

No. 641,815.

Patented Jan. 23, 1900.

W. H. WALTON.
LOOM SHUTTLE.

(Application filed Oct. 24, 1898.)

(No Model.)

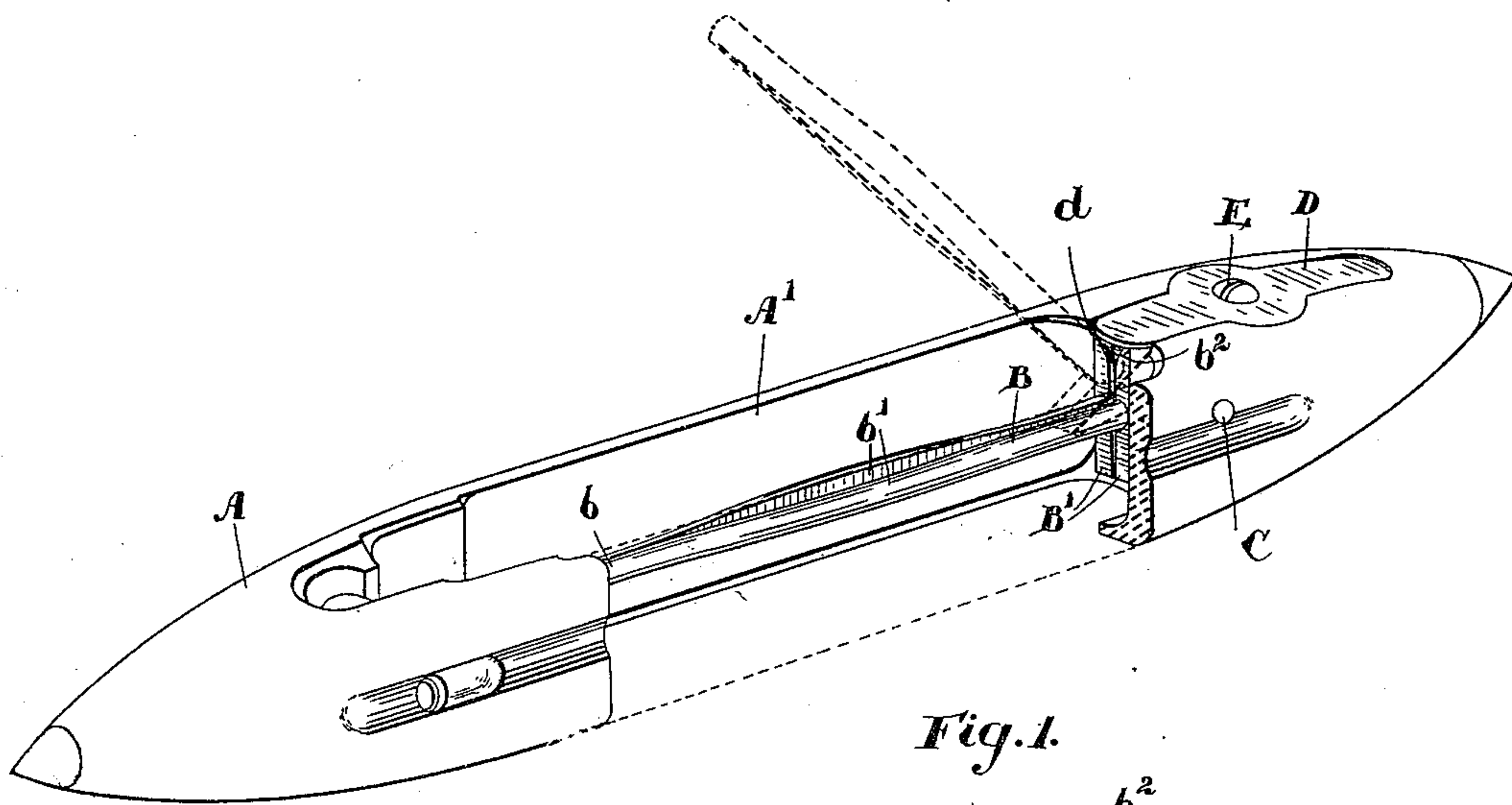


Fig. 1.

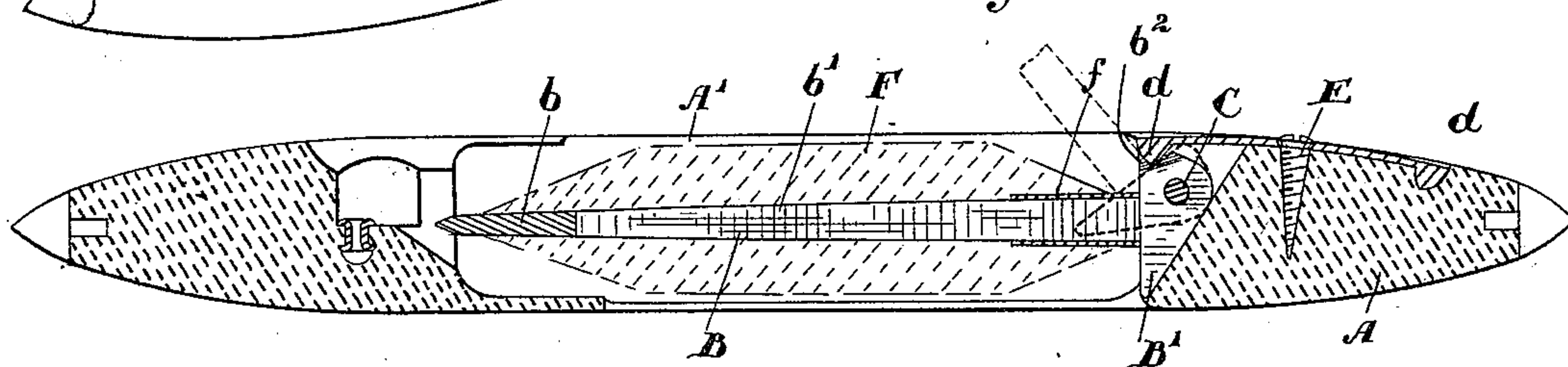


Fig. 2.

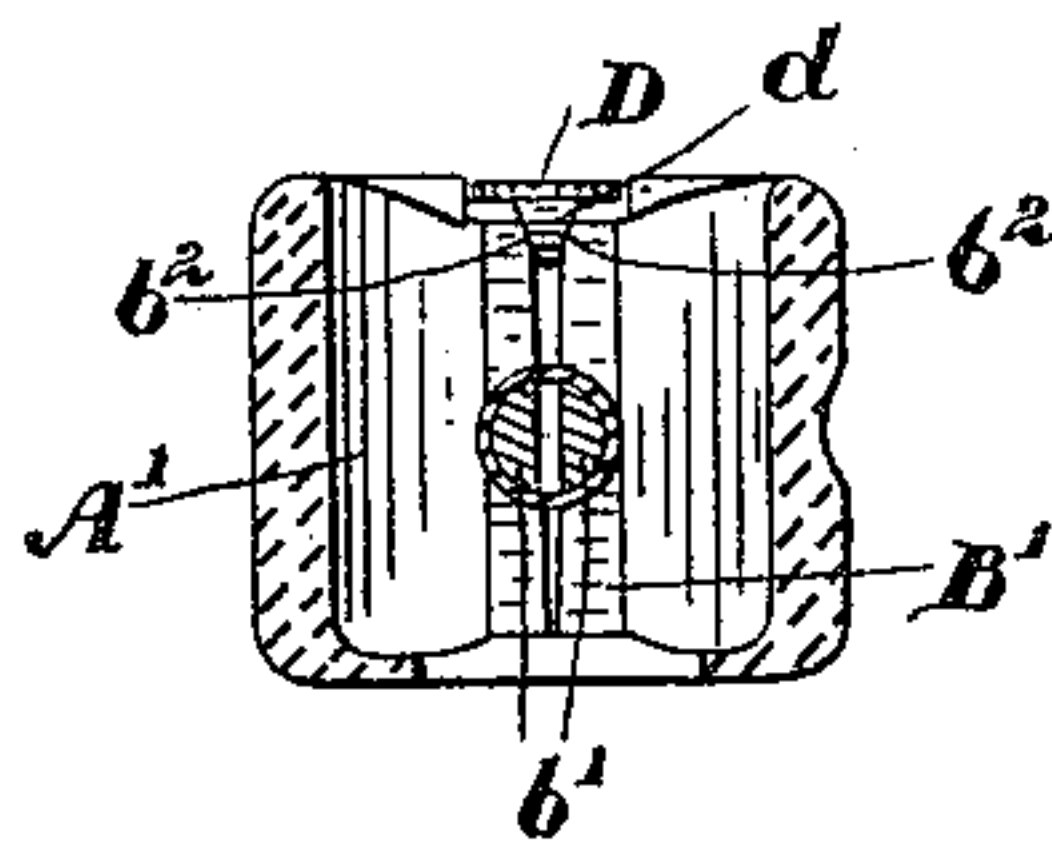


Fig. 3.

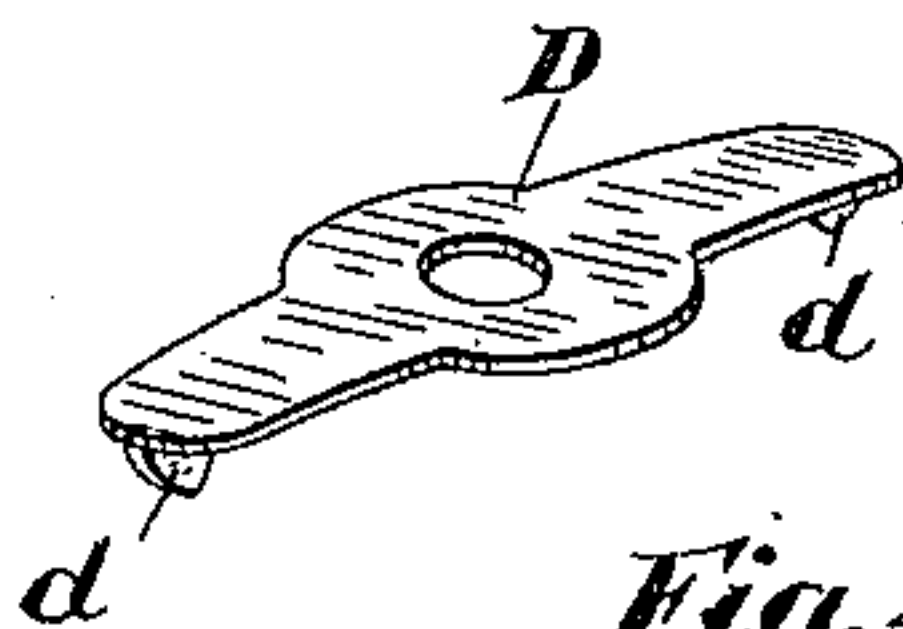


Fig. 4.

Witnesses.

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UNITED STATES PATENT OFFICE.

WILLIAM HENRY WALTON, OF BRANTFORD, CANADA, ASSIGNOR OF ONE-FOURTH TO JOHN COOK, OF SAME PLACE.

LOOM-SHUTTLE.

SPECIFICATION forming part of Letters Patent No. 641,815, dated January 23, 1900.

Application filed October 24, 1898. Serial No. 694,441. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY WALTON, of the city of Brantford, in the county of Brant, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Loom-Shuttles, of which the following is a specification.

My invention relates to improvements in loom-shuttles; and the object of the invention is to devise a means whereby the spindle upon which the cop is held may be decreased in diameter when the spindle is raised, so as to allow the cop to be easily placed thereon or withdrawn, and increased in diameter when the cop is in the normal position, so as to hold it securely; and it consists, essentially, of making the spindle for the major portion split and having spring sides and base of substantially triangular form, upon which the spindle is pivoted, the base being also divided and provided with beveled top inner end which is engaged by a projection on the retaining-spring secured to one end of the shuttle, as hereinafter more particularly explained.

Figure 1 is a perspective view of a loom-shuttle provided with my improvements, one side being broken away to exhibit the construction. Fig. 2 is a longitudinal section. Fig. 3 is a cross-section looking toward the base of the spindle. Fig. 4 is a detail of the spring-plate, having a projection on the bottom thereof.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the body of the shuttle, which is provided with the usual longitudinal slot A'.

B is the cop-spindle, which has a solid end *b* and two sides *b'*, which when open are substantially bow-shaped, such sides being connected at the base to the triangular end pieces B'. The sides *b'* are spring sides, and the normal tendency thereof is to force the triangular end pieces at the base inwardly.

Such triangular pieces of the base are pivoted on a cross-pin C.

D is a spring-plate which is fastened centrally to the body of the shuttle by a screw E. Each end of the plate is provided with a wedge-shaped downwardly-extending projection *d*. The free projection *d* engages with the beveled sides *b²* at the top of the triangular ends B' at the inside, and when the spindle is down it will thus be seen that such projections normally hold the sides *b'* of the spindle expanded, and thereby hold the cop F and sleeve *f* of same in place. By raising the spindle to the position shown in dotted lines in Figs. 1 and 2 the beveled sides *b²* are removed from contact with the projection *d*, thereby permitting the sides of the spindle to abut each other, and, as the sides can also spring together and are of less diameter, it will readily be seen that the cop may be removed and a new one placed thereon without the slightest difficulty and without in any way injuriously affecting the winding of the cop.

Heretofore it has been difficult to get the cop onto the spindle and the sleeve of it off; but by my invention none of the winding of the thread on the cop is effected, so that it remains perfect and ready for use.

What I claim as my invention is—

The combination with the shuttle-body of a spindle pivoted therein having spring sides and bases, a spring secured to the body for holding the spindle down and a projection depending from said spring adapted to enter between the bases to hold the same separated when the spindle is in normal position with the cop thereon, substantially as described.

WILLIAM HENRY WALTON.

Witnesses:

JOHN COOK,
R. A. WILLIAMSON.