(No Model.)

F. M. MARCY.

SPOOL OR BOBBIN.

No. 366,415. Patented July 12, 1887.

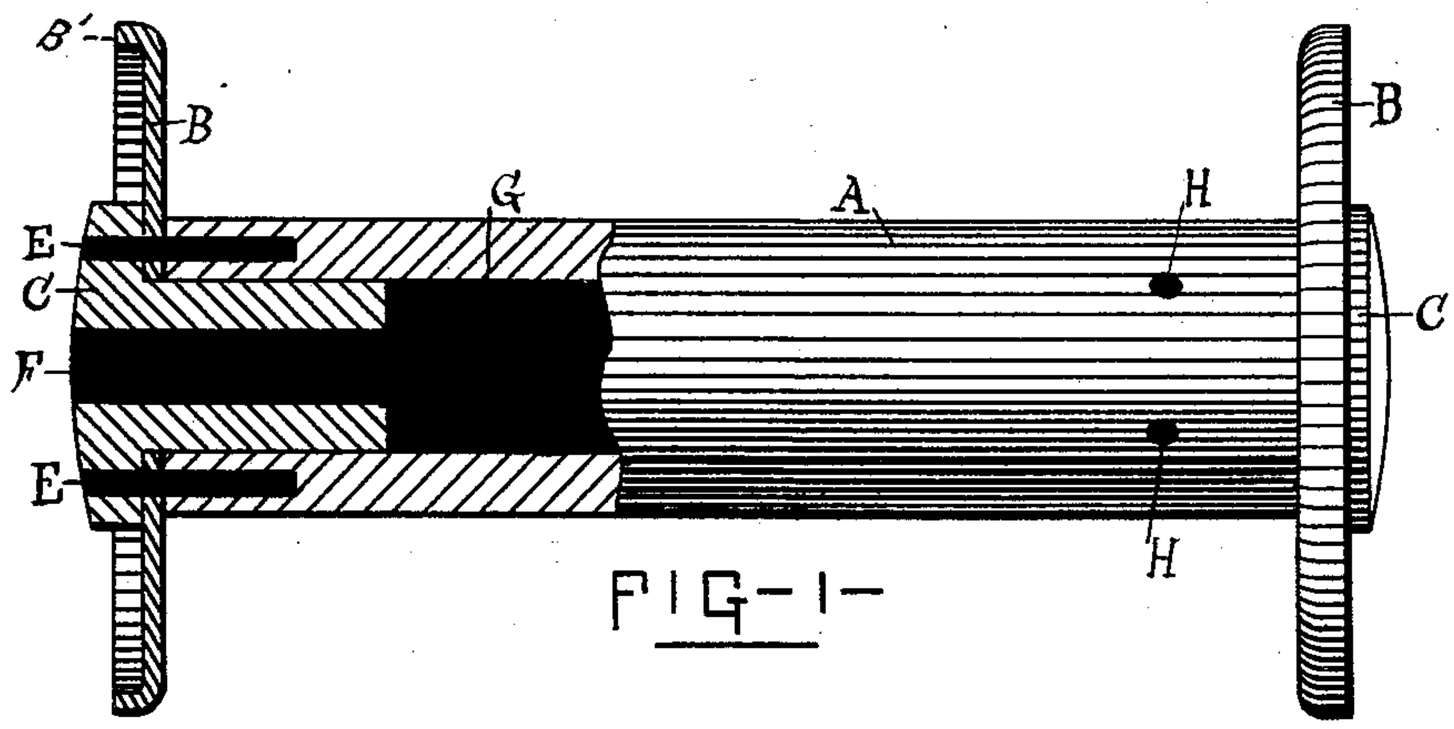
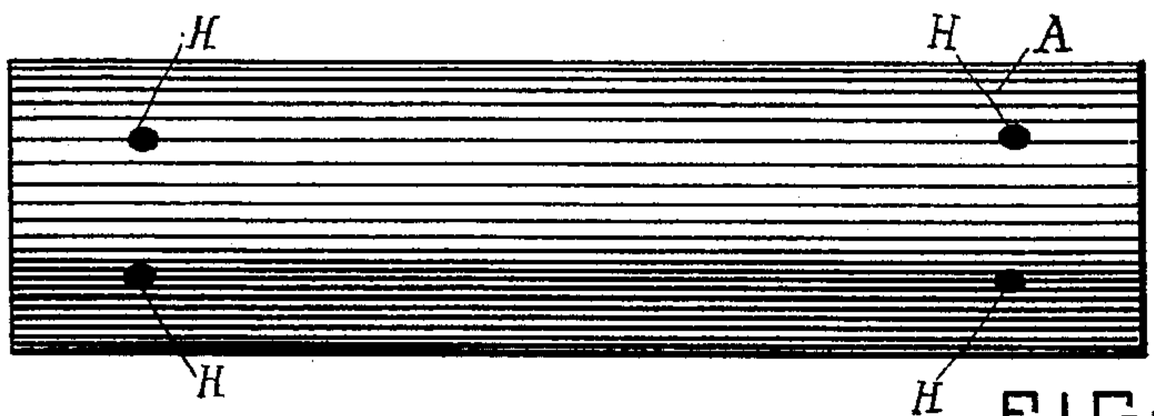


FIG-1-



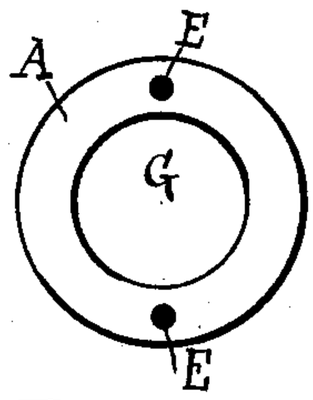


FIG-2-

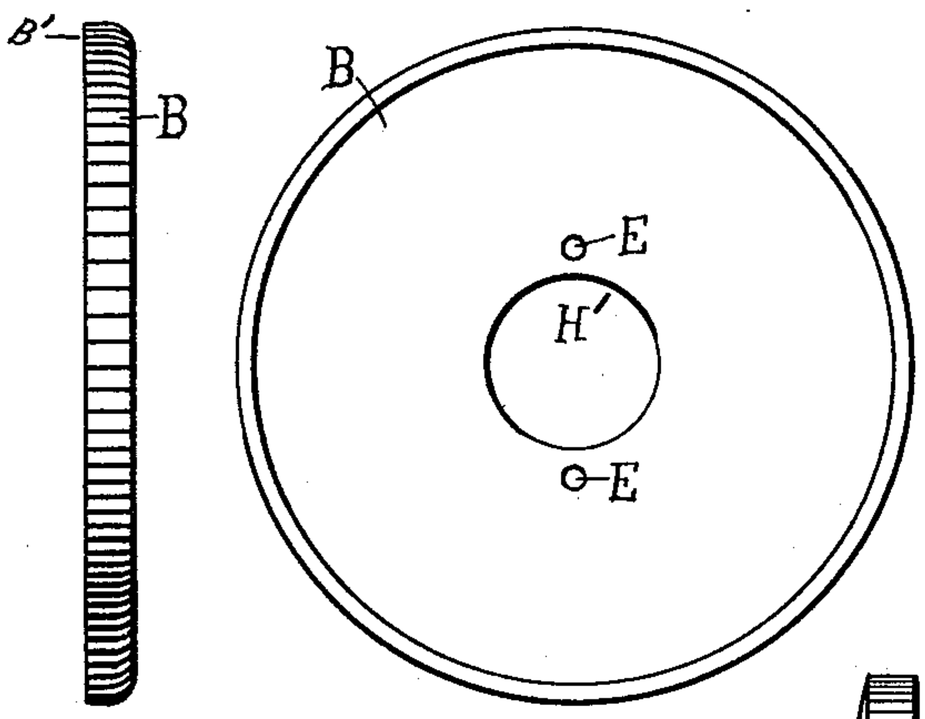


FIG-3-

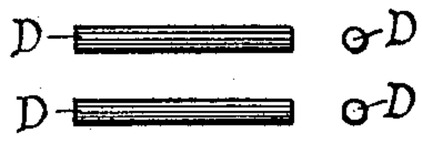
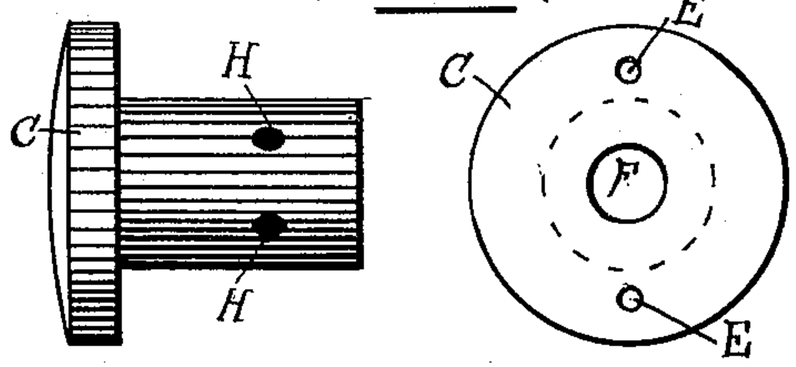


FIG-5-

FIG-4-



WITNESSES.

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SPOOL OR BOBBIN.

SPECIFICATION forming part of Letters Patent No. 366,415, dated July 12, 1887.

Application filed March 11, 1887. Serial No. 230,491. (No model.)

To all whom it may concern:

Be it known that I, FRANK M. MARCY, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Spools or Bobbins; and I do hereby declare the following to be a full, clear, and exact description of my invention.

Heretofore spools have been made of wood, and after being in use some time the heads are liable to become detached from the barrel of the spool or to check or crack, and in winding the thread gets into the cracks in the heads and breaks and causes more or less inconvenience. Spools or bobbins have also been made of metal or a combination of wood and metal, but have not proved satisfactory.

My invention consists of plain spring-steel head or heads, with or without a flange, fastened to a wooden barrel, and a plug of sufficient width to get friction enough to turn the spool or bobbin when in use. The plug is fastened to the inside of the barrel with glue or cement, or by a pin or pins passing through the side of the barrel and into the plug, as there are times when the spool is used where there is dampness or moisture.

The spring-steel head is firmly fastened to the barrel by one or more pins, passing through the plug, the spring-steel head, and into the wooden barrel a sufficient distance.

I am aware that corrugated flanged heads have been used and patented, but find by actual use that there is not enough stiffness to the corrugation to withstand the use to which it is put, but after being used a short time, by dropping or hitting each other, the heads become bent, so that it is impossible to wind the thread on them.

In my spool I make the head or heads of plain spring-steel, of a sufficient degree of elasticity, or, as it is called, "spring," so that when spools are dropped or thrown against each other the steel heads will spring and return to their proper position when the pressure is removed, and will not bend.

By the word spring-steel I mean either what is called "Bessemer steel," rolled, hammered, or tempered to give it sufficient spring, or the finer grades of steel called "tool-steel," rolled, hammered, or tempered to give it sufficient spring.

In the accompanying drawings, forming part of this specification, Figure 1 represents the spool or bobbin complete, with one end bisected, showing the construction; B B, the head or heads; B′, the flange on the head B; C, the plug; E E, the pin-holes through which the pins are driven for holding the heads firmly in position; F, the hole in the center of the plug C; H H, the pin-holes in the barrel A and plug C, for driving the pins for holding the plug C in the barrel A; A, the wooden barrel, and G the hole in the barrel A, into which the plug C is driven.

Fig. 2 represents a side and end view of the barrel A; G, the hole in the center of the barrel A; E E, the holes in the barrel A, into which the pins O O are firmly driven, and H H the pin-holes.

Fig. 3 represents the face and edge of the plain spring-steel head B; B′, the flange; H′, the hole through the center, of the same size as the hole G in the barrel A, Fig. 2, and E E the pin-holes.

Fig. 4 represents the plug C; F, the hole through the center; E E, the pin-holes, and H H pin holes to match pin-holes H H in barrel A.

Fig. 5 represents a side and end view of the pins D D.

Having fully described my invention, what I desire to secure Letters Patent on is—

As a new article of manufacture, a spool or bobbin having spring-steel heads and a wooden barrel, and having said heads held in position by pins and plugs, as shown and described.

FRANK M. MARCY.

Witnesses:
M. D. MARCY,
C. A. MERRILL.