

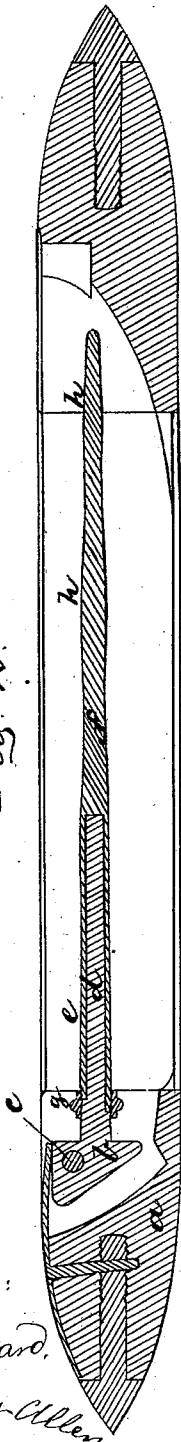
J. H. Le MOYNE.

Loom-Shuttle.

No. 161,972.

Patented April 13, 1875.

Fig. 2.

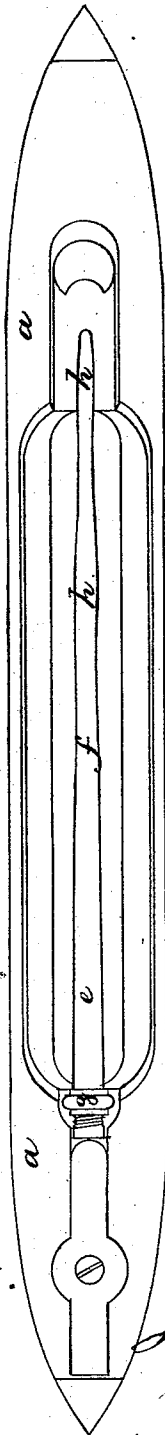


Witnesses:

John R. Heard.

Francis Allen.

Fig. 1.



Inventor:

Joel H. Le Moyne

by

Wm. Andrieu.
his atty.

UNITED STATES PATENT OFFICE.

JOEL H. LE MOYNE, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN LOOM-SHUTTLES.

Specification forming part of Letters Patent No. **161,972**, dated April 13, 1875; application filed March 8, 1875.

To all whom it may concern:

Be it known that I, JOEL H. LE MOYNE, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Loom-Shuttles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in loom-shuttles; and consists in a hinged spindle-head in the shuttle provided with a locking-nut, by means of which a detachable upper portion of a spindle carrying a spun cop can be firmly secured to the said hinged head when the shuttle is to be used in the loom. This detachable spindle is provided with a number of annular projections or swells, by which the cop is prevented from breaking during the operation of the shuttle.

The object of this invention is to enable the shuttle to receive a detachable portion of a spindle, which, during the process of spinning is attached to and forms a part of the mule-spindle, whereby I am able to use in the shuttle the same spindle upon which the cop is spun without transferring the cop from the spindle, until it is fed out from the eye of the shuttle during the ordinary process of weaving in the loom, thereby saving much time and material in preventing the breaking and transferring of the cops.

In the accompanying drawings, Figure 1

represents a ground plan of my improved shuttle, and Fig. 2 represents a central longitudinal section of the same.

Similar letters refer to similar parts wherever shown in the drawings.

a a represent the shuttle, provided with its hinged head *b*, and hinge-pin *c*, as usual. The head *b* is provided with a short shank, *d*, that is made to fit in a bored-out sleeve in the rear end *e* of the detachable spindle *f*, or vice versa. A small nut, *g*, is screwed over the junction, between the rear end of the spindle *f* and the shank *d*, by means of which the spindle is firmly secured in the shuttle during the operation of weaving. The spindle *f* is provided with a number of annular swells or projections, *h h h*, by means of which I am able to hold the cop more firmly on the spindle, and to prevent the cop from breaking when the spindle is used in the shuttle during the process of weaving.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent, and claim—

The combination of the loom-shuttle *a*, hinged head *b*, shank *d*, nut *g*, and the detachable spindle *f*, as herein shown, and for the purpose set forth.

In testimony that I claim the foregoing as my own invention, I have affixed my signature in presence of two witnesses.

JOEL H. LE MOYNE.

Witnesses:

ALBAN ANDRÉN,
JOHN R. HEARD.