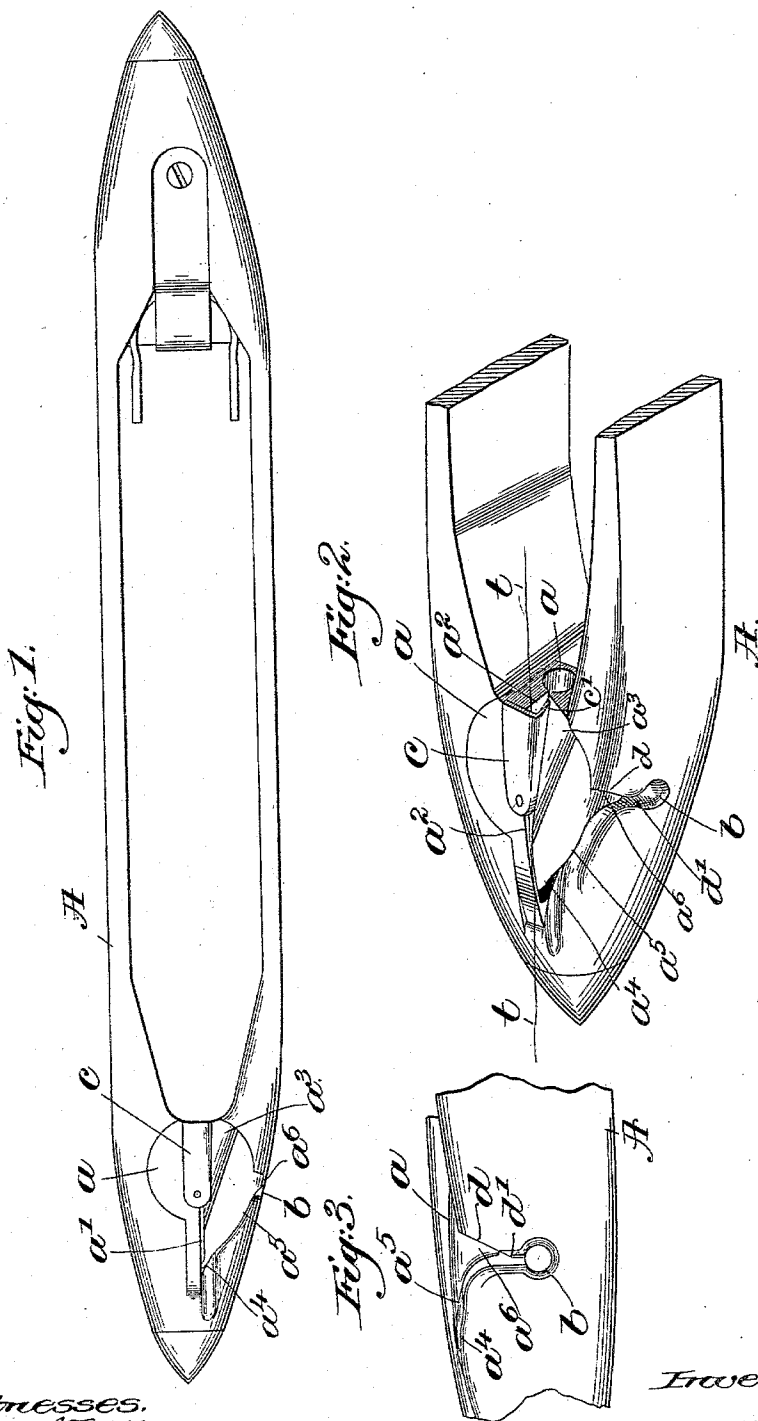


(Model.)

E. S. STIMPSON.
LOOM SHUTTLE.

No. 556,705.

Patented Mar. 17, 1896.



Witnesses.
Edward F. Allen.

Thomas J. Drummond.

Inventor.
Edward S. Stimpson.
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UNITED STATES PATENT OFFICE.

EDWARD S. STIMPSON, OF HOPEDALE, MASSACHUSETTS, ASSIGNOR TO THE
DUTCHER TEMPLE COMPANY, OF SAME PLACE.

LOOM-SHUTTLE.

SPECIFICATION forming part of Letters Patent No. 556,705, dated March 17, 1896.

Application filed August 6, 1895. Serial No. 558,368. (Model.)

To all whom it may concern:

Be it known that I, EDWARD S. STIMPSON, of Hopedale, county of Worcester, State of Massachusetts, have invented an Improvement in Loom-Shuttles, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

Self-threading shuttles for looms are now usually constructed with a slot through which the thread is led to the usual eye in the side of the shuttle. When such shuttles are used in automatic looms provided with devices for supplying fresh filling to the shuttle when the previous filling is nearly or quite exhausted, the thread must guide itself into the slot by reason of its position as it is drawn off from the end of the filling-carrier or bobbin. It frequently happens that the thread thus led into the slot will slip or fly out again before it has passed under the spur or projection which is intended to guide it to the side eye, and this invention has for its object the production of means for guarding or confining the thread while in line with the threading-slot, so that it cannot accidentally escape therefrom before passing about the guide projection or spur.

Figure 1 is a top view of a shuttle embodying my invention. Fig. 2 is an enlarged perspective view of the eye end of the shuttle, showing the thread as confined by the guard, and Fig. 3 is an enlarged detail in side elevation of a portion of the shuttle adjacent the thread-eye.

The shuttle-body A, shown as entirely open at its upper and lower sides, has a filling-carrier or bobbin B supported or held therein in suitable manner, (see Fig. 1,) and the shuttle-body is cut away beyond the tip of the filling-carrier to receive therein a thread-guide block a , longitudinally slotted at a' to receive the thread after it has entered the thread-eye, the block having a vertical face a^2 and an inclined face a^3 converging to the said slot to direct the thread therinto as it is drawn off from the end of the filling-carrier. At that side of the guide-block a having the inclined face a^3 the spur or projection a^4 is formed to guide the thread in usual manner along the passage formed by the shuttle-body and the edge a^5

of the guide-block to the usual thread-eye b in the side of the shuttle.

Now when the thread t is drawn off from the end of the filling-carrier, in line with the slot a' , it frequently slips or flies out of the slot before it has been guided to the thread-eye b , and to prevent this I have provided a thread-guard, shown as a shelf c , bent or curved downward at c' and overhanging the entrance to the guide-slot a' , the lower edge of the guard approaching closely the inclined face a^3 , while permitting the thread to pass easily thereunder to the slot a' .

In Fig. 2 the thread t is shown as above and in line with said slot, but confined by the overhanging guard in such manner that it cannot fly or slip out of position, the guard maintaining it in line with the slot a' to properly enter it and be guided by the spur or projection a^4 to the thread-eye b . The rear edge a^6 of the spur-base is inclined forward and downwardly, the shuttle-body being similarly shaped at d' and extending slightly below the spur-base at d' , making a better construction of the parts, whereby the thread cannot become wedged or caught between the two parts, as the pull of the thread over the downwardly-inclined edge draws it away from any possible crack or crevice between the wood and metal.

Shrinkage of the wood will cause a crack, which, by catching the thread, might cause a great deal of trouble.

The shuttle is herein shown as adapted for holding the filling-carrier or bobbin; but my invention is not limited to such construction, as the self-threading devices described may be applied to any loom-shuttle without departing from the spirit and scope of my invention.

I claim—

1. A shuttle having a slot substantially in the plane of the longitudinal axis of the filling-carrier, into which the thread from the said carrier is led, longitudinally-extended and laterally-converging faces to direct the thread into the slot, and a downturned guard overhanging the entrance to the slot and approaching the inclined face, to prevent the escape of and confine the thread above the slot before it passes to the thread-eye, substantially as described.

2. A loom-shuttle having a slot through which the thread is led to be guided to the eye of the shuttle, an inclined face to guide the thread into the slot, and a guard overhanging the slot and downturned toward the guide-face, to receive the thread and prevent its escape before it passes to the eye, substantially as described.

3. A loom-shuttle having a side eye and thread-guide block, a longitudinal thread-receiving slot in said block, a spur or projection at one side of said slot to guide the thread

therefrom to the side eye, and a downturned guard longitudinally extended above the slot, to receive and retain the thread in position to enter the slot, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWARD S. STIMPSON.

Witnesses:

FRANK J. DUTCHER,

HENRY LAWRENCE.