

March 17, 1925.

1,530,433

A. STADLER

BOBBIN

Filed Sept. 20, 1923

Fig. 1,

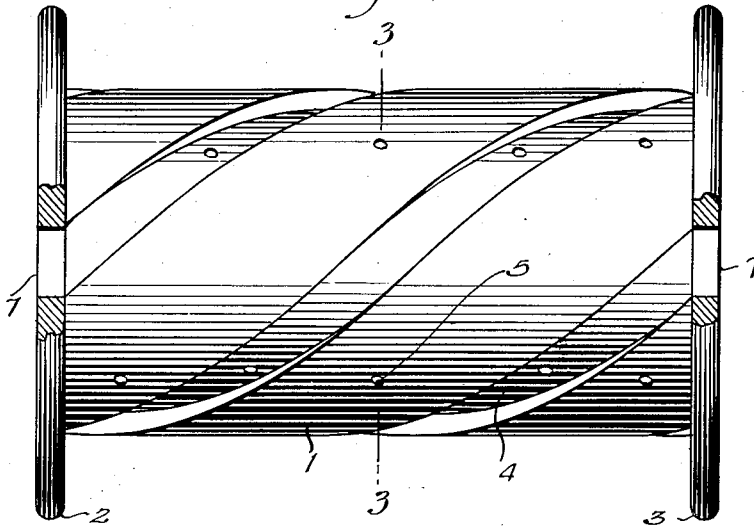
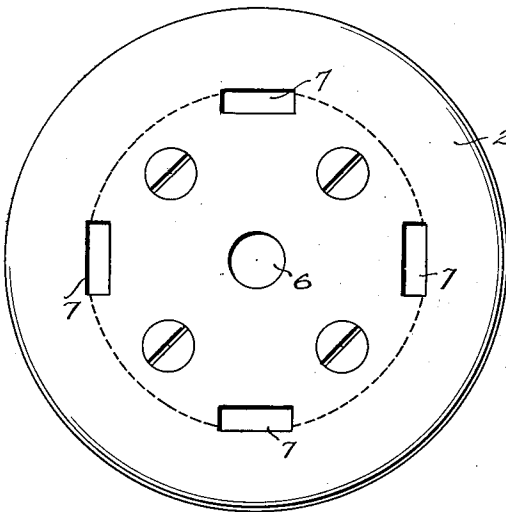


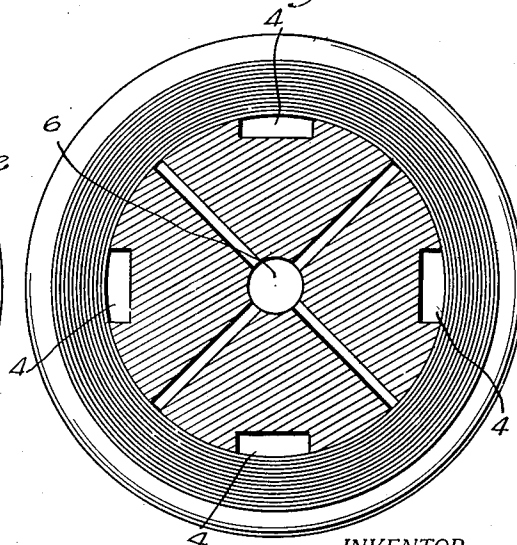
Fig. 2,



WITNESSES

Edw. Thorpe
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Fig. 3.



INVENTOR

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BY

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ATTORNEYS

UNITED STATES PATENT OFFICE.

ANDREW STADLER, OF TRENTON, NEW JERSEY, ASSIGNOR TO H. R. MALLINSON & CO. INC., OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

BOBBIN.

Application filed September 20, 1923. Serial No. 663,887.

To all whom it may concern:

Be it known that I, ANDREW STADLER, a citizen of the United States, and a resident of Trenton, in the county of Mercer and State of New Jersey, have invented a new and Improved Bobbin, of which the following is a full, clear, and exact description.

This invention relates to bobbins designed to receive threads of different kinds and has for an object to provide an improved construction wherein the thread may be dampened or otherwise treated to prevent kinking or curling as the thread is unwound from the spool.

Another object of the invention is to provide a spool formed with means whereby a treating liquid or other treating matter may be applied exteriorly and interiorly of the thread wound on the spool.

In the accompanying drawing—

Figure 1 is a side view of a spool disclosing an embodiment of the invention, certain parts being broken away for illustrating certain parts of the invention in a better manner.

Figure 2 is an end view of the spool shown in Figure 1.

Figure 3 is a sectional view through Figure 1, approximately on line 3—3.

Referring to the accompanying drawing by numerals, 1 indicates the body of a spool and 2 and 3 the ends, which are removably mounted on the body 1, said ends being held in place by any desirable means, as for instance, screws. The body 1 may be made of any suitable material, as for instance, hard wood, metal or some material which will not be readily affected by water or steam. The ends 2 and 3 are also made from rubber, metal or other suitable material. The bobbin is intended to be used in factories where the thread is laid from the spool to the loom or other device using the thread. The thread on leaving the spool must be in such a condition as not to kink or become snarled. Where the silk, wool, cotton or other thread is comparatively heavy, the tendency to kink as the thread moves is increased. Before the thread can be proper-

ly used, it must be straight and dead and in order to bring the thread to this condition heretofore, the thread has been soaked for a long time, as for instance, twelve hours in water or subjected to steam for an appreciable time, which steam oftentimes burned part of the thread as heretofore it was compelled to penetrate the thread on the spool from the exterior surface.

In the spool shown in the drawing, means have been provided whereby the thread may be killed by water or steam applied exteriorly and also interiorly. As indicated in the drawing, the body 1 is provided with a number of spiral grooves 4 and a number of radiating apertures 5 radiating from a central longitudinal bore 6. Some of the apertures 5 open or discharge in to the grooves 4 while others extend to the periphery of the body 1. Each of the ends 2 and 3 is provided with an opening 7 corresponding to the cross sectional area of the respective grooves and arranged so that there will be one opening registering with each groove whereby water may be forced from one end to the other through these openings and the respective grooves 4. In addition, water may be passed through the bore 6 and out through the radial openings 5. Where the bobbin with its thread is merely soaked in water, the water will penetrate the thread from the outside inwardly and also from the various grooves 4 and apertures 5 in a direction outwardly.

Where steam is used the same method may be followed of applying it inwardly and outwardly whereby the thread is soaked or killed more quickly than where an ordinary spool is used without the grooves 4 and apertures 5. It will, therefore, be seen that regardless of what method is used for killing heavy twisted thread, the arrangement of grooves 4 and apertures 5 is such that the thread may be treated in an appreciably less time than by the methods heretofore known.

What I claim is:—

1. A bobbin, comprising a body formed with end members, and helically arranged

grooves extending the length of said body and terminating in openings in said end members. ing an aperture registering with each of the grooves whereby liquid may be forced through the apertures in one of the end 10

- 5 2. A bobbin, comprising a body having helically arranged grooves extending from one end to the other, a pair of removable end members, each of said end members having an aperture registering with each of the grooves whereby liquid may be forced through the apertures in one of the end members, along said grooves and out the apertures in the opposite end member.

ANDREW STADLER.