(No Model.)

L. D. BENNETT.

MEANS FOR CONNECTING LOOM SHUTTLE BINDERS TO SHUTTLE BOXES.

No. 303,796. Patented Aug. 19, 1884.

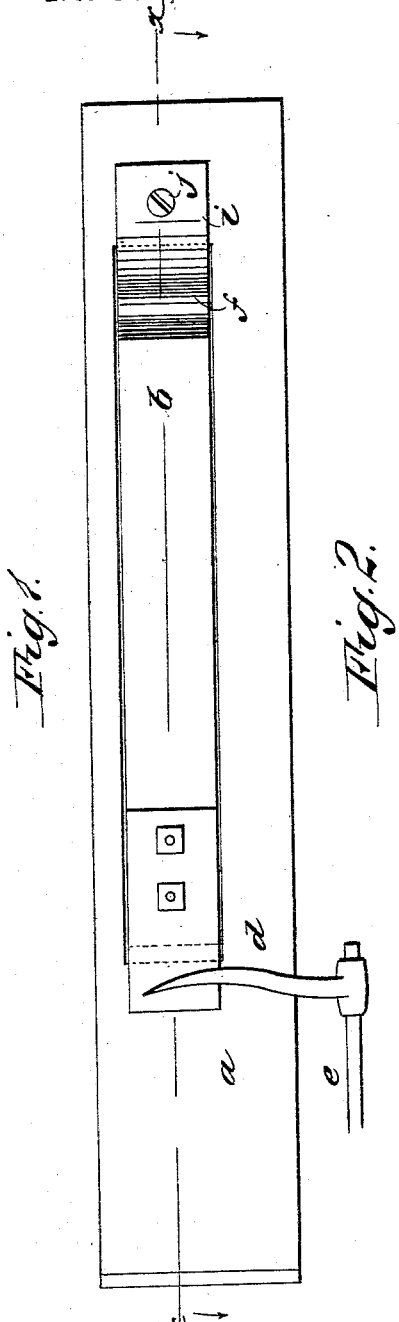

Fig. 1.

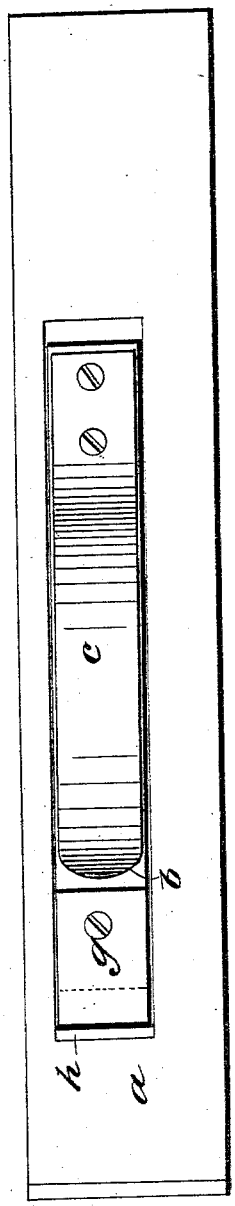

Fig. 2.

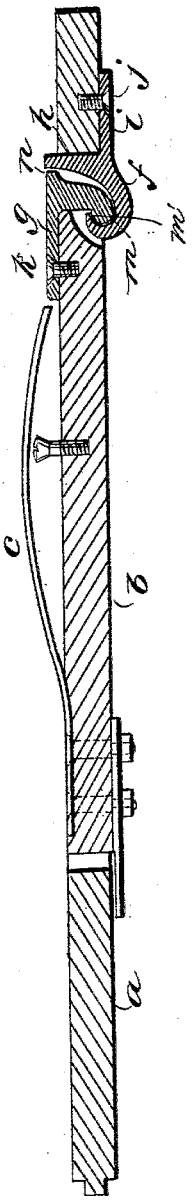

Fig. 3.

WITNESSES:

Francis McArdle.

C. Sedgwick

INVENTOR:

L. D. Bennett

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

LUMAN DUETT BENNETT, OF JEWETT CITY, CONNECTICUT.

MEANS FOR CONNECTING LOOM-SHUTTLE BINDERS TO SHUTTLE-BOXES.

SPECIFICATION forming part of Letters Patent No. 303,796, dated August 19, 1884.

Application filed November 14, 1883. (No model.)

To all whom it may concern:

Be it known that I, LUMAN D. BENNETT, of Jewett City, in the county of New London and State of Connecticut, have invented a new and Improved Means for Connecting Loom-Shuttle Binders to Shuttle-Boxes, of which the following is a full, clear, and exact description.

My invention relates to means for connecting shuttle-binders to shuttle-boxes; and it has for its object to provide a simple and efficient detachable joint which shall allow of the binder being readily taken out or replaced, and in which the binder-pivot shall be locked or held securely in its eye or socket when the binder is in its working position.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents an elevation of the front side of a shuttle-box, with the binder applied thereto, and also shows a portion of the protecting-rod and the finger thereof. Fig. 2 is an elevation of the inner side of the front side of a shuttle-box, showing the binder. Fig. 3 is a horizontal section through the front side of the box, the shuttle-binder, and the separable joint on the line *x x* of Fig. 1.

a represents the front side board of the shuttle-box; *b*, the board or plate of the shuttle-binder; *c*, the swell or binder-spring, and the finger of the protecting-rod *e*, used to stop the loom when a shuttle fails to properly enter a box, and which also serves to press the binder inward and cause it to bear upon the shuttle to stop it without shock when it enters the box, and to hold it in its proper position until thrown out. Ordinarily the connection between the binder and shuttle-box is made by a wooden or an iron pin passing through the binder and portions of the front side of the box, which pin soon wears and destroys the front. In some cases the binder *b c* is attached to the box-front *a* by a joint so made and attached that bolts or screws have to be taken out and put in with a wrench or screw-driver every time the shuttle-binder has to be taken out, which often occurs, and which wastes considerable time and labor, besides being very inconvenient. I therefore propose to connect the shuttle-binder to the box by means of a joint or connection formed of an open eye-piece, *f*, attached to the box, and an L-shaped pivot-piece, *g*, attached to the binder-plate, by which construction of parts the binder is held in place properly, yet may be readily detached when required. The eye-piece has a shoulder, *h*, to abut against the shoulder of the slot in the side of the box in which the binder is fitted, and it also has a flange, *i*, extending along the outer side of the box, to be fastened by a screw or bolt, *j*. The long side of the angle-plate *g* extends along the inside of binder-plate *b*, and is fastened to it with a screw or bolt, *k*, and the short side terminates at the end in a pivot, *m*, which fits into the eye *f* when the binder is in its proper position in the shuttle-box, while the heel *n* of said plate swings to such close proximity to the face of the shoulder-plate *h* of the eye-piece that the joint cannot disconnect while the binder is in the working position, and so that the binder can only be detached when the finger *d* of the protecting-rod is swung away from the binder sufficiently to allow the binder to swing open far enough to allow heel *n* to clear the edge of shoulder-plate *h;* then the binder may be taken out of the eye-piece, and it can be returned again from the same position. I propose to make these joint-pieces *f* and *g* of any suitable metal by casting, drop-forging, or by other suitable methods, as may be preferred.

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

The combination, with the shuttle-box and binder, of the eye-piece *f*, having shoulder-plate *h*, and attached to the outside of the front of the shuttle-box, and the pivot-piece *g*, having pivot *m* and heel *n*, and attached to the inside of the binder, said heel *n* and shoulder-plate *h* forming a lock to the binder-pivot when the binder is in the working position, substantially as described.

LUMAN DUETT BENNETT.

Witnesses:

JOHN PATRICK GORMAN,

JAMES W. FRANKLIN.