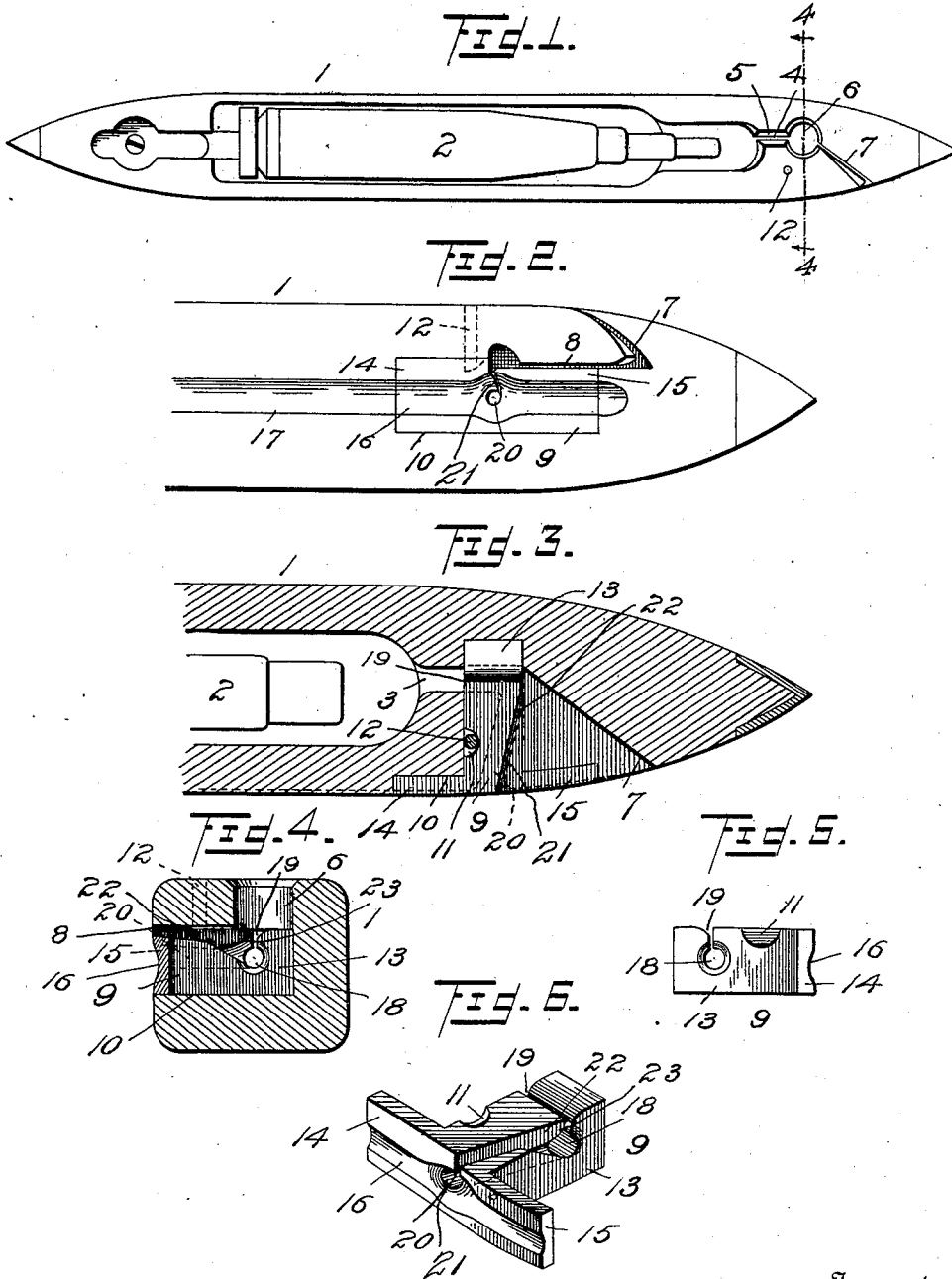


R. A. TAYLOR.
 THREADING SHUTTLE EYE.
 APPLICATION FILED MAR. 10, 1910.

988,294.

Patented Mar. 28, 1911.



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UNITED STATES PATENT OFFICE.

ROBERT A. TAYLOR, OF TRAVELLERS REST, SOUTH CAROLINA.

THREADING SHUTTLE-EYE.

988,294.

Specification of Letters Patent. Patented Mar. 28, 1911.

Application filed March 10, 1910. Serial No. 548,456.

To all whom it may concern:

Be it known that I, ROBERT A. TAYLOR, a citizen of the United States, residing at Travellers Rest, South Carolina, have invented certain new and useful Improvements in Threading Shuttle-Eyes; and I do 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.

My invention relates to shuttles and particularly to shuttle eyes.

The object of the invention is the provision of a shuttle of this character having a removable eye and into which the thread may be passed without running the end of the thread therethrough in the manner of ordinary needles.

A further object of the invention is the provision of a shuttle with an eye adapted to be used in combination therewith which is split whereby it may be threaded readily.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a top plan view of a shuttle equipped with this improvement; Fig. 2 is a side elevation of the eye carrying end thereof; Fig. 3 is a horizontal section thereof; Fig. 4 is a section taken on the line 4-4 of Fig. 1; Fig. 5 is a side elevation of the eye removed from the shuttle; Fig. 6 is a perspective view of the eye.

Referring more especially to the drawing, 1 represents the shuttle and 2 the ordinary spindle cop mounted therein. The forward end of the shuttle is apertured as at 3 in line with the spindle and a slot 4 extends downwardly to communicate with the aperture 3. The upper end of the slot is widened as at 5 to provide for the easy entrance of the thread. A vertical aperture or socket 6 is formed at the other end of the slot 4 and extending diagonally across the forward end from the socket 6 to one side of the shuttle is a slot 7, which communicates with a horizontal slot 8 leading into the false eye 9 in the shuttle body. This eye 9 extends inwardly into communication with the socket end of the slot 7 at its lower portion and substantially in the same plane as the

slot 8. The shuttle body is horizontally socketed as at 10 to receive the eye body whose upper edge is recessed at 11 to receive a locking pin 12, which passes downwardly through the shuttle to engage the socket and lock the eye in its socket. The eye comprises a substantially T-shaped body 13 with the laterally projecting arms 14 and 15 grooved on their forward or outer faces as at 16 to correspond with the groove 17 usually found in all shuttles for the accommodation of the thread. The free end of the stem is provided with a transversely extending aperture or bore 18 which alines with the aperture or bore 3 and leading into the bore 18 from the upper face of the stem is a narrow slot 19 which alines with the slot 4. An eye 20 extends obliquely through the stem 13 from the center of its outer end opening through one side thereof and has communicating therewith a narrow threading slot which permits the insertion of the thread in the eye as will be hereinafter described. The eye 20 merges at its rear end in the bore 18 to provide for the passage of the thread through the bore 18 and around out through the eye 20. The top of the arm 15 is cut away to lie in a plane with the bottom of the slot 8 and to form a shoulder 22 which prevents the thread from wedging between the top of the stem and the under side of the socket while in the shuttle.

In threading the shuttle, the thread is grasped at its end and passed through the diagonal slot 4 into the slot 7 and thus down into the bore 3 and through the slot 19 into the bore 18. The end is then pulled rearwardly until it engages the shoulder 22 at which time any pull thereupon will cause the thread to engage against the cam surface 23, which forces the thread down over the shoulder 22 into the eye 20. The thread may be easily removed by raising it through the slot 21 carrying out of the slots 7 and 8 and pulling upwardly so that it passes through the slots 19 and 4.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the

principle or sacrificing any of the advantages of this invention as defined in the appended claims.

Having thus described my invention, what
5 I claim is:—

1. A shuttle eye consisting of a substantially T-shaped member having a bore extending transversely through the free end of the stem thereof with a slot opening
10 through its upper face, a bore extending longitudinally of said stem in an oblique direction and merging at its rear end into said transverse bore and a slot extending from the upper face of said stem and communicating with said longitudinal bore.
15

2. The combination with a shuttle having a longitudinally extending bore in one end thereof merging at its rear end into an aperture opening through the upper face of said
20 shuttle, a slot extending longitudinally of the shuttle and communicating with said

bore, said shuttle having a diagonally arranged slot extending from its upper face and communicating at its inner end with said aperture, a socket arranged in one side
25 of said shuttle and communicating with the bore therein and a substantially T-shaped shuttle eye mounted in said socket and having a slotted bore extending transversely of the stem thereof in position to aline with the
30 longitudinal bore in the shuttle, said eye having an obliquely disposed bore extending longitudinally of its stem to register with the inclined slot in said shuttle.

In testimony whereof I have hereunto set
35 my hand in presence of two subscribing witnesses.

ROBERT A. TAYLOR.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."