

No. 675,717.

Patented June 4, 1901.

O. CHANDRONNAIT.
PICKER CHECK FOR LOOMS.

(Application filed July 9, 1900.)

(No Model.)

Fig. 1.

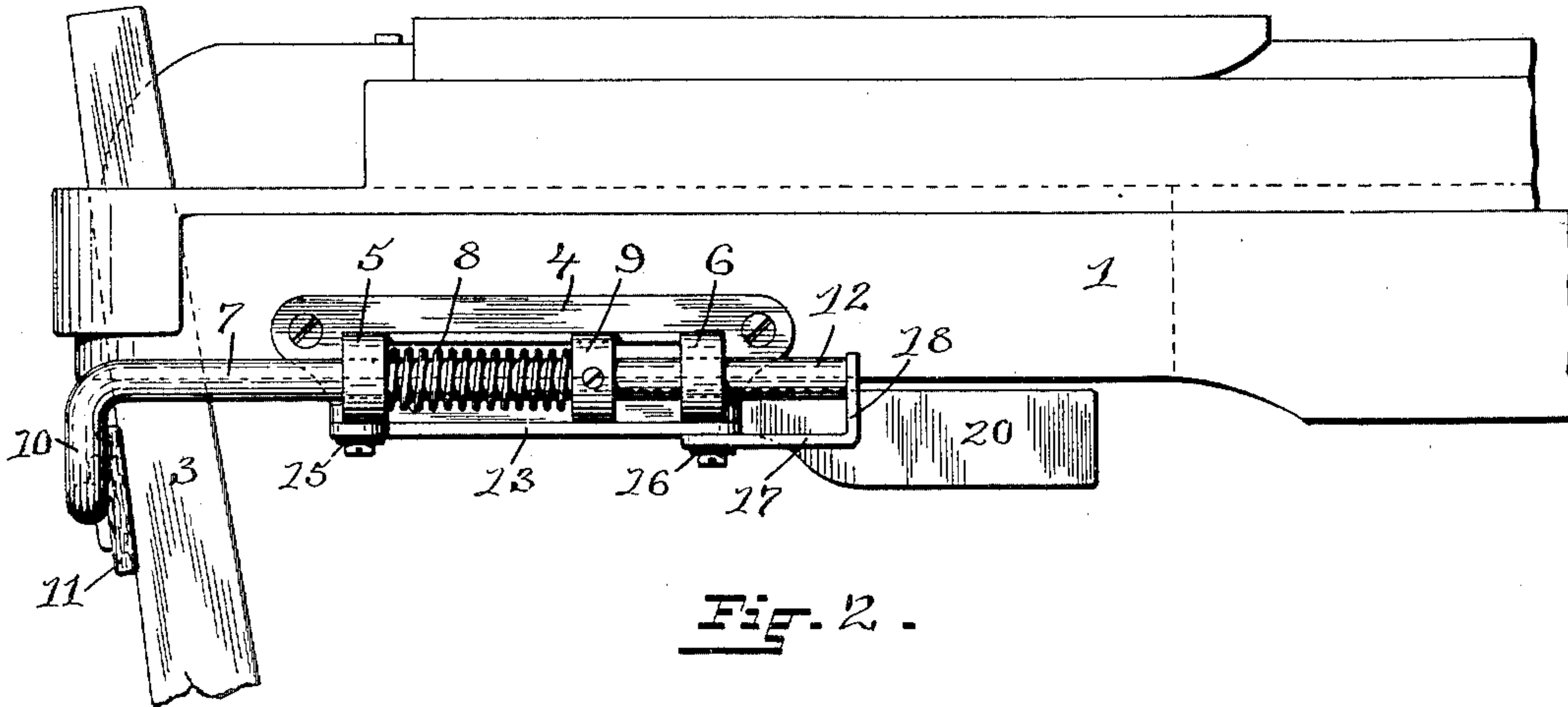


Fig. 2.

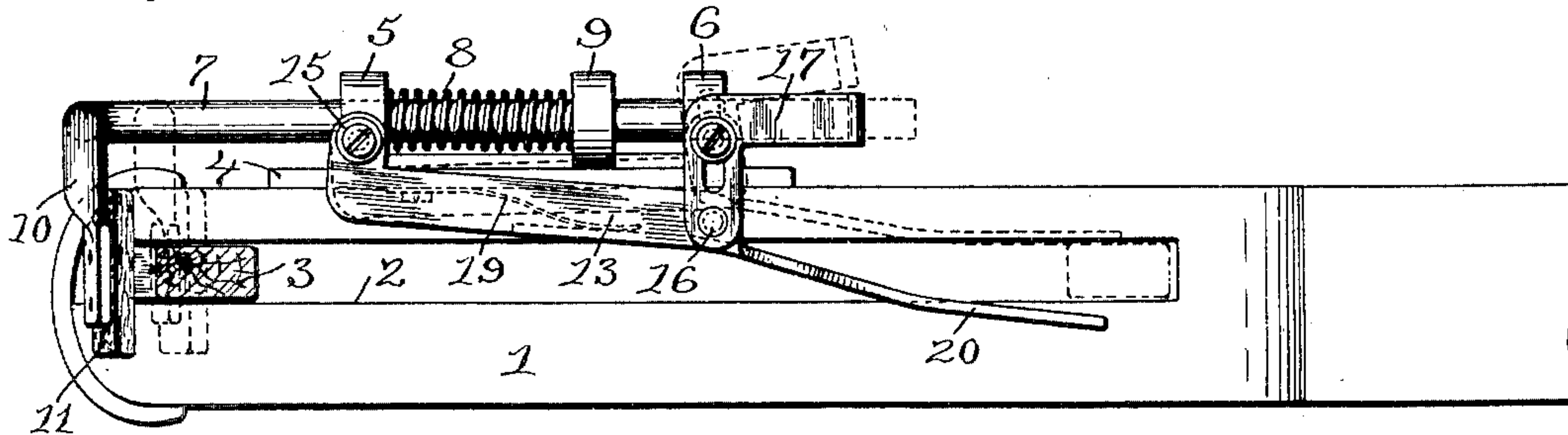


Fig. 3.

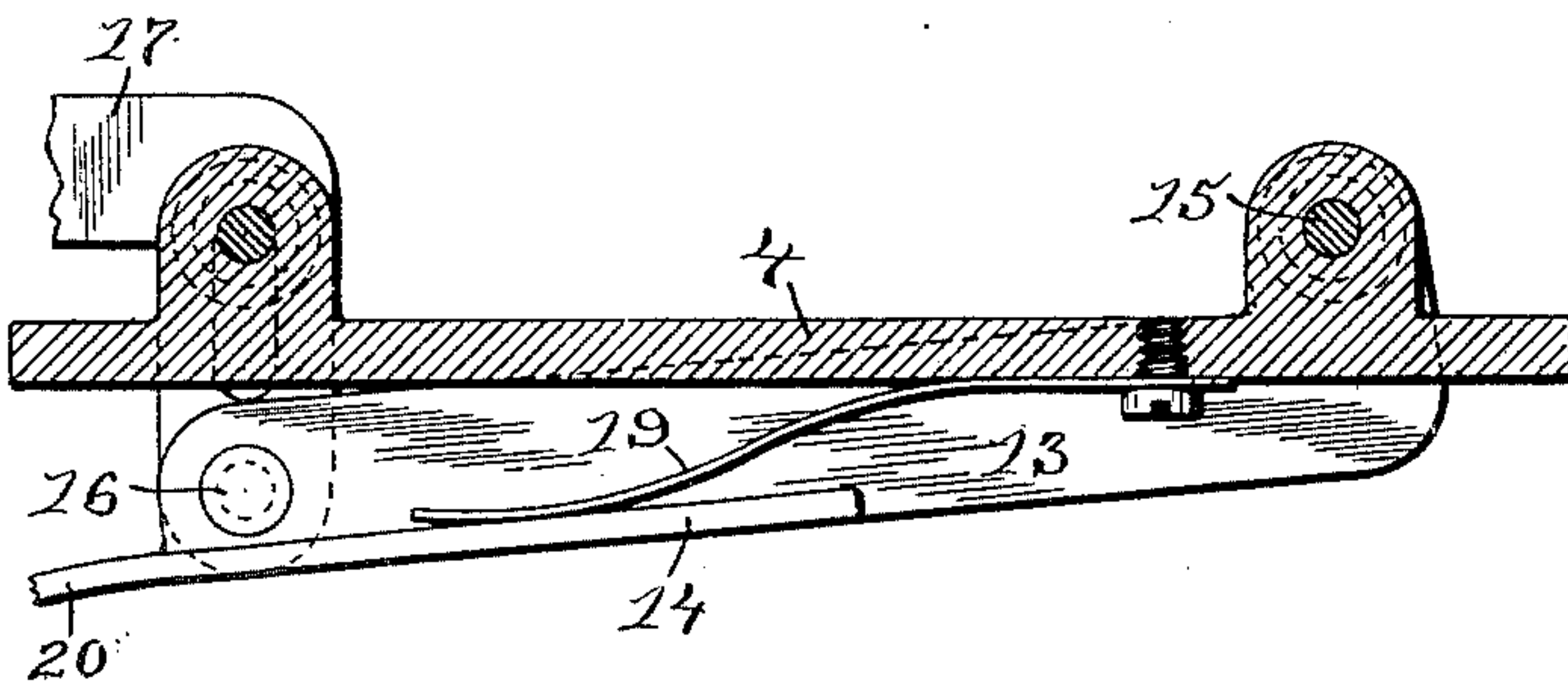
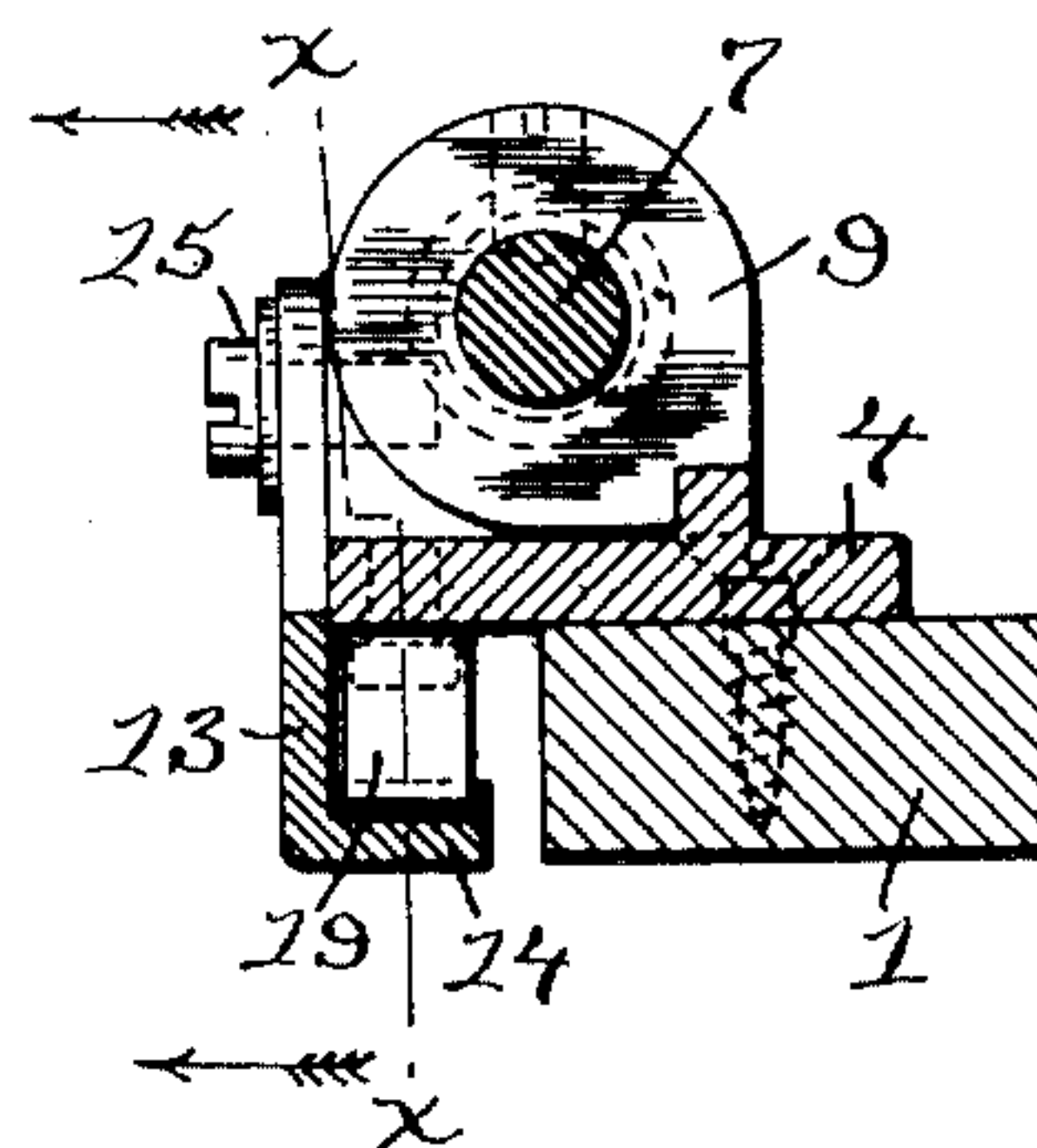


Fig. 4.



WITNESSES:

Chas. H. Luther Jr.
B. W. Simms

INVENTOR:

Oscar Chandronnait
by Joseph A. Miller & Co.
ATTORNEYS:

UNITED STATES PATENT OFFICE.

OSCAR CHANDRONNAIT, OF LIPPITT, RHODE ISLAND.

PICKER-CHECK FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 675,717, dated June 4, 1901.

Application filed July 9, 1900. Serial No. 23,009. (No model.)

To all whom it may concern:

Be it known that I, OSCAR CHANDRONNAIT, a citizen of the United States, residing at Lippitt, in the county of Kent and State of Rhode Island, have invented a new and useful Improvement in Looms, of which the following is a specification.

This invention has reference to an improvement in picker-checks for looms.

When in power-loom the shuttle is thrown across the shed of the warp into the shuttle-box at the end of the lay, it carries the picker and picker-stick against the end stop with such force that the picker and the shuttle rebound and the shuttle is left in a too-forward and an uncertain position. In all looms the best result is secured when the shuttle is arrested with the end point in contact with the picker. In automatic filling-supplying looms the arresting of the shuttle in the exact position required is of great importance. The pressure on the swells of the shuttle-boxes has been increased to more securely hold the shuttle, and when spring-checks have been used the rebound has usually been greater.

The object of this invention is to provide a spring-check to arrest the shuttle and prevent the rebound, while the pressure on the swells may be greatly diminished, thereby saving power and wear on the shuttle and shuttle-boxes.

The invention consists in the peculiar and novel construction and combination whereby the spring-check is automatically locked, as will be more fully set forth hereinafter.

Figure 1 is a side view of part of a shuttle-box provided with my improved picker-check, showing the same in the locked position. Fig. 2 is a bottom view of part of the shuttle-box, showing the arm of the latch in the path of the picker-stick. Fig. 3 is a longitudinal sectional view, on an enlarged scale, showing the spring-pressed arm of the latch pivotally connected with the bed-plate of the check on the line *xx* of Fig. 4. Fig. 4 is a transverse sectional view of the spring-check.

Similar marks of reference indicate corresponding parts in all the figures.

In the drawings, 1 indicates part of the shuttle-box; 2, the slot in which the picker-stick moves; 3, the picker-stick; 4, the plate of the spring-check; 5 and 6, perforated

brackets on the plate 4, through which the rod 7 extends and in which the rod slides, and 8 a coiled spring on the rod 7, bearing on the bracket 5 and on the collar 9, adjustably secured to the rod 7. One end of the rod 7 is formed into the bracket 10, to which the cushion 11 is secured and forms the stop against which the picker-stick bears. The end 12 of the rod 7 projects beyond the bracket 6.

The parts so far described form a spring-check in which when the picker-stick strikes the cushion 11 the bracket 10 and rod 7 move with the picker-stick and compress the coiled spring 8, thereby yieldingly resisting the blow of the shuttle.

The latch 13, which has along part of its length the flange 14, is pivotally connected at 15 with the plate 4, and at 16 is pivotally connected with the slotted bell-crank lever 17, from one end of which the arm 18 extends across the end 12 of the rod 7. The spring 19 is secured to the plate 4 and bears on the flange 14 of the latch 13. The latch 13 has the arm 20, which when the parts of the spring-check are in the locked position, with the arm 18 of the bell-crank lever extending across the end of the rod 7, extends diagonally across the picker-stick slot 2.

In the operation of my improved spring-check when the picker-stick is moved by the picker mechanism to throw the shuttle the picker-stick moves the arm 20 out of the path of the picker-stick into the position shown in broken lines in Fig. 2, thereby swinging the latch 13 and moving the bell-crank lever 17 upward and rocking the same to move the arm 18 above and out of the path of the end 12 of the spring-pressed rod 7, thus automatically setting the spring-check for the reception of the blow of the shuttle when it again enters the shuttle-box. The blow received by the picker forces the picker-stick against the bracket 10, moving the bracket and the rod 7 against the gradually-increasing force of the coiled spring and drawing the end 12 of the rod 7 from under the arm 18, which arm, as well as the latch 13 and arm 20, was held in the raised position (shown in broken lines in Fig. 2) by the end 12, and the spring 19 acts to move the latch into the position shown in solid lines in Fig. 2 and in front of

the end 12 of the rod 7, thereby locking the spring-check and preventing the rebound of the shuttle.

5 Practical tests have demonstrated that with the use of the improved check the pressure on the swell may be greatly reduced.

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

10 In a picker-check for looms, the combination with the shuttle-box and the picker-stick, the plate 4, the perforated brackets 5 and 6 on the plate, the rod 7, the bracket 10 on the rod, the coiled spring 8, and the adjustable

collar on the rod, of the latch 13 pivoted at 15 one end to the plate 4, the arm 20 on the latch extending diagonally across the path of the picker-stick, the slotted bell-crank lever 17 connected with the plate and the latch, the arm 18 on the bell-crank lever, and the spring 20 19, as described.

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

OSCAR CHANDRONNAIT.

Witnesses:

B. M. SIMMS,

J. A. MILLER, Jr.