

No. 737,219.

PATENTED AUG. 25, 1903.

E. H. GLEASON.
PICKER STICK CHECK FOR LOOMS.

APPLICATION FILED MAR. 28, 1903.

NO MODEL.

Fig. 1.

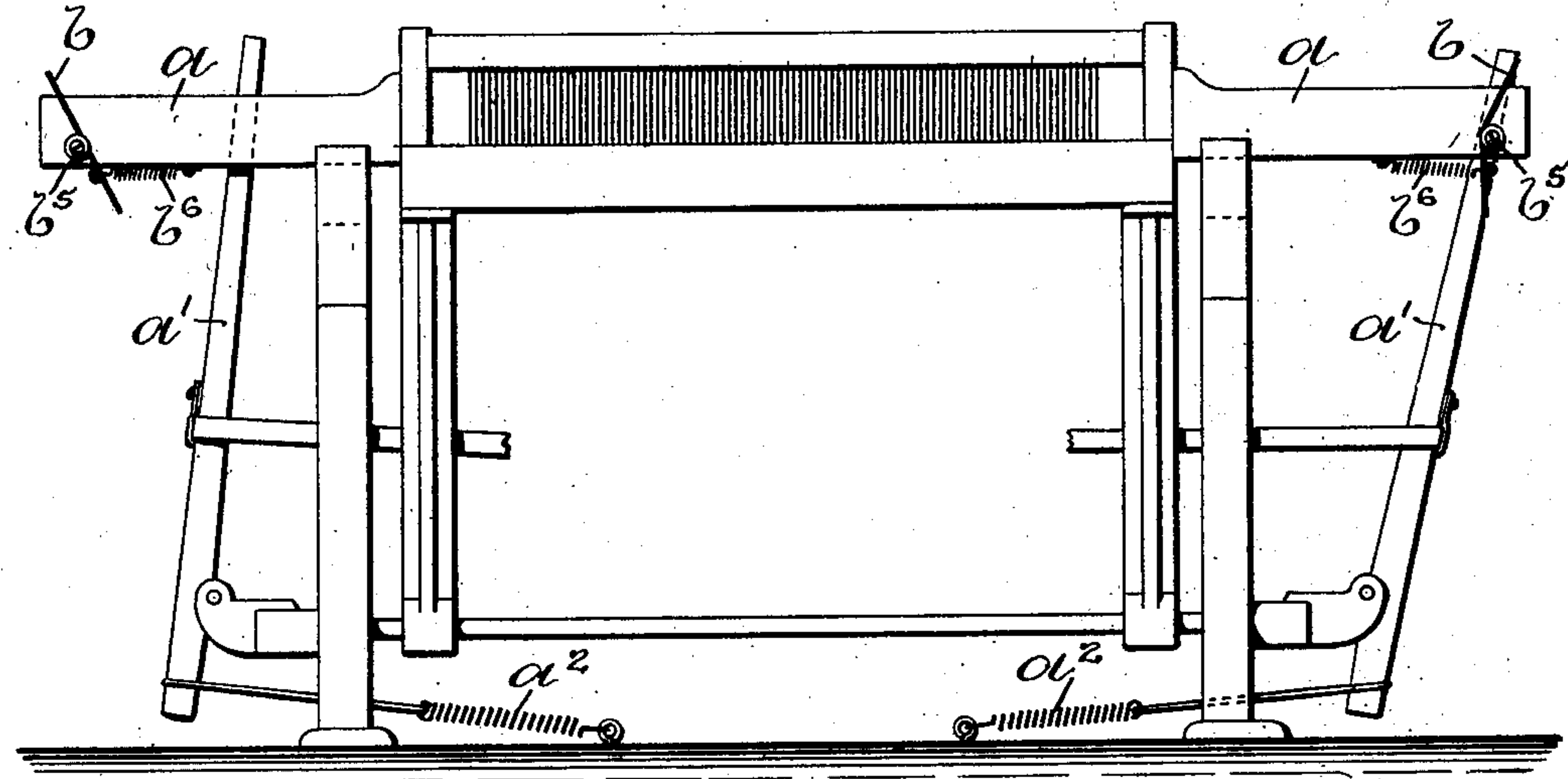


Fig. 2.

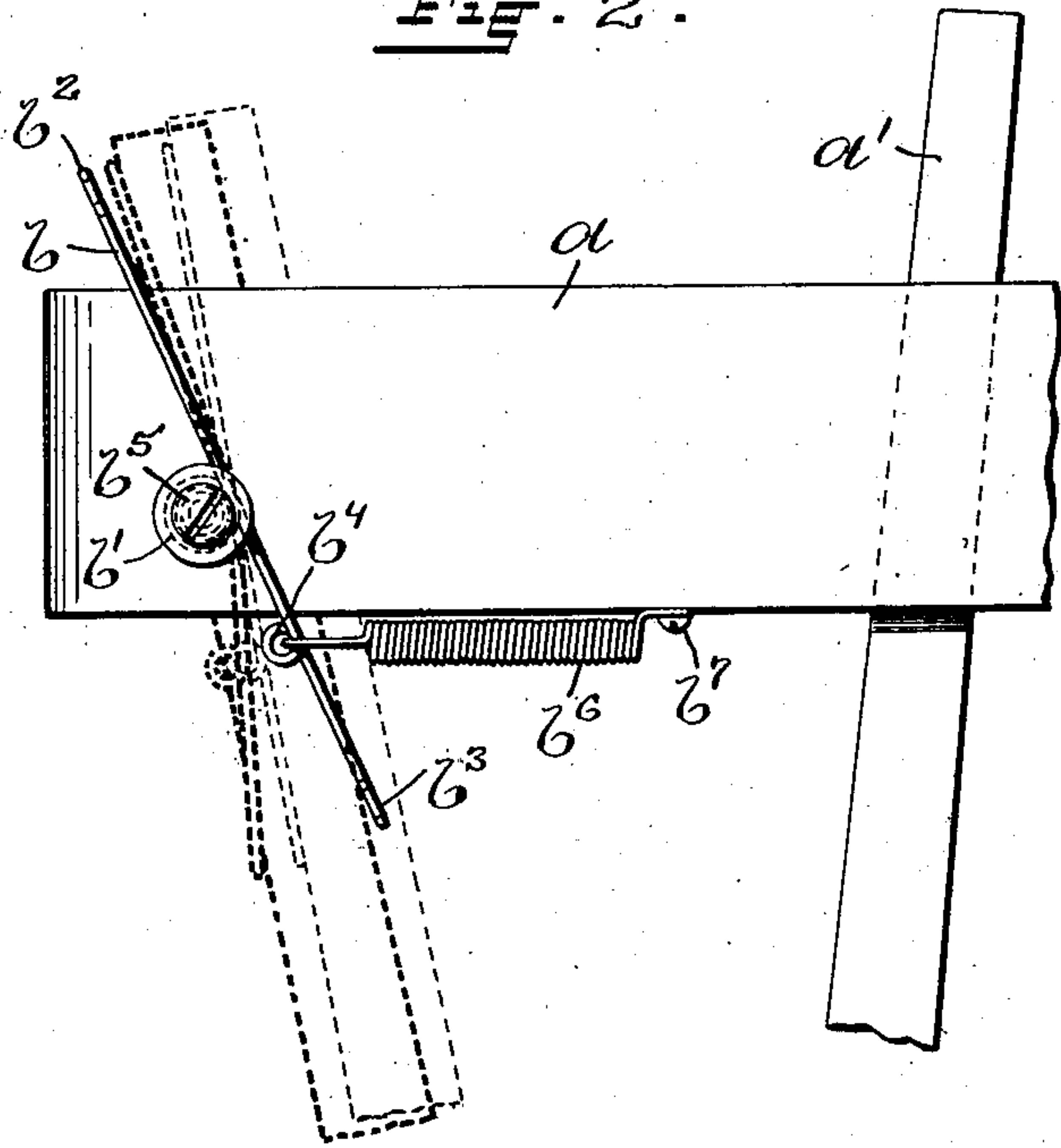
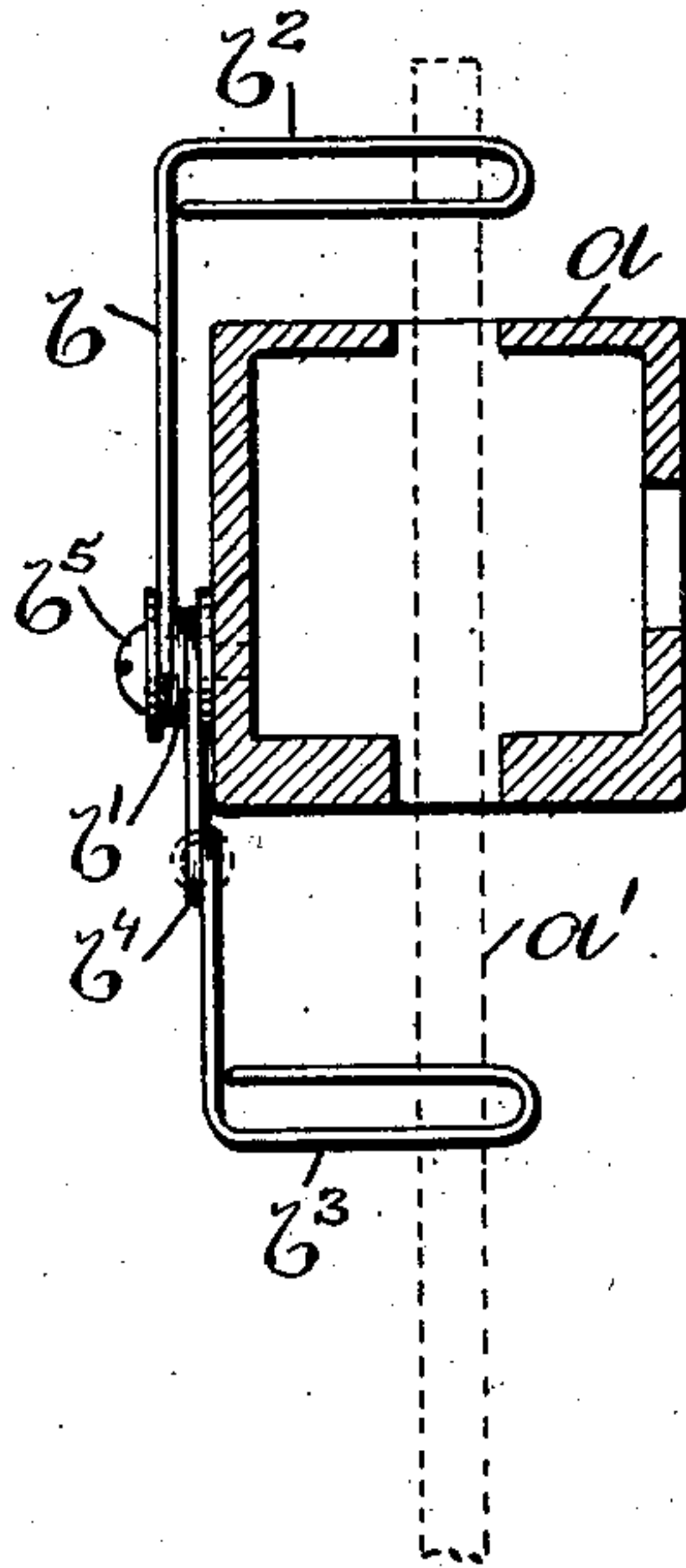


Fig. 3.



WITNESSES:

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ELI H. GLEASON, OF PUTNAM, CONNECTICUT.

PICKER-STICK CHECK FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 737,219, dated August 25, 1903.

Application filed March 28, 1903. Serial No. 149,923. (No model.)

To all whom it may concern:

Be it known that I, ELI H. GLEASON, a citizen of the United States, residing at Putnam, in the county of Windham and State of Connecticut, have invented a new and useful Improvement in Picker-Stick 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-stick checks for looms.

The object of my invention is to prevent 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-stick check adapted to be pivotally secured to the back of a shuttle-box, the said check consisting of an arm constructed of spring-wire and shaped to have a coil forming a spring and a pivot for the arm, the ends of which are bent to go over and under the shuttle-box and engage with the picker-stick and an auxiliary coiled spring connecting the arm with the shuttle-box to hold the check in its normal position and give an increased spring tension to the check, as will be more fully set forth herein-after.

Figure 1 represents a back view of a loom, showing my improved picker-stick checks pivotally secured to the back of the shuttle-boxes and the positions the spring-arm of the checks would assume when in its normal position and when engaged with the picker-stick. Fig. 2 is an enlarged view looking at the back of the shuttle-box, showing the spring-arm of the check in its normal position and the picker-stick in its inward position in full lines, the first operative position of the check and picker-stick in light broken lines, and the final position of the check and picker-stick in heavy broken lines; and Fig. 3 is a transverse sectional view through Fig. 2, showing the shuttle-box in section, the spring-arm of the check with its L-shaped ends to engage with the picker-sticks shown in broken lines and the pivot-screw to pivotally secure the arm to the shuttle-box.

In the drawings, a a are the shuttle-boxes of a loom. The picker-sticks a' a' are oper-

ated in the usual way by the picking-cones and picker-straps to throw a shuttle from the shuttle-boxes. The floor-springs a^2 a^2 are connected to the floor and the lower ends of the picker-sticks, the tension of the floor-springs returning the picker-sticks to their outward or normal position after the throw of the shuttle by the picker-stick.

My improved picker-stick check consists of the spring-arm b , constructed of spring-wire, so as to have the central coil b' forming a spring and the pivot of the arm, the L-shaped end b^2 extending over the shuttle-box and the L-shaped end b^3 extending under the shuttle-box to engage with the picker-stick and the eye b^4 in the lower part of the arm, the pivot-screw b^5 for pivotally securing the arm b through the coil b' to the shuttle-box, and the coiled spring b^6 , connecting with the arm b through the eye b^4 and to the bottom of the shuttle-box by the screw b^7 to hold the arm b in its normal position and to give an increased spring tension to the arm against the outward blow of the picker-stick.

In the operation of my improved picker-stick check the picker-stick in its outward movement under the impulse of the floor-spring strikes the lower end b^3 of the spring-arm b and forcing it outward against the tension of the coiled spring b^6 brings the upper end b^2 of the arm into contact with the picker-stick above the shuttle-box, as shown in light broken lines in Fig. 2, and a further outward movement of the picker-stick forces both the ends b^2 and b^3 outward against the tension of the central spring-coil b' and the spring b^6 , as shown in heavy broken lines. The peculiar operation of the arm b on the picker-stick and the tension of the springs neutralize the blow of the picker-stick, retarding and stopping it in its extreme outward position and preventing rebounding or chattering of the picker-stick on the shuttle or shuttle-box.

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

1. A picker-stick check, consisting of a spring having ends located above and below the shuttle-box in the path of the picker-stick, and means for securing the spring to the shuttle-box, as described.

2. A picker-stick check, consisting of a spring-arm having ends extending over and under a shuttle-box to engage with a picker-stick, means for pivotally securing the arm to a shuttle-box, and means consisting of a spring to hold the arm in its normal position and give an increased spring tension to the arm, for the purpose as described.

3. A picker-stick check, consisting of a spring-arm having L-shaped ends, means for pivotally securing the arm to a shuttle-box in a position to bring the L-shaped ends into the path of the picker-stick, and means consisting of a spring to hold the lower end of the arm in an advanced position, for the purpose as described.

4. In a picker-stick check, an arm constructed of spring-wire having L-shaped ends and a central coil forming a spring, means for pivotally securing the arm through the central coil to a shuttle-box, and means consisting of a spring for holding the arm in its normal position, for the purpose as described.

5. In a picker-stick check, an arm constructed of spring-wire having L-shaped ends and a central coil forming a spring, means for

pivotally securing the arm through the central coil to a shuttle-box, and means consisting of a coiled spring connecting the arm with the shuttle-box to hold the arm in its normal position with its lower end advanced to receive the picker-stick, for the purpose as described.

6. In a picker-stick check, the combination with the arm b constructed of spring-wire and having the central coil b' forming a spring and the pivot of the arm, the L-shaped ends b^2 and b^3 to engage with the picker-stick above and below the shuttle-box, and the eye b^4 in the lower part of the arm, the pivot-screw b^5 for pivotally securing the arm through the coil b' to a shuttle-box and the coiled spring b^6 connecting with the arm b through the eye b^4 and to a shuttle-box by the screw b^7 , all for the purpose as described.

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

ELI H. GLEASON.

Witnesses:

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