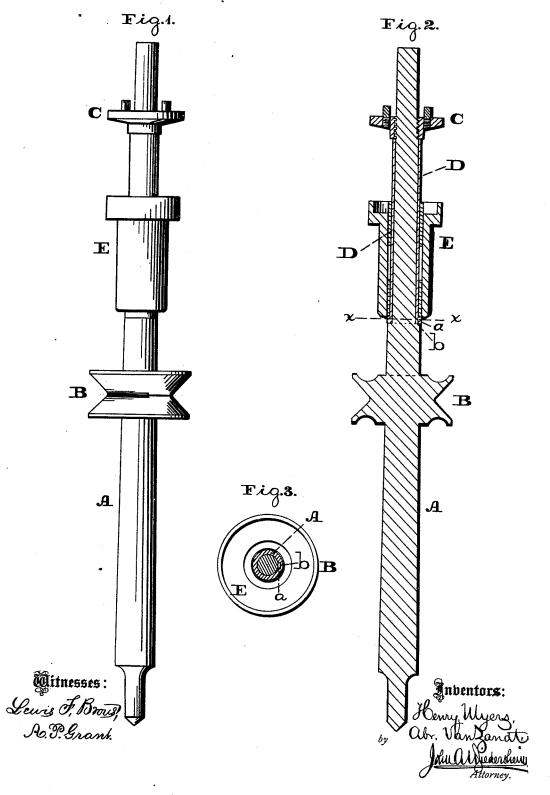
H. MYERS & A. VANZANDT.

SPINDLES FOR SPINNING-FRAMES, &c.

No. 183,698.

Patented Oct. 24, 1876.



UNITED STATES PATENT OFFICE.

HENRY MYERS AND ABRAHAM VANZANDT, OF UPPER DARBY, PA.

IMPROVEMENT IN SPINDLES FOR SPINNING-FRAMES, &c.

Specification forming part of Letters Patent No. 183,698, dated October 24, 1876; application filed August 17, 1876.

To all whom it may concern:

Be it known that we, HENRY MYERS and ABRAHAM VANZANDT, both of Upper Darby, in the county of Delaware and State of Pennsylvania, have invented a new and useful Improvement in Bobbin-Spindles; and we do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which our invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

making part of this specification, in which—
Figure 1 is a side elevation of the spindle
embodying our invention. Fig. 2 is a central
longitudinal section thereof. Fig. 3 is a horizontal section thereof.

Similar letters of reference indicate corresponding parts in the several figures.

It is well known that the contact of the bolster of a bobbin-spindle wears the latter so that the entire spindle becomes worthless. Our invention is designed to remedy this defect, and it consists of a sleeve encircling the spindle and carrying the bolster, whereby when the sleeve becomes worn it may be removed and a new sleeve fitted in its place, thus preserving the spindle proper. The sleeve will be prevented from rotation by locking-engagement with the spindle, and from vertical displacement by the bobbin-rest.

Referring to the drawings, A represents the spindle; B, its pulley, and C the bobbin-rest.

A portion of the spindle above the pulley B is reduced in diameter, and on the same is fitted a removable sleeve, D, on which is

mounted the bolster E. The inner face of the sleeve and outer face of the spindle are formed at adjacent points with a notch, a, and an engaging lug or tongue, b, respectively, whereby the sleeve and spindle will be locked, and rotation of the sleeve on the spindle is prevented. In order to retain the sleeve D in position, the bobbin-rest C will be screwed on the spindle above the sleeve, so as to fit tightly against the sleeve.

It is evident that the spindle, which heretofore has been subjected to wear by contact
with the bolster E, is removed from said contact, and, as the sleeve D is interposed between the bolster and spindle, said sleeve will
be subjected to wear. Wherefore, when the
sleeve is worn, it may be removed, the spindle
remaining intact and unaffected, and a fresh
sleeve may be applied, the spindle, heretofore
thrown away, thus being preserved.

In order to remove the sleeve, the bobbinrest C will be unscrewed or loosened, and the bolster and sleeve may then be slipped from the spindle.

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

The bobbin-spindle A, with encircling sleeve D locked therewith, in combination with the locking bobbin-rest C, substantially as and for the purpose set forth.

HENRY MYERS. ABRAHAM VANZANDT.

Witnesses:

ROBERT HARTLEY, JOHN J. VANZANDT.