

No. 753,515.

PATENTED MAR. 1, 1904.

J. M. PECKHAM.
PICKER CHECK FOR LOOMS.

APPLICATION FILED NOV. 14, 1903.

NO MODEL.

Fig. 1.

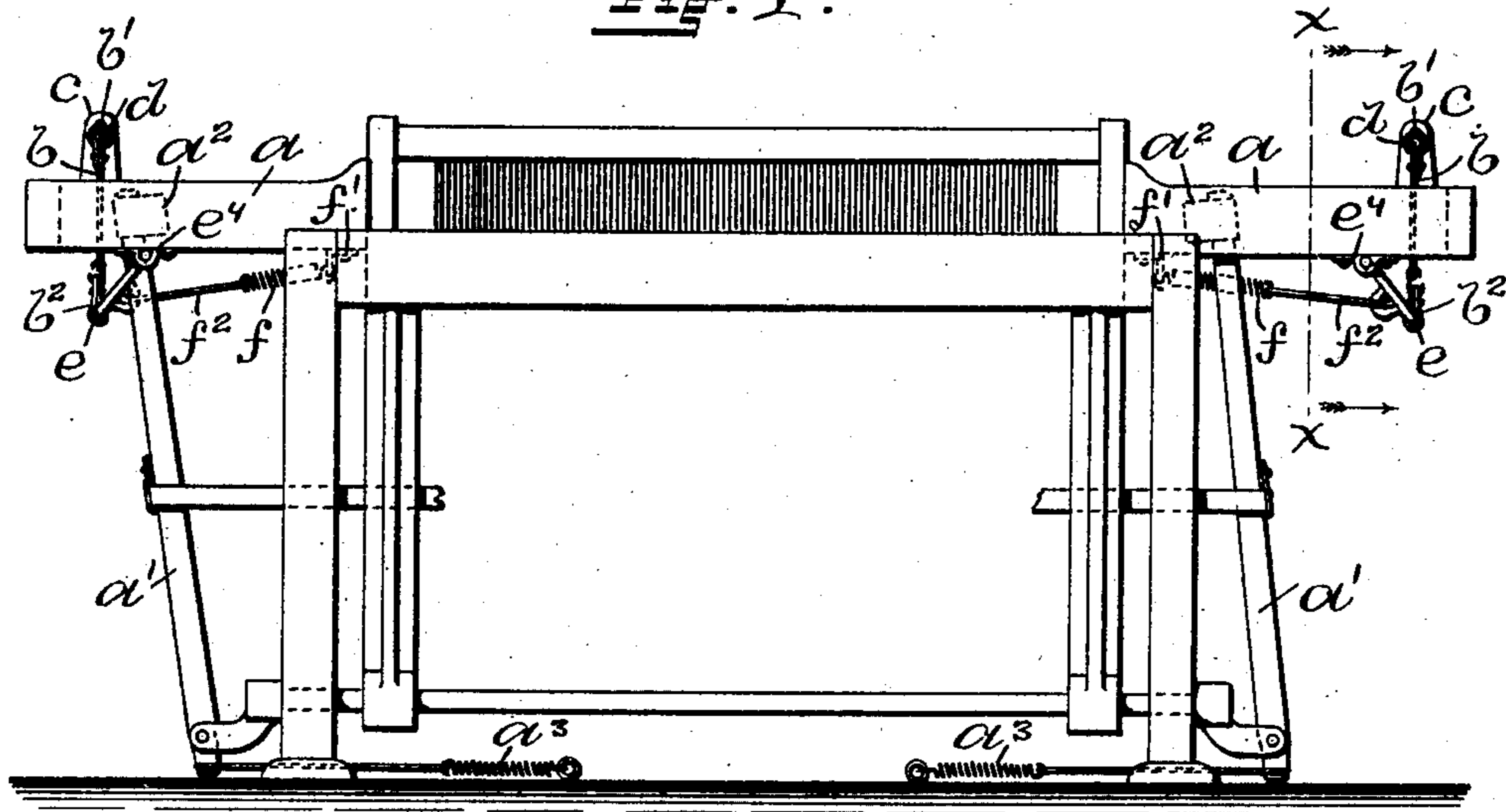


Fig. 2.

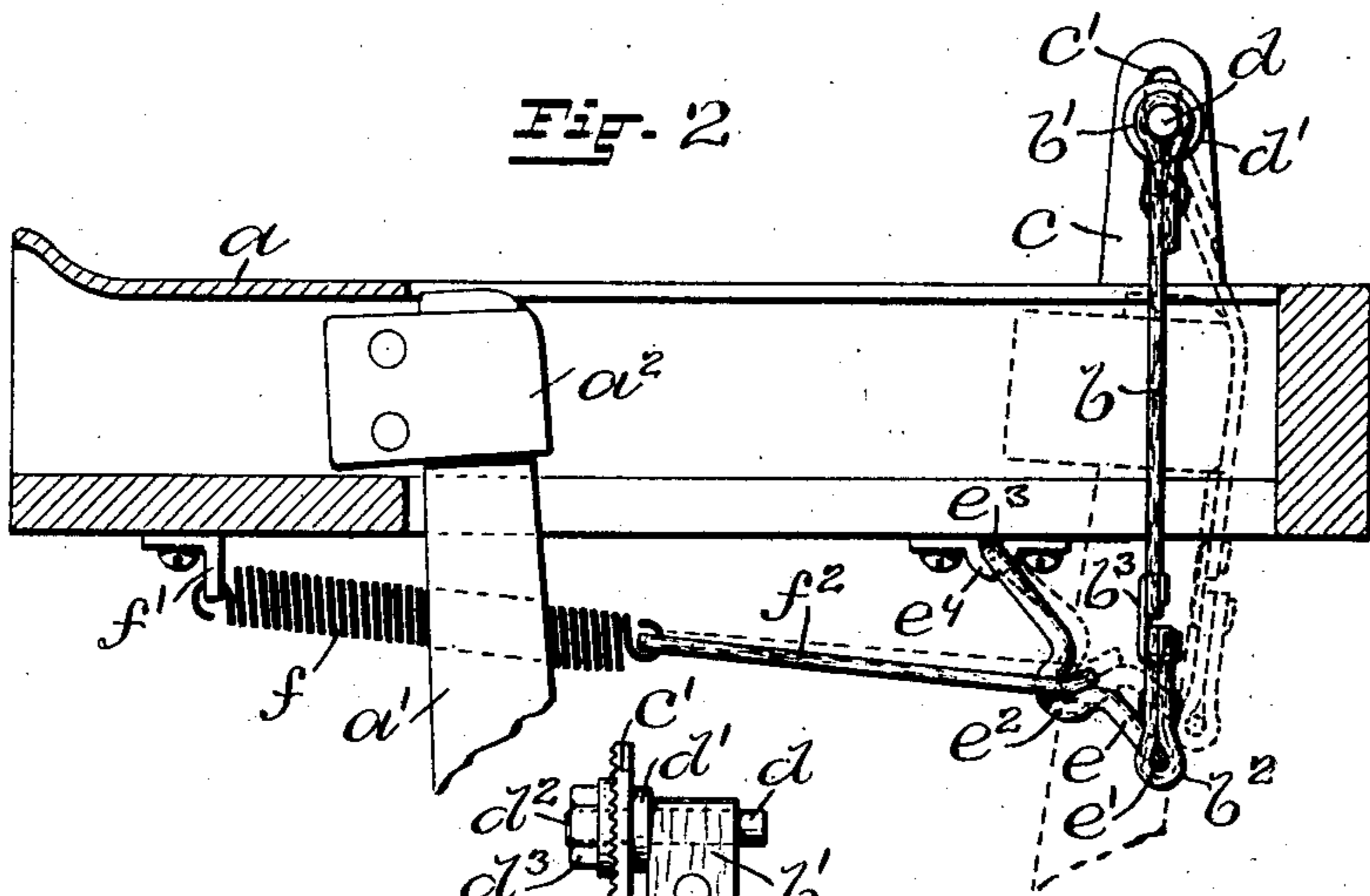
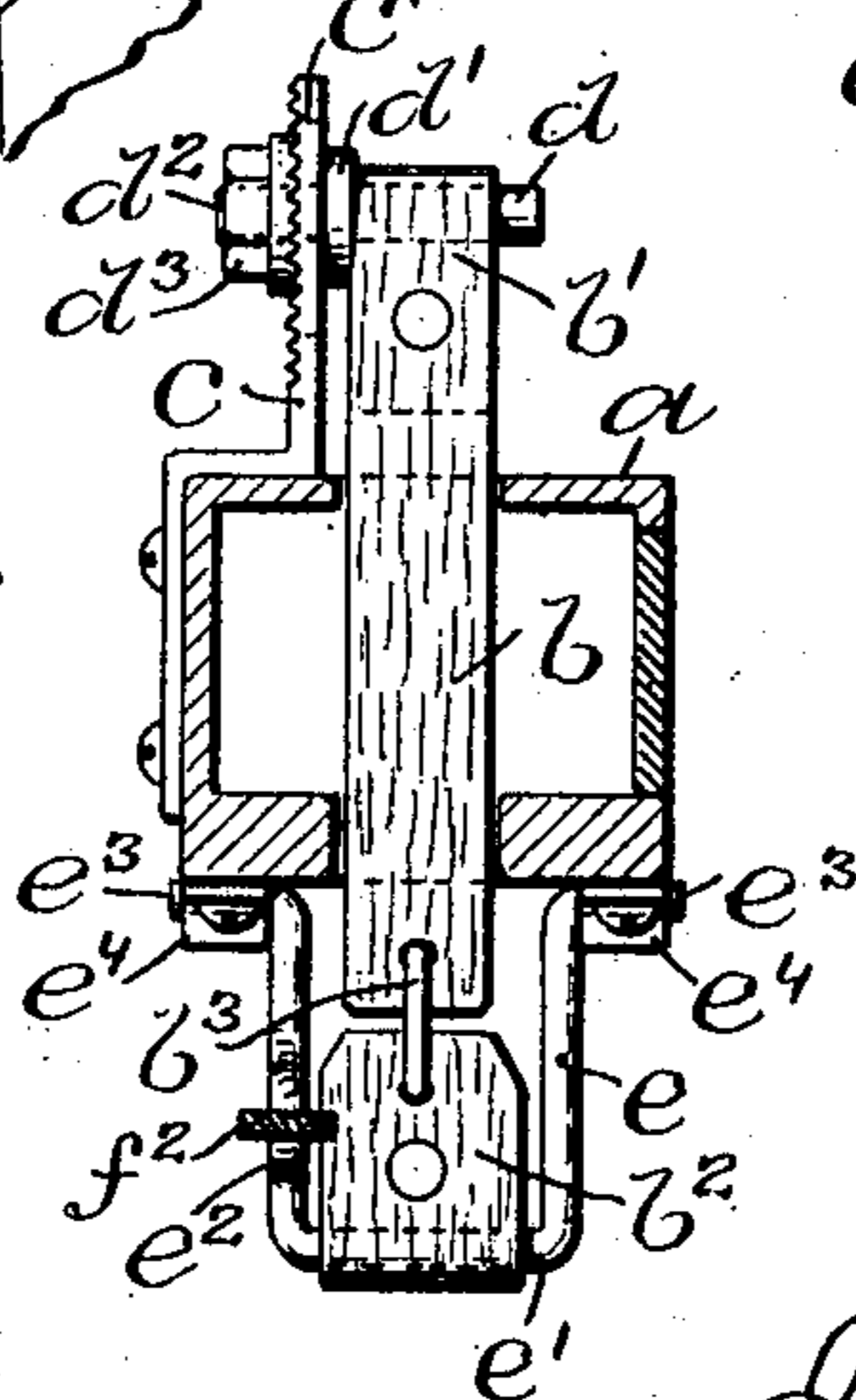


Fig. 3.



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JAMES M. PECKHAM, OF FALL RIVER, MASSACHUSETTS.

PICKER-CHECK FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 753,515, dated March 1, 1904.

Application filed November 14, 1903. Serial No. 181,168. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. PECKHAM, a citizen of the United States, residing at Fall River, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Picker-Checks for Looms, of which the following is a specification.

This invention has reference to an improvement in looms, and more particularly to an improvement in picker-checks for looms.

The object of my invention is to prevent the breaking of the cop in the shuttle by the return blow of the shuttle on the picker and the misplacement of the shuttle in the shuttle-boxes by the rebounding or chattering of the picker-sticks under the impulse of the floor-springs.

My invention consists in the peculiar and novel construction of a picker-check adapted to be secured to the shuttle-boxes of a loom, the said check consisting of a flexible strap extending downwardly through the shuttle-box in the path of the picker intermediate the picker and the outer end of the shuttle-box, an upwardly-extending arm rigidly secured to the shuttle-box, a stud supporting the upper end of the strap adjustably secured to the arm, a U-shaped link pivotally secured to the bottom of the shuttle-box and to the lower end of the strap, and a coiled spring attached to the shuttle-box and to the U-shaped link to exert a spring tension on the strap and hold it in its normal vertical position, whereby the strap on receiving the outward blow of the picker raises the U-shaped link against the tension of the coiled spring and the frictional contact of the picker on the strap, checking and bringing the picker gradually to a stop, as will be more fully set forth hereinafter.

Figure 1 is a front view of a loom, showing my improved picker-checks in the normal position attached to the shuttle-boxes of the loom. Fig. 2 is an enlarged vertical sectional view taken lengthwise through the right-hand shuttle-box, showing the picker-check in full lines and in the position it would assume under the outward blow of the picker in broken lines; and Fig. 3 is an enlarged transverse sectional view taken on line X X

of Fig. 1, showing the flexible strap extending downward through the shuttle-box, the rigid arm secured to the shuttle-box, the stud supporting the upper end of the strap adjustably secured to the arm, and the U-shaped link pivotally secured to the bottom of the shuttle-box and to a loop, which in turn is secured to the lower end of the strap by a belt-hook.

In the drawings, *a a* indicate the shuttle-boxes; *a' a'*, the picker-sticks; *a² a²*, the pickers on the picker-stick, and *a³ a³* the floor-springs attached to the floor and to the lower end of the picker-stick. The picker-sticks *a' a'* are operated by the usual picking-cones and picker-straps to throw a shuttle from the shuttle-boxes. The tension of the floor-springs *a³ a³* returns the picker-sticks *a' a'* to their normal or outward position after the throw of the shuttle by the picker-stick.

My improved picker-check is adapted to be secured to the shuttle-boxes of a loom and consists of the flexible strap *b*, which extends downward through the shuttle-box in the path of the picker *a²* and near the outer end of the shuttle-box in a vertical position. The upper end of the strap *b* is formed into the loop *b'*, and the lower end is connected to the loop *b²* by the belt-hook *b³*. The upwardly-extending rigid arm *c* is secured to the back of the shuttle-box *a* by screws or other means and has the slot *c'* in its upper end. The stud *d* has the collar *d'* and the screw-threaded end *d²*, which extends through the slot *c'* in the arm *c* and is secured to the arm by the nut *d³*. The stud *d* supports the strap *b* through the loop *b'* on the upper end of the strap, as shown in Figs. 2 and 3. The U-shaped wire link *e* has the closed end *e'*, on which the loop *b²* is pivotally secured, the indentation *e²* in one side of the link, and the outwardly-bent ends *e³ e³*, pivotally secured to the bottom of the shuttle-box by the bearings *e⁴ e⁴*. The coiled spring *f* is attached to the bottom of the shuttle-box by the L-shaped bracket *f'* and to the indentation *e²* in the link *e* by the connecting-strap *f²*.

In the operation of my improved picker-check the outward blow of the picker is received on the flexible strap *b*, the picker forc-

ing the strap outward into the position as shown in broken lines in Fig. 2. As the upper end of the strap *b* is fixed on the stud *d*, this movement of the strap raises the free end of the link *e* against the tension of the spring *f* and gradually brings the picker to a stop by the tension of the spring *f* and the frictional contact of the picker on the flexible strap *b*.

In practice I find that the force of the outward blow of the picker varies in different looms. To compensate for this, I adjust the tension of the spring *f* on the strap *b* by adjusting the stud *d* up or down on the arm *c* in the slot *c'* and securing it in the adjusted position by the nut *d*³, as shown in Fig. 3.

My improved picker-check is inexpensive in construction and simple in operation. The flexible strap *b* when worn out or broken is readily removed from the stud *d* and belt-hook *b*³ and renewed when required, and by the use of my improved picker-checks a more perfect action of the pickers and shuttle in a loom is attained than has heretofore been done.

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

1. In a picker-check, the combination with the shuttle-box and picker of a loom, of a flexible vertical strap extending downwardly across the path of the picker, means for rig-

idly holding the upper end of the strap, consisting of a stud on an arm secured to the shuttle-box, means for exerting a spring tension on the strap, consisting of a link pivotally secured to the lower end of the strap and to the bottom of the shuttle-box, and a coiled spring attached to the shuttle-box and to the link, and means for adjusting the tension of the spring on the strap, as described.

2. In a picker-check, the combination with the shuttle-box and picker of a loom, of the flexible strap *b* having its upper end formed into the loop *b'*, the loop *b*² connected to the lower end of the strap by the belt-hook *b*³, the arm *c* having the slot *c'*, the stud *d* having the collar *d'*, the screw-threaded end *d*² and the nut *d*³, the link *e* having the closed end *e'*, the indentation *e*², and the outwardly-bent ends *e*³ *e*³, the bearings *e*⁴ *e*⁴, the coiled spring *f*, the bracket *f'*, and the connecting-strap *f*², all for the purpose as shown and described.

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

JAMES M. PECKHAM.

Witnesses:

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