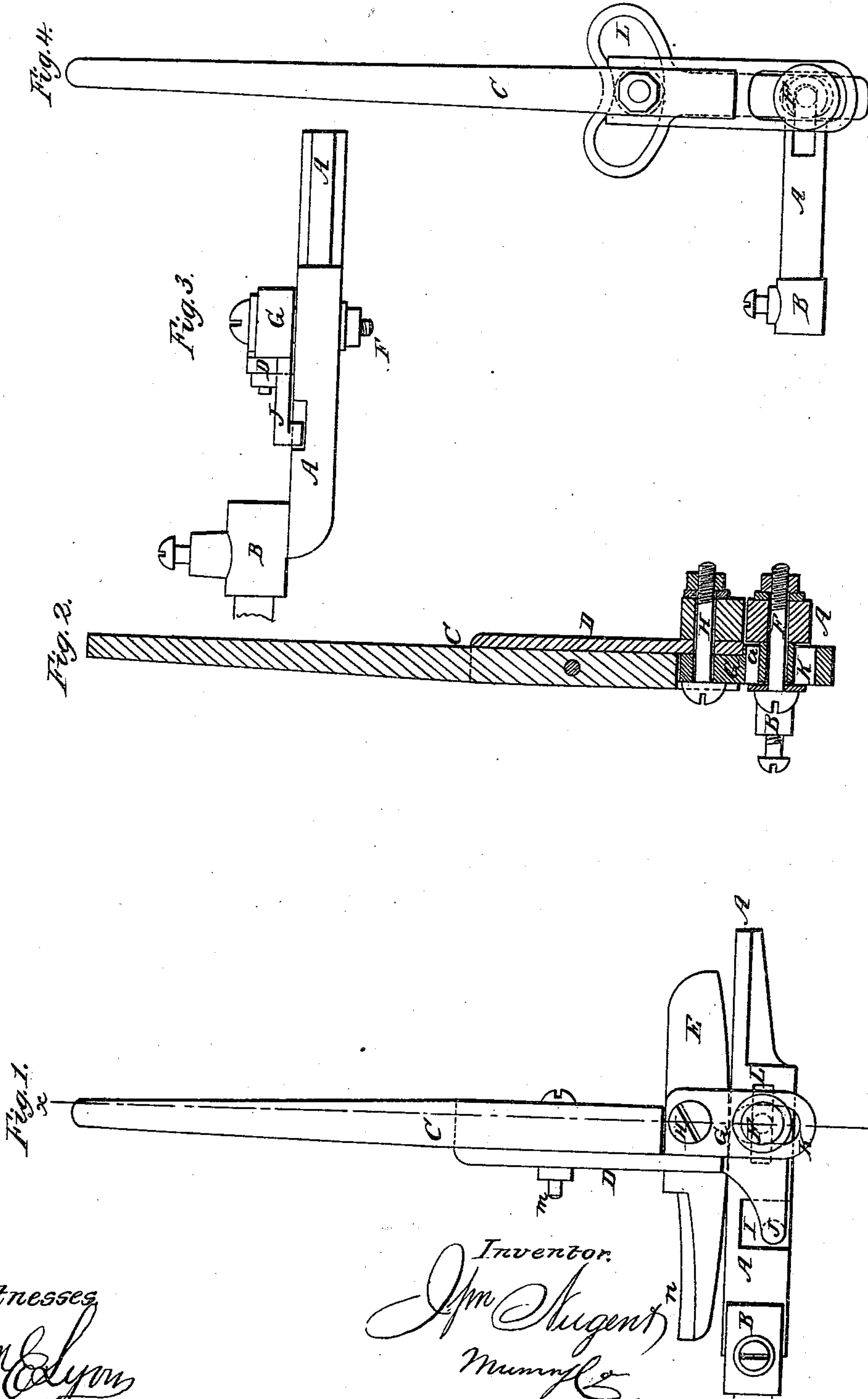


W. Nugent.
Shuttle Motion.

N^o 64,354.

Patented Apr. 30, 1867.



Witnesses
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WILLIAM NUGENT, OF NORTH PROVIDENCE, RHODE ISLAND.

Letters Patent No. 64,354, dated April 30, 1867.

IMPROVEMENT IN PICKER-MOTION FOR LOOMS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM NUGENT, of North Providence, in the county of Providence, and State of Rhode Island, have invented a new and useful Improvement in Picker-Staffs; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of a picker made according to my invention.

Figure 2 is a section in the plane indicated by the line *x* in fig. 1.

Figure 3 is an inverted or bottom view.

Figure 4 represents a picker of a familiar kind.

Similar letters of reference indicate like parts.

The object of this invention is the improvement of picker-staffs for looms. It consists in a peculiar device for preventing the rocker from jumping out of its place on the rail, and in constructing the whole so that when the picker strikes the shuttle it will not cause the latter to jump up or tilt so as to bring its nose up against the warp, but will cause it to be impelled along the race without rising or tilting, the picker-staff being allowed to rise from its rail by reason of a slot in the block which carries the staff, and for the purpose of adjustment to be moved in a horizontal direction by reason of a slot in the rail. The staff is carried by a block of peculiar construction, from which extend an arm and pin working in a recess made in the side of the rail.

A designates the ordinary rail, on which the rocker E of the picker rests. The upper surface of the rail is plain, and the bottom of the rocker, though convex, is smooth. The rail has at its inner end a socket, B, by which the picker is attached to the loom. A horizontal slot, L, is made through the rail beneath the place of the staff, said slot receiving the bolt which connects the picker-staff and its connections to the rail. Between this slot and the socket B is a cavity, I, of square outline, made in the front side of the rail, in which cavity plays a pin that projects from the arm J of the vertical block G. This block carries the staff C partly through the medium of the rocker E and of the vertical half-socket D, which latter embraces two sides and an angle of the lower part of the staff. The said block is placed alongside of the rail A and rocker E, and is connected to both of them by bolts, the lower bolt F serving to connect it to the rail by passing through the vertically elongated slot K of the block and the horizontally elongated slot L of the rail, and the upper bolt H serving to connect the upper part of the block rigidly to the rocker. The letter *a* designates a sleeve placed on the bolt F within the slot K of the block. One end of the sleeve comes in contact with a washer on the head of the bolt, and its other end comes in contact with the inner side of the rail. This arrangement enables me to tighten the nut and fix the bolt F at any point therein, so that the picker-staff can be adjusted horizontally to bring the toe *n* to a greater or less extent under the wiper of the loom. It will be observed that the cavity I is of such a length as to allow of this adjustment without interfering with the vertical play of the arm J. D is an angular socket-piece which embraces the lower part of the staff and the upper part of the block, being held to the block by means of the bolt H which confines one side of the socket-piece D between the block and the rocker. The upper part of the socket-piece D is secured to the staff by a screw-bolt and nut, *m*, the connection being so made as to allow the butt of the staff to rest on the top of the block G. In operating the picker-staff, when the wiper of the loom strikes the part *n* of the rocker, the latter is made to roll on the rail, and its right-hand end may be elevated until the bottom of the slot K of the block strikes the bolt F, at which time the front end of the rocker will rest on its extreme point. When the shuttle returns from the opposite side of the loom it strikes the left-hand face of the staff C, which yields to the blow and rolls on the rail until the pin of arm J strikes the top of cavity I. From the construction here shown it results that the staff can be easily removed to be renewed or repaired, and the position of the picker, with respect to the wiper or other device of the loom which causes it to vibrate and impel the shuttle along its race, can be readily adjusted by means of the bolt F, its sleeve *a*, and the slot L in the rail.

I claim as new, and desire to secure by Letters Patent—

1. The rail A, provided with cavity I, in which plays the pin of the arm J of the slotted block G which carries the staff C and rocker E, and having horizontal slot L, through which slot and the vertical slot of the block G plays the bolt F encircled by the sleeve *a*, and operating in the manner herein represented and described.
2. I also claim the cavity I in the side of the rail A, in combination with the block G, whose arm J has a pin that works in said cavity, substantially as shown.

WM. NUGENT.

Witnesses:

GEORGE T. HART,

GEO. W. WIGHTMAN.