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H. LAMPART

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METHOD OF MAKING SPINNING BOBBINS

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*Fig. 1.*

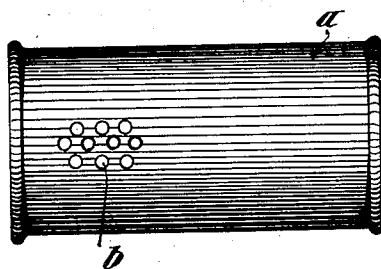


*Fig. 2.*

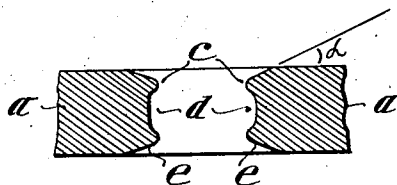
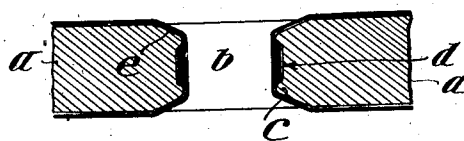


*Fig. 3.*



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# UNITED STATES PATENT OFFICE

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## METHOD OF MAKING SPINNING BOBBINS

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My invention relates to spinning bobbins and more specifically to a method of producing lacquered bobbins and the like with perforations, for the textile industry generally and the artificial silk or rayon industry in particular.

My improved method is distinguished from those already known in the art by the feature that when the material is displaced by flattened dies or plungers for the purpose of producing the perforations, beads or projections are formed at both sides below the edges bevelled or chamfered under an acute angle so that in the wall of the perforation a recess or set-back portion is located between these beads adapted for the reception of a coating or layer of lacquer of about double the normal thickness.

When lacquering or varnishing the bobbin the excess lacquer accumulates in the recess in the wall of the perforation and from there distributes itself by flowing towards the sides of the bobbin just before drying up. In order to prevent a displacement of the material towards the surface of the shell of the bobbin when embossing the bevelled face, the bevel or chamfer forms according to my invention an acute angle with the shell of the bobbin body, preferably one between 20° and 35°. The advantage of my improved method is that a certain quantity of lacquer accumulates in the recess within the wall of the opening the excess of which is able to flow out simultaneously towards both sides shortly before the drying. The chamfer has apart from this the advantage that in non-lacquered bobbin bodies it prevents a displacement of the material towards the surface of the shell and that it acts like a funnel when lacquering the bobbin body.

In the drawings affixed to my specification and forming part thereof an embodiment of my invention is illustrated by way of example. In the drawings:—

Fig. 1 is a side view of a bobbin with openings or perforations in the shell,

Fig. 2, an opening after the bevelling of the edges and formation of the beads, in cross-section on an enlarged scale, and

Fig. 3, the opening according to Fig. 2 coated with the lacquer.

Referring to Fig. 1 of the drawings it will be noticed that the body of the bobbin *a* is provided with a plurality of circular perforations *b*. After the perforations or openings *b* which naturally might also be oval, polygonal or oblong have been punched out, the sharp edges are subsequently flattened out and bevelled at both sides and uniformly by pressing a tapering punch or die into the opening or in any other suitable manner, as shown in Fig. 2 of the drawings. By the displacement of the substance of the bobbin towards the inside of the opening two annular beads or semi-circular projections *c* are formed so that the wall of the opening receives a central annular recess cavity or groove *d*. To avoid a displacement of the material of the bobbin towards the outside, i. e. towards the surface of the shell, the bevel or chamfer *e* is provided under an angle  $\alpha$  of 20 to 35 degrees to the surface of the shell. When the thus prepared bobbin *b* is varnished about double the quantity of lacquer or varnish remains in the cavity of the wall which would remain if the perforation were cylindrically straight, see Fig. 3 of the drawings. The lacquer is thus able to spread better just prior to drying up and to distribute itself over the beads towards the external surface of the bobbin.

I claim as my invention:—

1. A method of shaping and finishing the perforations in spinning bobbins which comprises in displacing the sharp edges of the perforation towards the inside thereof to form beads at both sides and a central cavity in the wall of the perforation between the beads, and coating the perforation so that a double coating will be formed in the annular cavity and on the beads.

2. A method of shaping and finishing the perforations in spinning bobbins which comprises in displacing the sharp edges of the perforation towards the inside thereof to form beads at both sides and a central annular cavity in the wall of the perforation between the beads, and coating the perforation with lacquer so that a double coating

thereof will be formed in the annular cavity and on the beads.

3. A method of shaping and finishing the perforations in spinning bobbins which comprises in displacing the sharp edges of the perforation towards the inside to form beads at both sides under an angle of between 20° and 35° and a central annular cavity in the wall of the perforation between the beads, and coating the perforation with lacquer whereby a double coating thereof will be formed in the annular cavity and distribute itself over the sides of the bobbin and on the beads.

In testimony whereof, I affix my signature.

HUGO LAMPART.

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