No. 649,638. Patented May 15, 1900.

E. E. HENDRICK.

BOBBIN.

(Application filed July 15, 1899.)

(No Model.)

Fig. 1

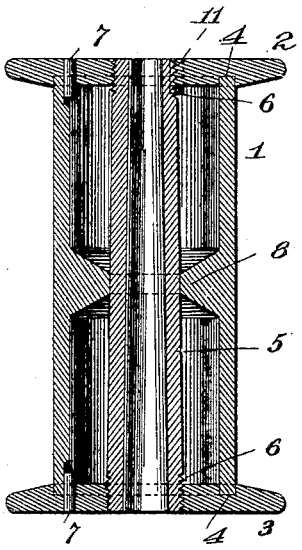
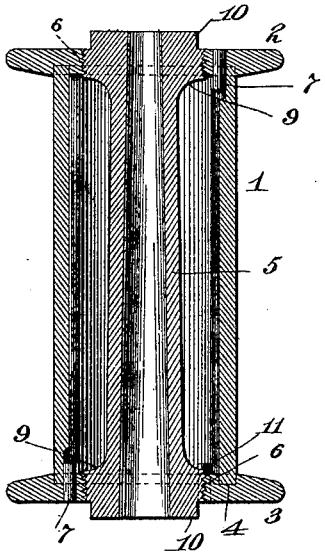


Fig. 2



Witnesses:

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UNITED STATES PATENT OFFICE.

ELI E. HENDRICK, OF CARBONDALE, PENNSYLVANIA.

BOBBIN.

SPECIFICATION forming part of Letters Patent No. 649,638, dated May 15, 1900.

Application filed July 15, 1899. Serial No. 723,916. (No model.)

To all whom it may concern:

Be it known that I, ELI E. HENDRICK, a citizen of the United States, residing at Carbondale, in the county of Lackawanna and State of Pennsylvania, have invented a certain new and useful Improvement in Bobbins, of which the following is a description.

My invention relates to various new and useful improvements in bobbins; and the object of the invention is to simplify the construction, increase the efficiency, and reduce the cost of manufacture of such devices.

I purpose applying the invention especially to bobbins constructed wholly or partly of hard fiber.

In order that the invention may be better understood, attention is directed to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a longitudinal section of one form of my improved bobbin, and Fig. 2 a similar view of another form thereof.

In both of the above views corresponding parts are represented by the same numerals of reference.

1 represents a tubular body made of wood, metal, or any other suitable material, and 2 3 the circular heads thereof. Preferably the ends of the body 1 are seated in annular recesses 4 in said heads.

5 is a mandrel or core located within the body 1 and having screw-threaded ends 6 6, which engage screw-threaded openings formed centrally in the heads 2 3, as shown. The mandrel or core 5 is provided with a bore (here shown as tapered, although it may be straight) for the proper mounting of the bobbin, as will be understood.

In assembling the parts of the bobbin one of the heads is first engaged with one end of the core or mandrel 5. The body 1 is then inserted in place over the said core or mandrel and the other head is screwed upon the other end of said core, whereby the body 1 will be clamped tightly between said heads. Displacement of the heads relative to the body is prevented in any suitable way—as, for instance, by a pin 7 inserted in an opening extending through the head and into the body, as shown, said opening being formed after the parts have been assembled or by a pin, such as shown in dotted lines at 11, inserted in an opening extending through the head and into the core or mandrel 5. If desired, the body 1 may be formed with a rib 8, fitting over the core or mandrel 5 and by means of which the body will be very materially stiffened at its central part.

The modification shown in Fig. 2 is practically identical with that just described, with the exception that the rib 8 is omitted, and the core or mandrel 5 is provided at its ends with enlarged portions 9 9, which are screw-threaded into the two heads. With this modification also the enlarged portions of the core or mandrel 5 for facility of adjustment are made to extend beyond the heads 2 3 at 10, as shown.

A bobbin made in accordance with my present invention can be constructed very cheaply and will be light and durable in use.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows:

1. As a new article of manufacture, a bobbin provided with a cylindrical body, a head at each end of said body, a hollow core or mandrel engaging the heads by screw-threaded connections, whereby the heads will be clamped tightly in position against the ends of the body, and means for preventing the heads from rotating with respect to the body, whereby disengagement of the heads from the screw-threaded ends of the core or mandrel will be prevented, substantially as set forth.

2. As a new article of manufacture, a bobbin provided with a body, a head at each end of said body, a hollow core or mandrel engaged with said heads and clamping the same upon the body, and a pin passing through each head into the body for preventing the disengagement of the body from said core or mandrel, substantially as set forth.

3. As a new article of manufacture, a bobbin provided with a body, a head at each end of said body, a hollow core or mandrel screw-threaded into said heads and clamping the same upon the body, and a pin passing through each head into the body for preventing the disengagement of the heads from said core or mandrel, substantially as set forth.

4. As a new article of manufacture, a bobbin provided with a cylindrical body, a cir-

cular head at each end of said body, a hollow core or mandrel mounted within the body and having enlarged ends which are screw-threaded into said heads, and a pin passing through each head into the body for preventing said heads from being unscrewed, substantially as set forth.

5. As a new article of manufacture, a bobbin provided with a cylindrical body, a circular head at each end of said body, a hollow core or mandrel mounted within the body and having enlarged ends which are screw-threaded into said heads, said enlarged ends extending beyond the heads, and a pin passing through each head into the body for preventing said heads from being unscrewed, substantially as set forth.

This specification signed and witnessed this 10th day of July, 1899.

ELI E. HENDRICK.

Witnesses:
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