

H. T. ROBBINS.
SHUTTLE GUIDE.

No. 13,322.

Patented July 24, 1855.

Fig. 1.



Fig. 2.

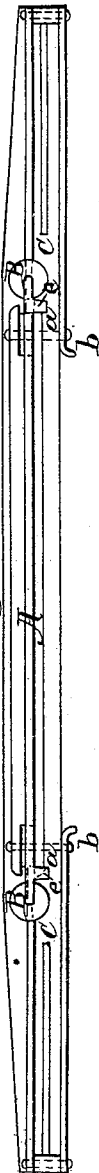


Fig. 3.

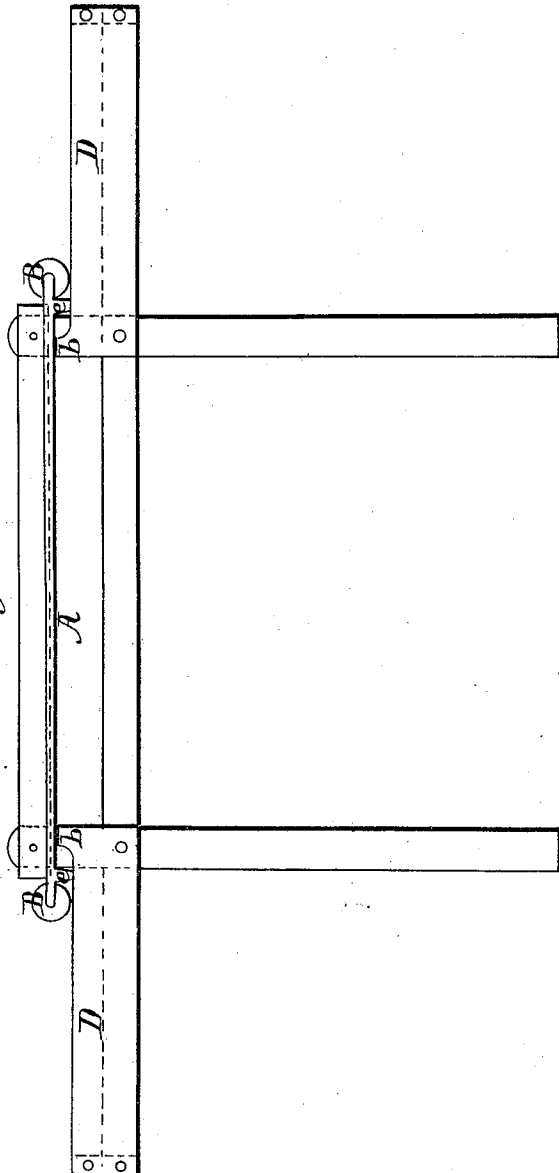
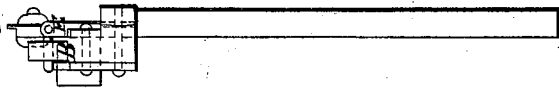


Fig. 4.



UNITED STATES PATENT OFFICE.

H. T. ROBBINS, OF LOWELL, MASSACHUSETTS.

SHUTTLE-GUIDE FOR LOOMS.

Specification of Letters Patent No. 13,322, dated July 24, 1855.

To all whom it may concern:

Be it known that I, HORACE T. ROBBINS, of Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Shuttle-Guides for Cloth-Weaving Looms; and I do hereby declare that the same is fully described in the following specification and accompanying drawings, letters, figures, and references thereof.

In the said drawings Figure 1, is a top view of the lay of a loom having a shuttle guide A, with my invention applied to it where the shuttle guide is represented as turned down over the race of the shuttle to prevent the shuttle from flying out of its course. Fig. 2, is a top view of the same where the guide is represented as turned up for the purpose of changing the shuttle; it will be seen by this view that the hand of the attendant may be passed freely into the shuttle box C, C, through the mouth *a, a*, for the purpose of changing the shuttle. Fig. 3, is a front view and Fig. 4, is an end view of the same where the guide is represented as turned down over the race of the shuttle.

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

The nature of my invention consists in furnishing the shuttle guide of cloth weaving looms with one or more pulleys, B, B, at either end of the guide A, in the vicinity of the mouth or inner end *a, a*, of the shuttle box C, C, in such a manner that the pulleys may take the place of the top of the mouth piece as it is called and to arrange the pulleys in such a way that they may be turned up out of the way for the purpose of changing the shuttle or such other manipulations as may be necessary as seen in Fig. 2. This enables the attendant to change the shuttle and pass it into the box C, C, with more ease and despatch than the old way where the attendant has to use one hand to place the shuttle into the mouth of the shuttle box and with the other hand to crowd it home to the picker; also to arrange the pulleys in such a position as to prevent the shuttle from flying out over the shuttle box at the end of the guide; in some looms

the top of the mouthpiece *b, b*, is made on a line or nearly so with the top of the front board D, D, Fig. 3, that leaves a space of sufficient width for the shuttle to fly out over the shuttle box unless the guide is placed very low down, so much so, as to be very much in the way of the attendant; this difficulty has proved of a very serious character; I have known one girl to loose an eye from being hit with a shuttle flying out in this way. I have tried various ways to prevent this trouble and find the pulleys when applied to the guide prove the best as they are arranged in such a position that when the shuttle rises up so as to come in contact with the pulleys the point of the shuttle will always strike below the center of the pulley consequently it gives it a rolling motion and guides it into the box.

The pulleys B, B, may be made of wood or any other light material and fitted loosely onto either end of the guide A, which is bent backward at *c, c*, Fig. 1, the back ends are supported by studs E, E, Fig. 4, and work in hinge joints *d, d*, Fig. 1, the front side of the guide is supported by studs *e, e*, Fig. 3, which rest on the front board of the shuttle box. The pulleys are equally applicable to the guides when rigidly fixed so as not to swing on hinges, and to those which extend farther over, and to those which do not extend as far over the shuttle box as the one represented.

I do not now claim the shuttle guide A, as that was secured to me by Letters Patent granted September 14th, 1852; but

What I now claim as new and desire to secure by Letters Patent is—

An improvement on my former invention which was patented September 14th, 1852, which consists in furnishing the shuttle guide A, with pulleys B, B, or their equivalent substantially in the manner and for the purpose above described.

In testimony whereof I have hereto set my signature this twenty seventh day of June, A. D. 1855.

HORACE T. ROBBINS.

Witnesses:

WILLIAM A. RICHARDSON,
JOHN BENNETT.