C. B. WEBSTER. LOOM SHUTTLE.

APPLICATION FILED APR. 8, 1903. NO MODEL. Fig. 2.

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CHARLES B. WEBSTER, OF FALL RIVER, MASSACHUSETTS.

LOOM-SHUTTLE.

SPECIFICATION forming part of Letters Patent No. 753,337, dated March 1, 1904.

Application filed April 8, 1903. Serial No. 151,660. (No model.)

To all whom it may concern:

Be it known that I, Charles B. Webster, a citizen of the United States, residing at Fall River, in the county of Bristol and State of Massachusetts, have invented new and useful Improvements in Loom-Shuttles, of which the following is a specification.

This invention relates to shuttles for looms; and its object is to provide a self-threading shuttle of simple and cheap construction and which will not become accidentally unthreaded.

In the accompanying drawings, Figure 1 is a side elevation of one end of a shuttle containing my improvements. Fig. 2 is a top plan view of the same. Fig. 3 is a cross-section on the line 3 3, Fig. 2. Fig. 4 is a longitudinal section on the line 4 4, Fig. 2. Fig. 5 is a side elevation of the thread-guide.

Fig. 6 is a front elevation of the same. Fig. 7 is a bottom plan view thereof.

In the solid end portion of the shuttle 1 is cut a longitudinal slot or recess 2, extending down from the top of the shuttle to about its center. This slot opens at its rear end into the hollow body of the shuttle. At its front end is a lateral recess 3 somewhat deeper than the slot 2 and extending nearly to the outside of the shuttle. Near its lower end is a circular hole 4 in the side of the shuttle, and a narrow slit 5 runs from the top of the shuttle down to the top of the hole 4.

The thread-guide is shown separately in Figs. 5, 6, and 7. It is preferably cast in one piece and comprises a flat semicircular head 6, a shank 7 at right angles therewith, and a tubular eye portion 8 at the lower end of the shank, projecting toward the outside of the shuttle and adapted to fit in the hole 4. The outer end of the eye portion is beveled downwardly, and a slit 9 runs along the bottom of the eye its entire length. At its inner end said eye portion is cut away in front of the suit, as indicated at 10.

A screw 11 passes up through the solid part of the shuttle and into a tapped hole 12 in the head of the thread-guide, holding the head 6 firmly down on a shoulder 13, formed by a shallow recess 14 in the top of the shuttle.

5° The front of the head 6 is chamfered off under-

neath at 15, so as to have a space between it and the top of the shuttle. Furthermore, the shank does not touch the front wall of the lateral recess 3 nor does the eye portion 8 touch the front and bottom of the hole 4.

To thread the shuttle, the thread is laid in the slot 2 and carried forward and under the front end of the head 6, then down through the slit 5 into the hole 4, then up through the slit 9 into the tubular eye portion 8, this 60 movement of the thread being facilitated by the cut-away portion 10. In this position the thread will not drop down through the slit 9 of its own accord, since it is held up in the inner end of the eye portion by the bottom of 65 the slot 2, which stands above the bottom of the eye portion, as shown in Figs. 3 and 4.

Having thus described my invention, what I claim is—

1. The combination with a shuttle having 7° a longitudinal slot and a lateral recess, of a thread-guide in said recess having a tubular eye portion provided with a slit below the bottom of said slot.

2. The combination with a shuttle having 75 a longitudinal slot, a lateral recess, a hole through the side of the shuttle near the bottom of said lateral recess and a slit extending from the top of the shuttle down to said hole, of a thread-guide in said lateral recess having a 80 tubular slitted eye portion at its lower end entering said hole.

3. A thread-guide for a shuttle having a head, a shank perpendicular thereto, and a tubular eye portion transverse to said shank and 85 provided with a slit in its bottom.

4. A thread-guide for a shuttle having a head 6 chamfered off underneath at 15, a shank 7 perpendicular to said head, and a tubular eye portion 8 transverse to said shank and 9° provided with a slit 9 and a cut-away portion 10 at the inner end of said slit.

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

CHARLES B. WEBSTER.

Witnesses:

ARBA N. LINCOLN, EDMUND DOMINGUE.