Jan. 6, 1925. 1,522,036

F. G. SNYDER

BOBBIN

Filed June 15, 1922

Fig. 1.

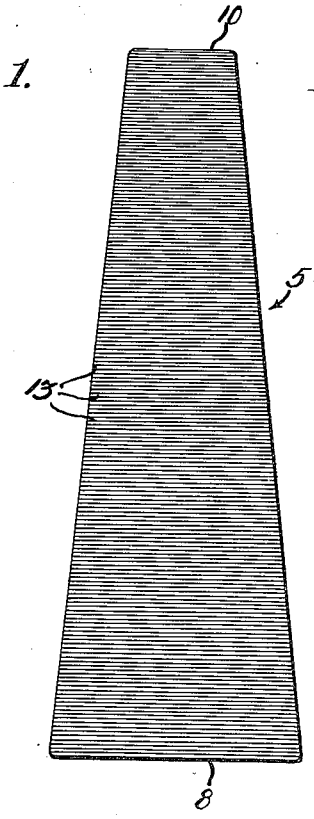


Fig. 2.

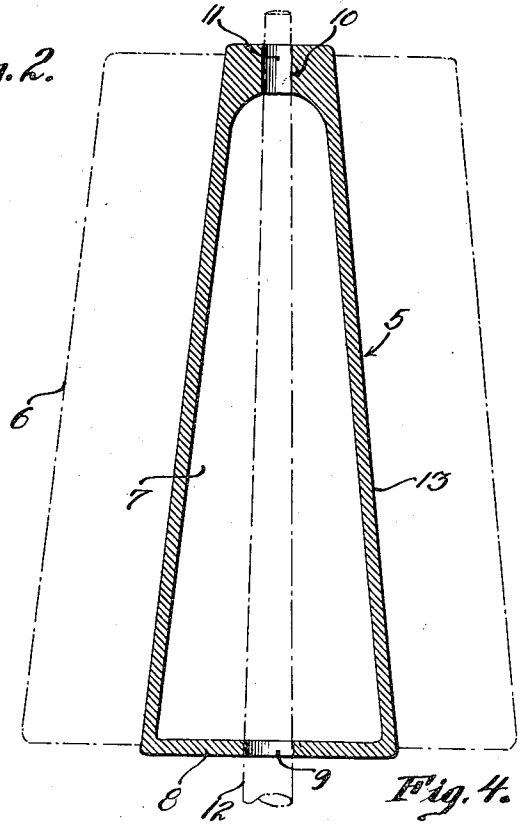
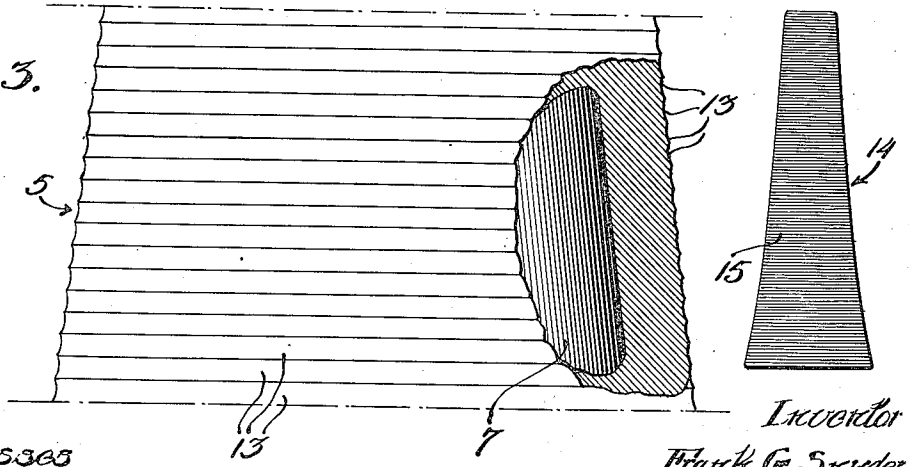


Fig. 4.

Fig. 3.



Witnesses

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Patented Jan. 6, 1925.

1,522,036

UNITED STATES PATENT OFFICE.

FRANK G. SNYDER, OF PHILADELPHIA, PENNSYLVANIA.

BOBBIN.

Application filed June 15, 1922. Serial No. 568,411.

To all whom it may concern:

Be it known that I, FRANK G. SNYDER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Bobbins, of which the following is a specification.

My invention relates to bobbins and the objects thereof are to provide an improved bobbin of metal which is provided with a roughened or corrugated surface to support the yarn wound thereon and prevent it from slipping; which is light in weight; durable; will not splinter, warp or split as do wooden bobbins or spools and therefore will last almost indefinitely; will not absorb moisture or interfere with the proper unwinding of the yarn, or corrode and which can be produced economically in an integral structure.

These objects, and other advantageous ends which will be described hereinafter, I attain in the following manner, reference being had to the accompanying drawings in which—

Figure 1 is a side elevation of the improved bobbin,

Figure 2 is a central longitudinal sectional view,

Figure 3 is an enlarged fragmentary side elevation partly broken away and in section to show the roughened or corrugated surface, and

Figure 4 is a side elevation showing a modified form of bobbin.

Referring to the drawings in detail, there is shown a bobbin 5 for use in the textile industry for supporting the yarn 6 which is wound thereon in a manner common in the art for use in knitting or weaving operations. The bobbin is produced from some light weight metal, such as aluminum, and is cast in the form of a hollow shell 7. The shell is in the form of a cone and has a bottom wall or base 8 provided with one or more openings 9 and the top wall or upper end 10 is provided with an opening 11. The openings 9 and 11 are disposed in axial alignment to receive the pin 12 by which the bobbin is supported.

In order to support the yarn on the bobbin and prevent it from slipping off or dropping down and to effect the proper feeding or unwinding thereof, the external surface is roughened or corrugated as indicated at 13. This roughened surface is preferably produced by a series of annular corrugations disposed parallel to each other or otherwise and arranged closely together so as to receive the thread or yarn. In this manner, the metal surface will be rendered suitable for use as a bobbin or the like and will possess many advantages over the use of wood since it will not splinter, warp or split and will not become indented or rendered useless through wear and tear. From Figure 3 of the drawings, it will be seen that the corrugations 13 provide seats for the thread or strands.

In Figure 4 of the drawings, another form of bobbin is shown. In this construction the bobbin 14 is provided with corrugations 15 corresponding to the corrugations 13 and instead of the surface being straight or plane from end to end, it is tapered with a concaved curvature but other shapes may be resorted to in connection with the other features described so long as the device is suitable for textile use.

While I have described my invention as taking a particular form, it will be understood that the various parts of my invention may be changed without departing from the spirit thereof, and hence I do not limit myself to the precise construction set forth, but consider that I am at liberty to make such changes and alterations as fairly come within the scope of the appended claim.

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

A hollow bobbin made of cast metal and having its outer surface formed with contiguous minute grooves covering substantially the entire surface and means for engaging a support.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK G. SNYDER.

Witnesses:

ELIZABETH GARBE,

CHAS. E. POTTS.