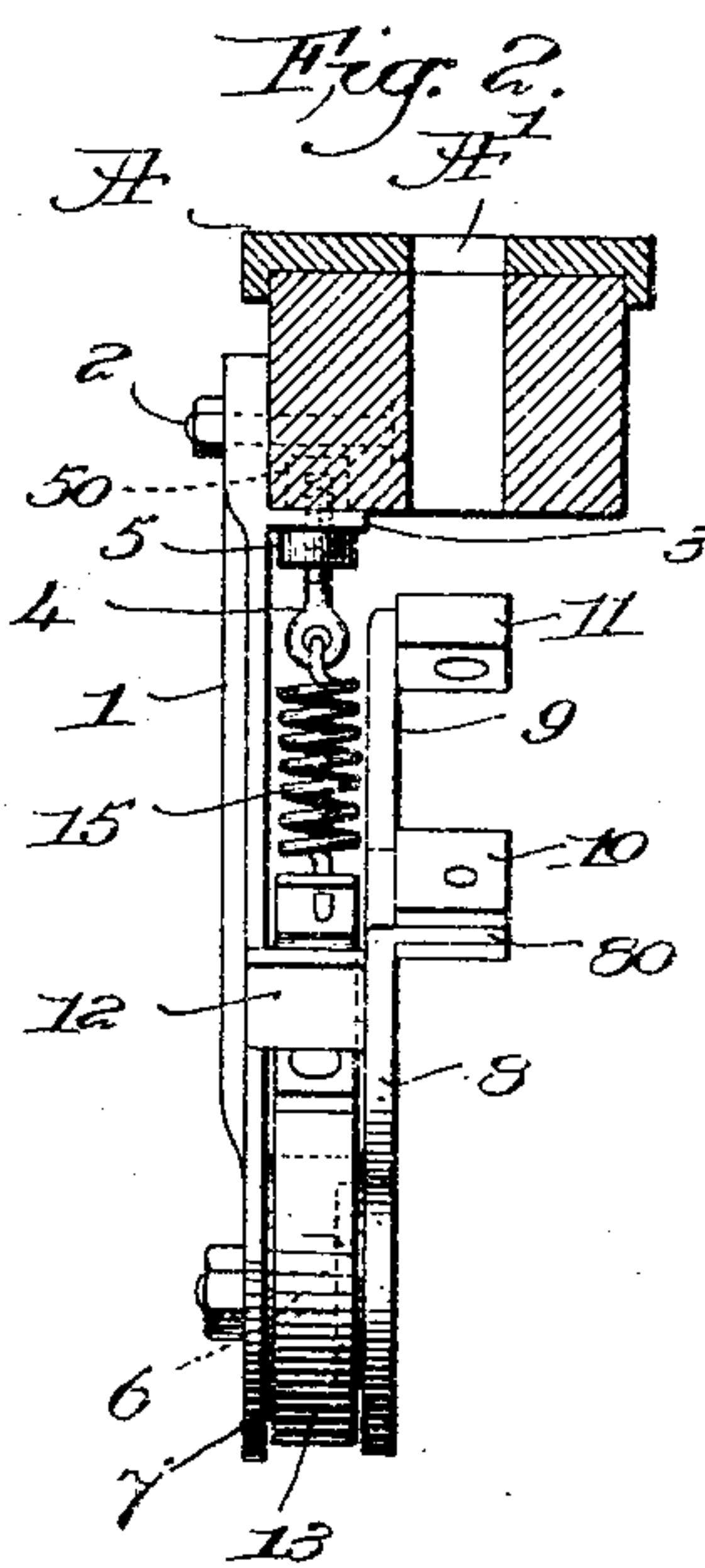
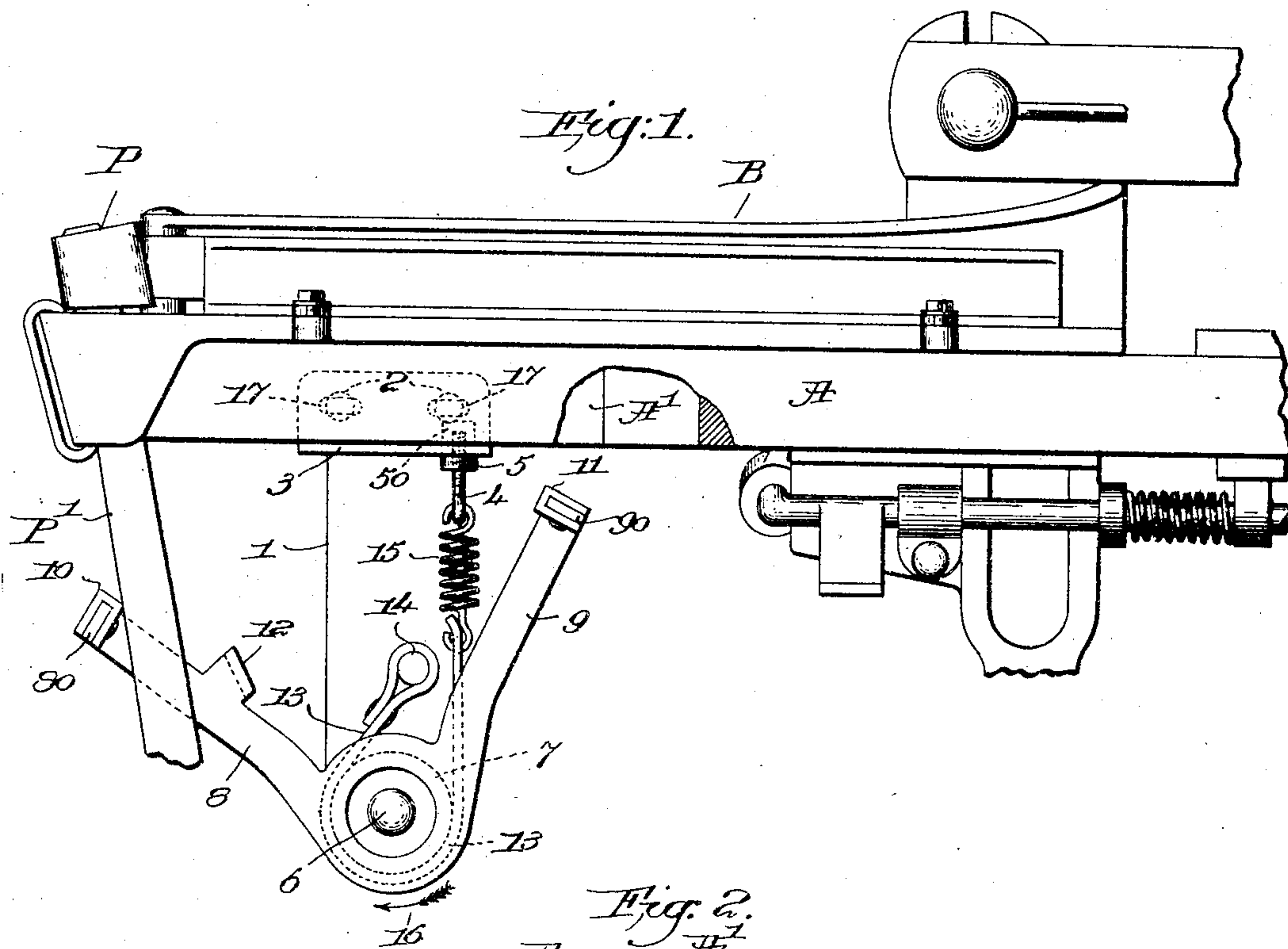


No. 779,902.

PATENTED JAN. 10, 1905.

S. H. BEVILL.
PICKER CHECK FOR LOOMS.
APPLICATION FILED DEC. 18, 1903.



Witnesses,
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UNITED STATES PATENT OFFICE.

SIDI H. BEVILL, OF ANDERSON, SOUTH CAROLINA, ASSIGNOR TO DRAPER COMPANY, OF HOPEDALE, MASSACHUSETTS, A CORPORATION OF MAINE.

PICKER-CHECK FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 779,902, dated January 10, 1905.

Application filed December 18, 1903. Serial No. 185,615.

To all whom it may concern:

Be it known that I, SIDI H. BEVILL, a citizen of the United States, residing at Anderson, county of Anderson, and State of South Carolina, have invented an Improvement in Picker-Checks for Looms, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention has for its object the production of a novel, simple, and effective picker-check for looms whereby the outward movement or stroke of the picker is checked with maximum effect, the inward stroke of the picker operatively setting the check with minimum retarding action.

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

Figure 1 is a front elevation, partly broken out, of one end of the lay of a loom and its shuttle-box with one embodiment of my invention applied thereto, the check being shown in operation; and Fig. 2 is a left-hand side elevation of the checking means and its support, the lay being shown in section.

The lay A, longitudinally slotted at A', its shuttle-box B, picker P, and picker-staff P', Fig. 1, may be all of known construction, it being understood that each picker will be provided with a check such as shown in the drawings and to be described.

In the present embodiment of my invention a depending bracket 1 is secured by suitable bolts 2 (see dotted lines, Fig. 1) to the lay, preferably at its back, the bracket having a shelf 3 extended forward beneath the lay and having a threaded boss 5 to receive the threaded shank of an eye 4, the under side of the lay being cut out, as at 50, to receive the upper end of the shank. At its lower end the bracket supports a horizontal headed stud 6, projecting forward and forming a fulcrum for the annular shoe or hub 7 of a bell-crank 8 9, the upper ends of the arms being bent forward, as at 80 90, in the path of the picker-staff P'. Leather or other suitable bunters 10 11 are

secured, respectively, to the bends 80 and 90 to be engaged by the staff on its outward and inward swing, the distance between the bunters being somewhat less than the amplitude of movement of the cooperating part of the staff. A rearwardly-bent lug 12 on the arm 8 of the bell-crank is adapted to engage the outer upright edge of the bracket 1 when the check is operatively set by the inward or picking stroke of the staff. A friction member, shown as a flexible band or strap 13, is fixedly held at its outer end on a pin 14 on the bracket above the shoe 7, the friction member being carried down around the shoe and up at the inward side thereof, as clearly shown in Fig. 1. One end of a spring 15 is secured to this end of the member 13, the other end of the spring being attached to the eye 4, the contractile action of the spring drawing the friction member tightly against the shoe, and thereby retarding or acting as a friction-brake upon the rocking movement of the bell-crank 8 9.

With the exception of the bunters the entire check is supported on the lay behind and out of the path of the staff, so that the latter can swing clear in the usual manner.

Supposing the parts to be in the position shown, when the picker and its staff are thrown inward to eject the shuttle from the box B the staff hits the bunter on arm 9 and quickly rocks the bell-crank in the direction of arrow 16, Fig. 1. Such rotation of the shoe 7 acts, through its frictional engagement with the member 13, to pull down the inner side thereof and stretch the spring 15, thereby relieving the drag of the said member 13 on the shoe, as the movement of the member 13 will be in the direction of rotation of the shoe, so that the retarding action of the friction device is minimized, and the stop 12 engages the bracket 1 after the staff P' reaches the end of its inward stroke, and the spring contracts. The check is then set in readiness to operate. On its outward stroke the staff P' hits the bunter on the arm 8, and the bell-crank is rocked oppositely to the arrow 16; but now the direction of rotation of the shoe acts against the fixedly-held end of the friction member 13, so that the retarding action is at

its maximum as the member 13 is held stationary, and the shoe must rub over it. The picker is thus checked on its outward throw, as it should be, the friction device exerting
 5 its greatest effort to retard and bring the picker to a stop at the proper point, while on the picking or inward stroke the picker is free to move until it hits the inner bunter, and the retarding action of the friction device is
 10 then the least.

By turning the threaded shank of the eye 4 up or down in the boss 5 the tension of the spring can be adjusted to accommodate the check to varying conditions, and wear can
 15 thereby be compensated for.

By passing the bolts 2 through elongated horizontal slots 17 (see dotted lines, Fig. 1) in the bracket 1 the latter can be adjusted longitudinally of the lay to bring the bunters
 20 in proper position with relation to the picker-staff.

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

25 1. In a loom, the lay, a picker and its staff, a rocking check mounted on the lay and having portions located in the path of the picker-staff, a friction-retarding device cooperating with the check on each stroke of the picker-
 30 staff, and means to cause said check to exert its maximum action on the outward stroke of the staff.

2. In a loom, the lay, a picker and its staff, a rocking check mounted on the lay and hav-
 35 ing portions located in the path of the picker-staff, a friction-retarding device cooperating with the check, and means positively and directly actuated by return movement of the picker to set the check.

40 3. In a loom, the lay, a picker and its staff, a rocking check mounted on the lay and having portions located in the path of the picker-

staff, an annular shoe movable with the check, and a relatively fixed friction member cooperating therewith to retard the operative
 45 movement of the check on each stroke of the picker-staff.

4. In a loom, the lay, a picker and its staff, a bell-crank pivotally mounted on the lay and having bunters to be engaged by the staff on
 50 its outward and inward strokes, and a friction-retarding device adapted to exert its maximum effect on the bell-crank on the outward stroke of the staff.

5. In a loom, the lay, a picker and its staff, 55 a rocking check carried by the lay and having a bunter in the outward path of the staff, friction-retarding means for the check, including a flexible member fixedly held at one end and
 60 yieldingly controlled at its other end, and means to set the check by or through return movement of the staff.

6. In a loom, the lay, a picker and its staff, and checking means for the picker-staff, comprising a bell-crank fulcrumed on the lay and
 65 having a concentric annular shoe, a friction-strap cooperating therewith and fixedly held at one end, a spring connected with its other end, and bunters on the bell-crank in the path of the staff, outward movement of the latter
 70 causing the friction-strap to exert its maximum retarding effect, inward movement of the staff causing the spring to stretch and thereby loosen the strap.

7. A check consisting of an oscillating mem- 75 ber having similar arms extending in substantially opposite directions.

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

SIDI H. BEVILL.

Witnesses:

M. F. YOUNG,
 HENRY H. ORR.