Bandle Step.

10.81,732.

INOUTEN SET. 1.1868.



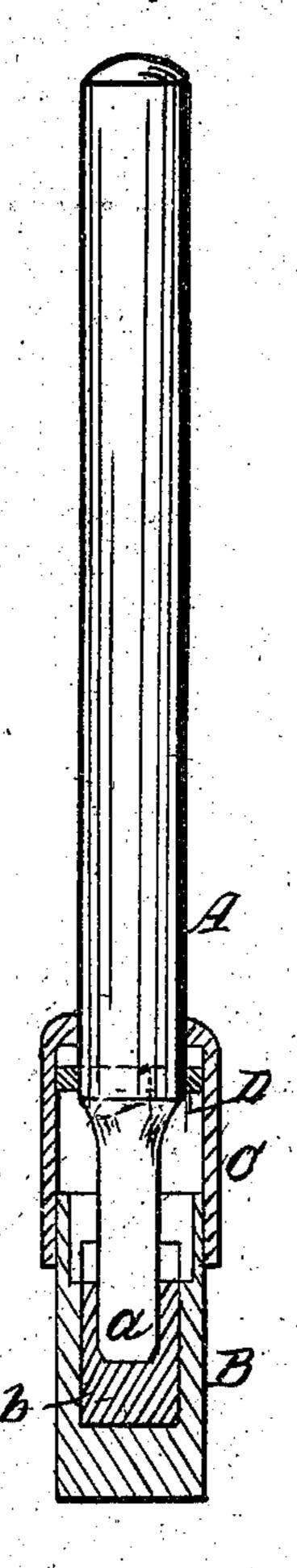
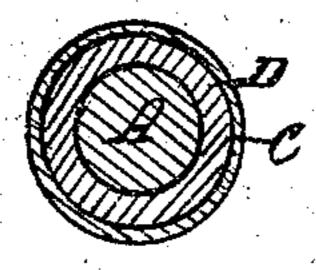


Fig.L.



Wytnesses N. Phy.

Joseph B. Bancrott

by his attorney.

Millelled

Anited States Patent Office.

JOSEPH B. BANCROFT, OF MILFORD, MASSACHUSETTS.

Letters Patent No. 81,732, dated September 1, 1868.

IMPROVEMENT IN SPINDLE-STEP.

The Schedule referred to in these Zeiters Patent and making part of the same.

TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME:

Be it known that I, Joseph B. Banchoff, of Milford, in the county of Worcester, and State of Massachusetts, have made a new and useful invention having reference to Spinning-Spindle Steps and their caps; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a vertical section of the lower portion of a spinning-machine spindle, its step and cover, as provided with my invention.

Figure 2 is a transverse section taken through the annular flange of the spindle.

In the drawings, A denotes the spindle, B the step, and C the cover of the latter. The bearing of the foot a of the spindle is shown at b.

In carrying out my invention I make the cap C, which encompasses the spindle and the step, to fit closely to and around the latter, so as to be held stationary thereto by friction, while the spindle may be in revolution, the same serving also to keep fibrous filaments or dust from working between the cover and step, and getting into the latter. I also encompass the spindle, when within the cover or cap, with a ring or flange, D, to extend from the spindle nearly to the internal surface of the said cover or cap, the purpose of such ring or flange being to prevent waste, dust, or extraneous matters, which may work through the hole in the cap, from getting into the step.

The common bell-cap of the spindle-step usually rests on the step-rail, and in consequence thereof is fiable to be caught by the spindle, (particularly when waste may work into the eye of the cap,) and revolved so as to more or less affect the movements of the spindle, and cause it to irregularly wear its step, but, by supporting the cap on the step, and so fitting it to the latter, that it (the cap) cannot be revolved by the spindle, I am enabled to accomplish the result of better protecting the step from dirt or waste and from being improperly worn by the cap in being revolved by the spindle.

The flange also serves to steady the cap and prevent it from being worn where it is closest to the spindle. I claim the arrangement and combination of the ring or flange D with the spindle, its step, and cap, the whole being substantially in manner and for the purpose or objects as specified.

Witnesses:

EBEN. D. BANCROFT, OSCAR E. DRAPER. JOSEPH B. BANCROFT.