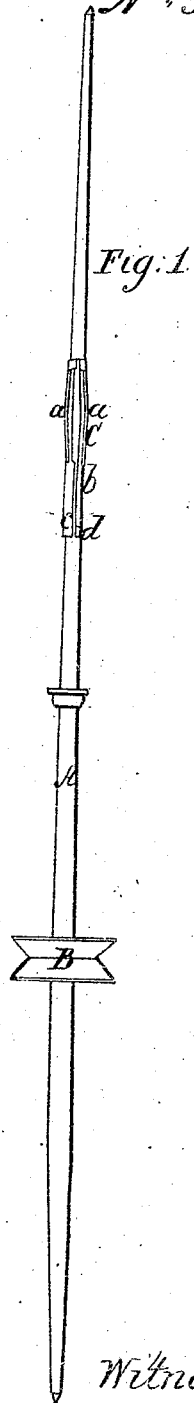


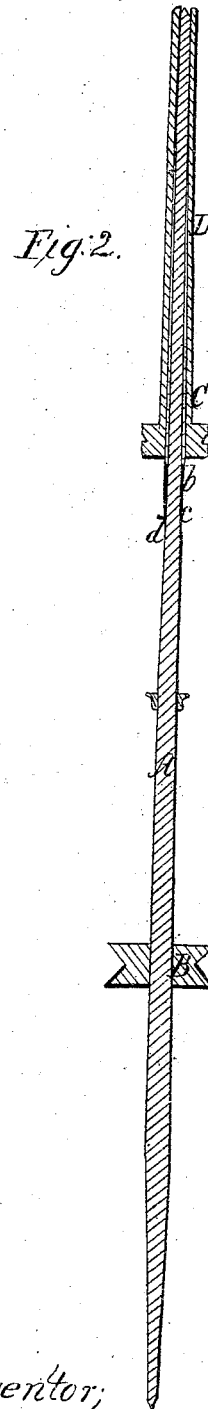
# J. Goulding. Bobbin Holder.

N<sup>o</sup> 50,241.

Patented Oct. 3, 1865.



Witnesses;  
Thos. H. Dodge  
H. Fuller



Inventor;  
John Goulding

# UNITED STATES PATENT OFFICE.

JOHN GOULDING, OF WORCESTER, MASSACHUSETTS.

## IMPROVEMENT IN BOBBIN-HOLDERS FOR SPINNING.

Specification forming part of Letters Patent No. 50,241, dated October 3, 1865.

*To all whom it may concern:*

Be it known that I, JOHN GOULDING, of the city and county of Worcester, and State of Massachusetts, have invented certain new and useful Improvements in Bobbin-Holders; 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 a part of this specification, in which—

Figure 1 represents a spindle with my improved bobbin-holder applied thereto. Fig. 2 represents a longitudinal section of a spindle bobbin-holder and bobbin, and Fig. 3 represents a perspective view of a bobbin-holder upon an enlarged scale.

In the drawings A represents the spindle; B, the whirl; C, the bobbin-holder, and D the bobbin.

My improved bobbin-holder is stamped or cut from a flat piece of thin steel plate or other suitable metal, and then bent in cylindrical form to fit the spindle. The edges are not fastened together, and the spring of the metal causes the bobbin-holder to cling closely to the spindle at the point to which it is driven. The center of the bobbin-holder is sprung or bulged out and forms a series of springs, *a*, which serve to hold the bobbin in place and prevent its turning upon the spindle. The lower part, *b*, of the metal piece from which the bobbin-holder is made forms a long tube or spring, *c*, which holds the bobbin-holder to the spindle, and at

the same time does not materially interfere with the removal of threads that may be wound upon the spindle below the bobbin, and thus I am enabled to overcome and fully obviate a practical objection which is found to exist in the use of the bobbin-holder heretofore invented by myself, as well as in that of Edward Wright. Before doffing, the threads are lowered and wound around the spindle below the bobbin, and in a short time they accumulate to such an extent that they have to be removed, and in bobbin-holders held to the spindle by a ring the yarn has to be cut off; while with a bobbin-holder like that shown in the accompanying drawings the yarn can be easily slipped off from the spindle by hand. The lower edge, *d*, of the tube or spring *c* is beveled off to expedite the operation.

Having described my improvements in bobbin-holders, I would observe that I lay no claim to the formation of the springs by punching the same out of sheet metal; but

What I claim as new and of my invention, and desire to secure by Letters Patent, is—

The combination, with the spindle A, of the bobbin-holder C, when constructed with a long tube or spring, *c*, which serves as the only support to the bobbin-holder, as set forth.

JOHN GOULDING.

Witnesses:

THOS. H. DODGE,  
H. L. FULLER.