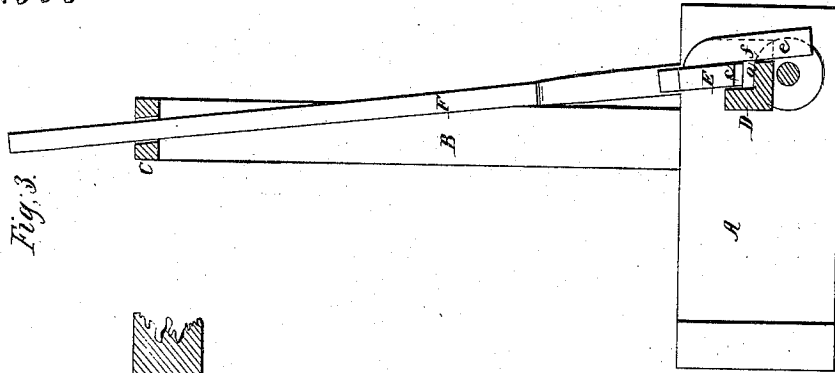
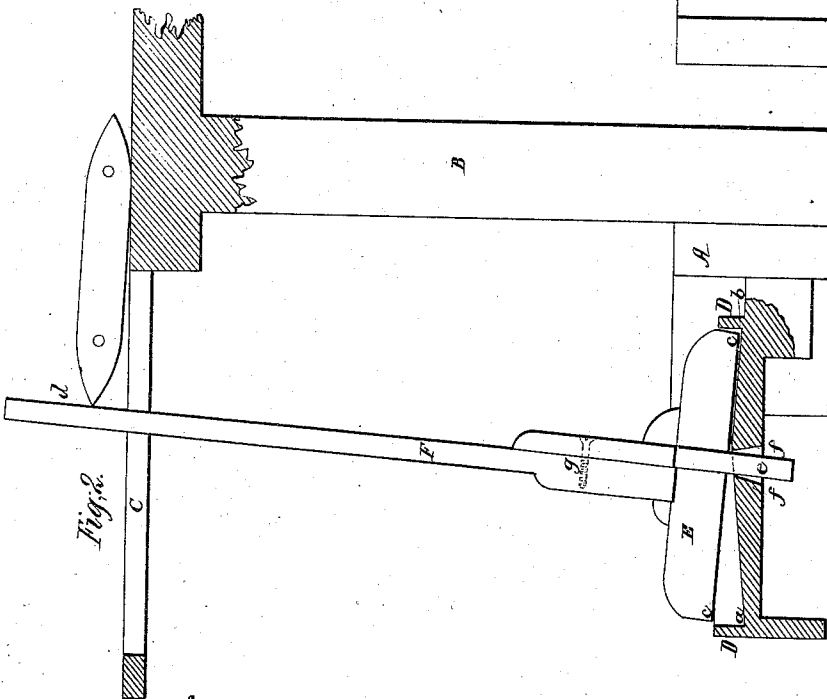
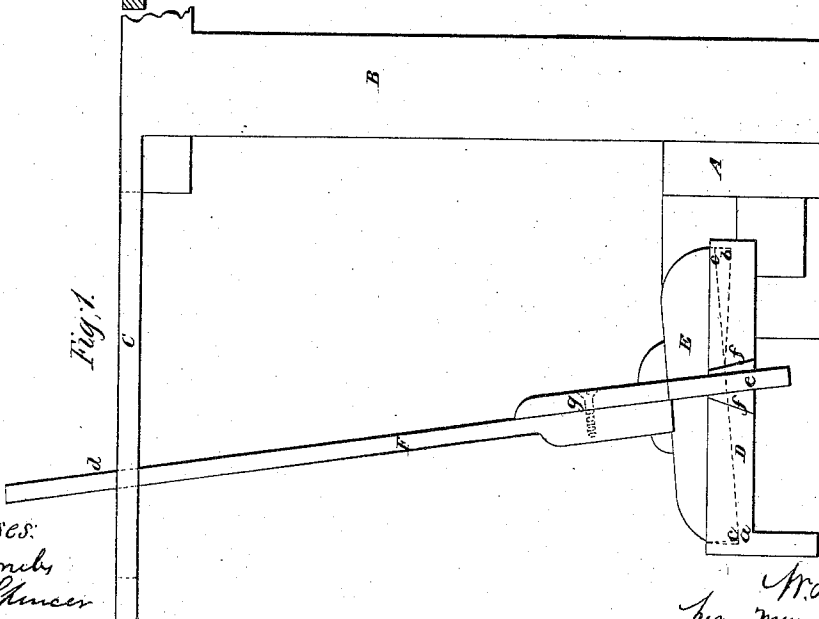


W. Nugent. Shuttle Motion.

No. 1,304.
32,308

Patented May 14, 1861.



Witnesses:
J. W. Combs
R. S. Spencer

Inventor:
W. Nugent
per Munn & Co. Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM NUGENT, OF CHICOPEE, MASSACHUSETTS.

PICKER-MOTION.

Specification of Letters Patent No. 32,308, dated May 14, 1861.

To all whom it may concern:

Be it known that I, WILLIAM NUGENT, of Chicopee, in the county of Hampden and State of Massachusetts, have invented a new and useful Improvement in the Picker-Motion of Power-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 part of this specification, in which—

Figure 1 is a front view of a portion of the lay of a power loom and part of the picker motion belonging to one side of the loom. Fig. 2 is a front view of the same parts but showing them partly in section. Fig. 3 is a transverse vertical section of the same.

Similar letters of reference indicate corresponding parts in the several figures.

My invention relates to the employment for keeping the movement of the operating point of the picking stick in or as nearly as desirable in a line parallel with the raceway, by means of a rocker attached to the bottom of the stick and a bed at the bottom of the lay. And my improvement consists in a certain novel construction of the rocker and the part of the lay which contains the bed on which the rocker works whereby the liability of the parts to break, get out of repair, or become displaced is, in a great degree, obviated.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

A represents the lower part of the lay; B is one of the swords; and C is the part of the raceway which is within one of the shuttle boxes. The shuttle box is not shown.

D is a long narrow and shallow box attached to the lower part A of the lay on the outer side thereof and just above the line of its axis of oscillation, the bottom *a, b*, of the interior of the said box constituting the bed on which the rocker E of the picking stick F works, and the interior of the said box being just wide enough and long enough to permit the rocker to work freely within it.

The rocker E, is made with its face or sole *c, c*, which rests upon the bed *a, b*, straight and at right angles to the working face *d*, of the picking stick F, and is furnished with a downwardly projecting parallel sided piece

e, which is received within a recess *f*, of dovetail form in the front of the box D, the object of such projecting piece and recess being to prevent the rocker jumping out of the box D, when the loom is in rapid operation. The rocker bed *a, b*, inclines downward in opposite directions from a point 4, near the middle of its length to permit the oscillation of the rocker and the form of this bed will govern the character of the movement of the rocker, which should be such as to make the operating point of the picking stick move nearly horizontally during the greater portion of its stroke but to rise slightly as it completes its movement toward the center of the loom in order to raise the rear end of the shuttle, as illustrated by the representation of the shuttle in red outline in Fig. 2, and so keep down the front end thereof and prevent it from flying out of the loom.

The box D, and rocker E, may be made of cast iron, the upper part of the rocker being made of a form to permit the attachment of the wooden picking stick by a screw *g*.

The picker may be operated by many of the systems of cams heretofore in use, or in any convenient manner, the power being applied to the rocker. The rocker works almost entirely without friction and by being fitted to the box D, as specified is kept in place without the straps and springs heretofore used in connection with rockers to which the picker staves or sticks have been attached.

I do not claim the attachment of the picking stick to a rocker applied to rock on a bed at the bottom of the lay.

What I claim as my invention and desire to secure by Letters Patent, is—

The rocker E, constructed with a straight bottom and downward projecting piece *e*, and the box D, constructed as described to receive the bottom of the rocker and contain the bed for the same to work upon, and with a dovetail recess *f*, in front for the reception of the projection *e*, the whole combined substantially as herein set forth.

WM. NUGENT.

Witnesses:

M. D. WHITAKER,
W. G. BLISS.