

J. POISSON.
HAND THREADING SHUTTLE.
APPLICATION FILED NOV. 8, 1911.

1,025,881.

Patented May 7, 191

Fig. 1.

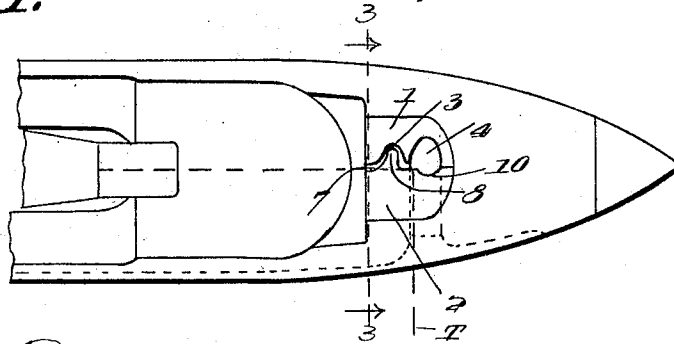


Fig. 2.

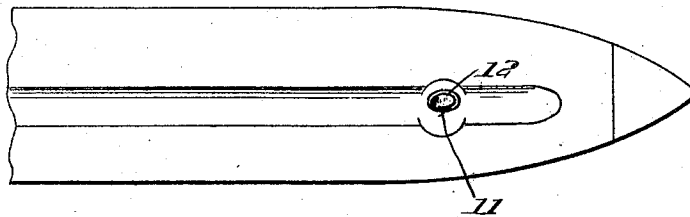


Fig. 3.

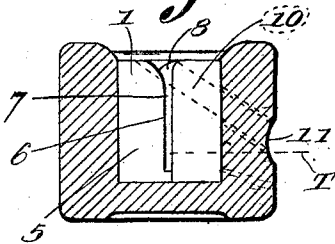


Fig. 4.

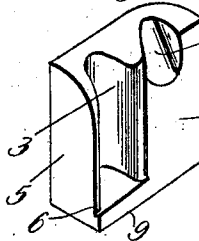


Fig. 5.

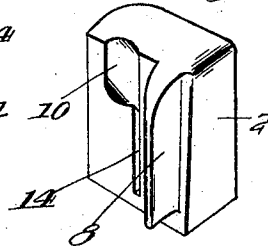
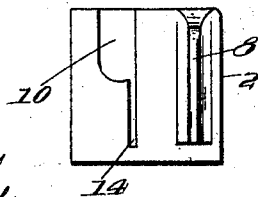


Fig. 7.



Fig. 6.



Witnesses
Ada C. Fagerly.
Amos F. Miller

Inventor
Joseph Poisson
by Joseph A. Miller
Attorney

UNITED STATES PATENT OFFICE.

JOSEPH POISSON, OF FALL RIVER, MASSACHUSETTS.

HAND-THREADING SHUTTLE.

1,025,881.

Specification of Letters Patent.

Patented May 7, 1912.

Application filed November 8, 1911. Serial No. 659,165.

To all whom it may concern:

Be it known that I, JOSEPH POISSON, a citizen of the United States, residing at Fall River, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Hand-Threading Shuttles, of which the following is a specification.

This invention pertains to certain new and useful improvements in hand threading shuttles, and pertains more particularly to the friction device employed in connection with the shuttle.

The objects of the invention are to generally improve, simplify and increase the efficiency of the friction device, and provide a structure of new and novel form, which can be constructed of a minimum amount of material.

In the drawings: Figure 1 is a fragmentary top plan view of a shuttle constructed in accordance with the present invention, Fig. 2 is a side elevation, Fig. 3 is a section on the line 3—3 of Fig. 1, Fig. 4 is a perspective view of one of the halves or parts of the friction device, Fig. 5 is a similar view of the other half or part of the friction device, Fig. 6 is a front elevation of Fig. 5, and Fig. 7 is a side elevation of the delivery eye bushing.

The friction device consists of two halves or parts 1 and 2 each being formed from metal and being of somewhat block form as depicted in Figs. 4 and 5 of the drawings. The part 1 is provided with a vertical passage 3 that extends from a point above the bottom wall 9 through the upper end of the block as shown clearly in Fig. 4 of the drawings. Passage 3 is located to one side of the block and on the same face thereof adjacent to the passage 3, and at the top of the block is formed a depression 4 that inclines upwardly through the top end of the block, the depression forming a bottom wall which is concave in cross section. The inner end wall 5 of the block 2 is cut away as indicated at 6 so that when the block is placed in the position depicted in Figs. 1 and 3 of the drawings, a thread passage 7 will be formed between the block 1, and the inner end wall of the block 2. The block 2 is provided with a tooth 8 which has a cross section so that when the tooth 8 projects within the vertical passage 3 of the block 1, a thread passage will be formed therebetween, the thread passage having a tortuous outline. The base of the tooth 8 is located above the

bottom end wall of the block 2 so that when the blocks are in the position shown in Fig. 1, of the drawings the base end of tooth 8 will rest on the bottom wall 9 of the block 1. The block 2 is formed with a downwardly inclined opening 10 that registers with the depression 4 when the blocks are in the position depicted in Fig. 1, of the drawings, so that the depression 4 and the opening 10 conjointly form a passage which inclines downwardly and registers with the delivery eye 11 of the shuttle, the delivery eye having the usual bushing 12 therein. A vertical slot 14 is formed in the block 2 and communicates at its upper end with the inclined opening 10 at the base of the latter, so that the thread designated T in the drawings will enter this slot and pass through the delivery eye in a horizontal plane, as indicated in Fig. 3 of the drawings. The passage formed by the registering depression 4 and the opening 10 is for the reception of a threading hook (not shown) which latter is passed through said passage so that the hook there projects above the top end of the blocks, after which the thread is engaged with the hook, and the latter is moved out of the eye, drawing the thread therewith, the latter being passed through slot 14 and out through the delivery eye.

From the above it will be seen that the tooth 8 acts as a friction creating medium and causes the thread to travel in a tortuous path from the bobbin to the delivery eye, thus imparting tension thereto.

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

1. In a friction device for shuttles, a pair of blocks, one of the blocks having a vertical passage on one side and a depression at its upper end on the same side, the second block having an inclined opening that registers with said depression to form a thread hook passage in conjunction therewith, said second block having a vertical passage that extends up into said opening to form a thread passage, and a vertical tooth carried by the second block and projecting in said vertical passage of the first block to form a tortuous thread passage in conjunction therewith.

2. In a friction device for shuttles, a pair of abutting blocks, one of said blocks having a downwardly inclined opening that extends through the opposite side faces thereof and

communicates with the shuttle delivery eye, said block also having a thread passage which communicates with said opening, and cooperating thread tensioning means formed
5 on the blocks to the rear of said thread passage.

3. In a friction device for shuttles, a pair of abutting blocks, one of said blocks having a vertical passage, the other block having a
10 tooth that projects in said passage and also having a slot to one side of the tooth to re-

ceive the thread, said slot being in register with the shuttle delivery eye and extending through the back of the second named block.

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

JOSEPH POISSON.

Witnesses:

ADA E. HAGERTY;
J. A. MILLER.