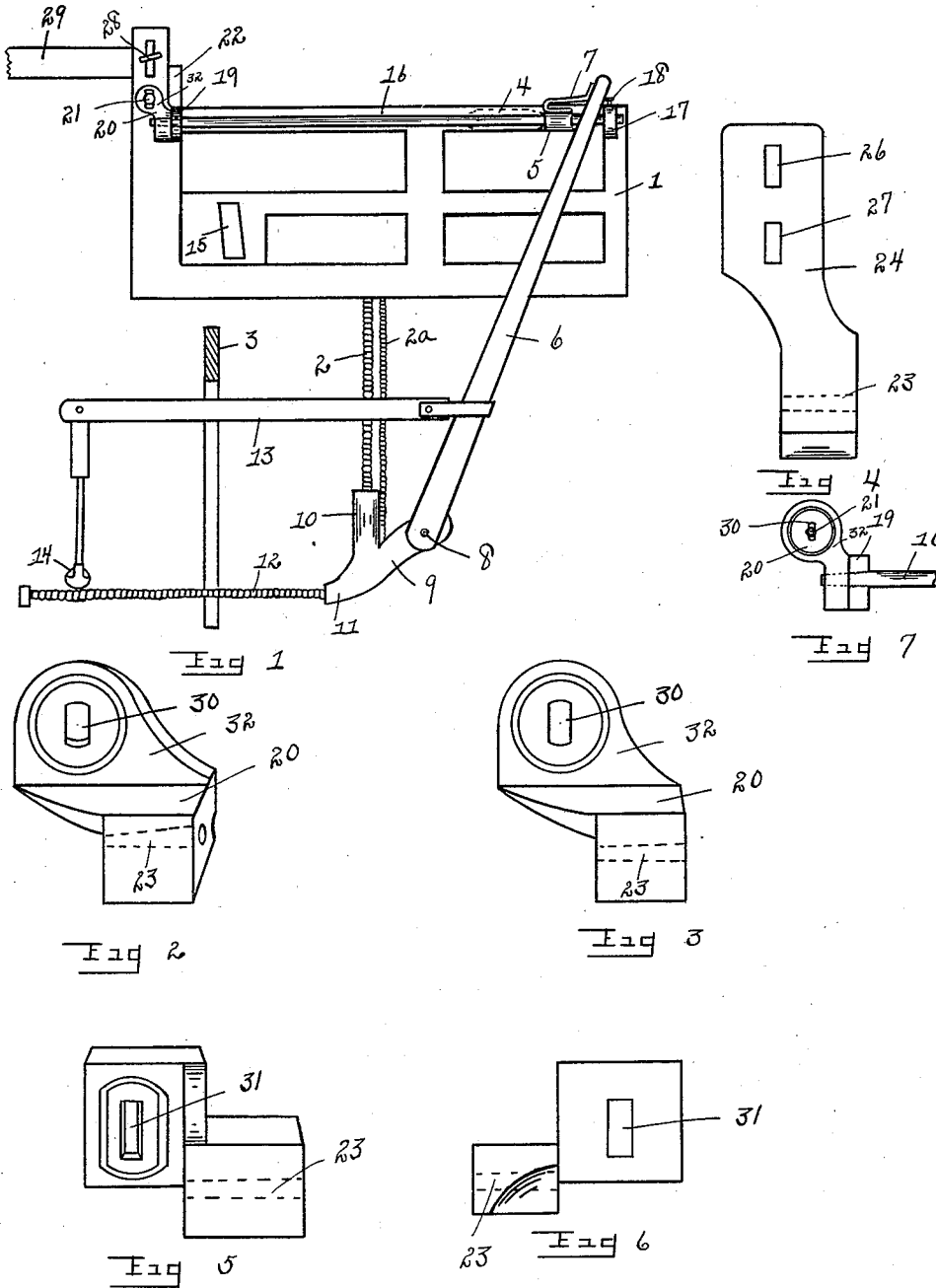


D. E. JONES.
 AUXILIARY PICKER ROD STAND.
 APPLICATION FILED MAY 24, 1911.

1,022,483.

Patented Apr. 9, 1912.



WITNESSES:
T. L. Wilder
E. T. DeGiorgi

INVENTOR
 DAVID E. JONES
 BY *Risley & Love*
 ATTORNEYS

UNITED STATES PATENT OFFICE.

DAVID E. JONES, OF UTICA, NEW YORK.

AUXILIARY PICKER-ROD STAND.

1,022,483.

Specification of Letters Patent.

Patented Apr. 9, 1912.

Application filed May 24, 1911. Serial No. 629,171.

To all whom it may concern:

Be it known that I, DAVID E. JONES, citizen of the United States, residing at Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Auxiliary Picker-Rod Stands, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to an auxiliary picker rod stand for picker boxes of looms, and I declare the following to be a full, clear, concise and exact description thereof, sufficient to enable any one skilled in the art to which it appertains to make and use the same reference being had to the accompanying drawings in which like reference characters refer to like parts throughout the specification.

The object of the invention is to provide an economical, efficient, device whereby the destruction of the picker rod stand of looms, caused by the bearing of the picker rod, under constant strain, therein, may be avoided.

The picker rod stand is built integral with the frame of the picker box, of necessity, for the reason that said rod must be held rigid and in direct alinement with the reed of the loom in order to permit the picker to thrust the shuttle in a straight line across the loom for perfect weaving.

Certain expedients have been tried to accomplish applicant's contemplated result, with little or no useful purpose, such, for instance, as inserting a bushing in the hole, as enlarged by the constant strain on the picker rod. The bushing, however, is subjected to the same wear, as the original bearing, and hence does not suffice for any great length of time.

The picker rod is generally screw threaded at one end for screwing same into the bearing in picker box. It has been found impracticable to screw thread both ends for insertion into their respective bearings on the picker box, for the reason that the picker rod, when thus mounted, has a tendency to spring from direct alinement, and thus cause the shuttle to be thrown across the reed in an abnormal path. It has also been found impracticable to employ set screws, mounted in the respective bearings of the picker rod, to hold same rigid for the same reason as that mentioned above, namely the tendency of the rod to spring out of direct alinement. One end of the picker rod must necessarily

be held in a free, though rigid manner, and the free end should preferably have a bearing in the lay end of the picker box, for the maximum strain is directed toward said portion.

The end of the picker rod thus held in a free manner at the lay end of the picker box is generally made to taper slightly to fit a corresponding bore in the picker stand. When this bearing in the stand is worn sufficiently whereby the rod vibrates under the constant strain of the picker sliding back and forth thereon, the auxiliary stand is secured in the rear of the lay end of the picker box preferably by the same bolt that holds the guide plate in assembled position.

The advantages of the device may be seen more particularly from the drawings in which,—

Figure 1 is a fragmentary view partly in section of a portion of a loom, showing the picker box and immediate parts thereof; Fig. 2 is a detail view enlarged of the auxiliary stand; Fig. 3 is a side elevation of the auxiliary stand shown in Fig. 2; Fig. 4 is a detail enlarged of a modified form of auxiliary stand; Fig. 5 is a detail enlarged of a modified form of auxiliary stand; Fig. 6 is a view of the stand shown in Fig. 5, looking in the reverse direction; Fig. 7 is a partial view, showing the auxiliary picker rod stand in position and reinforcing the picker stand which has been broken by use thereof.

Referring more particularly to the drawings, the picker box is represented generally by 1, which is held normally in elevated position by spring 2, steadied by spring 2^a.

The frame of the loom is indicated at 3.

The picker box 1 is adapted to hold shuttle 4 which is, when the loom is in operation, continually forced across the reed of the loom, not shown, by the picker 5 actuated by picker staff 6, to which it is connected by a suitable leather band or strap 7. Picker staff 5 is fulcrumed at 8 upon bracket 9 having portion 10 adapted to support spring 2, and portion 11 adapted to be connected with spring 12 whereby said staff 5 may be normally held in the position indicated by full lines in Fig. 1. The movement of said staff 5 forward whereby to carry picker 5 against which one end of shuttle 4 is adapted to lie, is controlled by sweep 13 which is reciprocated by its intermediate connection with spoon 14 actuated in the well known manner of the art. A buffer is represented by 15,

adapted to arrest the forward movement of the picker staff. The picker rod 16 is mounted at the outer end of the picker box 1 in a bearing 17, and held therein in any
 5 suitable manner well known in the art as by a set screw 18. The remote or lay end of the picker rod has a free tapering bearing in stand 19 integral with the frame of picker box 1. The constant reciprocation of picker
 10 5 along picker rod 16 tends to cause the end of the picker rod 16 bearing in stand 19 to wear said bearing until there is an aperture large enough to permit said end of said rod 16 to vibrate and thus impair the efficiency
 15 of same as heretofore explained. In time the vibration of rod 16 will break through the side of stand 19.

The invention resides in assembling to the rear of stand 19, as soon as the aperture in
 20 said stand becomes sufficiently worn, an auxiliary stand 20 which may be held in proper position whereby its aperture will aline with the aperture of stand 19, by the same bolt and nut 21 that holds guide plate 22 in position. Said auxiliary stand 20 is provided
 25 with a tapering bore 23 adapted to receive the correspondingly shaped end of the picker rod 16, in order to hold said end rigidly in position. Portion 32 of said
 30 stand 20 is provided with an elongated aperture 30 whereby said stand may be vertically adjustably assembled in position, so that its bore 23 will aline with that of the stand 19.

Fig. 4 shows an auxiliary stand 24 modified in a manner to adapt the same to be assembled by bolt 28 which vertically adjustably holds reed cap 29, and by a bolt and nut 21 that holds the guide plate 22. In order to be so assembled, said stand 24 is provided with elongated apertures 26 and 27,
 40 for the adjustable mounting of the same relative to the aperture in stand 19. Figs. 5 and 6 are similarly modified in a manner whereby they may be assembled to a different make of machine. The tapering bore 23
 45

of stand 20 is the same in each instance of the modifications shown in 24, and 35. Said modification 35 is provided with an elongated aperture 31 to hold the same in position. These modifications indicate my intention to include similar forms of auxiliary stand that may be found convenient to employ in this manner.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a picker box, a stand integral with the frame thereof, and disposed at the lay end of the loom, said stand being reinforced by an auxiliary stand having a tapering aperture for the reception of the corresponding shaped end of the picker rod, whereby to hold said picker rod rigidly in normal position, substantially as described.

2. In a picker box for looms, a picker rod held in the lay end of the box by a stand formed integral with the frame of said box, means for reinforcing said stand, said means comprising an auxiliary stand secured in assembled position by a bolt connected with the frame of the picker box.

3. In a picker box for looms, a stand formed integral with the frame of said box, and disposed at the lay end of the loom, an auxiliary stand detachably secured to the picker box frame in rear of the integral stand, whereby to reinforce said integral stand, and a tapering aperture in said auxiliary stand adapted to receive and hold in a rigid manner the correspondingly shaped end of a picker rod, whereby said rod may cause the picker to throw a shuttle in a direct path across the loom.

In testimony whereof I have hereunto affixed my signature in the presence of two witnesses.

DAVID E. JONES.

Witnesses:

ELEANOR T. DeGIORGI,
 T. L. WILDER.