

(No Model.)

N. H. EASTON.

BOBBIN HOLDER FOR SPOOLING MACHINES.

No. 530,492.

Patented Dec. 4, 1894.

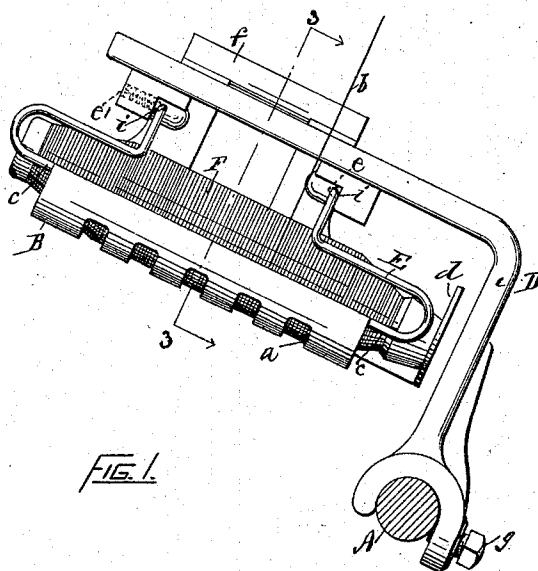


FIG. 1.

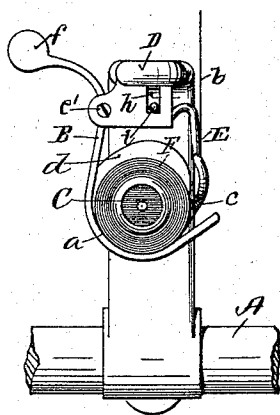


FIG. 2.

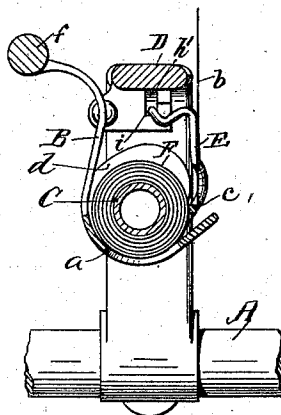


FIG. 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

NICHOLAS HOWARD EASTON, OF CENTRAL FALLS, ASSIGNOR TO THE EASTON
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BOBBIN-HOLDER FOR SPOOLING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 530,492, dated December 4, 1894.

Application filed August 28, 1894. Serial No. 521,506. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAS HOWARD EASTON, of Central Falls, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Bobbin-Holders for Spooling-Machines, of which the following is a specification.

This invention relates to a holder or support for a bobbin, while the yarn is being removed therefrom, and rewound upon a spool in a spooling machine; and it consists in the employment of a counter-balanced pivoted cradle or holder for the bobbin, and a pivotally held gravitating tension arm, the said cradle and gravitating tension arm being arranged to rock from side to side, to relieve the yarn from undue strain while it is being wound from the bobbin onto the spool; the gravitating arm serving to steady the bobbin at its drawing side, and produce the required uniform tension upon the yarn.

In the accompanying drawings:—Figure 1, represents a side view of a bobbin-holder or support, embodying the invention, with the bobbin in place therein. Fig. 2, represents a direct front end view, taken in line with the axis of the bobbin. Fig. 3, represents a section taken in the line 3, 3, of Fig. 1.

The bobbin-holders or supports are intended to be located side by side, and to be mounted upon the spooling machine in any suitable manner, as by being attached to a rod or bar A, which runs longitudinally of the machine, each holder being placed in front of a spool, upon which the yarn of the bobbin is to be wound by the usual mechanism.

B is the inclined cradle, in the trough *a*, of which, the bobbin C is loosely placed, to rest with its inner end against the head *d*; the

said cradle being loosely pivoted to the frame D, by means of the pivot pin *e* and the center pointed screw *e'*, shown by dotted lines in Fig. 1, and provided with the counter-balancing weight *f*.

The frame D is secured to the rod or bar A, by means of the set screw *g*, and is provided with the slots *h*, *h'*, in which are pivotally held the opposite ends *i*, *i*, of the swinging gravitating arm E, so that while the said arm has a swinging movement, with the swinging movement of the cradle B, and the bobbin C, it may also have an up and down movement; such up and down movement being caused by the tension of the yarn *b*, as it is being drawn from the bobbin against the side of the bar *c*, of the gravitating arm E, the pivot ends *i*, *i*, of the gravitating arm, rising and falling as occasion requires in the slots *h* and *h'*, in the frame.

The tension of the yarn *b* forces the bar *c* of the gravitating arm E against the side of the yarn F on the bobbin, and tends to secure a uniform tension between the bobbin and the winding spool, an excess of tension being relieved by the resulting upward movement of the gravitating arm E.

I claim as my invention—

The combination with the frame, and the counter-balanced pivoted cradle for holding the bobbin, of the gravitating tension arm adapted to swing with the cradle, and have an up and down movement, caused by the tension of the yarn from the bobbin, substantially as described.

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Witnesses:

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