A. M. WADE.

Bobbin-Supporter for Spooling-Machines.

No. 159,053. Patented Jan. 26, 1875.

Fig. 1.

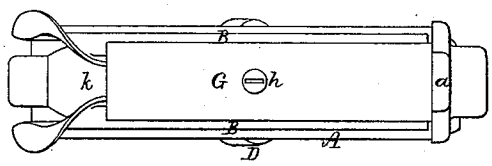


Fig. 3.

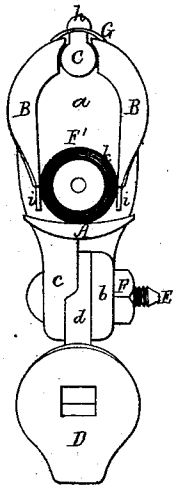


Fig. 2.

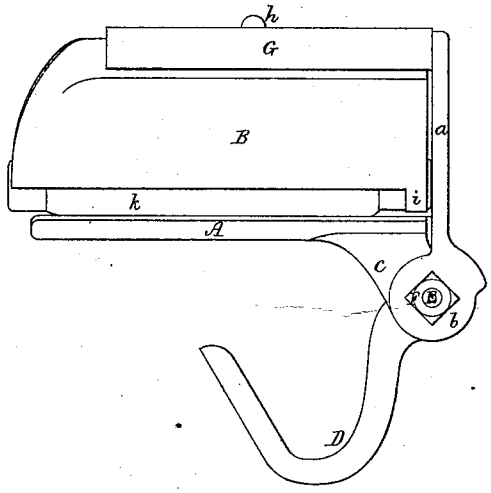


Fig. 4.

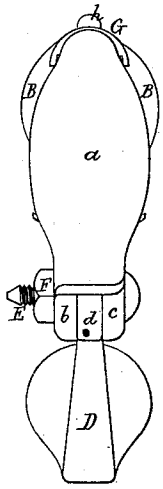


Fig. 5.

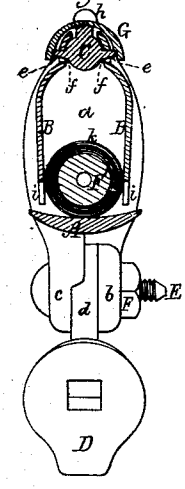


Fig. 6.

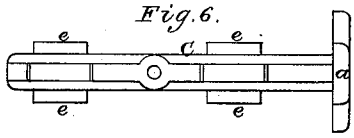
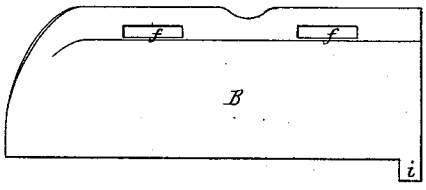


Fig. 7.



Witnesses.
S. N. Pipes
L. R. Gillett

Asel M. Wade,
by his attorney.
N. H. Sellers

UNITED STATES PATENT OFFICE.

ASEL M. WADE, OF LAWRENCE, MASSACHUSETTS.

IMPROVEMENT IN BOBBIN-SUPPORTERS FOR SPOOLING-MACHINES.

Specification forming part of Letters Patent No. **159,053**, dated January 26, 1875; application filed November 25, 1874.

To all whom it may concern:

Be it known that I, ASEL M. WADE, of Lawrence, of the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Bobbin-Supporters for Spooling-Machines; and 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 top view; Fig. 2, a side elevation; Fig. 3, a front end view; Fig. 4, a rear end view of one of my improved bobbin-supporters. Fig. 5 is a transverse section of it. Fig. 6 is a top view of its lip-carrier. Fig. 7 is a side view of one of its gravitating lips.

This bobbin-holder is provided with a rest, A, for sustaining the bobbin. It also has over the said rest two gravitating or self-adjusting lips, B B, which are suspended from the opposite edges of a carrier, C, formed with an elbow or bend, as shown at *a*. An ear, *b*, projects from the lower part of the carrier, and another such ear, *c*, extends from the rest A, all being in the manner as shown. Between these two ears the flat head *d* of the sustaining-arm D is arranged. A clamp-screw, E, provided with a nut, F, goes through the said head and two ears, and serves to connect together the arm D, the rest A, and the carrier C, and to admit of the proper adjustment of such parts relatively to each other, and to the guide-bar of the spooling-machine. The carrier C has tenons *e e* projecting from its opposite edges, and going loosely through corresponding slots *f* in the upper parts of the gravitating lips. These tenons serve to support the said lips, which swing freely toward or away from each other on the said tenons, and are kept in place by an arched cap, G, which straddles the tenons and lips in the manner shown, and is fastened down to the carrier by a screw, *h*, which goes through the cap, and is screwed into the carrier. The lips at their outer ends are bent or flared, as represented, in order to facilitate the introduction of the bobbin between them, and each lip at its inner end is provided with a shoulder or projection, *i*, extending from it in the manner shown. The purpose of such lip is to prevent the yarn from the bobbin from accidentally passing up and getting caught between the adjacent end of the lip and that part of the carrier which is next thereto.

When a bobbin is on the rest and between the lips, as shown at F, the said lips embrace it, and bear against the opposite sides of its yarn-load *k*, and adjust themselves to it, as it may diminish in size by the yarn being unwound from it. They readily open apart while the bobbin, with its load, is in the act of being placed between them. Their purpose is to hold the bobbin steady, or from vibrating laterally, or jumping about, as it will when lying loosely in a trough or cell, as hereinbefore generally employed for holding it in a spooling-machine. The lateral vibration or jumping of the bobbin, incident to the cell or trough, seriously affects the tension or draft of the yarn, which it is very desirable to have regular or uniform. The gravitating lips produce the requisite pressure or friction on the bobbin for steadiness of draft, and fall toward each other as the yarn-load of the bobbin may diminish in diameter.

If desirable, springs may be applied to the lips and their carrier, in order to force the lips toward each other, but generally speaking the weight of the lips will suffice therefor.

I claim—

1. The combination of the rest A, with the arm or carrier C, and the gravitating or self-adjusting lips B B, suspended from the latter, all being arranged as specified.

2. The combination of the arched cap G, with the carrier C and its tenons *e*, and with the gravitating or self-adjusting lips B B, provided with slots *f*, to receive such tenons, all being arranged and applied substantially as represented.

3. The gravitating lips B, each provided with the shoulder or projection *i*, arranged as and for the purpose as explained.

ASEL M. WADE.

Witnesses:
R. H. EDDY,
J. R. SNOW.