

H. M. BROWN.  
LOOM SHUTTLE.  
APPLICATION FILED JUNE 19, 1908.

918,123.

Patented Apr. 13, 1909.

Fig. 1.

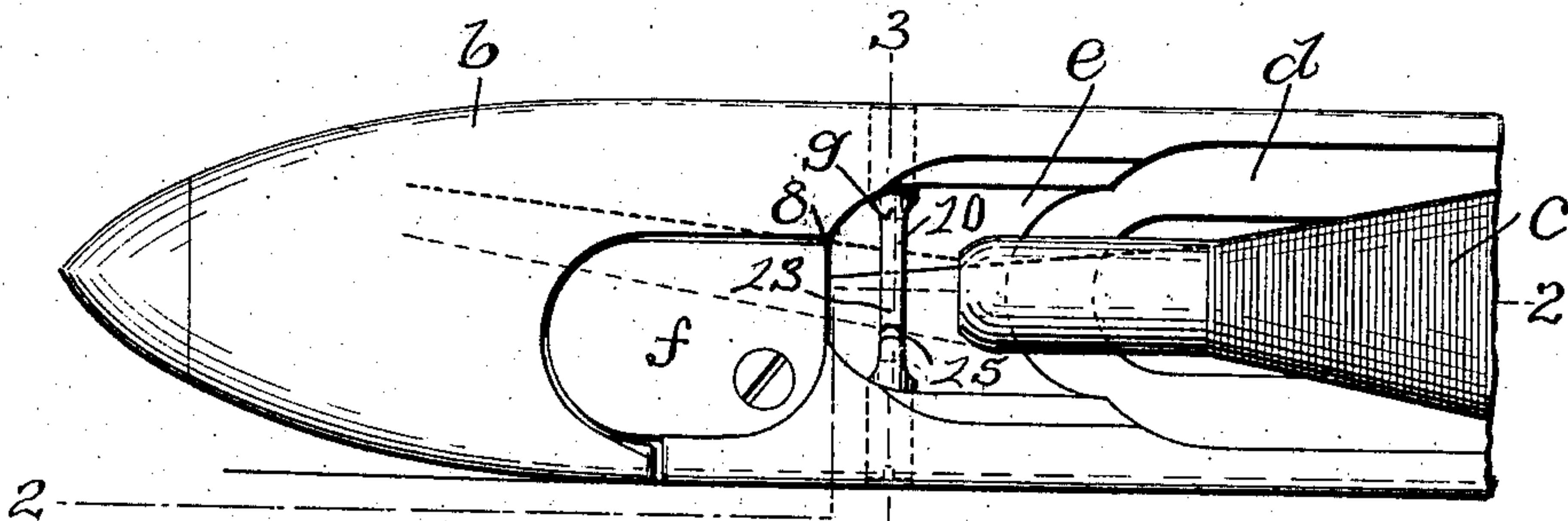


Fig. 2.

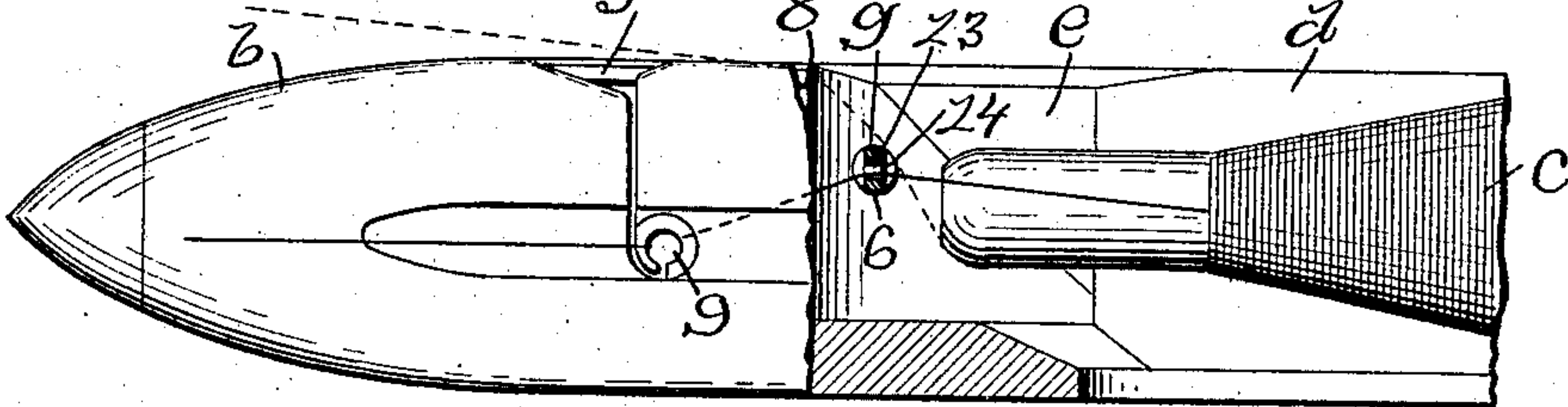
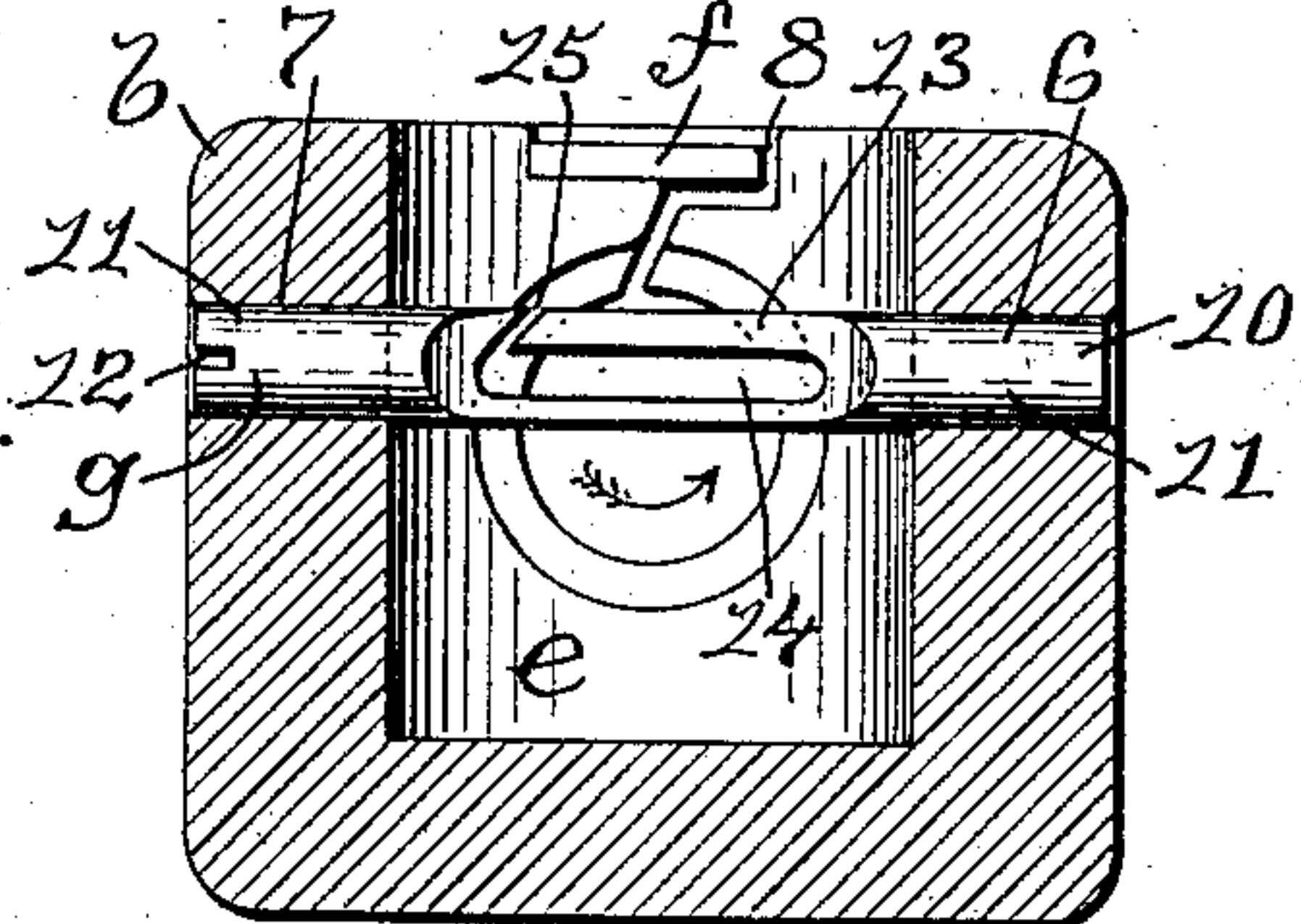


Fig. 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

HENRY MARTIN BROWN, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO U. S. BOBBIN AND SHUTTLE CO., OF PROVIDENCE, RHODE ISLAND, A CORPORATION OF NEW JERSEY.

## LOOM-SHUTTLE.

No. 918,123.

Specification of Letters Patent.

Patented April 13, 1909.

Application filed June 19, 1908. Serial No. 439,346.

*To all whom it may concern:*

Be it known that I, HENRY MARTIN BROWN, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Loom-Shuttles, of which the following is a specification.

This invention has reference to an improvement in loom shuttles and more particularly to an improvement in auxiliary threading devices for hand threading loom shuttles.

In threading loom shuttles by hand the thread is first pulled from the bobbin over the hand threading mechanism of the shuttle. As usually constructed the threading mechanism requires that the thread be depressed between the end of the bobbin and the threading mechanism, so as to bring the thread into the entrance opening of the threading mechanism.

The object of my invention is to improve the construction of an auxiliary threading device for hand threading loom shuttles, whereby in drawing the thread from the bobbin over the hand threading mechanism to thread the shuttle the device is adapted to automatically depress the thread into the threading mechanism and to be adjusted by turning the device on its axis.

A further object of my invention is to construct an auxiliary threading device for hand threading loom shuttles integral, whereby the device is strengthened and supported at both ends in the throat of the shuttle by the side walls of the shuttle.

My invention consists in the peculiar and novel construction of an adjustable auxiliary threading device adapted to be applied to any form of hand threading loom shuttle to facilitate the threading of the shuttle by hand, said auxiliary threading device having details of construction as will be more fully set forth hereinafter and claimed.

Figure 1 is a top plan view of the thread delivery end of a hand threading loom shuttle provided with my improved adjustable auxiliary threading device. Fig. 2 is a longitudinal sectional view through the delivery end of the shuttle, taken on line 2 2 of Fig. 1, and Fig. 3 is an enlarged transverse sectional view through the shuttle taken on line 3 3 of Fig. 1.

In the drawings; *b* indicates the thread delivery end of a loom shuttle, *c* the bobbin, *d*

the bobbin cavity, *e* the throat, *f* the hand threading mechanism which may be any one of the usual constructions, and *g* the adjustable auxiliary threading device located in the throat *e* intermediate the end of the bobbin *c* and the hand threading mechanism *f*. The shuttle has the transverse holes 6 and 7 extending through the side walls on a line with each other into the throat *e* and preferably centrally between the end of the bobbin *c* and the threading mechanism *f* and slightly above the center line of the bobbin. The threading mechanism *f* has the entrance opening 8 for the thread which is manipulated by hand through the threading mechanism *f* to bring the thread out of the delivery eye 9 in the side of the shuttle.

The auxiliary threading device *g* consists of a round pin 10 the length of which equals approximately the width of the shuttle and having the round ends 11 11 in one of which is a transverse slot 12 and the flattened central portion 13 in which is a longitudinal slot 14 and an inclined slit 15 extending from the upper edge of the flattened portion 13 downward toward the transverse slot 12 into the end of the longitudinal slot 14, as shown in Fig. 3. The pin 10 is driven through the holes 6 and 7 in the side walls of the shuttle in a position to bring the flattened portion 13 in the throat *e* and to bring the inclined slit 15 in an upward position. The auxiliary threading device may now be adjusted to bring the slit 15 into the required position to catch the thread by inserting a screw-driver or other tool into the slot 12 and turning the pin 10 on its axis.

In the operation of my improved auxiliary threading device the thread in threading the shuttle by hand is pulled off the end of the bobbin over the auxiliary threading device *g* and over the threading mechanism *f*, as shown in light broken lines in Figs. 1 and 2. The thread as it is pulled from the bobbin whips around the end of the bobbin in the direction of the arrow shown in Fig. 3 and catches in the slit 15 in the auxiliary threading device *g* and passes downward through the slit 15 into the longitudinal slot 14. The thread is now depressed or forced downward by the auxiliary threading device *g* in the throat *e* and into the entrance opening 8 of the threading mechanism *f*, as shown in heavy dotted lines in Fig. 1, from which point the thread is easily and quickly ma-



nipulated through the threading mechanism *f* and out of the delivery eye 9, as shown in Fig. 2, to thread the shuttle. The auxiliary threading device *g* being placed between the end of the bobbin *c* and the threading mechanism *f* with the thread extending through the slot 14 in the auxiliary threading device prevents excessive ballooning of the thread and also exerts a slight friction or tension on the thread.

Having thus described my invention, I claim as new and desire to secure by Letters Patent;

1. In a hand threading loom shuttle, an auxiliary threading device consisting of a pin extending transversely through the side walls and throat of the shuttle and having a longitudinal slot and an inclined slit extending from the side of the pin downward into the longitudinal slot.

2. In a hand threading loom shuttle, an auxiliary threading device consisting of a pin

extending transversely through the side walls and throat of the shuttle and having a flattened central portion in which is a longitudinal slot and an inclined slit extending from the side of the pin downward into one end of the longitudinal slot, and means for adjusting the auxiliary threading device.

3. An auxiliary threading device for hand threading loom shuttles consisting of a pin having the round ends 11 11, the transverse slot 12 in one end and the flattened central portion 13 in which is a longitudinal slot 14 and an inclined slit 15 extending downward from the side of the pin into one end of the longitudinal slot 14, as described.

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

H. MARTIN BROWN.

Witnesses:

GEO. H. WILSON,  
WM. G. HODGES.