

J. R. COE.

BOBBIN.

APPLICATION FILED DEC. 22, 1905.

914,793.

Patented Mar. 9, 1909.

FIG. 1.

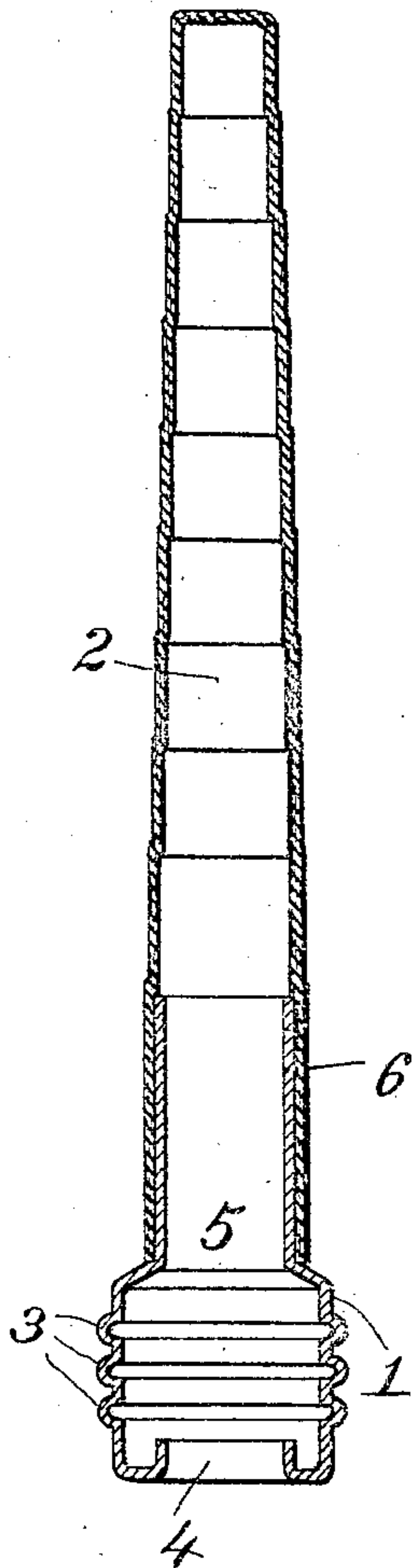


FIG. 2.

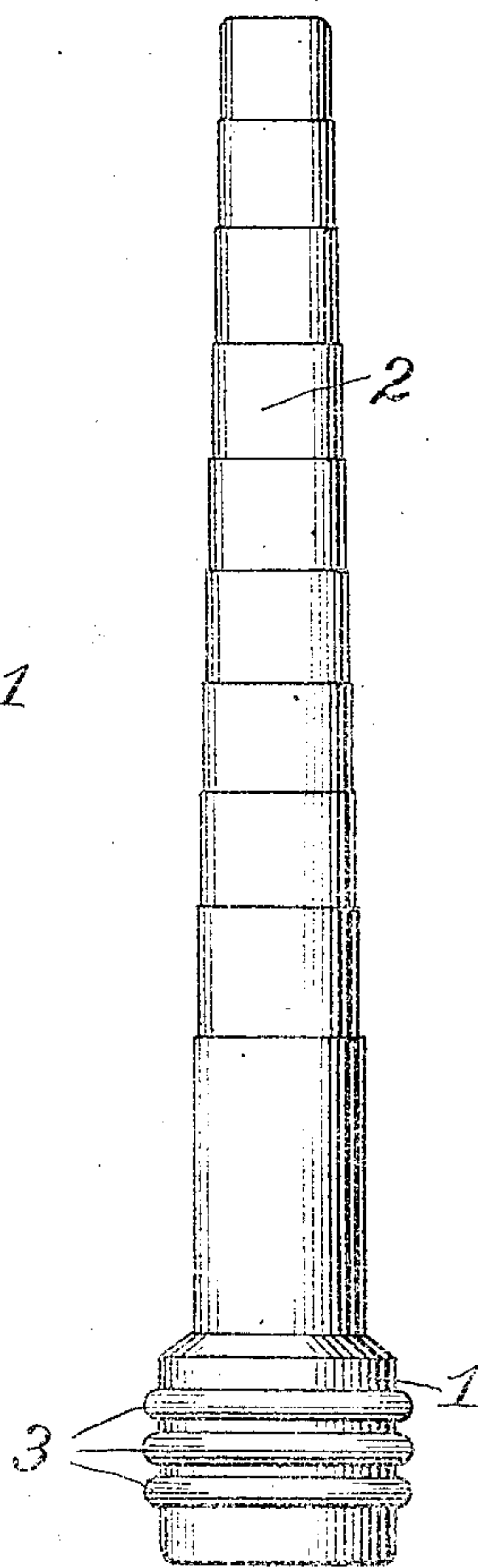
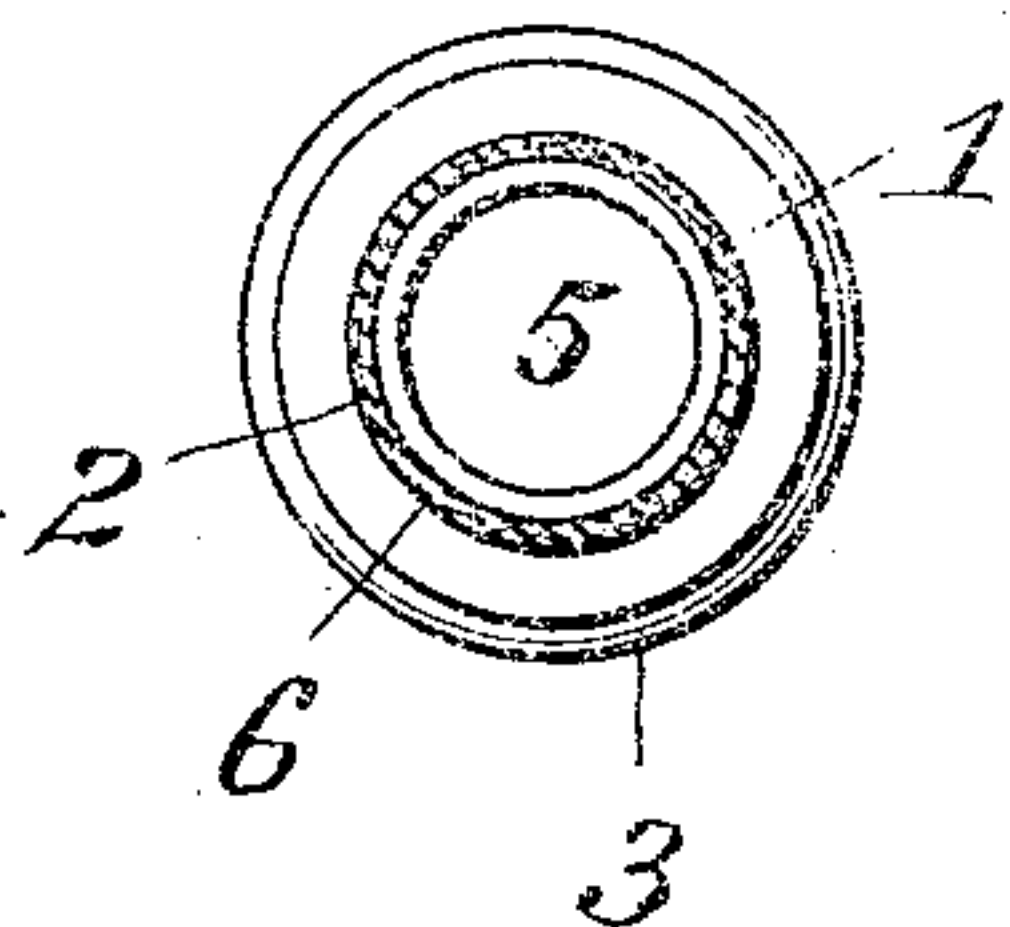


FIG. 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JAMES ROBERT COE, OF ANSONIA, CONNECTICUT, ASSIGNOR, BY MESNE ASSIGNMENTS, TO  
CONNECTICUT MILL SUPPLY COMPANY, A CORPORATION OF NEW JERSEY.

## BOBBIN.

No. 914,793.

Specification of Letters Patent.

Patented March 9, 1909.

Application filed December 22, 1905. Serial No. 292,952.

*To all whom it may concern:*

Be it known that I, JAMES ROBERT COE, a citizen of the United States, residing at Ansonia, county of New Haven, State of Connecticut, have invented certain new and useful Improvements in Bobbins, of which the following is a specification.

My invention consists in a yarn carrier or bobbin for spinning or twisting apparatus.

The object of my invention is to provide a bobbin which will not split and which will not be liable to injury when introduced in or thrown out of a shuttle, and which will cost less to manufacture than the bobbins now in use.

Bobbins have heretofore been made of dried wood, with a heavy wire wound around the base of the bobbin, which wire is intended to cooperate with the shuttle to hold the bobbin in place when in the shuttle. Such bobbins are open to the objection that the wood absorbs moisture, and is, therefore, liable to expand, contract and split, and the wire to be displaced by such expansion, and contraction, and the blows to which the bobbin is subjected in introducing it into and throwing it out of the shuttle.

My improved bobbin is made in two parts, the upper part intended to receive the yarn or thread, is made of paper, or other non-cellular material having no pores for the absorption of moisture, and the lower part, which is intended to cooperate with the shuttle is made of spun metal.

The accompanying drawings will serve to illustrate my invention, in which—

Figure 1 is a vertical sectional view. Fig. 2 a view in elevation, and Fig. 3 a cross section.

The bobbin as a whole consists of a base portion or head 1, and a tapered shank or stem 2. The head is formed of spun metal, in which is formed a number of annular bands, ridges or corrugations 3, which are

adapted to interlock with correspondingly grooved parts of a shuttle, in the usual manner. The lower part of the head is bent upward to form a flange surrounding an opening 4 to receive a pin on the spinning frame. The upper portion of the head has a tubular extension 5, over which the lower end of the shank 6 is placed and secured in any suitable manner. The tapered shank I prefer to form of paper, vulcanized fiber, celluloid or other material which will not absorb moisture or split. The shank or tapered portion is adapted to fit over and may be attached to the base portion or head in any suitable manner.

I wish it understood that I do not limit myself to the precise form of the parts shown.

Having thus described my invention, I claim:

1. A bobbin comprising a non-cellular shank, a spun metal base having an extended upper portion to cooperate with the lower portion of the shank and an extended lower portion below the shank provided with corrugations.

2. A bobbin comprising a tapered shank and a spun metal base, said base having a tapered portion extending upward within the shank and a cylindrical portion extending below the shank having corrugations upon its surface.

3. A bobbin comprising a tapered shank, and a spun metal base, said base having a tapered upper portion extending within the shank, a cylindrical lower portion below the shank having exterior corrugations and an inturned flange adapted to surround a pin on the spinning frame.

In testimony whereof, I affix my signature, in the presence of two witnesses.

JAMES ROBERT COE.

Witnesses:

MAY G. MORAN,  
E. C. WHEELER.