

(No Model.)

D. A. WILLBANKS.

LOOM SHUTTLE.

No. 267,628.

Patented Nov. 14, 1882.

Fig. 1.

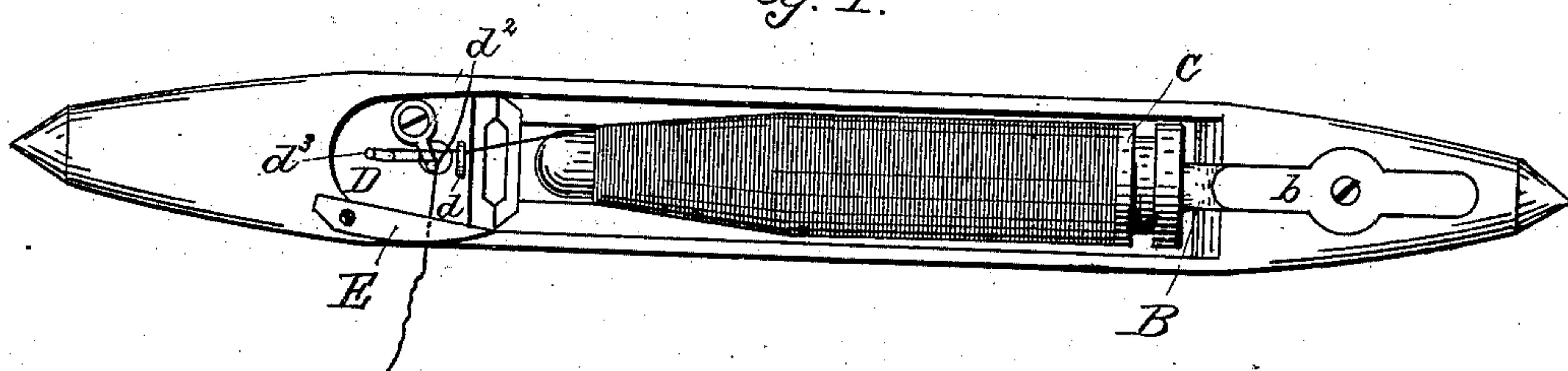


Fig. 2.

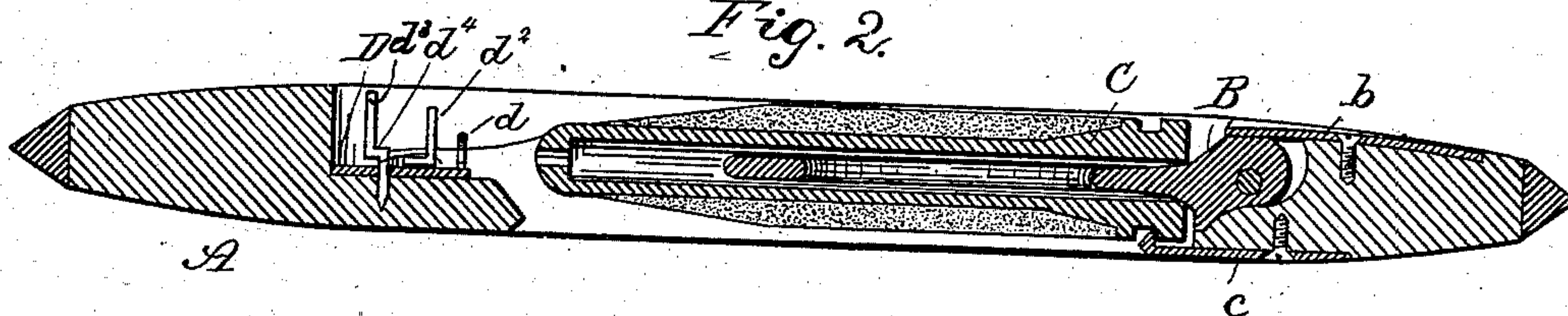
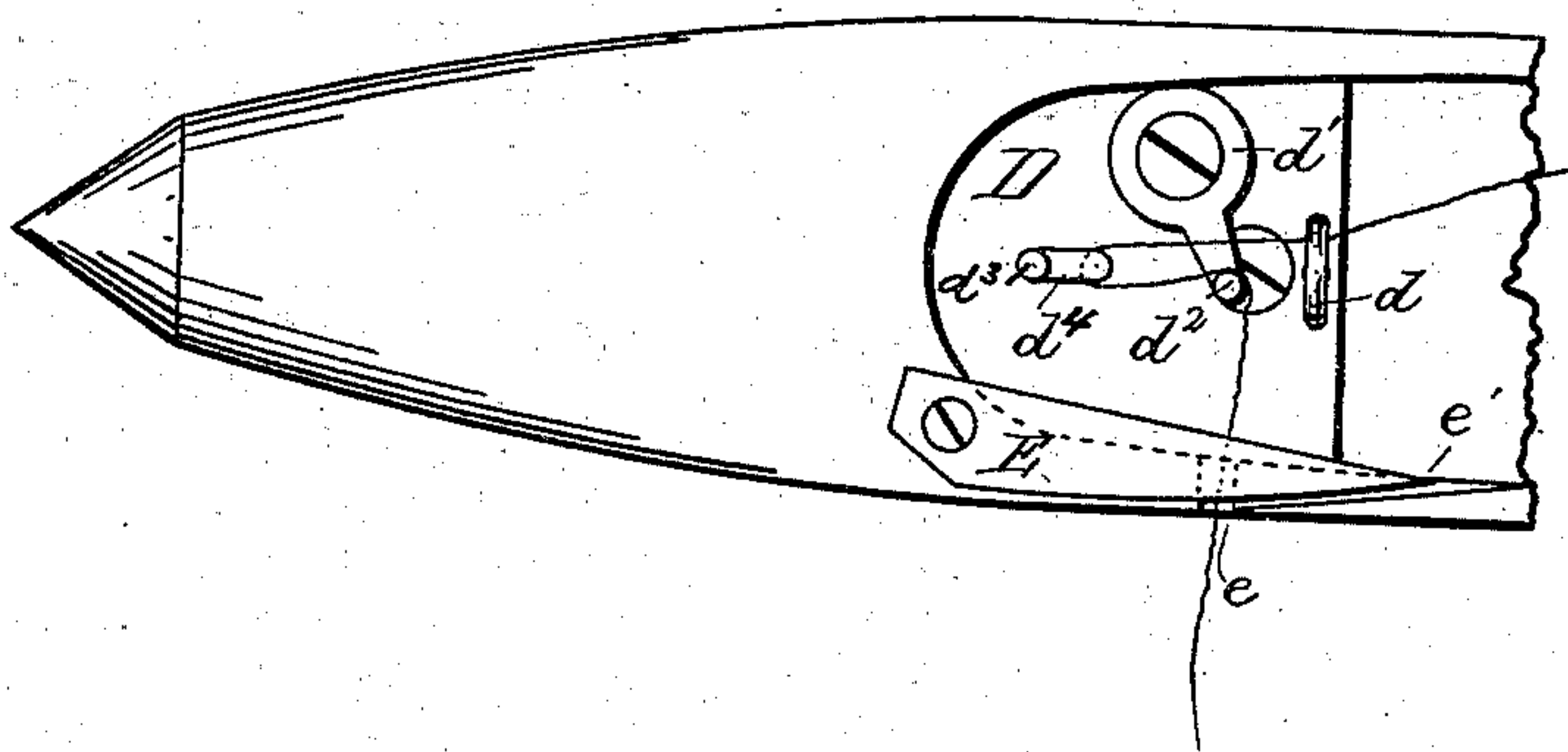


Fig. 3.



Witnesses:

J. W. Garner
W. S. D. Haines

Inventor:
David A. Willbanks,
by Howard A. Horn,
Attorney.

UNITED STATES PATENT OFFICE.

DAVID A. WILLBANKS, OF HIGH SHOALS, GEORGIA.

LOOM-SHUTTLE.

SPECIFICATION forming part of Letters Patent No. 267,628, dated November 14, 1882.

Application filed January 4, 1882. (No model.)

To all whom it may concern:

Be it known that I, DAVID A. WILLBANKS, a citizen of the United States, residing at High Shoals, in the county of Walton and State of Georgia, have invented certain new and useful Improvements in Loom-Shuttles, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to loom-shuttles; and it consists in the construction and arrangement of its several parts, as will be hereinafter fully set forth.

In the drawings, Figure 1 is a top or plan view of a loom-shuttle; Fig. 2, a longitudinal section thereof; and Fig. 3 a top or plan view of the end containing the tension-regulating mechanism.

A is the shuttle-body. It is provided with the usual central recess, as shown.

B is the spindle. It extends into the recess, and is pivoted at its shank or base end in a groove in the shuttle-frame. It is held in position by the pressure of the spring *b* upon the top of its shank, as shown in Figs. 1 and 2.

C is the bobbin. It is placed upon the spindle B, and is held thereon by the spring-catch *c*, which engages with a groove around the head or end of the bobbin.

D is a plate placed upon a projection of the shuttle-body immediately in front of the bobbin, and has secured upon its top the tension-regulating mechanism for the yarn. Upon the end of the plate nearest the spool is a ring, *d*, through which the yarn or thread is run. The pivoted disk *d'* is arranged upon the plate in front of the ring *d*, and to the right-hand side of it, as shown. It has a projection upon its

side, the outer end of which is bent upwardly, forming the tension-pin *d*². Near the forward end of the plate is a pin, *d*³, which has a right-angled turn in its length, forming a hook, *d*⁴, around which the thread passes. In the side of the shuttle, and opposite the plate D, is cut a vertical slot, *e*, over the top of which is placed a bridge, E.

Between the point *e'* of the bridge and the slot the top of the shuttle is cut away sufficiently to allow the thread to pass along under the bridge into the slot, as shown.

In threading the shuttle the bobbin is placed in position on the spindle B, the end of the thread passed through the ring *d* to the right-hand side of the pin *d*², around the pin *d*³, back around the pin *d*², under the bridge E, and into the slot in the side of the shuttle-body, as shown. The disk *d'* and pin *d*² regulate the tension. If the disk is turned toward the pin *d*³, the tension will be lessened, and increased as it is turned toward the ring *d*.

What I claim is—

1. The combination of the guide ring *d* and hooked pin *d*³ with the plate D, disk *d'*, and tension-pin *d*², all arranged to operate substantially as shown and described.

2. The tension-regulating mechanism, consisting of the ring *d*, pivoted tension-disk *d'*, having pin *d*², hooked pin *d*³, and the plate D, all combined and arranged as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID A. WILLBANKS.

Witnesses:

WILLIAM C. LOUEIN,
SEABORN I. OWENS.