

E. Robbins.

Picker & Picker Staff.

N^o 73045

Patented Jan. 7, 1868.

Fig. 2.

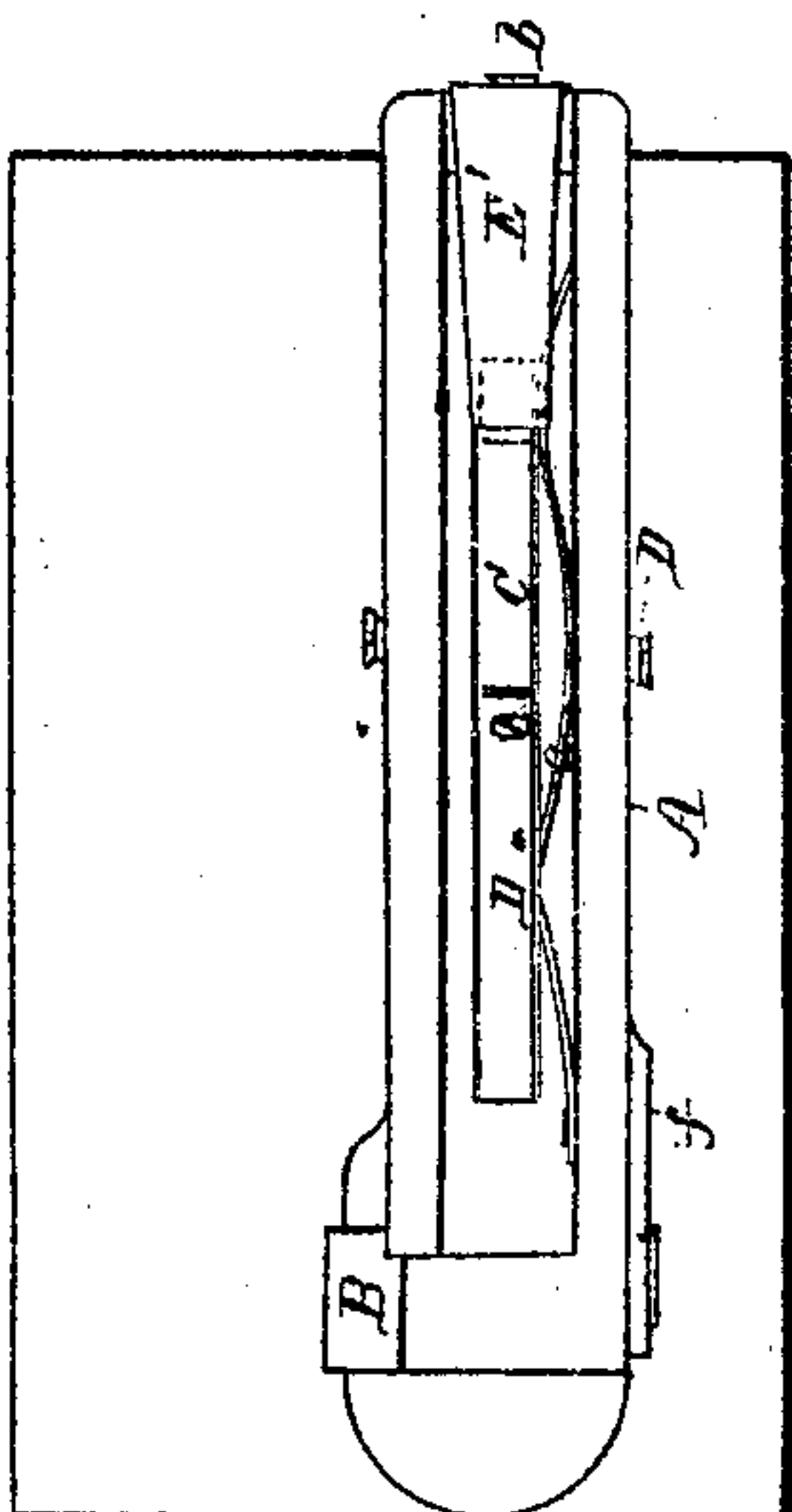


Fig. 3.

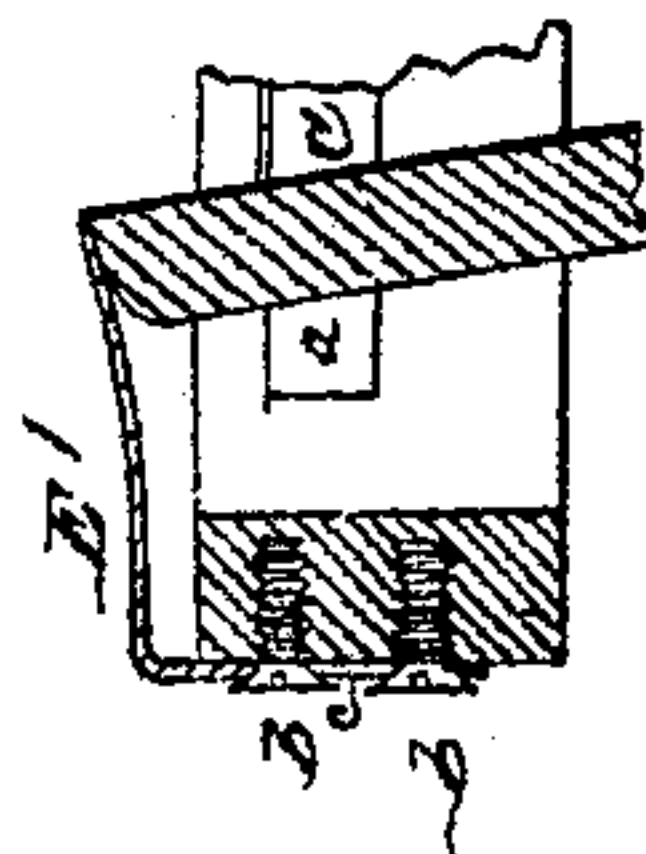


Fig. 4.

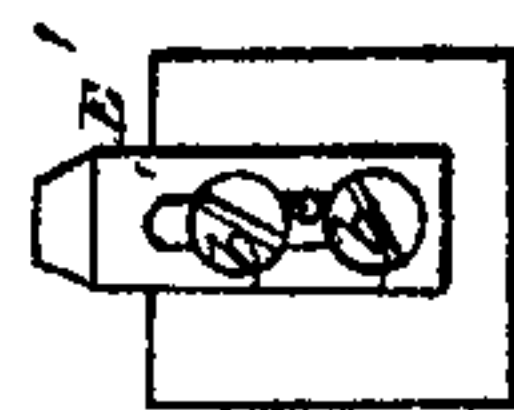
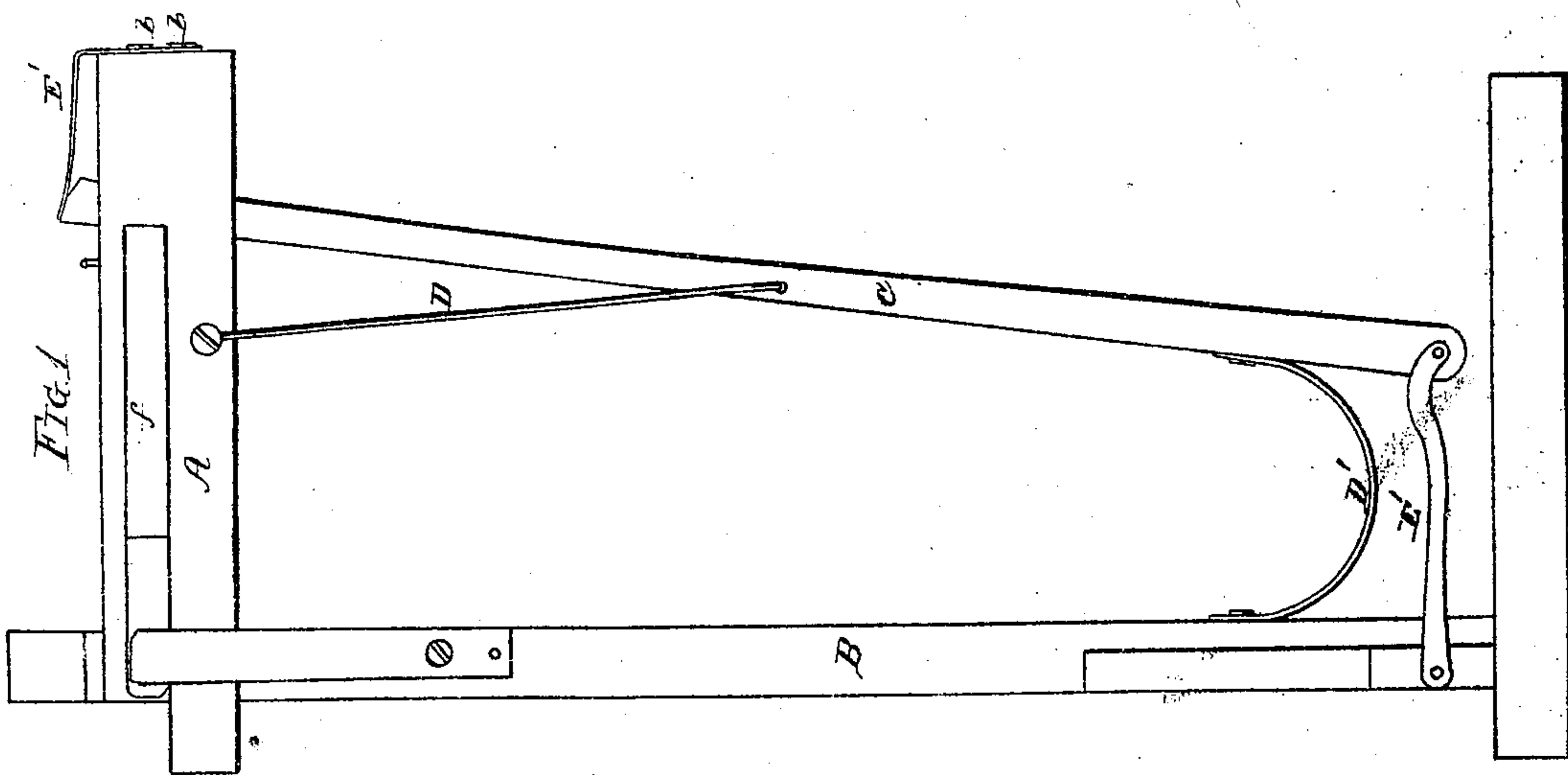


Fig. 1.



Witnesses.

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ELISHA ROBBINS, OF WORCESTER, MASSACHUSETTS.

Letters Patent No. 73,045, dated January 7, 1868.

IMPROVEMENT IN CHECK FOR PICKER-STAFF.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME:

Be it known that I, ELISHA ROBBINS, of Worcester, in the county of Worcester, and State of Massachusetts, have invented a new and useful Improvement in Looms for Weaving; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a side elevation, and

Figure 2 a top view of a loom-lay and picker-staff, with my invention applied thereto.

In such drawings, A denotes the shuttle-box, and B the sword of the lay. The picker-staff is represented at C, as suspended from the race-beam by a hanger, D, and as jointed at its foot to a radial arm, E, extended from the sword of the lay. A bow, or inverted arch-spring, D', also connects the picker-staff with the sword B, such spring, at or near its ends, being fastened to such parts. Furthermore, another spring E', formed as shown in the drawings, is fixed to the shuttle-box, and extends over it and toward the picker-staff, in manner as represented. The arch-spring is for retracting the picker-staff, after a throw of the shuttle thereby, and it not only does this, but operates with the spring or brake E' to arrest the staff when near the outer end of the shuttle-box. The shuttle, at the termination of its stroke or advance, is arrested by a spring, a, extended from the inner side of the shuttle-binder f.

The object of my invention is to gradually arrest the picker-staff at and near the termination of each retraction of it, and to bring it into a position for acting on the shuttle. This may be accomplished by the spring-brake E', or more properly by such and the arch-spring D', as the brake will check the back movement of the staff, and the arch-spring, by its contractile power, will restore the picker-staff to its normal position, or that which it should have prior to throwing the shuttle. The brake is so arranged as to act on the upper end of the staff, and furthermore, the brake is applied to the end of the shuttle-box by means of screws b b going through a slot, c, in the brake, the same being as represented in figs. 3 and 4, the former being a vertical section, and the latter an end view of the box. This application of the brake to the said box enables the brake to be adjusted vertically, so as to act upon the staff to the best advantage. The arch-spring will operate in a manner to effect the gradual arrest of the picker-staff, the adjustable brake being necessary for the full accomplishment thereof. Sometimes the brake alone will suffice for the purpose, although it will not effect with certainty the after movement of the staff toward the shoulder, so as to be ready for its throw. With the adjustable brake, or the same and the arched spring, there is a great saving in wear of pickers and their staffs.

I claim the arrangement and application of the adjustable spring-brake with the picker-staff and shuttle-box, as described.

I also claim the combination and arrangement of the adjustable spring-brake and the arch-spring, with the shuttle-box, the picker, and the sword of the lay, the whole being substantially as specified.

ELISHA ROBBINS.

Witnesses:

R. H. EDDY,

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