W. BEATTY & G. M. EDWARDS.

LOOM-SHUTTLE.

No. 182,150. Patented Sept. 12, 1876.

FIG. 1.

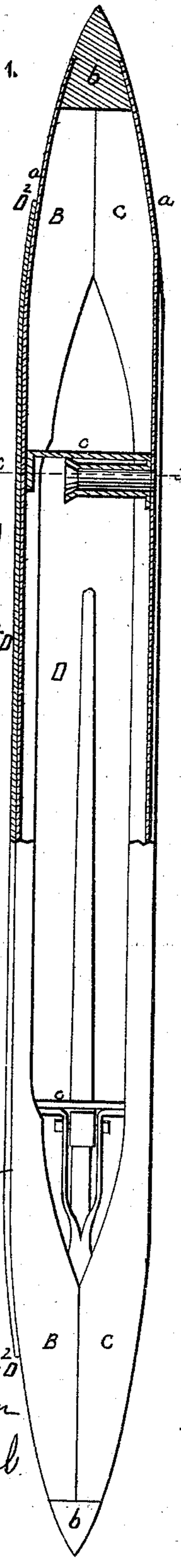


FIG. 2.

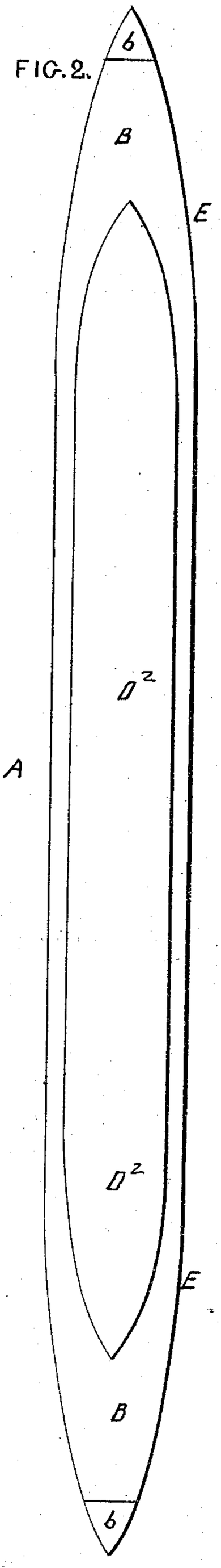


FIG. 3.

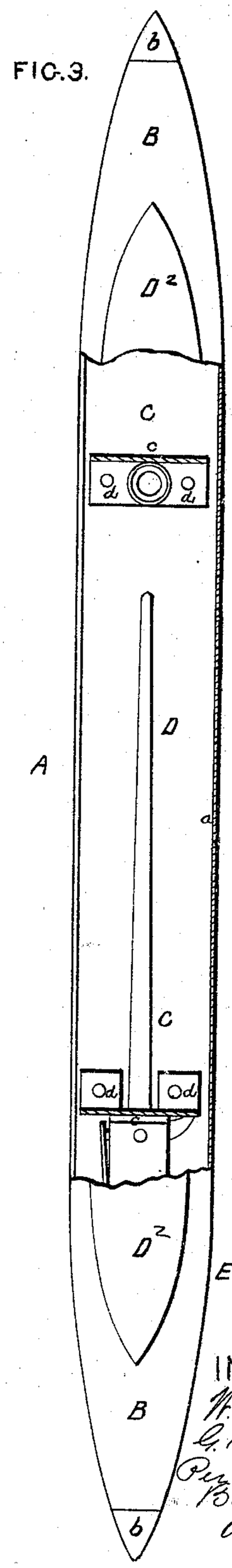
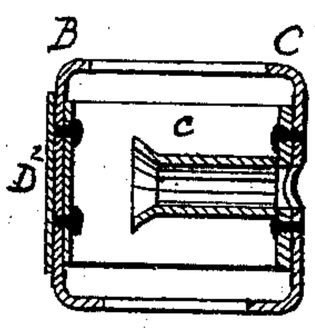


FIG. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM BEATTY AND GRANVILLE M. EDWARDS, OF GRAY, MAINE.

IMPROVEMENT IN LOOM-SHUTTLES.

Specification forming part of Letters Patent No. **182,150**, dated September 12, 1876; application filed June 2, 1876.

To all whom it may concern:

Be it known that we, WILLIAM BEATTY and GRANVILLE M. EDWARDS, of Gray, county of Cumberland, and State of Maine, have invented new and useful Improvements in Loom-Shuttles, of which the following is a specification:

This invention relates to an improved metallic shuttle; and consists in a shuttle constructed of two steel shells, in combination with a steel tip at each end, secured by means of steel cross-pieces, as hereinafter more fully set forth.

In the accompanying plate of drawings, Figure 1 is a view of the open side of a sheet-steel loom-shuttle in part section; Fig. 2, a view of the faced side of a sheet-steel loom-shuttle; Fig. 3, a longitudinal section of the shuttle; and Fig. 4, a cross-section on line *x x*, Fig. 1.

In the drawings, A represents a loom-shuttle, of the ordinary shape longitudinally and transversely. This shuttle A is longitudinally in two parts, B and C, and each part B and C is made of a distinct sheet or plate, *a*, of steel, shaped to the proper shape in any suitable manner—as, for instance, by dies of proper form; and, when so shaped, they are placed together, one alongside of the other, with a solid steel tip, *b*, in each end, and then there secured by a steel cross-piece, *c*, near each end of the shuttle. These cross-pieces *c* are within the open space D of the shuttle, and they are secured, by rivets *d*, against and to the inner faces of the steel plates *a*, which make up the shuttle, as is shown in the drawings. D^2, a facing of brass, or other equivalent material, on and along the side or face E of the shuttle, which, in the use of the shuttle, runs contiguously or adjacent to the reeds of loom.

The brass facing D^2 is secured to the steel shuttle by brazing it on the steel; but it may be otherwise secured, as by rivets. Brazing, however, is most preferable.

The facing D^2, as it is of a softer metal than that of which the reeds are made, does not cut or wear away the reeds as a harder metal—such as steel—would. Therefore its application as a facing to the steel shuttle, as herein described, obviously relieves the steel shuttle of all liability of wear upon the reeds.

A shuttle made of steel obviously is most strong and durable, and does not splinter like wood, of which loom-shuttles are usually made.

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

The metallic shuttle, constructed of two shells, B C, of steel, in combination with the steel tips *b* and the cross-pieces *c*, by which they are secured, substantially as described.

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