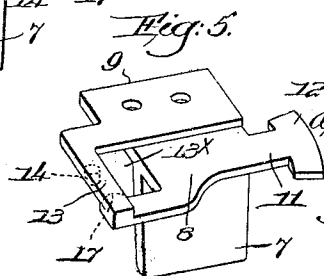
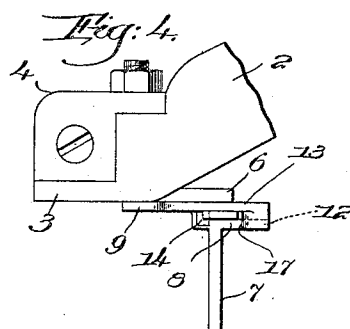
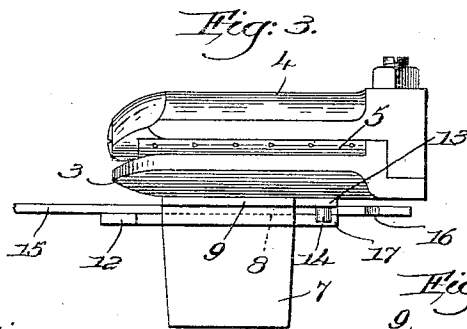
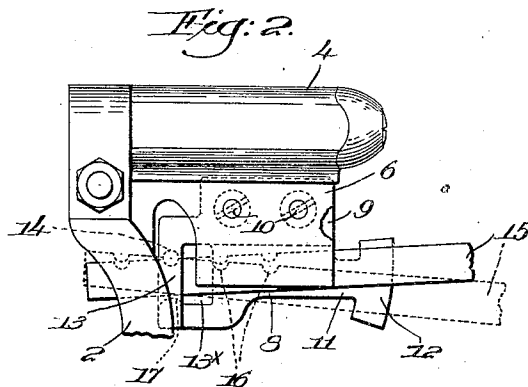
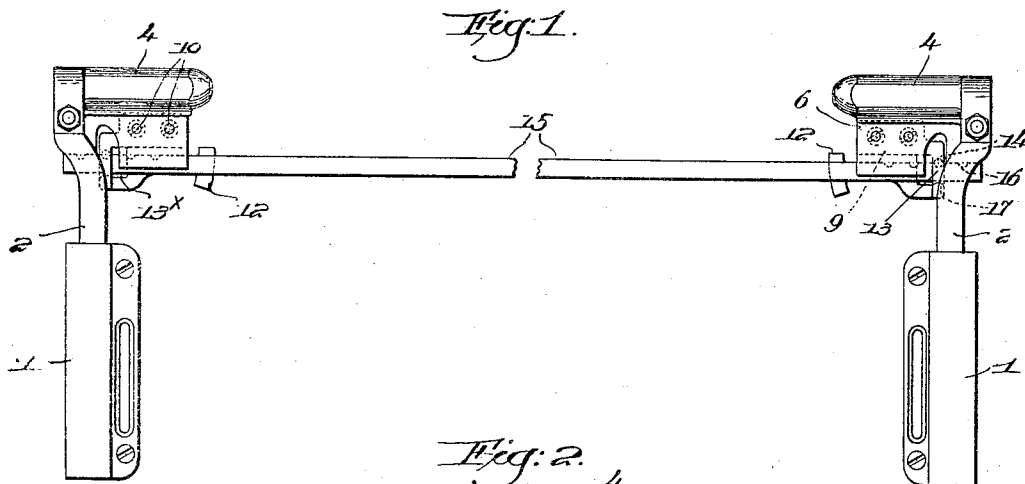


I. E. LAWRENCE, DEC'D.
 E. A. LAWRENCE, ADMINISTRATRIX.
 TEMPLE MECHANISM FOR LOOMS.
 APPLICATION FILED JUNE 17, 1908.

932,298.

Patented Aug. 24, 1909.



Witnesses,
 Edward F. Allen.
 Joseph M. Wood.

Elizabeth A. Lawrence,
 Administratrix of the estate of
 Isaac E. Lawrence,
 by Lerby Gregory,
 atty.

UNITED STATES PATENT OFFICE.

ELIZABETH A. LAWRENCE, OF LOWELL, MASSACHUSETTS, ADMINISTRATRIX OF ISAAC E. LAWRENCE, DECEASED, ASSIGNOR TO DRAPER COMPANY, OF HOPEDALE, MASSACHUSETTS, A CORPORATION OF MAINE.

TEMPLE MECHANISM FOR LOOMS.

932,298.

Specification of Letters Patent.

Patented Aug. 24, 1909.

Application filed June 17, 1908. Serial No. 439,090.

To all whom it may concern:

Be it known that ISAAC E. LAWRENCE, deceased, who was a citizen of the United States, and resident of Somerville, county of Middlesex, State of Massachusetts, invented an Improvement in Temple Mechanism for Looms, of which the following description, in connection with the accompanying drawing, is a specification, like numerals on the drawing representing like parts.

This invention has for its object the production of novel temple mechanism for looms whereby while the reciprocating temples are connected by a controller member to prevent lifting of the temple-head either temple can be moved forward by hand away from the fell of the cloth without interfering with its fellow at the opposite side of the cloth, such manipulation being at times required, as in picking out.

In the ordinary operation of the loom the two temples are moved forward in unison by engagement of the lay with the depending heels connected with the temple-heads, and the controller member or bar is so connected with the latter that they cannot be tilted up into improper position, but the connection with the controller-bar is such that manual forward movement of one temple can be effected independently of the other temple.

The use of a connecting controller-bar or steadying-rod is old, broadly speaking, but heretofore the bar or rod has been so rigidly connected with the temples that any forward movement of one would be at once communicated to the other temple.

The novel features of the present invention will be fully described in the subjoined specification and particularly pointed out in the following claims.

Figure 1 is a top plan view of a pair of reciprocating loom-temples and their stands, with an evenner-bar connecting the temples in accordance with this invention, the bar being centrally broken out; Fig. 2 is an enlarged top view of one of the temple-heads and a portion of its shank, to more clearly show the construction and the arrangement whereby the controller-bar is connected, the part of the latter shown in two positions by full and dotted lines illustrating the independent movement of either temple; Fig. 3 is a rear elevation of the temple-head and the adjacent portion of the controller-bar;

Fig. 4 is a left hand end elevation of the parts shown in Fig. 2; Fig. 5 is a perspective view of the heel and the seat thereon for the controller-bar.

Referring to Fig. 1 each temple-stand 1, in practice fixedly mounted on the breast-beam of the loom, has slidably mounted in it the shank 2 connected with the temple-head comprising a pod 3 and cap 4, inclosing a suitable toothed roll 5, Fig. 3, are all of substantially well known construction and operate in usual manner, the pod having a shelf-like forward extension 6, to which ordinarily the usual heel is attached. In accordance with the present invention, however, the heel 7 is formed with a flat, laterally elongated head 8 provided with a horizontal ear 9 which is placed beneath and secured to the extension 6 by suitable screws 10, the upper face of the head being in a plane below the ear, and forming a seat for the controller-bar.

The inner end of the head is prolonged at 11 and widened transversely to form a segmental, flat bearing 12, while at its outer end the head is crossed by a bridge 13 the under face of which is above the plane of the upper face of the head 8, Fig. 5, a rounded lug or stud 14 depending from the bridge.

When the heel is attached to the extension 6 of the temple-head said extension projects forward over the head 8 between the bearing 12 and the bridge 13 as clearly shown in Figs. 1 and 2, the head being cut away at 13* adjacent the bridge.

The controller-bar is herein shown as a stiff, flat metal bar 15 provided at each end with a series of notches 16 in its rear edge, the width and thickness of the bar being such that it can be inserted between the head 8 and the extension 6 and under the bridge 13, the lug or stud 14 entering one of the notches 16. When the controller-bar is thus applied it is connected with each temple by the cooperation of the lugs and notches, described, the bar being seated on the heads 8 and resting on each of the bearings 12 at some little distance from the temple shank 2, and any tendency of the temple-head to lift or tilt at its inner end is prevented by the engagement of the bearing 12 with the under side of the controller-bar. This resistance to tilting is also increased by the insertion of the bar between the extension 6 and the head 8 of the heel, as will be manifest, but it will

be seen by reference to Fig. 1 that there is quite a clearance between the rear edge of the bar and the front edge of the ear 9.

In the ordinary operation of the loom the lay as it beats up will strike the heels 7 simultaneously and the two temples will be moved forward in unison, their shanks 2 sliding in the stands 1.

When it is necessary for the weaver to move one of the temples forward away from the fell, as in picking out, the controller-bar 15 will rock on the two lugs or studs 14 to accommodate such movement, so that the bar will assume a diagonal position relative to the fell.

If the right hand temple, Fig. 1, is moved forward the bar as a whole will swing on the stud 14 on the left hand side, as a fulcrum, without moving the left hand temple, as indicated by dotted lines Fig. 2, the bearing 12 remaining in supporting engagement with the bar, and the right hand end of the bar will assume an angular position relative to the temple head at the right, the stud 14 of the latter temple maintaining the connection between the bar and the temple.

The full line position of the bar 15 in Fig. 2 shows the relation of the parts if the left hand temple is moved forward, the clearance between the rear edge of the bar and the ear 9 permitting this movement.

The bridge has formed on its under side a rounded abutment 17, the controller-bar 15 fitting loosely between such abutment and the stud 14 so that it may swing as described, but it cannot be withdrawn by a lengthwise movement.

To apply the controller-bar it is tilted up and its end passed through the opening 13* and then the bar is brought down to seat on the head 8, the stud 14 entering a notch 16 while the bar lies between the stud and the abutment 17. Thereafter the ear 9 is secured to the extension 6 on the temple-head, and the parts are in readiness for use.

A series of the notches in the ends of the controller-bar are provided so that lateral adjustment of the temples may be made to accommodate the cloth.

From the foregoing description, in connection with the drawing, it will be clear that any tilting up of the temple is prevented by the controller-bar, and while the connection of the latter with the temples is

positive it permits a relative pivotal or swinging movement of the bar and the temples, whereby either temple may be moved manually transversely of the bar without disturbing or changing the position of the other temple.

Having fully described the invention, what is claimed as new and desired to be secured by Letters Patent is:—

1. In a loom, temples located at opposite sides of the cloth and movable longitudinally thereof, each temple having an attached depending heel to be struck by the lay, a head on each temple prolonged at its inner end and terminating in a flat, segmental bearing, and each head having an upright stud at its outer end, a controller-bar seated on the heads and segmental bearings and having its edge notched near each end, each stud entering a notch and connecting the bar positively and pivotally with each temple, and separate means to retain the bar in engagement with the studs and seated upon the heads and bearings, such co-operation of the bar with the bearings preventing tilting of the temples while the length of such bearings permits a change in the angularity of the bar relatively to either temple without disturbing the other temple.

2. In a loom, temples located at opposite sides of the cloth and movable longitudinally thereof, each temple having an attached depending heel to be struck by the lay, an elongated bearing on each temple, a bridge overhanging the outer end of each bearing, provided with a depending stud and an abutment, and a controller-bar having its edge notched near each end and adapted to pass under the bridge between the abutment and stud, the latter entering a notch in the bar, said bar being thereby positively and pivotally connected with each temple and coöperating with the bearings to prevent tilting of the temples.

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

ELIZABETH A. LAWRENCE,
Administratrix of the estate of Isaac E. Lawrence, deceased.

Witnesses:

LILLA M. LAWRENCE,
FISHER H. PEARSON.