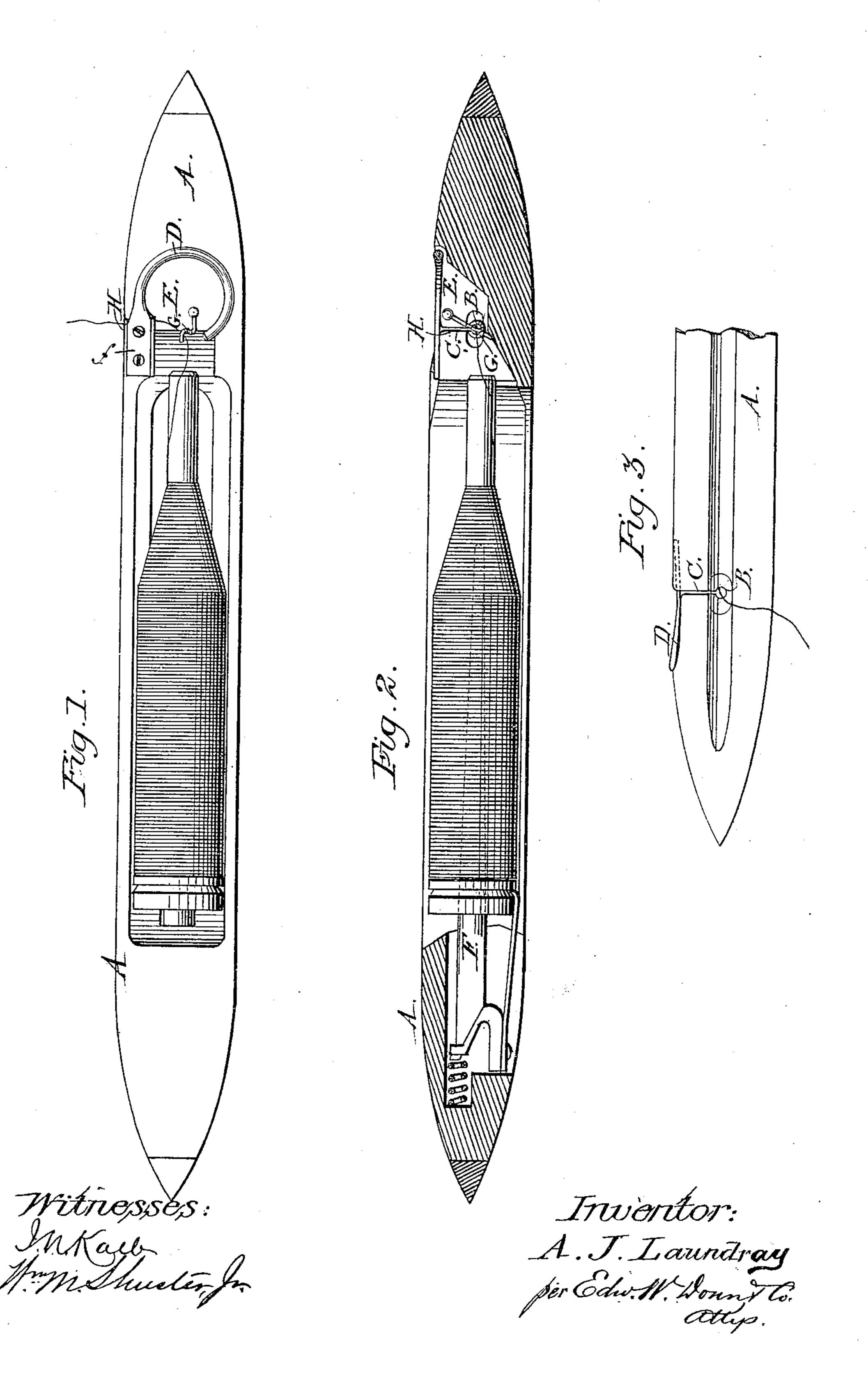
## A. J. LAUNDRAY.

LOOM SHUTTLE.

No. 265,330.

Patented Oct. 3, 1882.



## United States Patent Office.

ADOLPHUS J. LAUNDRAY, OF TURNER'S FALLS, MASSACHUSETTS.

## LOOM-SHUTTLE.

SPECIFICATION forming part of Letters Patent No. 265,330, dated October 3, 1882.

Application filed March 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, ADOLPHUS J. LAUN-DRAY, of Turner's Falls, in the county of Franklin and State of Massachusetts, have invented certain new and useful Improvements in Loom-Shuttles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 of reference marked thereon, which form a part of this specification.

My invention is an improvement in loom-15 shuttles, and relates particularly to devices for directing the thread from the bobbin to

the eye in threading.

It consists in the combination, with a shuttle-body provided with a thread-eye and a vertical slot leading to said eye, of a spiral and inclined loop and a hook formed and located so as to serve, together with said loop, the purpose of directing the thread from the bobbin to said eye, all of which will be fully set forth

25 hereinafter.

In my drawings, Figure 1 is a plan or top view of a loom-shuttle, showing the guide-hook and the spirally-formed loop. Fig. 2 is a longitudinal section of the same. Fig. 3 is a side elevation of one end of the shuttle, showing the thread-eye, slot, and guide-hook.

Similar reference-letters indicate like parts

in all of the figures.

Referring to the drawings, A is the shuttle-35 body, having an eye, B, in its side and a slot,

C, extending upward from it.

D is the guide-hook, of metal or other suitable material, bent in a circular or elliptical form a part of its length, and secured at one end to the shuttle by screws, the other end being free. The said guide-hook is preferably formed of round wire throughout the greater portion of the bend therein, so that the thread in traversing its route to the slot will encounter no sharp cutting-edge that might cause it to break. Immediately beneath this hook D is a recess, E, the upper portion of which is of the form of the guide-hook D, but somewhat

wider than the outer contour of said hook, affording a narrow space around said hook with-50 in the recess for the passage of the thread as it is drawn toward the eye B.

Within the recess E, in line with the axis of the spindle F, is fixed a loop, G, bent somewhat in a spiral form, which, inclining forward, 55 terminates with a spherical head a little below the plane of the under side of said guide-hook D.

In threading the shuttle the thread is drawn from the bobbin under the point or free end of the guide-hook D, and carried around between 60 its outer contour and the wall of the recess E, until it is stopped by a shoulder, H, in line with the slot C, and thence down in said slot until it reaches the eye B. In the movement of the thread toward the eye B, when in line 65 with the axis of the spindle, it comes in contact with the shank of the loop G, and by said shank the thread is directed downward, reaching the said spiral loop at the same time that the said thread finds its way into the eye of 70 the shuttle. The head above the spiral loop serves to prevent the thread from slipping off as it is passing around toward the shuttle-eye.

It will be observed that the flat portion f of the guide-hook D covers the slot C and pre- 75 vents the unthreading of the shuttle as it moves through the warp in its work.

It will readily be seen that the appliances constituting my improvement have many advantages over the usual arrangements for 80 threading a shuttle.

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

Patent, is—

The combination, with the shuttle-body, pro-85 vided with a thread-eye and a vertical slot leading to said eye, of the spiral and inclined loop G and hook D, all arranged substantially as and for the purpose set forth.

In testimony that I claim the foregoing as 90 my own I affix my signature in presence of two

witnesses.

ADOLPHUS J. LAUNDRAY.

Witnesses:

JAMES S. GRINNELL, FRANCIS M. THOMPSON.