

(No Model.)

T. CROSS.  
LOOM SHUTTLE.

No. 486,087.

Patented Nov. 15, 1892.

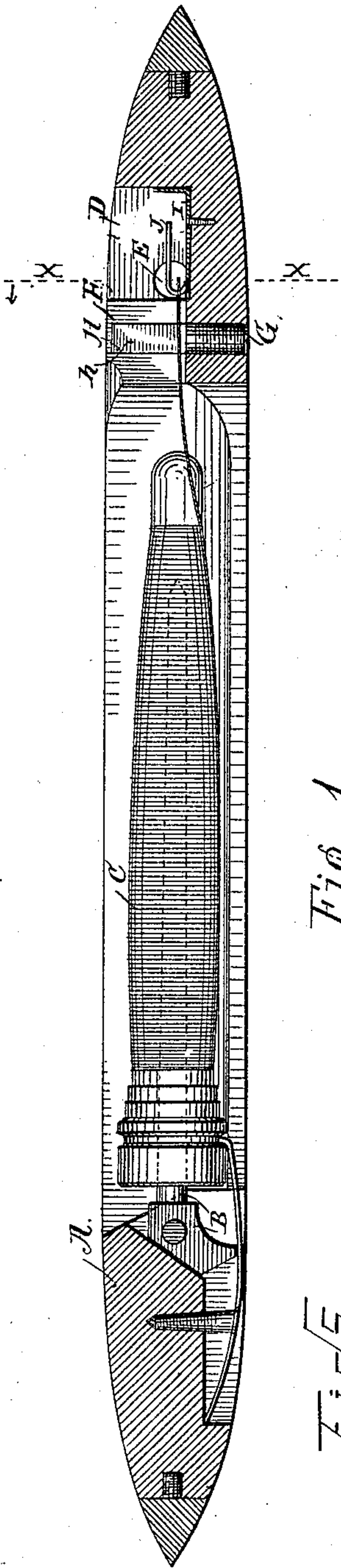


Fig 1

Fig 5

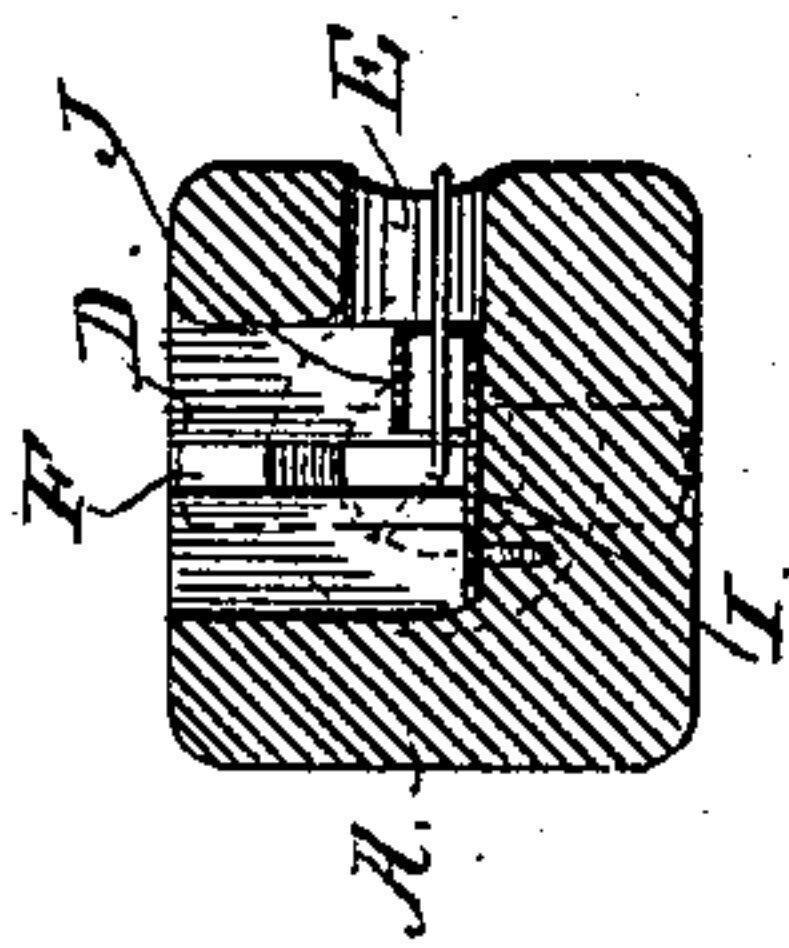


Fig 2

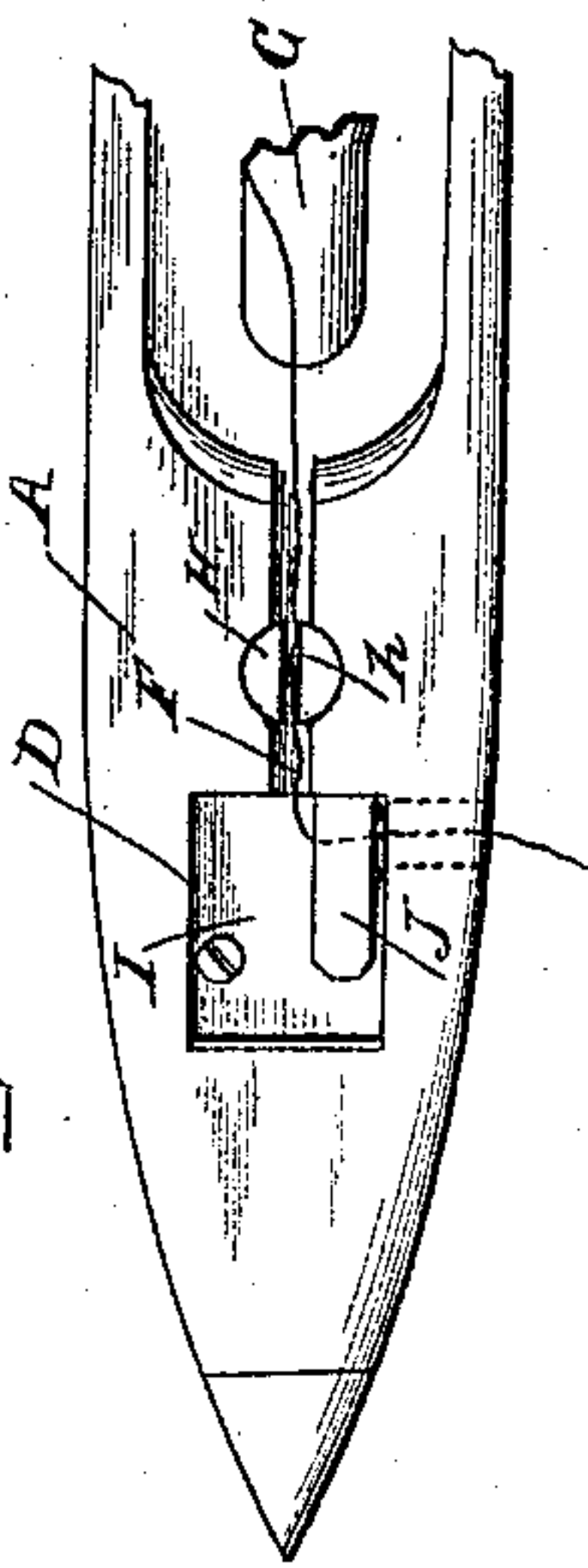


Fig. 3.

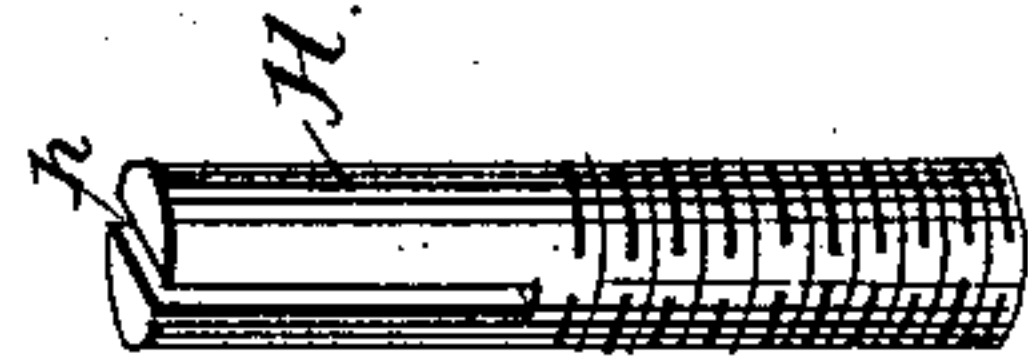


Fig. 4.

Witnesses  
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# UNITED STATES PATENT OFFICE.

THOMAS CROSS, OF TAUNTON, MASSACHUSETTS.

## LOOM-SHUTTLE.

SPECIFICATION forming part of Letters Patent No. 486,087, dated November 15, 1892.

Application filed April 27, 1892. Serial No. 430,815. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS CROSS, a citizen of the United States, residing at Taunton, in the county of Bristol and State of Massachusetts, have invented a new and useful Loom-Shuttle, of which the following is a specification.

This invention relates to loom-shuttles; and it has for its object to provide certain improvements in the thread guiding and retaining devices thereof which provide means for not only readily and quickly threading the shuttle with the filling from the cop, so as to avoid the many disadvantages and loss of time attendant upon the threading of ordinary shuttles, in which the filling is sucked through the eye of the shuttle by the person threading the same, but also for guiding and retaining the thread in proper position with respect to a particular construction of tension.

With these objects in view the invention consists in the novel construction, combination, and arrangement of parts hereinafter more fully illustrated and claimed.

In the accompanying drawings, Figure 1 is a vertical sectional view of a loom-shuttle constructed in accordance with this invention. Fig. 2 is a detail sectional view on the line *xx* of Fig. 1. Fig. 3 is a detail in perspective of the tongued threading guide-plate. Fig. 4 is a similar view of the tension-screw. Fig. 5 is a detail plan view of one end of the shuttle.

Referring to the accompanying drawings, A represents a shuttle-body of ordinary construction, within which is mounted the spring-closed cop-spindle B, pivoted at one end of the shuttle-body and carrying the cop C wound with the ordinary filling. The said shuttle-body is provided at the end opposite to that in which the cop-spindle is pivoted with the deep squared recess D, from which leads the shuttle-eye E, through which the filling from the cop passes in the ordinary manner. Communicating with the said squared recess D from the inner opening of the shuttle-body is the thread or filling slot F, provided in the base thereof with the threaded perforation G, which receives the lower threaded end of the slotted tension-screw H. The said slotted tension-screw H is provided with a longitudinally-disposed slot *h*, corresponding to the communicating slot F, and is designed to receive the filling from the cop,

which is threaded through the side eye of the shuttle and which can be tightened or loosened, so as to regulate the drag or pull of the weft from the shuttle, as desired, by turning the said tension-screw in the threading-slot F. Seated in the bottom of the squared recess D is the rectangular thread guide and retaining plate I. The said guide and retaining plate I is provided with an inwardly-extending guide and retaining tongue J, which is turned up from end of said plate and extends back over the same parallel therewith alongside of the eye of the shuttle and at one side of the slot F. Now it will be readily seen that in threading the shuttle all that is necessary is to take the end of the filling from the cop and pass the same through the eye E of the shuttle from the enlarged squared recess D. By now shoving the portion of the thread or filling within the squared recess up to and over the end of the tongue J by the end of the forefinger and pulling on the end of the thread or filling passing through the eye of the shuttle that the said filling will be drawn back under the tongue J and through slot F and the tension-screw therein, thereby providing easy means for the threading of the shuttle. There will also be observed the simplicity and readiness with which the tension of the filling is regulated by the tension-screw, and also that the guide and retaining plate not only serves to assist in threading the shuttle, but also provides a simple guide for the filling therein and holds the same to its place in the tension-screw.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

A loom-shuttle having a squared recess in one end, a side eye leading from said recess, and a threading-slot communicating with said recess from the body of the shuttle, a rectangular plate seated in said recess and provided with a back-turned guide and retaining tongue arranged alongside of said eye at one side of the slot, and a slotted tension-screw working in said slot, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

THOMAS CROSS.

Witnesses:

PERCIVAL C. LINCOLN,  
EDWARD H. TEMPLE.