

No. 706,270.

Patented Aug. 5, 1902.

A. ST. ANDREWS.
PICKER CHECK FOR LOOMS.

(Application filed Jan. 2, 1902.)

(No Model.)

Fig. 1.

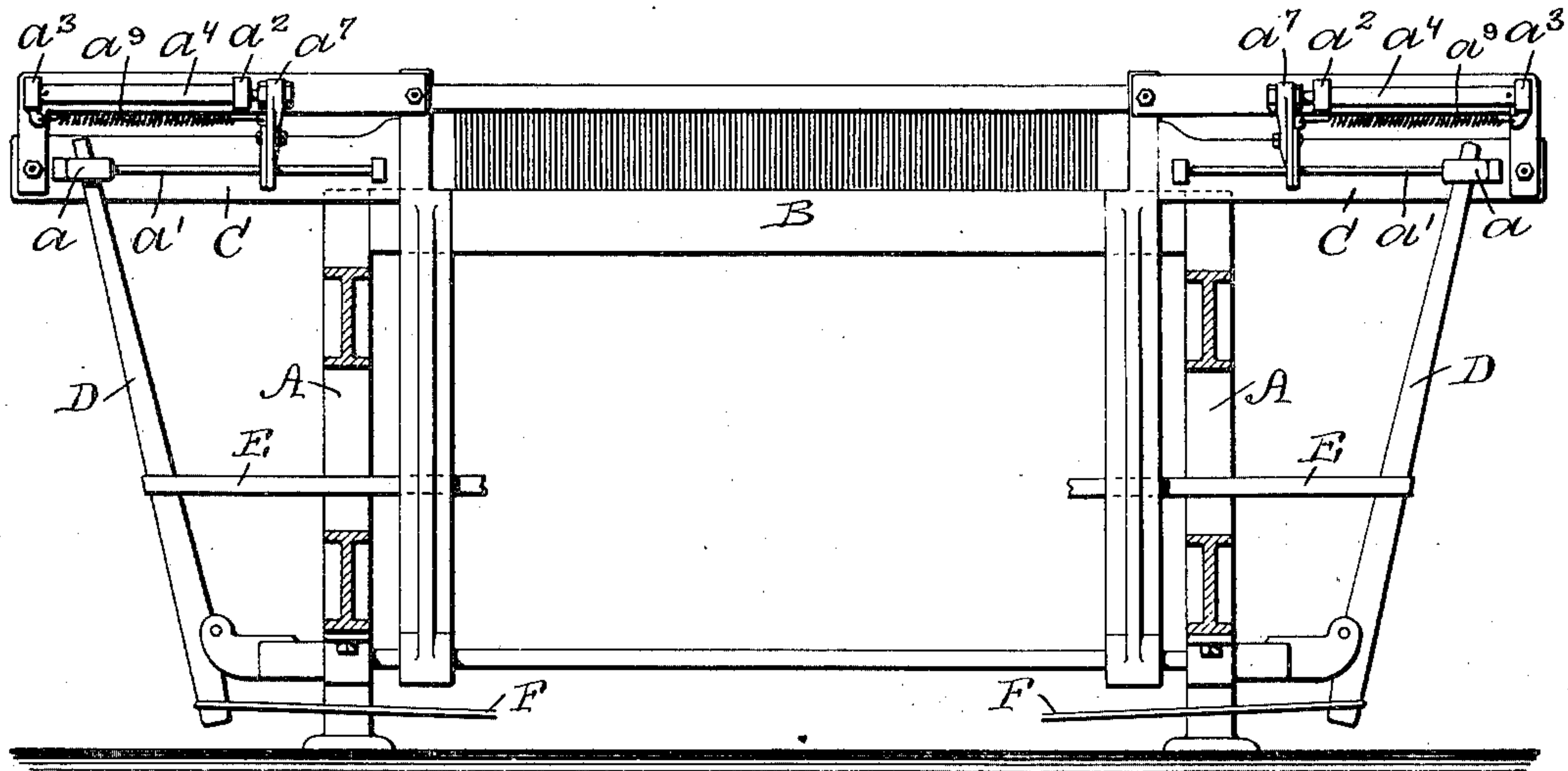


Fig. 2.

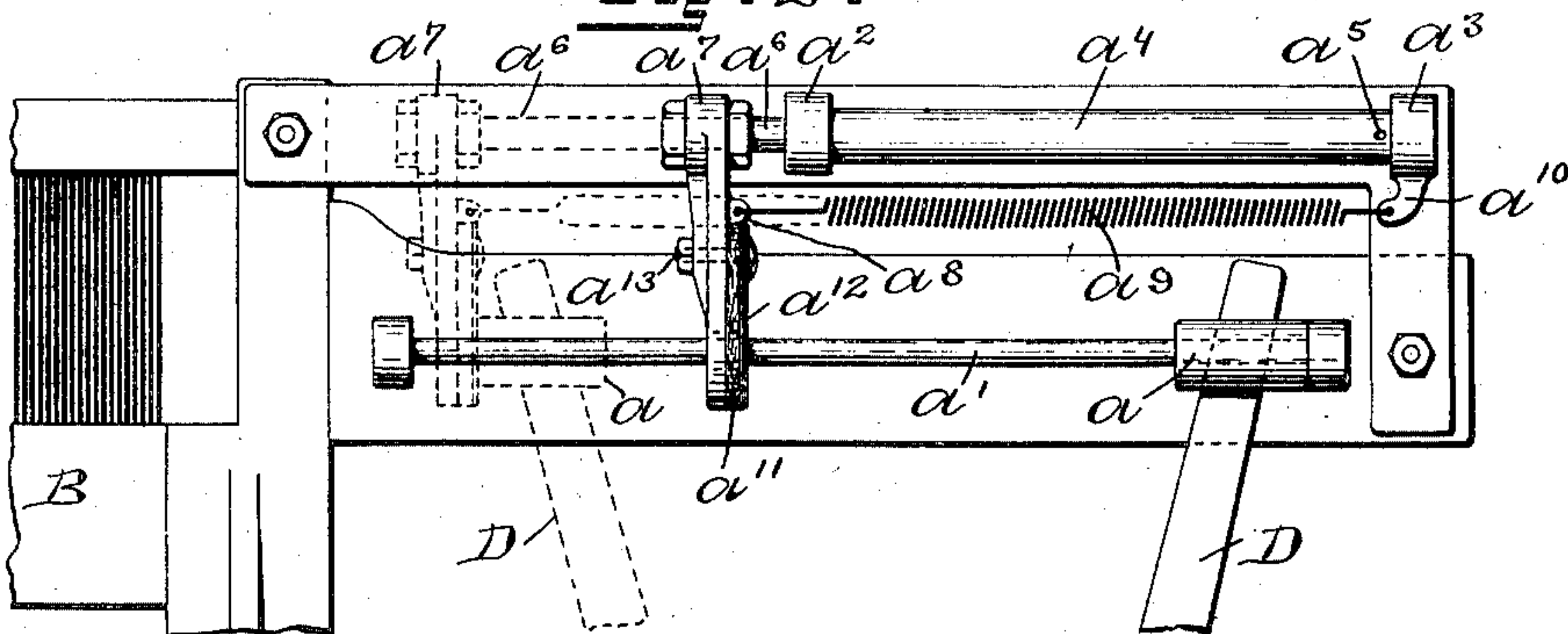


Fig. 3.

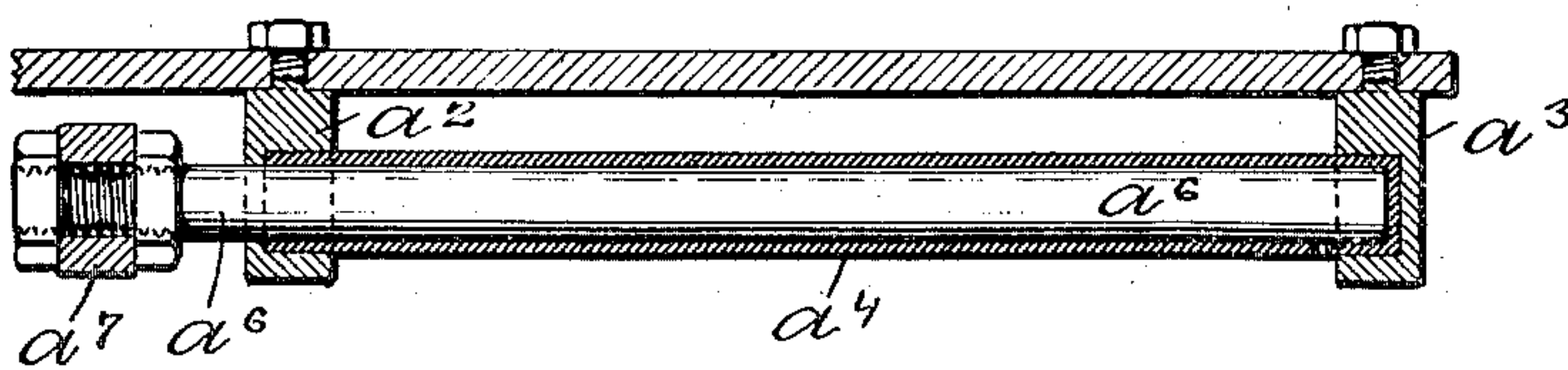
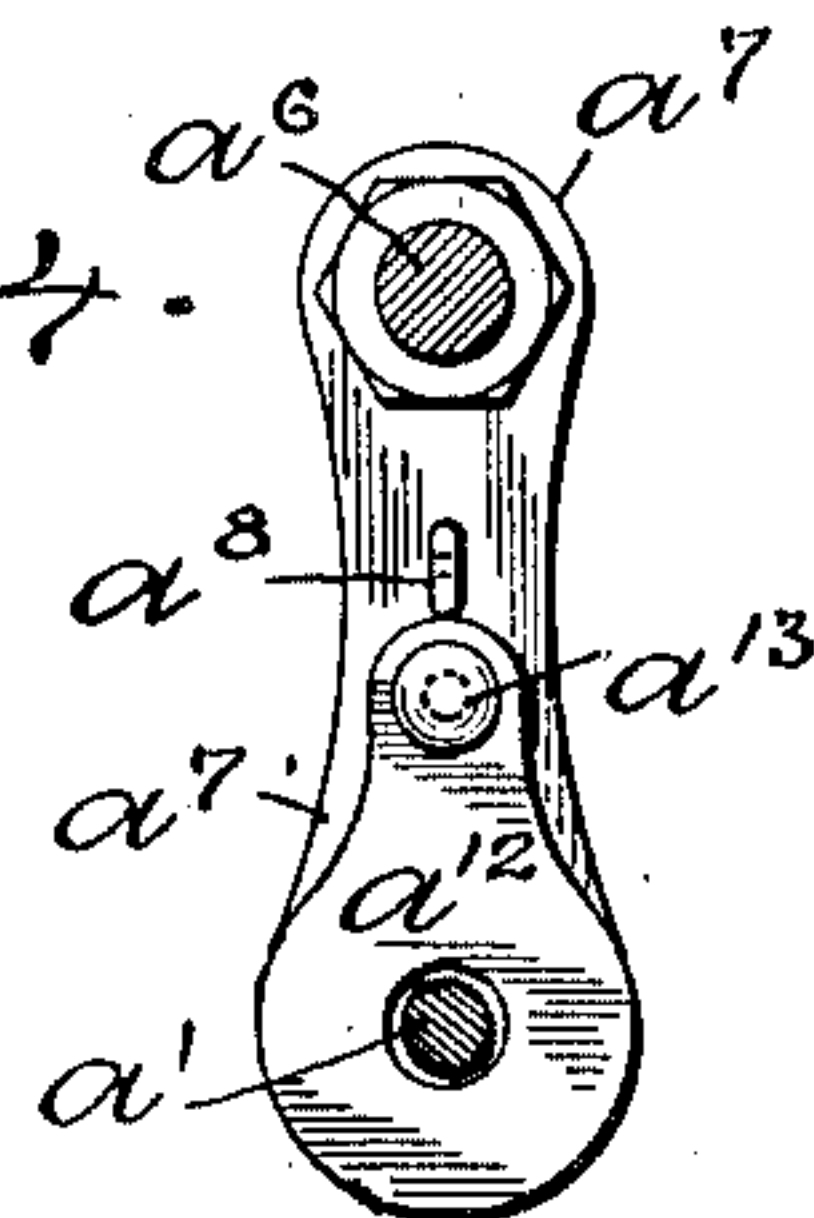


Fig. 4.



WITNESSES:

Chas. H. Luther Jr.
Ada E. Hagerty.

INVENTOR:

Adolph St. Andrews
Joseph H. Miller & Co.
ATTORNEYS:

UNITED STATES PATENT OFFICE.

ADOLPH ST. ANDREWS, OF MANVILLE, RHODE ISLAND.

PICKER-CHECK FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 706,270, dated August 5, 1902.

Application filed January 2, 1902. Serial No. 88,178. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH ST. ANDREWS, a citizen of the United States, residing at Manville, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Picker-Checks for Looms, of which the following is a specification.

This invention relates to picker-checks for looms used to check and arrest the picker when the shuttle is thrown from the shuttle-box.

The object of the invention is to more effectually check the picker and control the throw of the shuttle.

The invention consists in the peculiar and novel construction of the picker-check, more fully set forth hereinafter.

To throw a shuttle fairly across the warp without injury to the filling carried in the shuttle, it should be started easily without a blow and moved with increasing velocity. When the highest speed is attained, the picker by which the shuttle is thrown should be checked and gradually arrested. To secure these results, I provide the shuttle-box with a tube closed at the outer end. In this tube I place a piston, to the outer end of which I secure the picker-check, which is perforated and slides on the picker-rod. A tensile spring is connected with the picker-check and the end of the shuttle-box.

Figure 1 is a longitudinal sectional view of a loom provided with my improved picker-check. Fig. 2 is a rear view of the shuttle-box and part of the lay of a loom, showing the picker and picker-check in the position before the shuttle is thrown in solid lines and after the shuttle is thrown in broken lines. Fig. 3 is a sectional view of the piston and tube, forming the support of the picker-check and the air-cushion. Fig. 4 is a view of the face of the picker-check, the picker-rod and the piston-rod being shown in section.

In the drawings, A indicates the loom-frame, B the lay, C C the shuttle-boxes, D the picker-sticks, E the sweeps, and F the heel-springs.

a indicates the picker which slides on the picker-rod a' and extends through a slot into the shuttle-box, being operated by the picker-stick.

The parts so far described form the usual shuttle-throwing mechanism for looms.

In carrying out my invention I secure to

the shuttle-box by means of the brackets a^2 and a^3 the tube a^4 , open at the end toward the center of the loom and closed at the outer end. I provide this tube, near the closed end, with an escape-opening a^5 . Into the tube a^4 I insert the piston-rod a^6 , which fits the tube with a sliding fit. The bracket a^7 is secured to the screw-threaded end of the piston-rod a^6 . It is provided with the eye a^8 , to which one end of the spiral tensile spring a^9 is secured, the other end of the spring being secured to the arm a^{10} on the bracket a^3 . A cushion a^{11} , of leather or other suitable material, is placed on the flat face of the bracket a^7 and covered by the metal plate a^{12} , which is secured to the bracket by the bolt a^{13} . The bracket, the cushion, and the plate a^{12} are perforated, so as to slide on the picker-rod a' .

I find in practice that by the use of this device the shuttle is more uniformly thrown from one shuttle-box into the other, that there are less breaks of the filling-thread, and that the check is far more durable than picker-checks as heretofore used.

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

1. In a picker-check for looms, the combination with a tube and a piston-rod sliding in the tube, of a bracket secured to the piston-rod and having its face provided with a cushion, a metal plate covering the face of the cushion, and the tensile spring secured to the bracket and a fixed part of the loom near the end of the shuttle-box, as described.

2. In a picker-check for looms, the combination with the shuttle-box, the picker, and the picker-rod, of the tube a^4 closed at one end, the opening a^5 near the closed end of the tube, and the brackets a^2 and a^3 , of the piston-rod a^6 , the bracket a^7 secured to the piston-rod, the cushion a^{11} , the plate a^{12} secured to the bracket by the bolt a^{13} , and the tensile spring a^9 secured to the bracket and a fixed part of the loom, as described.

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

ADOLPH ^{his} ST. ANDREWS.
mark

Witnesses:

B. S. WEBSTER,
JOSEPH A. MILLER.