No. 744,862. PATENTED NOV. 24, 1903.

H. L. GOODWIN.

PICKER MOTION FOR LOOMS.

APPLICATION FILED SEPT. 22, 1902.

NO MODEL.

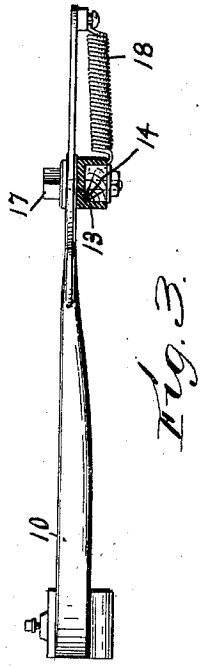


Fig. 3.

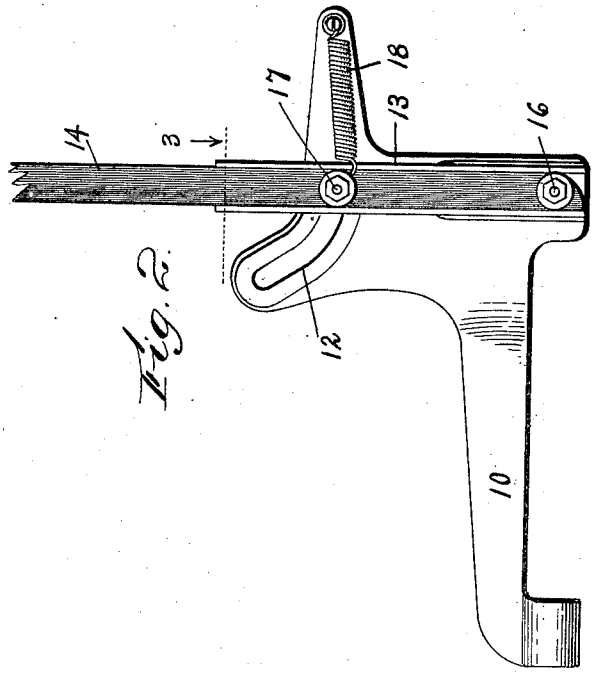


Fig. 2.

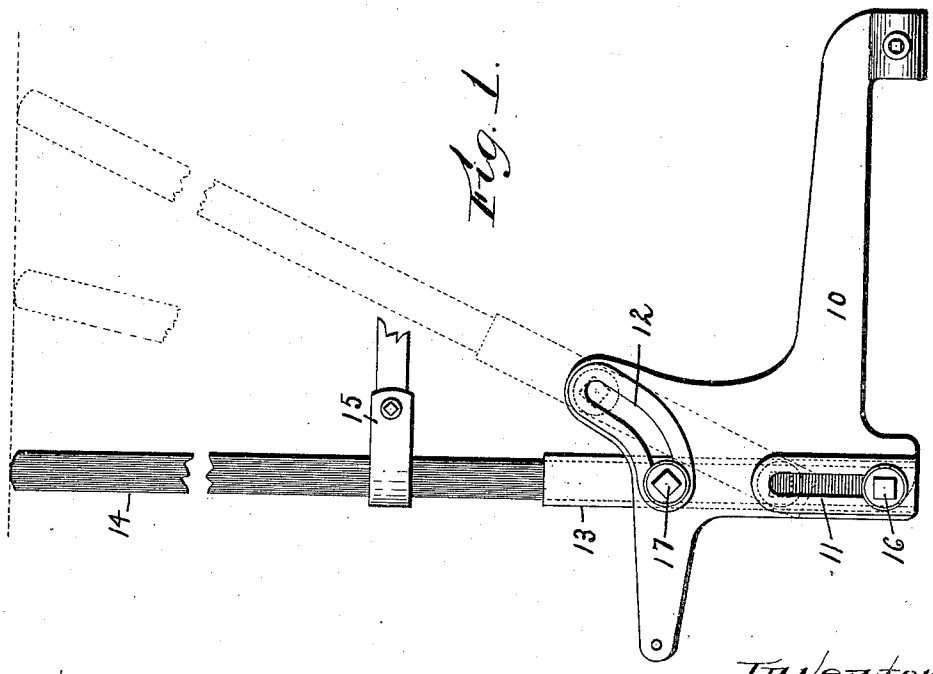


Fig. 1.

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No. 744,862. Patented November 24, 1903.

UNITED STATES PATENT OFFICE.

HARRY L. GOODWIN, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO BENJAMIN M. PEVEY, OF WORCESTER, MASSACHUSETTS.

PICKER-MOTION FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 744,862, dated November 24, 1903.

Application filed September 22, 1902. Serial No. 124,323. (No model.)

To all whom it may concern:

Be it known that I, HARRY LEE GOODWIN, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Picker-Motion for Looms, of which the following is a specification.

The object of this invention is to provide a new and improved picker-motion of that class in which the picker or the active end of the picker-stick moves in substantially a straight line to prevent slip on the end of the shuttle, which shall be simple and efficient in operation and of small cost.

To this end the invention consists in making the brackets, which are mounted at the ends of the pivot of the lathe, in a peculiar manner and in arranging the picker-sticks thereon as herein described.

One bracket will be hereinafter described, the two brackets used being substantially the same, except that they are rights and lefts. The bracket is provided with a lower guide, consisting of a vertical slot, and an upper guide, consisting of a curved slot. The picker-stick is provided with a fulcrum fitting the lower guide and with means engaging the upper curved guide. These parts are so proportioned and arranged that the picker-stick is substantially a floating picker-stick, whereby when the same is pulled by the picker-strap the fulcrum will run up the vertical guide, and the means fitting the curved guide will constrain the motion of the picker or the top of the picker-stick in such manner that it will move in substantially a straight line, thereby imparting a positive and even throw to the shuttle without the disadvantage which follows from the downward movement of the picker on the end of the shuttle, which follows when the picker-stick is arranged in the ordinary manner to turn on a pivot, so that the end of the same describes the arc of a circle.

The preferred way to arrange the picker-stick in relation to the bracket is to provide a picker-stick support consisting of a U-shaped bar into which the picker-stick fits. The picker-stick is held in place therein by means of two studs which project out from the back of said support and which engage said slots in the bracket, so as to form a fulcrum and special guiding means. A spring is arranged between the upper stud and a point on the bracket to return the picker-stick to normal position. This construction provides a strong support for the picker-stick. The whole arrangement is such that the device will operate efficiently to perform its function and is very simple and inexpensive to make.

In the accompanying drawings, forming part of this application, I have shown enough of the parts to illustrate my invention.

Referring to said drawings and in detail, Figure 1 is an elevation of the bracket and picker-stick. Fig. 2 is a similar view from the opposite side relatively to Fig. 1, and Fig. 3 is a plan view on the line 3 3 of Fig. 2.

In detail, 10 designates the bracket, which may be arranged on the pivot of the lathe in any of the ordinary ways. The same has a lower guide or vertical slot 11 and an upper curved guide or slot 12.

13 designates a picker-stick support, which is made in U shape.

14 designates the picker-stick, which is actuated by the usual picker-strap 15.

A stud 16, having a wrench-head and large collar, is fitted through the vertical slot 11, passes through a hole in the support 13 and a hole in the picker-stick, and has a nut on the end thereof, under which is placed a washer. This stud or bolt thus forms the fulcrum for the picker-stick. A similar stud or bolt 17 is arranged between the picker-stick support and picker-stick to engage the upper slot 12 to guide the picker-stick, so that its end will have the desired movement. These bolts or studs 16 and 17 serve not only to perform these functions, but also serve to hold and support the picker-stick rigidly in its support. By using this support the picker-stick is strongly supported and is not liable to break, as the strap 15 can be arranged as close as desired to the end of the support. A spring 18 is arranged between the upper stud 17 and a point on said bracket to return the picker-stick to normal position. This construction forms a simple, durable, and efficient device for the purpose stated. The details of construction of the same may be modi-

fied and changed by a skilled mechanic without departing from the scope of my invention as expressed in the claim.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

In a loom, the combination of a guide-plate, a vertical slot in the lower part thereof, an upper upwardly-curving slot also formed in the plate, an unslotted single-piece picker-stick, a metallic reinforcing-piece for the picker-stick substantially U-shaped in cross-section, two studs extending from the picker-stick and fitting into the slots, respectively, and nuts and washers secured on the studs to hold the picker-stick in place, said parts being proportioned so that the end of the picker-stick will move in a substantially straight line.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

H. L. GOODWIN.

Witnesses:
LOUIS W. SOUTHGATE,
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