No. 621,691. Patented Mar. 21, 1899.

T. MOONEY & C. RENAUD.

LOOM.

(Application filed Dec. 8, 1898.)

(No Model.)

Fig. 1.

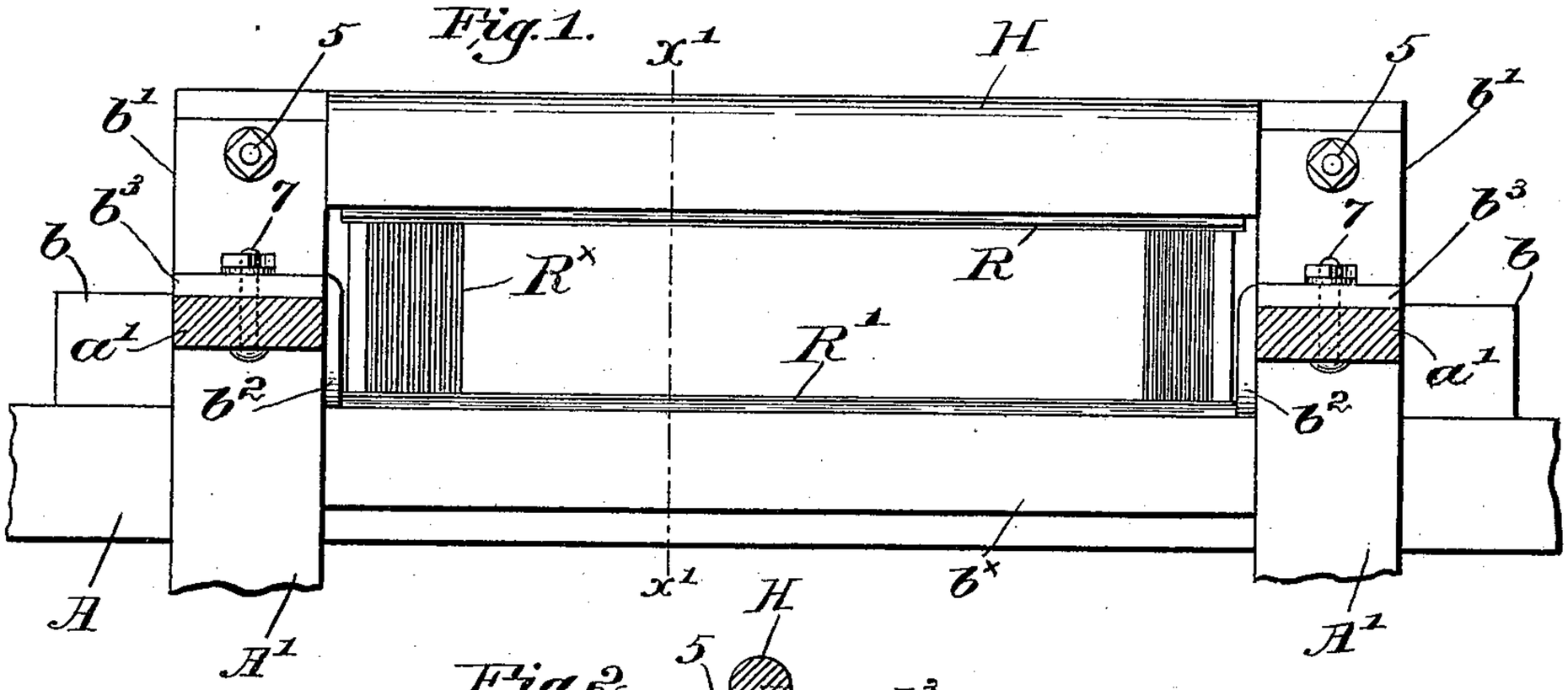


Fig. 2.

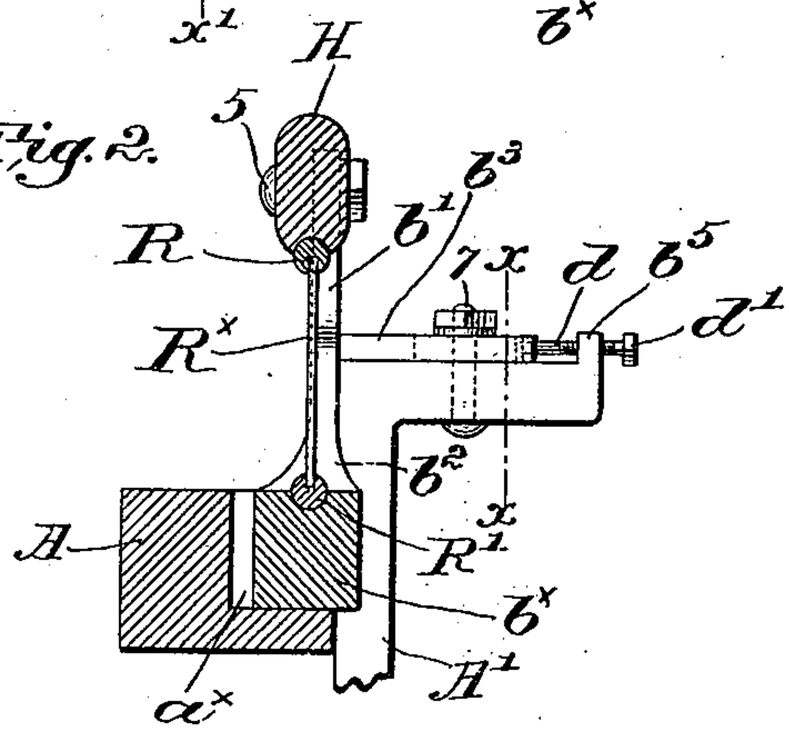


Fig. 3.

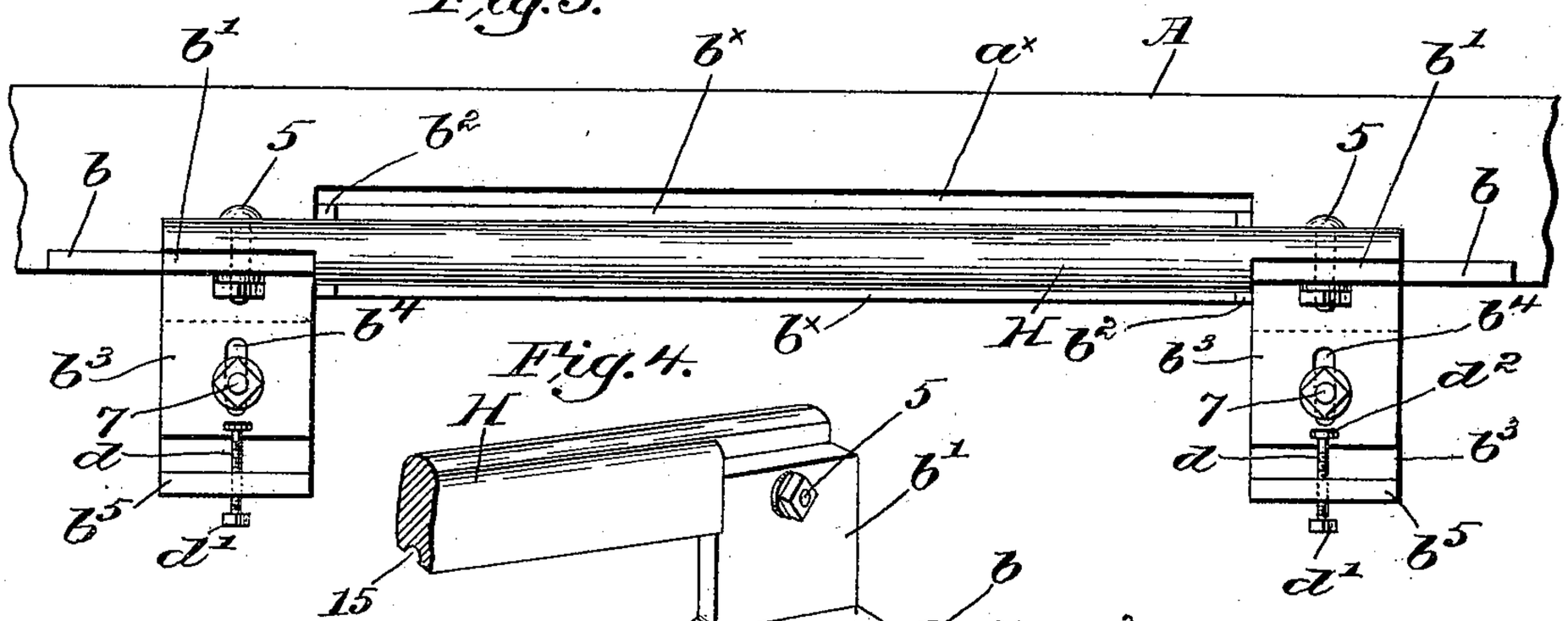
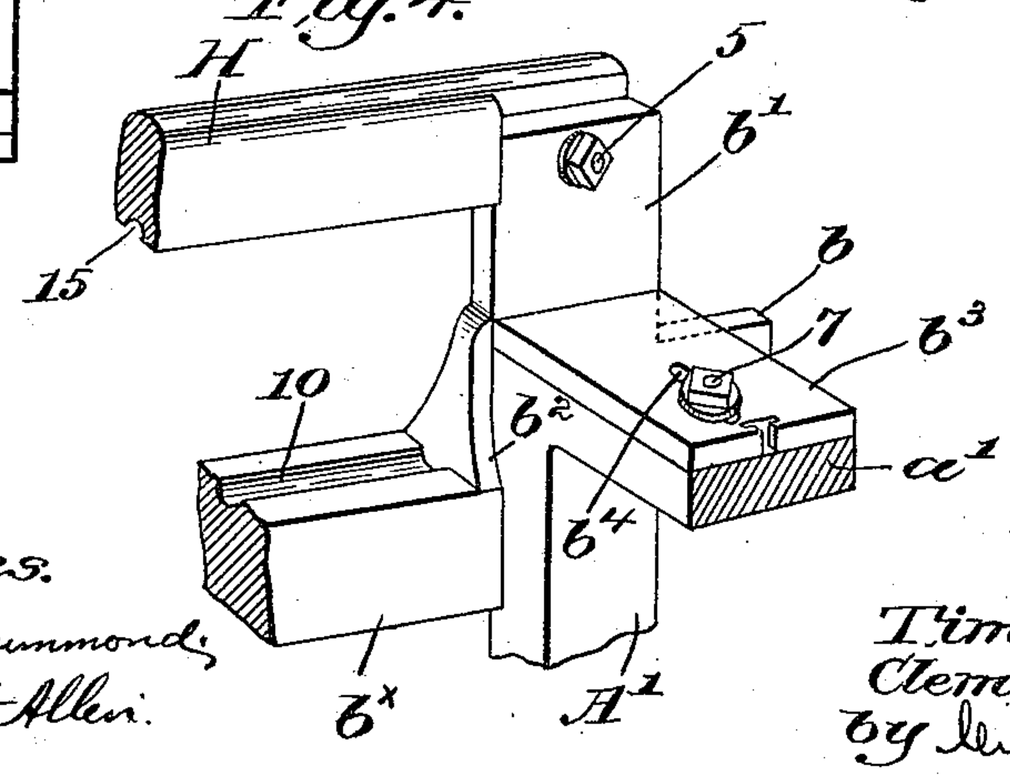


Fig. 4.



Witnesses.
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by Hornby Gregory & Atty's.

UNITED STATES PATENT OFFICE.

TIMOTHY MOONEY AND CLEMENT RENAUD, OF FALL RIVER, MASSACHUSETTS.

LOOM.

SPECIFICATION forming part of Letters Patent No. 621,691, dated March 21, 1899.

Application filed December 8, 1898. Serial No. 698,608. (No model.)

To all whom it may concern:

Be it known that we, TIMOTHY MOONEY and CLEMENT RENAUD, 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 and figures on the drawings representing like parts.

This invention has for its object the production of means for accurately and readily adjusting the back box-plate on the lay of a loom so that the backs of the shuttle-boxes will always be in alinement, the reed being connected to the box-plate to be adjusted therewith.

Figure 1 is a rear view, partly in section, of a portion of the lay of a loom with our invention applied thereto, the view being taken on the line $x\,x$, Fig. 2, looking toward the left. Fig. 2 is a transverse sectional view of the apparatus on the line $x'\,x'$, Fig. 1, looking toward the right. Fig. 3 is a top or plan view thereof, the lay being omitted. Fig. 4 is a perspective detail of one end of the apparatus, the top of the lay-sword being shown in section for the sake of clearness.

The lay A, of usual construction, is attached to the lay-swords A′ in suitable manner and has a longitudinal recess $a^{\times}$, Figs. 2 and 3, to receive the support, to be described, for the bottom bar R′ of the reed $R^{\times}$.

The back box-plates $b\ b$ are in our invention made as integral parts of a casting comprising upright end stands b', rigidly connected by a heavy cross-girth $b^{\times}$, which enters the recess $a^{\times}$ in the lay and forms the support for the bottom reed-bar R′, the upper face of the support being longitudinally grooved or recessed at 10 to receive said bar.

As is usual, the lay-swords A′ project above the lay, at the rear side thereof, and the end stands b' rest against them, as shown in the drawings, the inner upright edges of the stands being enlarged to form integral shoulders b^2, which abut against the inner sides of the lay-swords.

The usual wooden hand-rail H is attached by suitable bolts 5 to the end stands and supports the upper bar R of the reed $R^{\times}$, which rests in a groove 15, Fig. 4.

Each stand b' is provided with an integral rearwardly-extended ear b^3, which rests on the bent-over top a' of the adjacent lay-sword and is adjustably secured thereto by a clamping-bolt 7, extended through the top of the sword and through a slot b^4 in the ear.

The adjustment of the box-plates b is effected by loosening the bolts 7 and moving the stands forward or back, as may be necessary, and it will be obvious that as the box-plates are rigidly connected by the end stands and girth $b^{\times}$ they must always be in absolute alinement. It is thus impossible to leave one of the box-plates projecting out of line with the other or with the reed, so that there is no tendency to deflect the shuttle from its proper path as it is shot across the lay.

We have herein shown convenient means for effecting the adjustment of the back box-plates while the clamping-bolts are loosened, and for this purpose the tops a' of the lay-swords are provided each with an upturned shoulder b^5, having a threaded hole to be entered by a threaded stud d, provided at its outer end with a suitable head d' and at its inner end reduced in diameter and provided with an annular shoulder d^2 to enter a correspondingly-shaped notch b^6 in the ear b^3. (See Fig. 4.)

By rotating the studs d in one or the other direction the connected box-plates are moved forward or back on the lay, and a very delicate and accurate adjustment may be thus effected, the bolts 7 being thereafter set up to tightly clamp the stands and connected parts in adjusted position.

Our invention is not restricted to the precise construction and arrangement shown and described, as the same may be rearranged or modified without departing from the spirit and scope of our invention.

Having fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a loom, the lay, back box-plates, a rigid connection therebetween, and means to adjust them on the lay.

2. In a loom, the lay, back box-plates, means to adjustably connect them with the lay-swords, and a rigid connection between the box-plates to maintain the same in alinement.

3. In a loom, the lay, the lay-swords bent rearwardly at their upper ends, the back box-

plates, rigidly-connected end stands to which said plates are attached, and extensions on the stands to rest on the upper ends of the lay-swords.

4. In a loom, upright end stands, back box-plates forming a part thereof, and a cross-girth rigidly connecting the end stands, combined with the lay-swords, and means to adjustably connect the end stands thereto.

5. In a loom, the lay having a longitudinal recess behind the shuttle-race, the lay-swords, back box-plates, a rigid connection between them, entering the recess in the lay, means to adjust the box-plates relatively to the lay-swords, and clamping devices to maintain the plates in adjusted position.

6. In a loom, the lay, the lay-swords bent rearwardly at their upper ends and having each an upturned shoulder, the back box-plates, rigidly-connected end stands of which the said plates form a part, rearwardly-projecting, slotted ears on the stands, to rest on the upper ends of the lay-swords, clamping-bolts connecting the latter and the slotted ears, and adjusting screw-studs mounted in the shoulders of the lay-swords and in engagement with the ears of the stands.

7. In a loom, the lay, the lay-swords, back box-plates, a rigid connection between them, means to adjustably connect the plates with the lay-swords, and the reed mounted on the connection between the box-plates.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

TIMOTHY MOONEY.
CLEMENT RENAUD.

Witnesses:
JOHN T. COUGHLIN,
JOSEPH MENARD.