

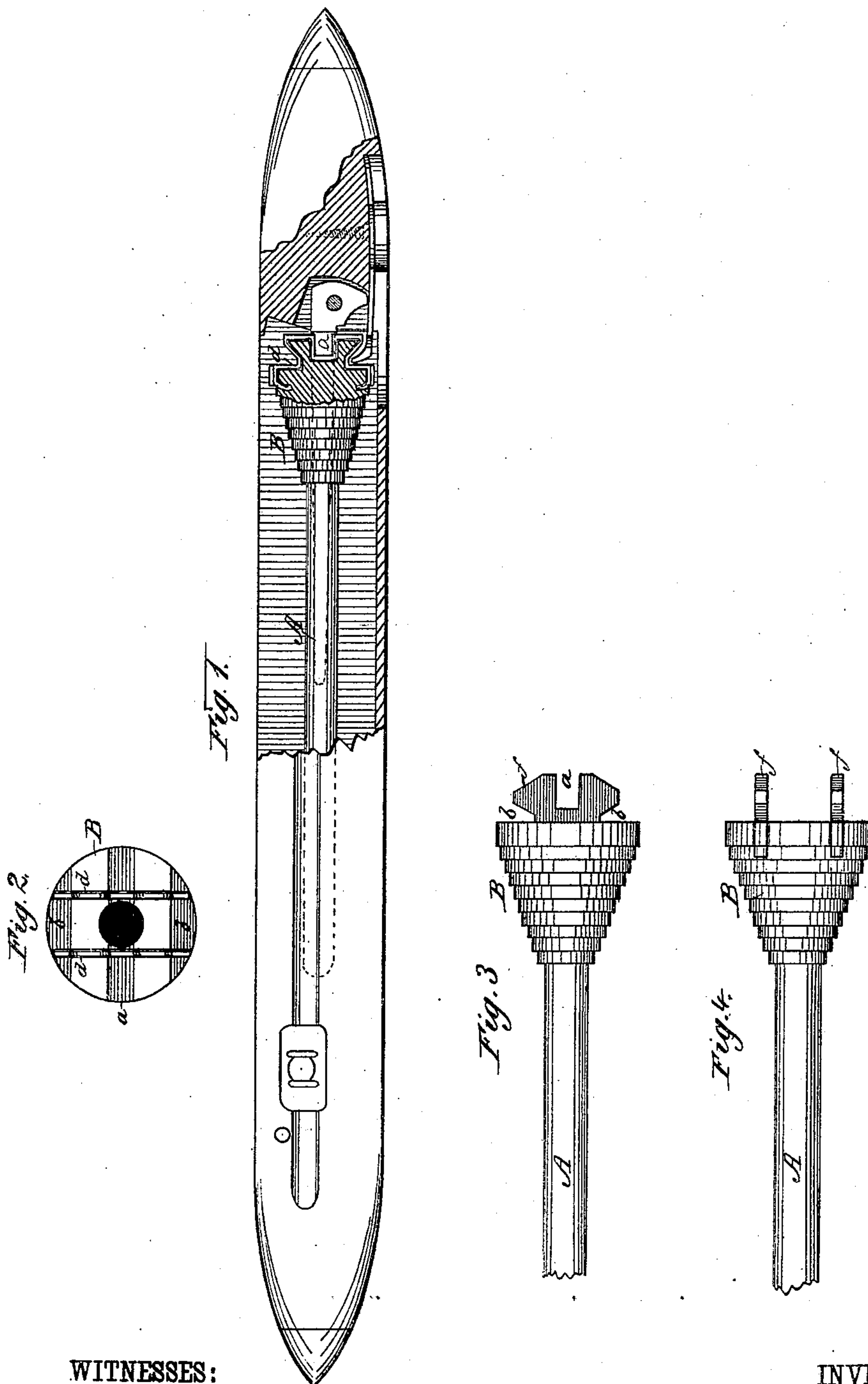
(No Model.)

A. H. CARROLL.

BOBBIN.

No. 245,446.

Patented Aug. 9, 1881.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ALBERT H. CARROLL, OF BALTIMORE, MARYLAND.

BOBBIN.

SPECIFICATION forming part of Letters Patent No. 245,446, dated August 9, 1881.

Application filed February 24, 1881. (No model.)

To all whom it may concern:

Be it known that I, ALBERT H. CARROLL, of Baltimore city, State of Maryland, have invented a new and Improved Bobbin; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of a shuttle with a portion broken away, showing also a portion of the bobbin broken away and in section. Fig. 2 is an end view of the bobbin, and Figs. 3 and 4 side views of a modification of the same.

My invention relates to an improvement in that class of filling-bobbins for the shuttles of looms in which the head or cone is provided at its end with a transverse slot to receive the lug of the winding-spindle when the bobbin is being filled, and in which a notch or cut is made in the sides of this head or cone to receive the spring of the shuttle, which holds the bobbin in place in said shuttle.

My invention consists in two pieces of metal inserted in the butt of the cone end in parallel position on opposite sides of the center, and whose edges are made to conform to the regular notches in the sides and end of the bobbin, as hereinafter described, whereby these parts are enabled to better withstand the wearing strain of the winding-spindle and shuttle-spring.

In the drawings, A represents the barrel or hollow stem of the bobbin, having at one end a cone, B. The usual mode of constructing this bobbin is to make it with a transverse slot,

a, in its cone end, which forms a seat for the lug of the winding-spindle, and with notches or cuts *b b* on each side of its cone end, which receive the spring of the shuttle, the relation of these notches to the spring of the shuttle being shown in Fig. 1. To enable the faces or walls of these notches to better resist the wear of the lug of the winding-spindle or the spring of the shuttle, I arrange upon opposite sides of the center of the butt-end of the cone inserted parallel pieces *d d*, which are made of wire, bent to conform to the contour of the notches, so as to form a bearing in the walls of notch *a*, and also in the walls of notches *b b*. Instead of bending the pieces *d d* to conform to the faces of the notches, I may, as a modification, saw parallel slits in the butt-end of the bobbin and stamp out from plate metal small plates *f f*, whose edges shall conform to the seats or notches in the cone, and then set these plates in the slits in the said cone, as shown in Figs. 3 and 4.

Having thus described my invention, what I claim as new, is—

A bobbin having its cone end provided with inserted metal pieces arranged parallel to each other on opposite sides of the center, which pieces serve the double purpose of a seat for the lug of the winding-spindle and a seat or bearing for the shuttle-spring, substantially as described.

ALBERT H. CARROLL.

Witnesses:

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