

E. Wright. *Shuttle Motion.*

N^o 70,308.

Patented Oct. 29, 1867.

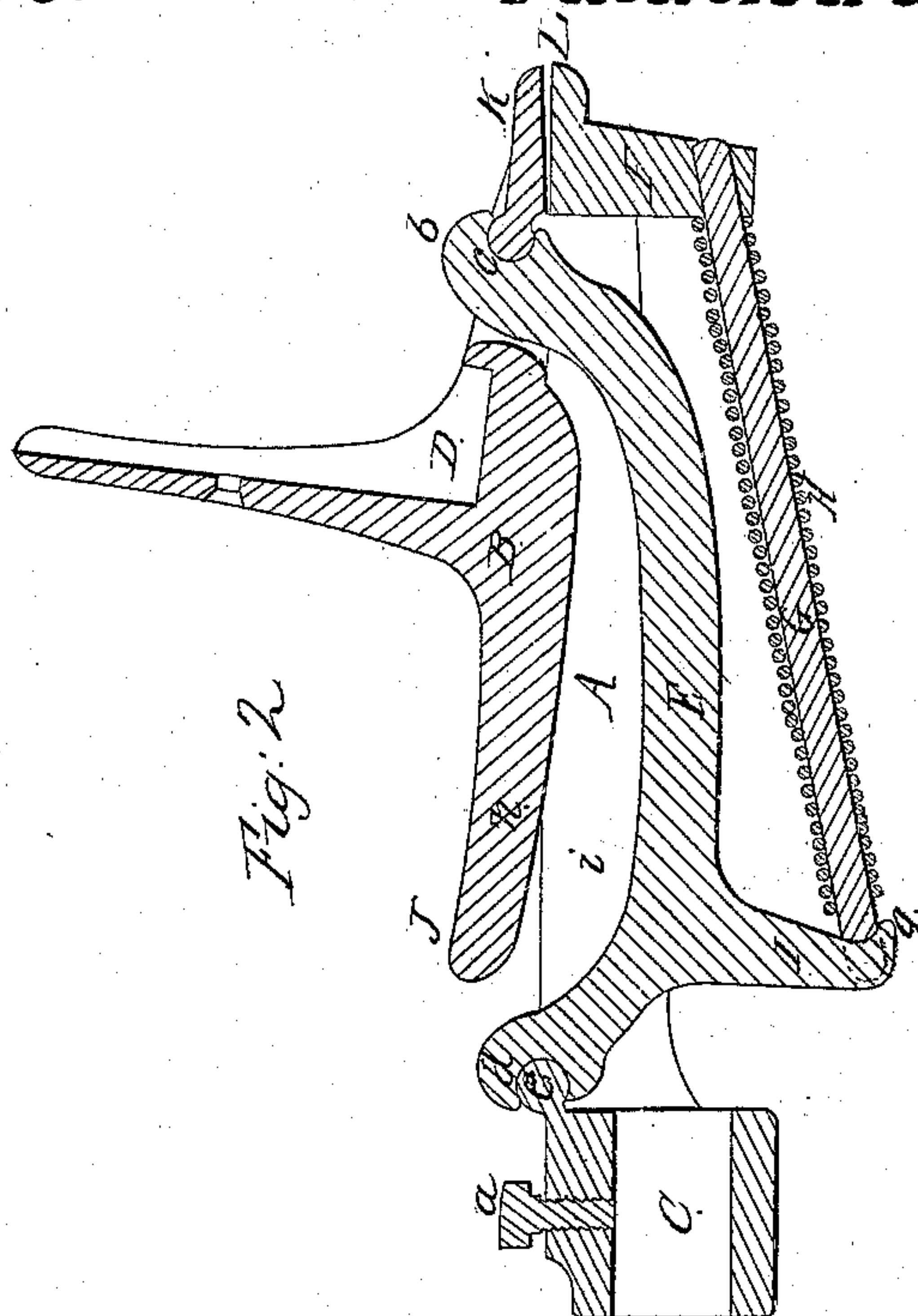


Fig. 2

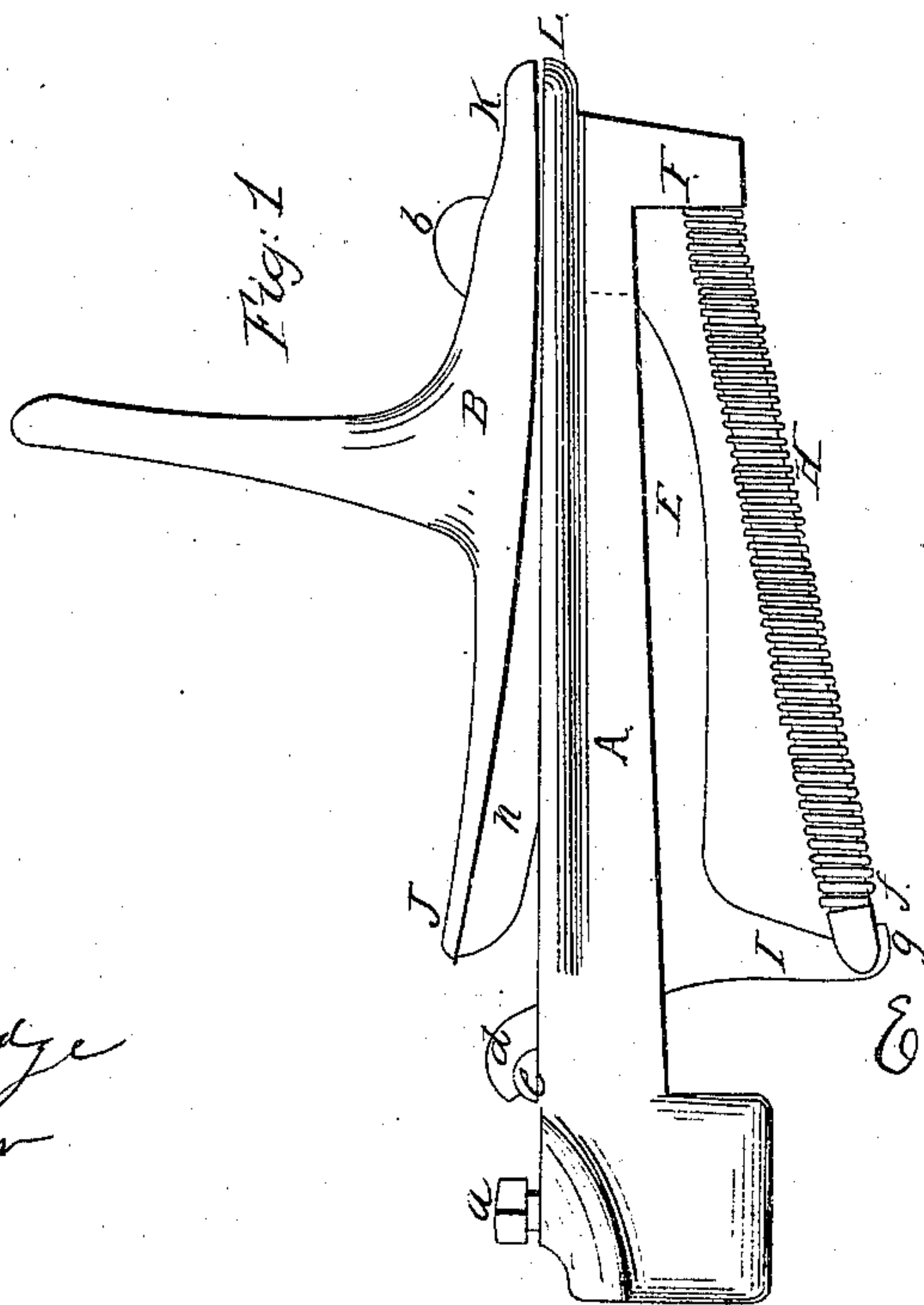


Fig. 1

Witnesses:

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Inventor:

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UNITED STATES PATENT OFFICE.

EDWARD WRIGHT, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN OPERATING PICKER-STAFF FOR LOOMS.

Specification forming part of Letters Patent No. 70,308, dated October 29, 1867.

To all whom it may concern:

Be it known that I, EDWARD WRIGHT, of the city and county of Worcester and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Parallel Motions for Looms; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a perspective view of my improved device, and Fig. 2 represents a longitudinal central section of the device shown in Fig. 1.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it in detail.

The part marked A is the slotted base upon which the tongued picker-staff stand B rests, and rocks back and forth when in operation, as described in my previous application for Letters Patent. The base A is provided with a hole, C, and set-screw *a*, by which it is fastened to the rocker-iron of the lay. The picker-staff is fastened in the recess D in the upright part of stand B. The rear part of the stand B is slotted out and rounded off to receive the rear end, *b*, of the lever E, which has a curved recess, *c*, to fit the rounded part of the stand B, as fully shown in Fig. 2.

From the rear of base A projects down the arm F, having a hole in its lower end, through which the rear end of rod G plays, the front end of said rod being enlarged, so as to have shoulders *f*, against which the front of the spiral spring H presses, while the rear of the spring bears against the arm F. The front end of rod G is slotted or forked to fit the arm I, which extends down from the lever E, as shown in the drawings. The lower end of arm

I is provided with a lip, *g*, upon which the front of rod G rests.

The operation is as follows: When the picker-staff is thrown forward the front part, J, of the picker-stand B rocks down upon the base A, its tongue *h* entering the slot *i* in the base A. As the front end, J, of the picker-stand descends, the rear end, K, rises, and thereby lifts the rear end, *b*, of lever E, which throws back arm I, thus compressing the spring H. As soon as the picker-staff is released, the action of spring H on arm I causes the picker-staff to start back, thus avoiding a severe concussion of the point of the shuttle against the picker on the staff. As soon as the picker-stand has passed back of the position shown in the drawings its rear point, K, begins to bear on the end L of the base A, which causes the rear end, *b*, of lever E again to be elevated, thus throwing back arm I and compressing spring H, the resistance of which arrests the motion of the picker-staff, and thus prevents the shuttle from driving the picker and upper end of the picker-staff hard against the end of the rear end of the shuttle-box.

The front of lever E has a curved recess, *d*, which fits the rounded part *e* on base A. (See Fig. 2.)

Having described my improved parallel motion for looms, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

The combination, with lever E and its arm I, of the arm F, rod G, and spring H, substantially as and for the purposes set forth.

EDWARD WRIGHT.

Witnesses:

THOS. H. DODGE,
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