

(No Model.)

J. T. BYRNE & W. J. LAFFERTY.  
PICKER SPINDLE STAND.

No. 475,484.

Patented May 24, 1892.

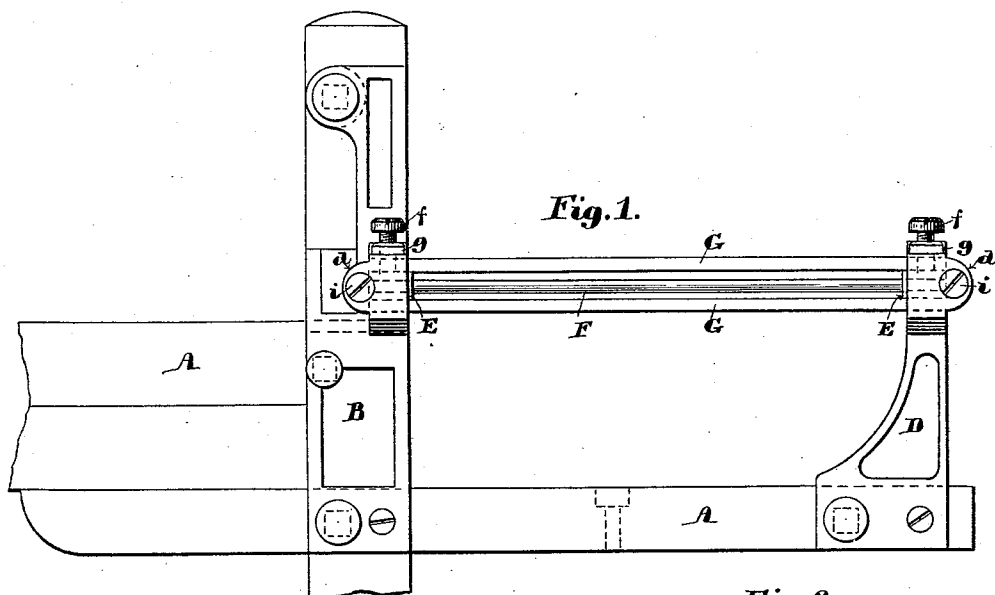


Fig. 2.

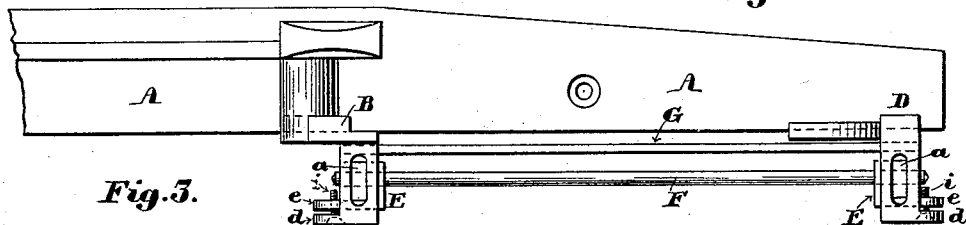


Fig. 3.

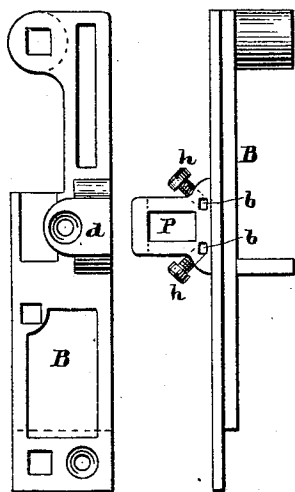


Fig. 5.

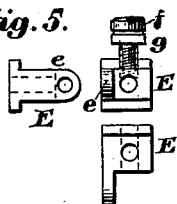


Fig. 6.

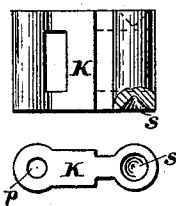
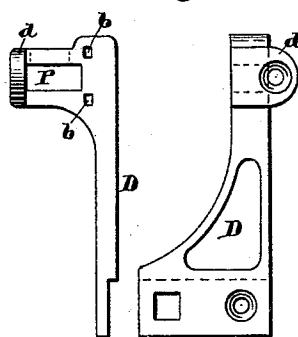


Fig. 4.



Witnesses:

Alex Scott  
Jas W. Graham

Inventors:

John T. Byrne  
W. J. Lafferty  
By John H. Smith, Attorney

# UNITED STATES PATENT OFFICE.

JOHN T. BYRNE AND WILLIAM J. LAFFERTY, OF PHILADELPHIA, PENN-  
SYLVANIA.

## PICKER-SPINDLE STAND.

SPECIFICATION forming part of Letters Patent No. 475,484, dated May 24, 1892.

Application filed November 6, 1891. Serial No. 411,117. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN T. BYRNE and WILLIAM J. LAFFERTY, citizens of the United States, residing, respectively, at Manayunk and Frankford, Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Picker-Spindle-Stands for Double-Shuttle-Box Looms, of which the following is a specification.

Our invention relates to the supports for the picker-spindle used in double-shuttle boxes for power-loom; and it consists in a mechanical arrangement of parts whereby the spindle and picker are made adjustable to the tip of the shuttle when in position in the shuttle-box, as is illustrated in the accompanying drawings, making a part of this specification, in which—

Figure 1 is a front view of one end of a power-loom lay, such as used for a four-shuttle box, and showing our improvements. Fig. 2 is a top view of Fig. 1. Fig. 3 shows two views of a mouth-piece, box-guide, and spindle-stand as constructed for our improvement. Fig. 4 shows two views of a "tail-end" spindle-stand as constructed for our improvement. Fig. 5 shows three views of our improved spindle-socket. Fig. 6 shows two views of a shuttle-picker such as used in connection with our improvements.

Similar letters refer to similar parts throughout the several views.

A represents one end of a loom-lay for a four-shuttle box of ordinary construction, and B and D the picker-spindle stands. These stands we construct with slotted pockets P. (See Figs. 3 and 4.) On the top of the pockets is formed a slot *a*. (Shown in Fig. 2.) The stands have also square holes *b b* (see Figs. 3 and 4) and also ears *d*.

E, Fig. 5, represents the spindle-sockets. These sockets are constructed with an ear *e* and fitted with a set-screw *f*. On the set-screw *f* is fitted a jam-nut *g*.

F represents the picker-spindle.

G represents square guide-bars.

In the spindle-stand B is fitted two set-screws *h h*. In the ears *d d* of the spindle-stands are fitted regulating-screws *i i*.

The picker to be used with our improvement we prefer to make in form as shown

in Fig. 6. That part of the picker marked K we make of such a thickness as will freely slide between the guide-bars G G. The picker-spindle stands are fastened to the loom-lay by bolts and screws in the usual manner. The spindle-sockets E are placed in the pockets P of the stands B and D. The set-screw *f*, with the jam-nut *g*, is inserted through the slot *a* and screwed into the socket E. The regulating-screws *i i* are then inserted. The spindle F is now inserted in the sockets E E and made fast by the set-screws *f f*. The square guide-bars G G are now inserted in the holes *b b* and made fast by the set-screws *h h*.

To place the picker on the spindle F and between the guide-bars G G, we loosen the set-screws *f* and *h*, draw to the right hand the spindle and top guide-bar, then insert the spindle in the hole *p* of the picker, and the part K will rest on the lower guide-bar. The top guide-bar and spindle are then put in their proper places and made fast by the screws *f* and *h*. The picker is then adjusted by the screws *i i* to the shuttle-tip, so that the tip will strike the center of hole *s* in the picker. The sockets E E are then made fast by the jam-nuts *g g*. The picker is now ready for use.

Should there be a soft place on one side of the "picker-head" and the hole *s*, which is made by the shuttle-tip, not wear in the center of the head, but to one side, the picker would in that case throw the shuttle from the loom. With our improvement, as above described, the picker may be adjusted in the following manner: Loose the jam-nuts *g g* and adjust the sockets E E by the screws *i i*, so that the tip of the shuttle will be in line with the center of the hole *s*. The spindle-sockets are then made fast by the jam-nuts *g g*. The picker will then throw the shuttle straight, make the loom run better, and the pickers last longer.

The drawings show our improvement as applied to a double-shuttle-box loom having the picker working in front of the box; but it is obvious our improvement can be applied to looms having the spindle and picker at the back of the shuttle-box.

Having, as above, fully described the construction and operation of our invention,

what we claim as new, and desire to secure by Letters Patent, is—

In a loom double-shuttle-box lay, spindle-stands arranged at the end thereof and provided with elongated slots P, in combination  
5 with the spindle-socket pieces E, adapted to slide in said slots, the adjusting-screws *ii* for moving the pieces E, set-screws for fastening the same in position, guide-bars G G, sup-

ported in said stands, and the picker-spindle carried by said pieces E, substantially as described.

JOHN T. BYRNE.  
WILLIAM J. LAFFERTY.

Witnesses:

JOHN SHINN,  
THADDEUS STEARNE.