M. J. NEALON & T. HIGGINS.

BOBBIN-HOLDERS AND BOBBINS FOR SLUBBING AND FLY FRAMES.

No. 192,655. Patented July 3, 1877.

Fig. 1.

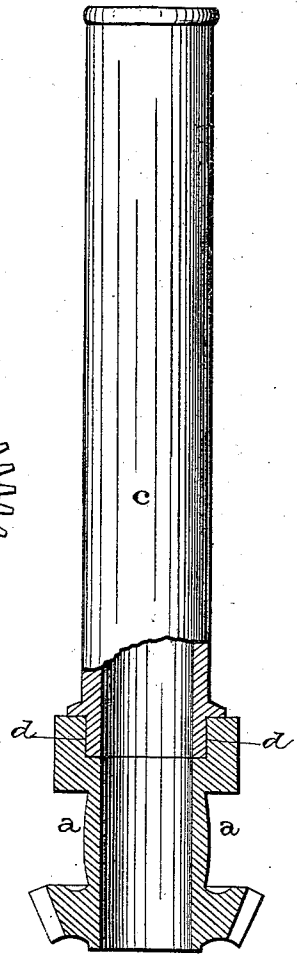


Fig. 2.

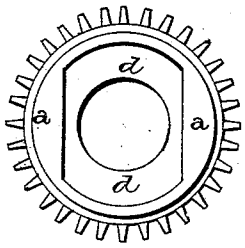
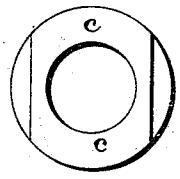
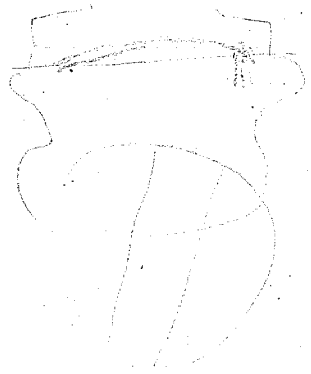


Fig. 3.





WITNESSES.

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MARTIN J. NEALON AND TIMOTHY HIGGINS, OF CHESTER, PENNSYLVANIA.

IMPROVEMENT IN BOBBIN-HOLDERS AND BOBBINS FOR SLUBBING AND FLY FRAMES.

Specification forming part of Letters Patent No. **192,655**, dated July 3, 1877; application filed January 18, 1877.

To all whom it may concern:

Be it known that we, MARTIN J. NEALON and TIMOTHY HIGGINS, of Chester, State of Pennsylvania, have invented certain new and useful Improvements in Bobbins; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in bobbin-holders and bobbins; and it consists in so constructing the holder and bobbin that the rotary power for turning the bobbin around is applied to the outside of the bobbin, whereby the bobbin is prevented from being split and broken, as will be more fully described hereinafter.

The accompanying drawings represent our invention.

a represents the bobbin-holder, and *c* the bobbin. The holder is constructed in the usual manner, with the exception of the top, where it has a cornered recess, *d*, of any suitable shape made in its top, and which is made of any depth required. The bobbin is also made in the usual way, with the exception of at its lower end, where it is shaped so as to fit in the recess *d* in the top of the holder.

By means of this construction the rotary power for revolving the bobbin is applied to its outside entirely, thereby effectually preventing the bobbin from being split and cracked, as is so frequently the case where the power is applied at any other point.

Not only can the holders be made more cheaply by constructing them as above described, but all the old bobbins that have been thrown away as cracked and useless can be fitted to these holders and again used, as good as new, by simply squaring their ends, so as to fit in the recesses in the tops of the holders.

Another great advantage gained by this construction is, that the bobbins cannot rise upward and get loose from their holding device, as is very common with some of the holders now in use.

We are aware that it is not new to revolve small bobbins, such as are used on "fliers," by applying the rotary power to the outside of the bobbin. We are also aware that the lower ends of the bobbins have been stuck in round sockets where they have been held by frictional contact; and these features we disclaim.

Where the ends are held by frictional contact alone the ends are constantly being worn away, and soon become too small to be any longer used; and, besides, such a method can only be applied to small bobbins.

By holding the ends in a cornered or irregular-shaped recess, we are enabled to use larger bobbins, can, by shaping the ends to fit our sockets, use up all the old cast-away bobbins, and thus effect an immense saving, and prevent any wear whatever upon the bobbin while being used.

Having thus described our invention, we claim—

A bobbin-holder having a cornered or eccentrically-shaped recess made in its top, to receive the lower end of the bobbin and rotate the same, and whereby also the ends of old cast-away bobbins can be reshaped to fit this recess, and again be used, substantially as shown and described.

In testimony that we claim the foregoing we have hereunto set our hands this 11th day of January, 1877.

MARTIN J. NEALON.
TIMOTHY HIGGINS.

Witnesses:
WILLIAM G. HEALY,
WILLIAM A. COBURN.