(No Model.)

J. B. NEWELL.

LOOM TEMPLE.

No. 409,369. Patented Aug. 20, 1889.

Fig. 1.

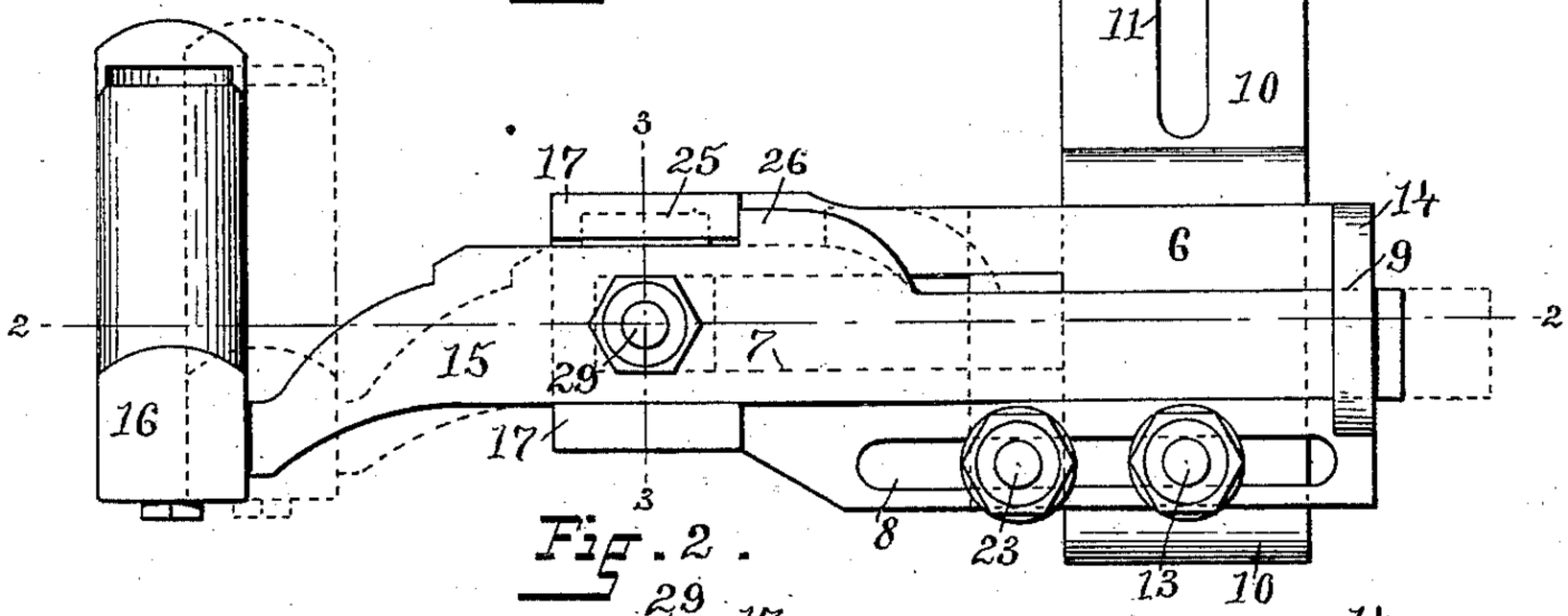


Fig. 2.

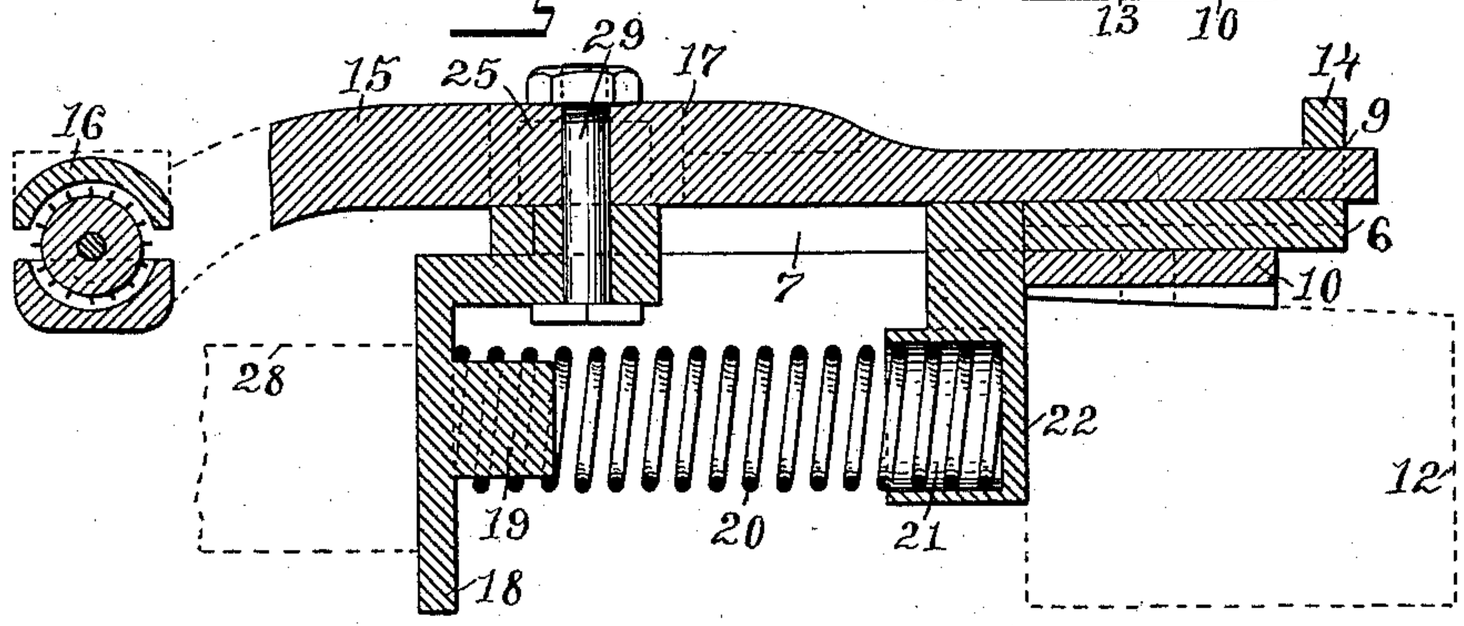


Fig. 3.

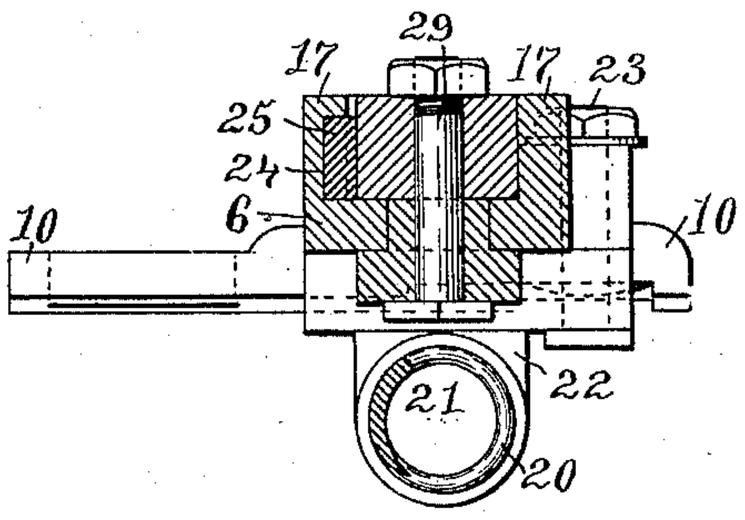
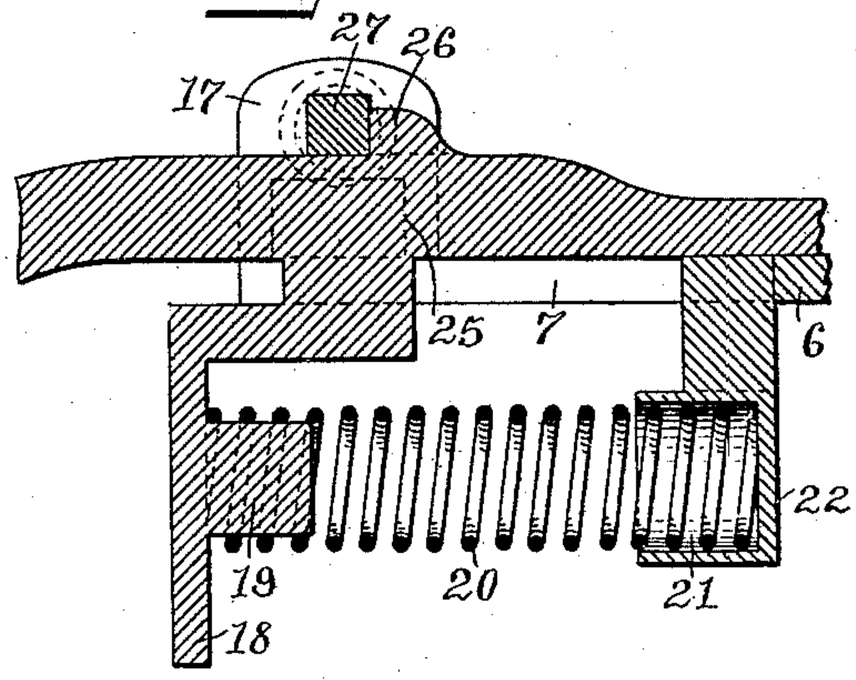


Fig. 4.



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LOOM-TEMPLE.

SPECIFICATION forming part of Letters Patent No. 409,369, dated August 20, 1889.

Aplication filed July 19, 1887. Serial No. 244,704. (No model.)

To all whom it may concern:

Be it known that I, JOSHUA B. NEWELL, of Georgiaville, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Loom-Temples, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to an attachment for a loom known as a "temple," and which is designed to keep a lateral tension upon the fabric in order to maintain the warps parallel.

The invention is an improvement upon the well-known Dutcher temple, the construction of which may be readily understood by reference to the United States Letters Patent No. 97,895, issued December 14, 1869, and No. 106,038, dated August 2, 1870.

The objects of my invention are to provide an efficient and durable temple, and, further, my invention provides a peculiar construction of parts of the temple, whereby the Dutcher temple may be made to better withstand the wear, and thereby rendered more lasting.

To the above purposes my invention consists in the certain novel and peculiar construction and arrangements of the various parts of the device, as will hereinafter be fully described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a top plan view of my improved form of temple, the broken lines showing the position of the support-bar and grip-roller mechanism attached thereto when the lay beats up against the push-piece of the support-bar and represses the same. Fig. 2 is a longitudinal sectional view of the device, taken on line 2 2 in Fig. 1, the bolt 29 being shown in elevation. Fig. 3 is a transverse sectional view of the temple, taken on line 3 3 in Fig. 1, the bolt 29 being shown in elevation. Fig. 4 is a longitudinal sectional view of a portion of another form of my temple, the section being taken on a line corresponding to the line 2 2 in Fig. 1.

In the said drawings like numbers of reference designate corresponding parts throughout.

Referring to the drawings, the number 6 designates the bed-plate, which is formed with the longitudinal slot 7 and the opening 8. At one end of the plate is an upright extension 14, which is provided with the guide-eye 9. The securing-plate 10 is formed with a slot 11, by means of which the plate may be secured to the breast-beam 12 with a bolt, the breast-beam being shown in broken lines in Fig. 2. The securing-plate is attached adjustably to the bed-plate 6 by the bolt 13, which extends through the slot 8. The support-bar 15 is provided at one end with the grip-roller mechanism 16, which is of a well-known construction, and the bar is mounted on the bed-plate 6 and is adapted to slide endwise thereon between the guiding projections 17 and through the guide-eye 9. The push-piece 18 is secured to the under side of the support-bar 15 by means of the tie-bolt 29. This piece 18 depends through the slot 7 of the bed-plate, and near the lower end is constructed the boss 19, which serves as a support for one end of the spiral spring 20, the other end of the spring being seated in the recess 21, formed in the depending holder 22, which is adjustably secured to the bed-plate 6 by means of the bolt 23, which takes through the opening 8 of the bed-plate. The holder 22 is made adjustable, so as to regulate the power of the actuating-spring 20.

In order to prevent the rapid wearing away of one of the guiding projections 17, as is the case in the Dutcher temple, I have provided the following means: The inner face of the guiding projection 17 is hollowed out, as at 24, (shown most clearly in Fig. 3,) and in the cavity is placed a block or cushion of soft material 25, preferably rawhide. As the lateral strain upon the support-bar causes the same to bear with much force upon the recessed guiding projection 17, the friction of the bar is received by the rawhide cushion 25, which, as well known, will withstand the wear better than the metal itself. The movement of the support-bar 15 is limited in one direction by the stop 26, which is formed upon the bar and engages the guiding projection 17, and it is limited in the reverse direction by means of the push-piece 18 striking against the holder 22 at the end of the slot 7.

In Fig. 4 I have shown another form of my improved temple, in which the slot 7 of the bed-plate is opened at one end, so as to allow

the push-piece 18, which is cast integral with the support-bar 15, to be entered within the slot 7 before the removable cross-bolt 27 is fixed in position between the guiding projections 17. The cross-bolt 27 passes through eyes formed in the guiding projections 17 and extends between the projections at right angles to the support-bar 15. In this form the stop 26 is formed upon the upper face of the support-bar and strikes against the cross-bolt 27. This form is likewise provided with the rawhide cushion 25.

The old form of the Dutcher temple shown in the aforesaid patents is not very durable, since the reciprocations of the support-bar rapidly wear away the guiding projections. By virtue of the construction of the parts shown in Fig. 4 I am enabled to readily repair the Dutcher temple and to furnish them with a rawhide cushion, thereby greatly increasing their durability.

The operation of the device is as follows: The selvage of the fabric is passed about the grip-roller mechanism in the usual way, and as the lay beats up a portion 28 thereof (shown in broken lines in Fig. 2) presses upon the push-piece 18 against the action of the spring 20, thereby sliding the support-bar in its bearings about the same distance as the movement of the take-up motion. When the lay moves in the reverse direction, the push-piece being free, the spring 20 exerts its full force and restores the support-bar and superposed parts to their normal positions. By having the push-piece connected directly to the support-bar I obtain an easy action of the device and increase the wearing quality of the same.

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

1. The combination, as hereinbefore set forth, with the bed-plate 6, provided with the slot 7, of the support-bar 15, provided with the grip-roller mechanism and mounted upon the bed-plate and capable of reciprocating thereon, the push-piece 18, attached to the support-bar, the spring 20, engaging the push-piece, and the holder 22, mounted upon the bed-plate and having means for adjustment, substantially as and for the purpose herein described.

2. The combination, as hereinbefore set forth, with the bed-plate 6, provided with the slot 7 and the opening 8, of the support-bar 15, provided with the grip-roller mechanism and mounted on the bed-plate and capable of reciprocating thereon, the depending push-piece 18, attached to the support-bar and provided with the boss 19, the spring 20, engaging the boss, and the holder 22, having the cavity 21 and adjustably secured to the bed-plate by means of the bolt 23, substantially as and for the purpose herein described.

3. The combination, as hereinbefore set forth, with the bed-plate 6, provided with the slot 7 and the opening 8 and formed with the guiding projections 17, and the upright extension 14, having the guide-eye 9, of the reciprocating support-bar 15, provided with the grip-roller mechanism and mounted upon the bed-plate, the depending spring-actuated push-piece, the securing-plate 10, and the clamping-bolt 13, attached to plate 10 and extending through the opening 8, substantially as and for the purpose herein described.

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