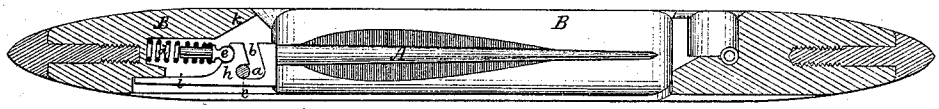
J. R. ARNOLD & H. A. PEASLEE.

Loom-Shuttles.

No. 150,931. Patented May 19, 1874.



Witnesses
S. N. Piper
L. N. Holler

Jabez R. Arnold
Hiram A. Peaslee.
by their attorney
R. K. Eddy

UNITED STATES PATENT OFFICE.

JABEZ R. ARNOLD AND HIRAM A. PEASLEE, OF SALEM, MASSACHUSETTS.

IMPROVEMENT IN LOOM-SHUTTLES.

Specification forming part of Letters Patent No. **150,931**, dated May 19, 1874; application filed April 22, 1874.

To all whom it may concern:

Be it known that we, JABEZ R. ARNOLD and HIRAM A. PEASLEE, of Salem, of the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Shuttles for Looms; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, which denotes a longitudinal section of a shuttle provided with our improvement.

The shuttle for which our invention is especially designed is the well-known one invented by Laroy Litchfield, and patented May 1, 1855, by the United States Patent No. 12,780, which, prior to the expiration of the original term of fourteen years, was extended a further term of seven years.

By our improvement the spindle-support pin can be fixed stationary in the body of the shuttle, so as not to be required to be removed therefrom in order to either remove the spindle from or fix it in the shuttle-body. Furthermore, with our improvement the spindle-support pin and its bearing in the head of the spindle may easily be oiled, as occasion may require. By fixing the pin in the body of the shuttle so that the pin cannot move endwise therein, such pin will be prevented from working out or projecting beyond the shuttle, so as to damage the reed of the loom, while the shuttle may be in flight across the race-beam.

Various ways may be adopted for immovably fixing the pin in the shuttle-body, some one or more of which are described in the Patent No. 141,803, dated August 12, 1873, and granted on the invention of Thomas K. McIntyre.

In carrying out our invention, we combine with the Litchfield shuttle, and arrange in the head of its spindle, a short slot, (horizontal or about so,) and a passage leading upward out of such slot and opening out of the head, all being substantially as shown in the accompanying drawing, in which *a* denotes the slot; *b*, the passage; A, the spindle; *h*, the head of the spindle; *i*, the stop-arm; *d*, the spring, and *e* its support-pin; B, the body of the shuttle, and *c* the spindle-pivot or support-pin. The spindle, when in its raised position, rests against the stop *k*. When the spindle is either down or up the spring will keep it upon the pin. By raising the spindle a short distance and pressing it backward and next downward it may be easily detached from the pin *c*. Were it not for the short slot *a* the spindle would not be likely to keep in place on the pin *c*. When the spindle is down oil can easily be poured or dropped into the passage *b* and upon the pin *c*.

In the spindle of McIntyre there is but one open slot; but in our spindle two of such slots become essential, one of which opens into the other, and also opens upward out of the head of the spindle.

We claim as our invention—

The spindle-head *h*, provided with the slot *a* and its outlet-passage *b*, in combination with the spindle A, the spring *d*, the shuttle-body B, and its spindle-support pin *c*, all being substantially as described and represented.

JABEZ R. ARNOLD.
HIRAM A. PEASLEE.

Witnesses:
J. S. POND,
N. R. ALLEN.