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2,237,837

BOBBIN AND THE LIKE

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FIG. 1.

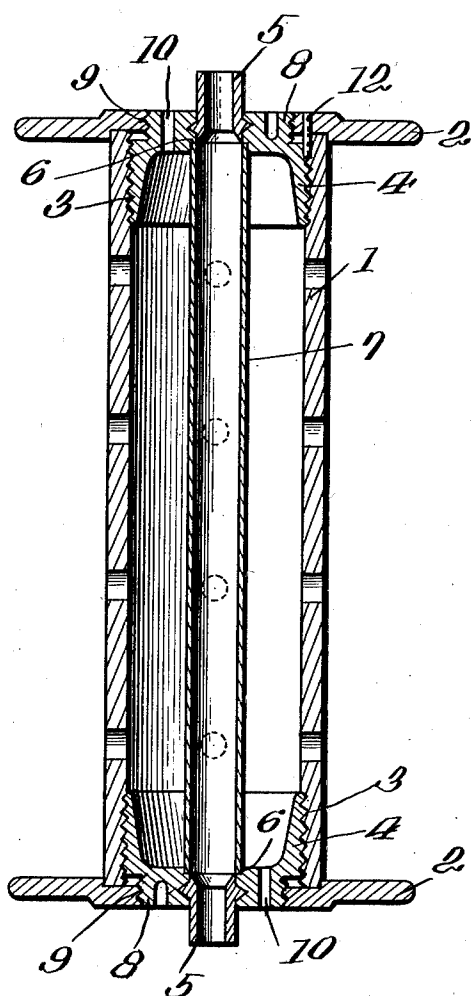


FIG. 2.

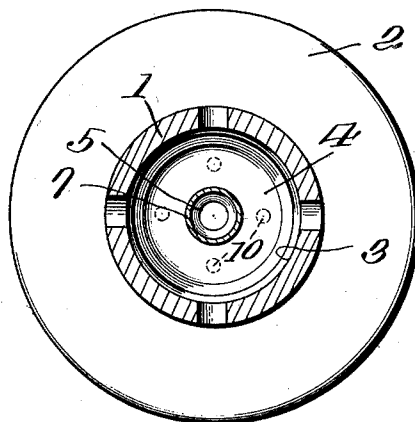
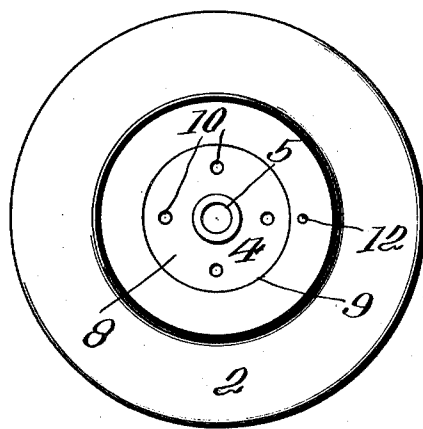


FIG. 3.



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BOBBIN AND THE LIKE

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Application September 13, 1939, Serial No. 294,742

4 Claims. (Cl. 242-118)

This invention relates to certain new and useful improvements in construction of bobbins and the like, the object being to provide a bobbin which is exceedingly simple and cheap in construction having novel means for connecting the heads to the barrel.

Another object of my invention is to provide a bobbin having a barrel in which is disposed a bushing having a collet die cast therewith, said bushing having a threaded engagement with the barrel and the head a threaded engagement with the bushing.

Another and further object of the invention is to provide novel means for positioning the central core whereby the core will be brought into engagement with the bushing through a threaded connection and the heads brought into engagement with the ends of the barrel through a threaded connection, each being adjustable in respect to one another so that inaccuracies in manufacturing the core and barrel will be compensated for.

A further object of my invention is to provide a bobbin or the like which is very strong and durable, the parts being so constructed that they can be readily assembled and when assembled will be held firmly in position.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claims.

In the drawing,

Figure 1 is a longitudinal section through a bobbin constructed in accordance with my invention;

Figure 2 is a transverse section through the bobbin; and

Figure 3 is an end view.

In the drawing 1 indicates a tubular barrel over which is arranged a head 2 at each end. The construction of bobbin herein shown is what is known in the art as a steaming bobbin and the barrel is herein shown provided with openings. Each end of the barrel is internally threaded as shown at 3 to receive the externally threaded portion bushing 4 which is provided with a collet 5 which is die cast with the bushing and the bushing can be formed of aluminum and the collet of stainless steel in order to increase the strength and wearing qualities of the collet.

The underside of the bushing is annularly reduced to form a seat 6 in which is arranged the end of a central core member 7. The bushing is annularly reduced and threaded as shown at 8 and the heads 2 are provided with circular internal threaded openings 9 in threaded engagement

with the threaded reduced portions 8 of the bushing so that by turning the heads they can be brought into engagement with the ends of the barrel in order to lock the heads in position thereon. When the bushing is turned, it is brought into engagement with the ends of the central core member so as to lock the core member centrally therein.

The bushing is provided with spanner receiving openings 10 which also form steam openings but it is, of course, understood that this could be in the form of sockets and the steam openings of the barrel can be dispensed with.

The barrel can be formed of any suitable material and the heads of any suitable material but I preferably form the heads of aluminum and by providing each end of the barrel with an internally threaded portion into which is threaded a bushing, the central core portion is independently locked within the barrel between the bushings and by having the heads threaded onto the bushings, the heads are independently locked against the end of the barrel so as to compensate for inaccuracies in the different lengths of the tube and barrel whereby the heads are firmly locked in position on the end of the barrel and the core within the barrel.

While I have shown the collets die cast within the bushing, it is, of course, understood that a bushing with an integral collet can be provided without departing from the spirit of my invention and I do not wish to limit myself to the details of construction as herein shown and described.

As herein shown a locking pin 12 is used for preventing the bushing from turning in respect to the heads, but it is, of course, understood that in some cases this may not be necessary, therefore I do not wish to limit myself to the use of a separate locking pin as by constructing a bobbin or the like in which the heads have a threaded engagement with the bushing which has a threaded engagement with the barrel, a locking action is obtained when these parts are assembled in threaded engagement with one another.

What I claim is:

1. A bobbin or the like comprising a tubular barrel having a bushing threaded into each end of said barrel, a central tubular core disposed in said barrel and locked in position therein by said bushings, each bushing being provided with an outwardly extending bearing, and a head having a threaded engagement with said bushing at each end for locking said heads against the ends of said

barrel independent of the locking of said core within said barrel by said bushings.

2. A bobbin or the like comprising a tubular barrel having a bushing threaded into each end of said barrel, a central tubular core disposed in said barrel and locked in position therein by said bushings, each bushing being provided with an outwardly extending bearing, a head having a threaded engagement with said bushing at each end for locking said heads against the ends of said barrel independent of the locking of said core within said barrel by said bushings, and a locking pin passing through each head engaging the bushing and barrel for locking the head and bushing in set position in respect to said barrel and core.

3. A bobbin or the like comprising a tubular barrel having internally threaded ends, an externally threaded hollow bushing threaded into each end of said barrel, a tubular core disposed in said barrel having its ends disposed in said hollow bushings and engaged by said bushings for locking said core in position within said barrel, each bushing being provided with an externally threaded reduced neck portion and heads having

circular seats on their inner faces to receive the ends of said barrel, said heads being provided with central threaded openings in threaded engagement with the threaded neck portions of said bushings for locking said heads on said barrel independent of the locking of said core therein.

4. A bobbin or the like comprising a tubular barrel having internally threaded ends, an externally threaded hollow bushing threaded into each end of said barrel, a circular seat formed within each bushing, a tubular core disposed in said barrel having its ends disposed in the seats of said bushings, each bushing being provided with an annular reduced threaded neck portion, heads having circular seats on their inner faces to receive the ends of said barrel, said heads being provided with central threaded openings in threaded engagement with the threaded necks of said bushings, and a locking pin passing through each head engaging the bushing and barrel for locking the head and bushing in set position in respect to said barrel and core.

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