R. DAVIDSON & J. RICHARDSON.

PICKER-CHECKS.

No. 183,649. Patented Oct. 24, 1876.

Fig. 1.

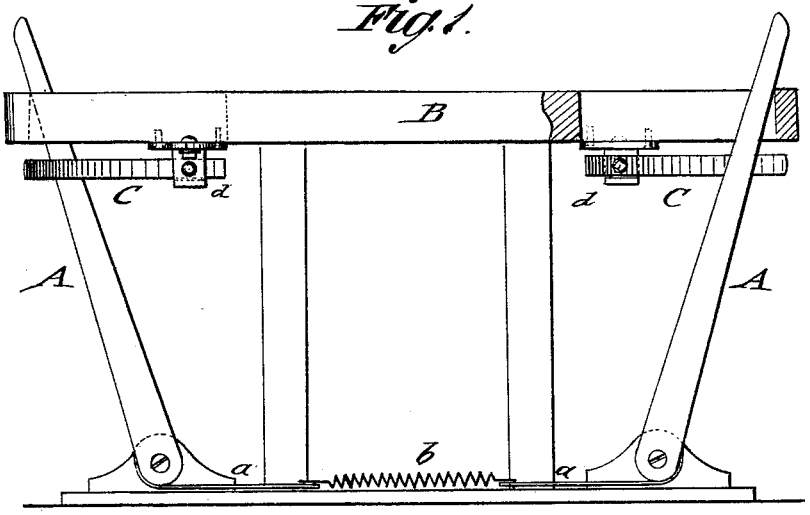
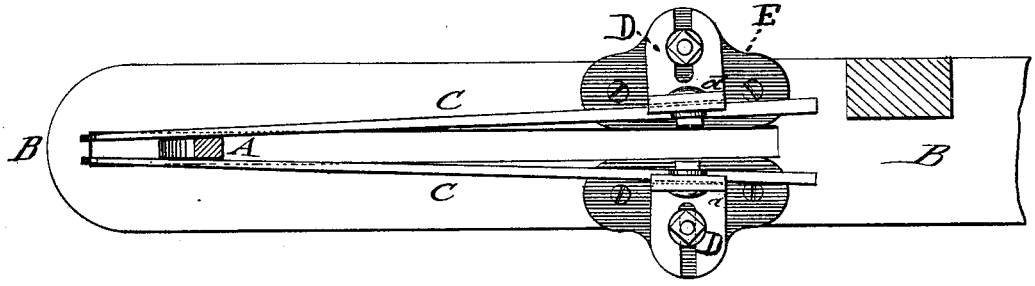


Fig. 2.



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ROBERT DAVIDSON AND JOHN RICHARDSON, OF FALL RIVER, MASS.

IMPROVEMENT IN PICKER-CHECKS.

Specification forming part of Letters Patent No. **183,649**, dated October 24, 1876; application filed June 20, 1876.

To all whom it may concern:

Be it known that we, ROBERT DAVIDSON and JOHN RICHARDSON, of Fall River, in the county of Bristol and State of Massachusetts, have invented a new and Improved Check-Motion for Power-Looms, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side view, partly in section, of the picker-rods of a power-loom with our improved check device; and Fig. 2 is a detail bottom view of the check-motion.

Similar letters of reference indicate corresponding parts.

The invention is an improvement in the class of friction devices designed for gradually arresting the picker-staffs of power-looms, in place of suddenly stopping them, as commonly practiced.

The improvement relates to the means of attaching the friction strips, plates, or binders to the shuttle-boxes, and of adjusting the angle of the strips to each other, for varying the friction exerted on the picker-staff, as hereinafter described.

In the drawing, A represents the picker-staffs, which are guided, in the usual manner in power-looms, in recesses or slots of the shuttle-box B, being pivoted at the lower ends to suitable bearings, to swing readily thereon and throw the shuttle from one side to the other. The lower ends of the picker-staff A are connected by leather straps *a* and a strong spiral spring, *b*, by which the staffs are thrown in outward direction as soon as released by the picking mechanism. Below the guide-slots of box B are arranged two binders, C, which are made of slightly-tapering strips of wood or other material, that are applied at the thicker ends by clamp-screws *d* to guide-plates of brackets D. The brackets D are adjusted by center slots and clamp-screws on a guide-plate, E, attached to shuttle-box B. The binders C extend along both sides of the guide-slots and picker-staffs, and are so adjusted as to receive the same and allow them gradually to go up to the end of the shuttle-box, breaking, by the binding action on the picker-staffs, the force of the shuttle. The binders C hold the picker-staff in steady position until it is ready to pick again, compelling the staff to move in the slot without coming in contact or rubbing along one side or the other of the box.

As the binders may be readily renewed with very little expense, and as the brackets are not exposed to wear, the binders form a cheap, reliable, and durable check device for the picker-staffs.

By means of the adjustable brackets the binders may be set nearer or farther from each other, and thereby the binding force of the check device increased or decreased, so as to offer greater or less resistance to the motion of the shuttle, and secure an easy running of the loom.

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

In combination with strips or friction-plates C C, the brackets D D, adapted for adjustment by clamp-screws, as shown and described, to vary the relative angle of said strips, as and for the purpose specified.

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