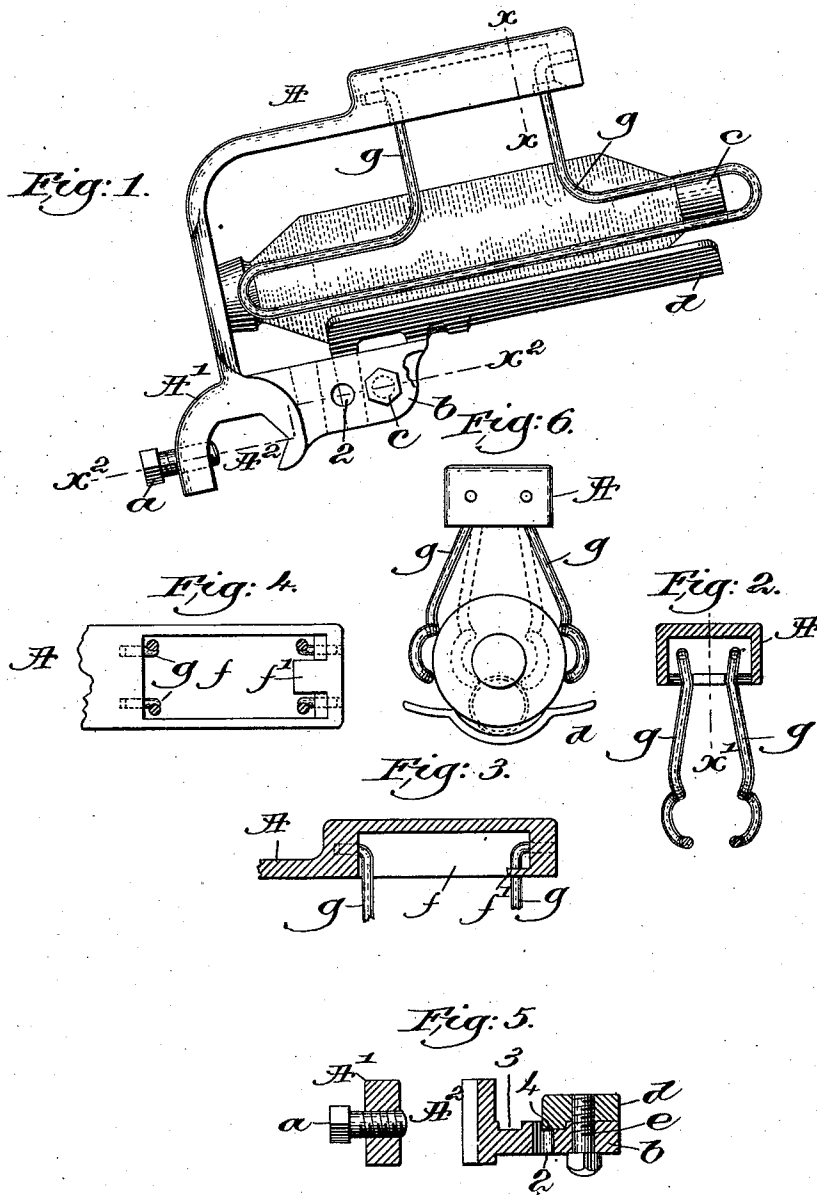


(No Model.)

H. LAWRENCE & A. E. RHOADES.  
BOBBIN HOLDER.

No. 575,929.

Patented Jan. 26, 1897.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

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DALE, MASSACHUSETTS, ASSIGNORS TO GEORGE DRAPER & SONS, OF  
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## BOBBIN-HOLDER.

SPECIFICATION forming part of Letters Patent No. 575,929, dated January 26, 1897.

Application filed October 22, 1896. Serial No. 609,665. (No model.)

*To all whom it may concern:*

Be it known that we, HENRY LAWRENCE, of Milford, and ALONZO E. RHOADES, of Hopedale, county of Worcester, and State of Massachusetts, have invented an Improvement in Bobbin-Holders, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

This invention has for its object to improve the construction of bobbin-holders, whereby they may be readily adapted to hold short or long bobbins, we having made the pan adjustable longitudinally on the bracket which supports it on the usual rod.

Figure 1, in side elevation, represents a bobbin-holder embodying this invention. Fig. 2 is a section in the line  $x x$ , Fig. 1, looking toward the right; Fig. 3, a section in the line  $x'$ , Fig. 2; Fig. 4, an under side view of the upper arm, the upper arms of the guard being shown in section. Fig. 5 is a section on the irregular dotted line  $x^2$ , Fig. 1; and Fig. 6 is a front view showing the peculiar shape of rest or "pan," as it is termed, on which the bobbin is supported.

The upper arm  $A$  of the holder rises from a clamp  $A'$ , (shown as forked, as at  $A^2$ ), and provided with a set-screw to aid in confining the said arm in place.

Extended from the clamp is a bracket  $b$ , having a plurality of bolt-holes 2, one of which is entered by the bolt  $c$ , employed to hold the rest or pan  $d$  on which the bobbin  $e$  is laid, said bracket also, as shown, having at one side of each of said holes a notch 3, in which may enter a teat or tongue 4 at the inner end of said rest or pan, as in Fig. 5.

By taking out the bolt  $c$  the rest or pan  $d$  may be adjusted in the bracket, and the bolt may then be put back into whichever of the holes 2 desired, that depending upon whether a long or short bobbin is to be held, the parts being shown in Fig. 1 as in place for the longer bobbins.

The enlarged free outer end of the arm  $A$

is chambered at its under side, as at  $f$ , and one end of said chamber is provided with an extension  $f'$ , entering said chamber, made by sawing slots out of the solid casting on each side, and the end walls of the chamber are provided with holes (shown by dotted lines) to receive the bent ends of the arms of the guards  $g g$ , said extension acting as a separator for the guards, so that they will remain separated for a short distance when the bobbin is not in place between the arms.

The rest or pan  $d$  upon which the bobbin is placed is of novel shape, it having a central cavity 10 and side wings extended therefrom, leaving corners 13 between the said cavities and the wings.

A full bobbin resting upon the corners is maintained central with relation to the pan, and when the bobbin is being unwound it grows smaller in diameter and enters the cavity, and when nearly unwound in jumping about in the cavity the corners act to check the movement of the bobbin, and should the bobbin escape over the corners it will rest upon the wings, and under the action of the guards will be pushed back again into the cavity. In this way the wings prevent the escape of the bobbin from the pan.

The usual circular pan, if used for large diameter bobbins, allows the nearly empty bobbin to roll around and break the thread.

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

1. In a bobbin-holder, an upper overhanging arm, a bracket, a rest or pan, and means to adjust said rest or pan longitudinally on said bracket to adapt it for the reception of bobbins of different lengths and diameter, substantially as described.

2. In a bobbin-holder, an upper overhanging arm, a bracket, a rest or pan, and means to adjust said rest or pan longitudinally on said bracket to adapt it for the reception of bobbins of different lengths and diameter, and pivoted guards, substantially as described.

3. In a bobbin-holder, a bobbin-holding  
rest or pan provided with a central depres-  
sion and having flattened side wings extended  
from the edges of said depression, combined  
5 with guards to act upon the sides of the bob-  
bin supported by said pan, substantially as  
described.

In testimony whereof we have signed our

names to this specification in the presence of  
two subscribing witnesses.

HENRY LAWRENCE.  
ALONZO E. RHOADES.

Witnesses:

GEO. OTIS DRAPER,  
HERBERT S. MANLEY.