shuttle as it comes to rest in the shuttle-box; but if the face of the front plate, commencing at its end nearest the end of the lay, should be held parallel with the reed then the space afforded at the open mouth of the shuttle-box to admit the shuttle would be too small and would not properly receive the shuttle should it be a little out of alinement as it passed the selvage-warps. Consequently the face of the front plate is commonly set at an angle to the plane occupied by the face of the reed, and as a result thereof the shuttle on its arrival in the box may stop in an inclined position with relation to the face of the reed, and the shuttle when started in such position will be moved in an angular direction with relation to the face of the reed and will be thrown off of the race of the lay into the shed, causing what is called a "smash."

One of the chief purposes of the face-plate is to correctly position the shuttle in the shuttle-box or line it up in the box, so that when it starts on its flight after it has been struck by the picker it will have a straight-line movement, and it will continue such movement from end to end of the lay.

To overcome the possibility of starting the shuttle in an angular direction with relation to the direction of the lay and at the same

time afford ample space for the entrance of the shuttle in the shuttle-box should it have deviated somewhat from a straight line at the time it emerged from the shed, I have devised a novel front plate having two straight or plane surfaces, one intersecting the other at a slight angle, that part of the straight face of my improved front plate nearest the outer end of the shuttle-box being set substantially parallel with the reed, the second portion of the straight face nearest the open end of the shuttle-box being inclined from the junction of said angle somewhat outwardly toward the breast-beam to thus form an enlarged entrance for an incoming shuttle, the said shuttle when it reaches the picker in the box being positioned parallel with the lay by the straight face of the front plate nearest the outer end of the lay and remaining in that position when it is struck by the picker and during the first part of the flight being guided in a straight line parallel to the reed.

Figure 1, in plan view, shows one end of a lay with my improvements added; and Fig. 2 is a side elevation of the front plate detached.

The lay A, the back plate B of the shuttle-box, it having an overhanging lip B' at the entrance end of the box, and the binder C, pivoted at C', are and may be all as usual.

The front plate D, forming one side of the shuttle-box, has slotted ears, which receive the screws d , used to connect the front plate adjustably to the lay. The face of the front plate from near its end nearest the end of the lay is made straight, as at d^2 , to substantially the point x' , and from that point toward the opposite end of the front plate the face is also straight, but the second straight-line face d^3 is at an obtuse angle to the straight-line face of the other part of the front plate. The straight face d^2 is located substantially parallel to the usual reed carried by the lay, so as to insure the proper position for the shuttle when fully into the shuttle-box, so that as the picker strikes the shuttle to throw it from the box through the shed the said shuttle will start straight.

By inclining the face d^3 ample entrance for the shuttle into the box will be insured, and thereafter the straight face d^2 will correctly

position the shuttle preparatory to a new flight.

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

In a loom, a lay provided near its end at one side with a binder it forming part of the box to receive the shuttle, and a one-piece front plate presenting at its continuous inner
10 side two faces intersecting each other between the ends of said plate at an obtuse angle, the

outer end of said front plate serving to line up the shuttle in the box, substantially as described.

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

TIMOTHY MOONEY.

Witnesses:

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