

J. C. WELLENS.

Bobbin-Holders for Spinning-Machines.

No. 155,558.

Patented Sept. 29, 1874.

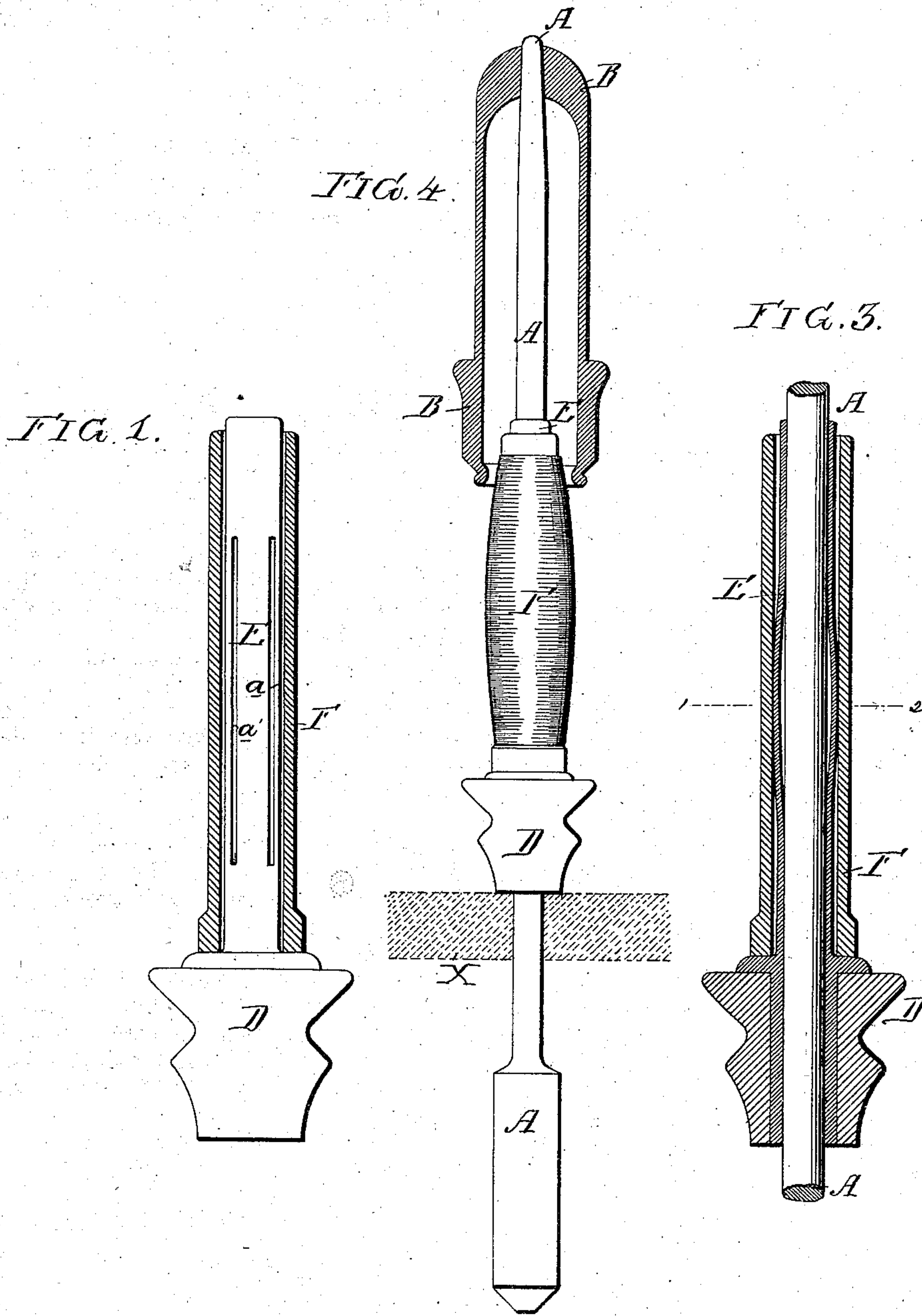


FIG. 2.
 Witnesses, *Thos. McIlroy*
Harry Smith

Jules C. Wellens
by his Atty.
Howson and Son.

UNITED STATES PATENT OFFICE.

JULES C. WELLENS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN BOBBIN-HOLDERS FOR SPINNING-MACHINES.

Specification forming part of Letters Patent No. **155,558**, dated September 29, 1874; application filed May 18, 1874.

To all whom it may concern:

Be it known that I, JULES C. WELLENS, formerly of Brussels, Belgium, but now residing at Philadelphia, Pennsylvania, have invented an Improvement in Tubular Bobbin-Holders for Spinning-Machines, of which the following is a specification:

The object of my invention is to secure a bobbin to its tubular holder by forming longitudinal slits in the latter, so that, when rapidly rotated, it shall be caused to expand by centrifugal action, and to thus bind against the interior of the bobbin, all as fully described hereafter, and as illustrated by the sectional view, Figures 1, 2, and 3, of the accompanying drawing.

My invention is especially applicable to spinning-machines of the character illustrated in Fig. 4, in which A represents a stationary spindle, provided with a cap, B, at its upper end, a whirl or pulley, D, tubular bobbin-holder E, and bobbin F, admitting of being rapidly rotated upon this spindle, at the same time that they are raised and lowered by a lifting-rail, X, represented by dotted lines. Ordinarily the bobbin F is prevented from turning independently of the tubular holder and whirl by a pin on the latter adapted to a hole in the lower flange of the bobbin.

The principal objections to this plan are, that time is lost in effecting the adjustments, and that the bobbin frequently works loose from its holder, thus producing waste, or necessitating a stoppage of the machinery.

These objections I entirely overcome by forming longitudinal slits *a* in the tubular bobbin-holder E, as shown in Figs. 1 and 2, so that, when the said holder is rapidly rotated, its slit portion will become sufficiently expanded by centrifugal action to bind against the interior of the bobbin, as shown in Fig. 3, and to thus firmly hold the same, while, when the motion is stopped, the said holder will contract, as shown in Fig. 1, and offer no obstruction whatever to the removing and replacing of the bobbins. Less power is also required to drive my improved bobbin-holder, as there is no contact of the expanded portion with the stationary spindle. When desired, the bobbin can also be adjusted to the holder in an inverted position, and a paper bobbin can be used directly upon the expanding holder, without requiring an intermediate wooden tube, as usual.

I claim as my invention—

The combination of a tubular bobbin-holder, split longitudinally, and a bobbin having an opening so much greater in diameter than the holder, that the two will revolve together only when the holder is expanded by centrifugal force, as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JULES C. WELLENS.

Witnesses:

WM. A. STEEL,
HARRY SMITH.