F. BLUMER-STREIFF.

WEAVER'S SHUTTLE.

APPLICATION FILED JAN. 3, 1910.

986,040. Patented Mar. 7, 1911.

Fig. 1

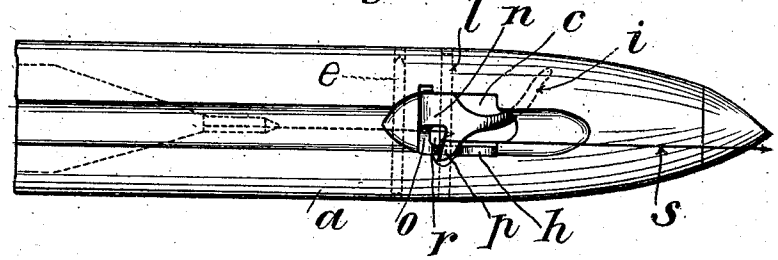


Fig. 2

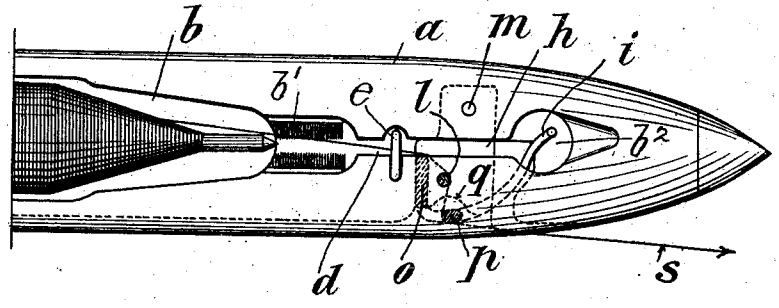


Fig. 3

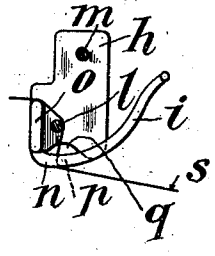


Fig. 4

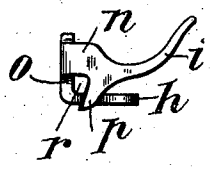
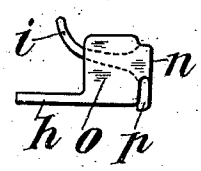


Fig. 5



Witnesses:

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WEAVER'S SHUTTLE.

986,040. Specification of Letters Patent. Patented Mar. 7, 1911.

Application filed January 3, 1910. Serial No. 536,166.

To all whom it may concern:

Be it known that I, FRITZ BLUMER-STREIFF, a citizen of the Republic of Switzerland, residing at Engi, Canton of Glarus, Switzerland, have invented certain new and useful Improvements in Weavers' Shuttles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

The invention relates to improvements in weavers' shuttles and has for its object to strengthen the shuttle body and to simplify and cheapen the construction of both the shuttle body and threading device.

The invention consists in forming an aperture in the side of the shuttle body and providing a thread guide, formed of a single piece of metal, having the eye for the thread formed with a downwardly open eyelet and so disposed that said eye lies in the aperture in the body.

In the accompanying drawing: Figure 1 is a side view of a shuttle embodying my invention. Fig. 2 is a plan view thereof. Fig. 3 is a detail plan view of the threading device. Fig. 4 is an end view and Fig. 5 a bottom view of the threading device.

The shuttle body as *a* is provided with the main bobbin chamber as *b*, and with a lateral aperture *c* which communicates with the chamber *b* through a central longitudinal channel *d* which extends through the top of the body and is preferably provided with thread guide *e* between the throat *b'* and the aperture *c*.

The aperture *c* is partially closed at the top by the shuttle body and the thread guiding device hereinafter described is fixed within and partly closes the side of the aperture.

The thread guide consists of a plate *h* which is secured to the bottom of the aperture *c* by means of a pin *l* which forms a thread guide and a pin *m* both of which project perpendicular to the plate through holes in the shuttle and plate. The plate *h* has an integral arm *o* bent upward at right angles and bears against the rear wall of the aperture *c* and extends inward therefrom to the near side of the longitudinal channel *d*.

A foot *n* projects from the outer edge of the arm *o* partly across the aperture *c* and terminates in a horn-shaped member or tongue *i* which extends entirely across said aperture and upward to a point close to the top of the shuttle body at which point a slot b^2 in the top of the shuttle body terminates in a circular aperture. Formed on the lower edge of the foot *n* near the arm *o* is a spur *p* which projects below the plate *h* which at this point is provided with a notch *q*, (Fig. 3), and said spur and notch cooperate with the arm *o* to form an eye *r* (Fig. 4) having an inlet through which the thread *s* enters the eye in threading.

The threading is effected initially in the ordinary way by laying the end of the thread over the free end of the tongue *i*, drawing back the end and drawing out the free end of the thread from the aperture *c*. By a further manipulation the thread is passed under the spur *p* into the eye *r*. The thread then rests against the pin *l* and a double change of direction is imparted to the thread, between the passage *d* and the eyelet *r*, when unwinding so that the necessary friction is provided for keeping the thread taut.

I claim:—

1. A shuttle having an aperture formed in its side and communicating with the bobbin chamber through a longitudinal channel, a thread guide consisting of a plate secured to the bottom of the aperture and having an arm projecting at right angles and extending from the mouth of the aperture to the longitudinal channel, said plate having a tongue extending across the mouth of the aperture and formed with a depending spur which coöperates with the arm to form an eye in the mouth of the aperture.

2. A shuttle having a bobbin chamber and provided with an aperture in its side communicating with the chamber through a longitudinal channel, a thread guide mounted in the aperture consisting of a plate having a notch in its outer end and an integral angle arm extending from the mouth of the aperture to the near side of the longitudinal channel, said angle arm

having a tongue on its outer edge extending across the mouth of the aperture, said tongue having a spur extending below the plate in front of the notch and forming with said arm and notch an eye at the mouth of the aperture.

In testimony that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

FRITZ BLUMER-STREIFF.

Witnesses:
GEO. GIFFORD,
ARNOLD ZUBER.