

No. 682,559.

Patented Sept. 10, 1901.

H. A. MACK.

BOBBIN.

(Application filed Mar. 8, 1901.)

(No Model.)

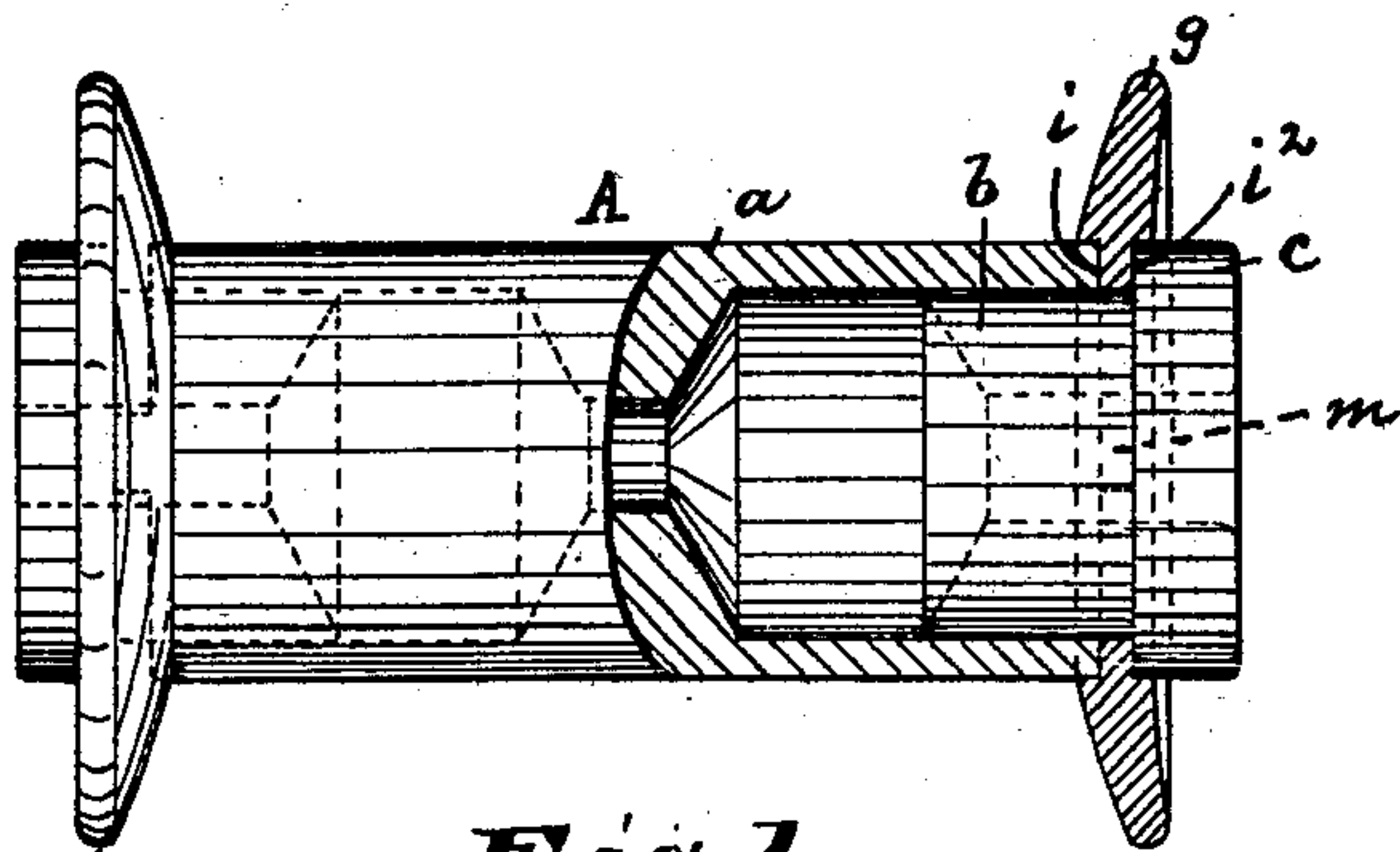


Fig. 1.

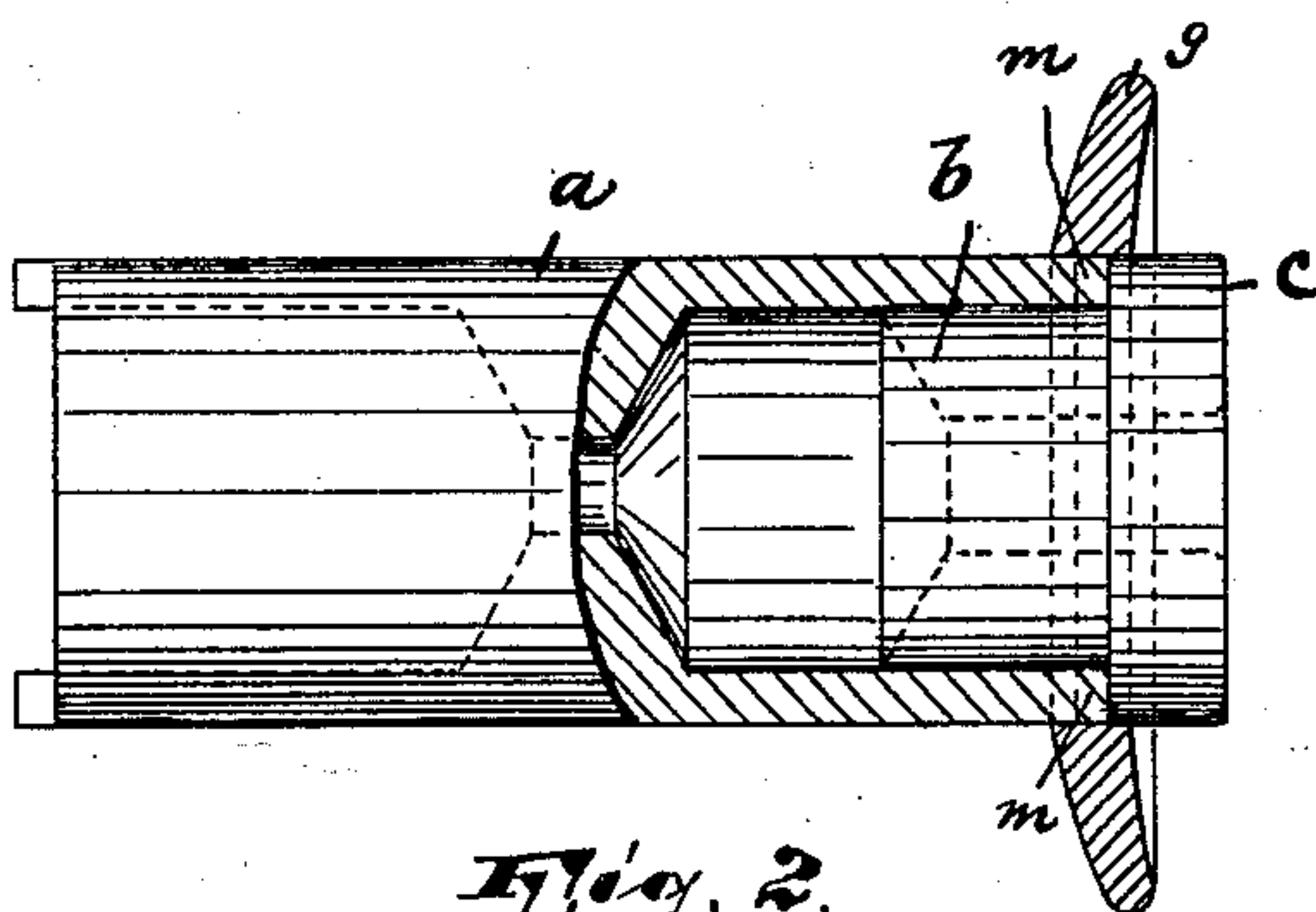


Fig. 2.

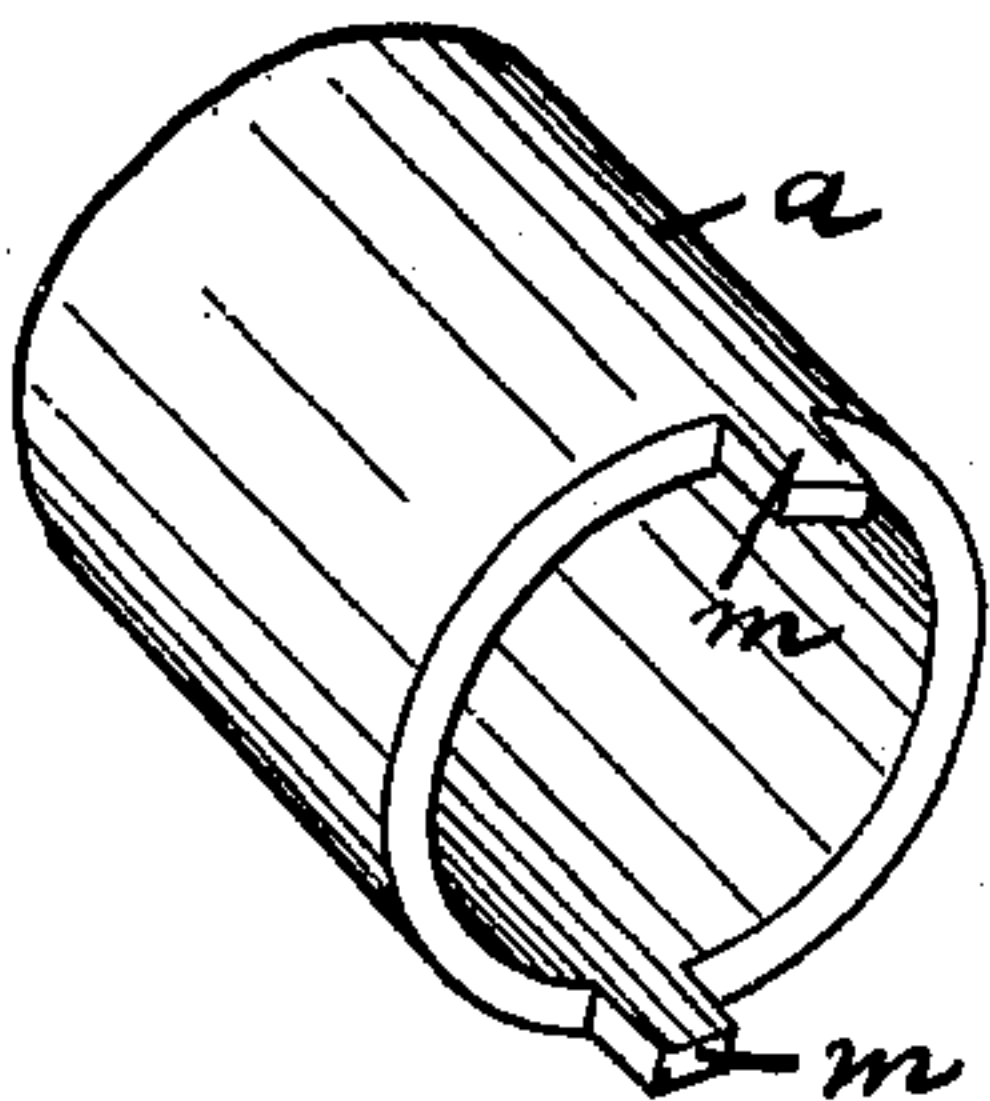


Fig. 3.

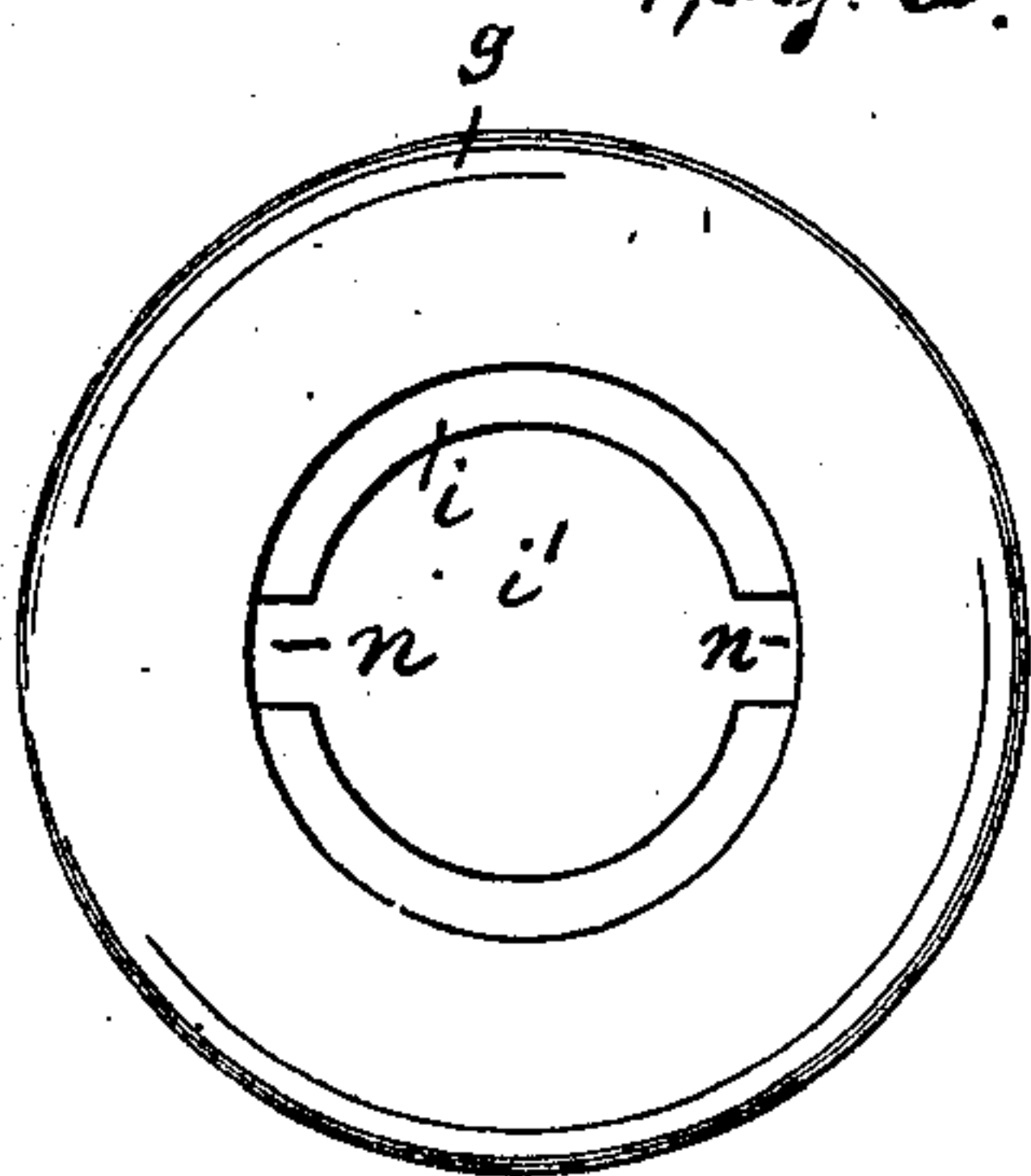


Fig. 4.

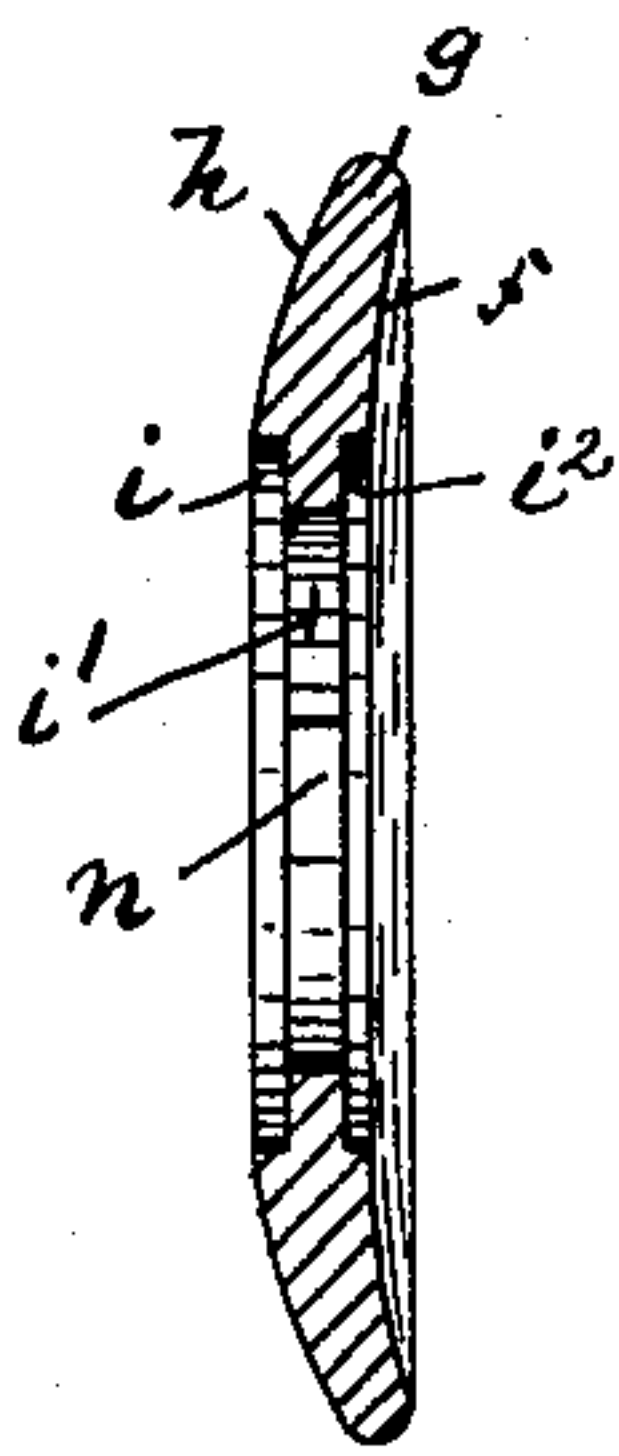


Fig. 5.

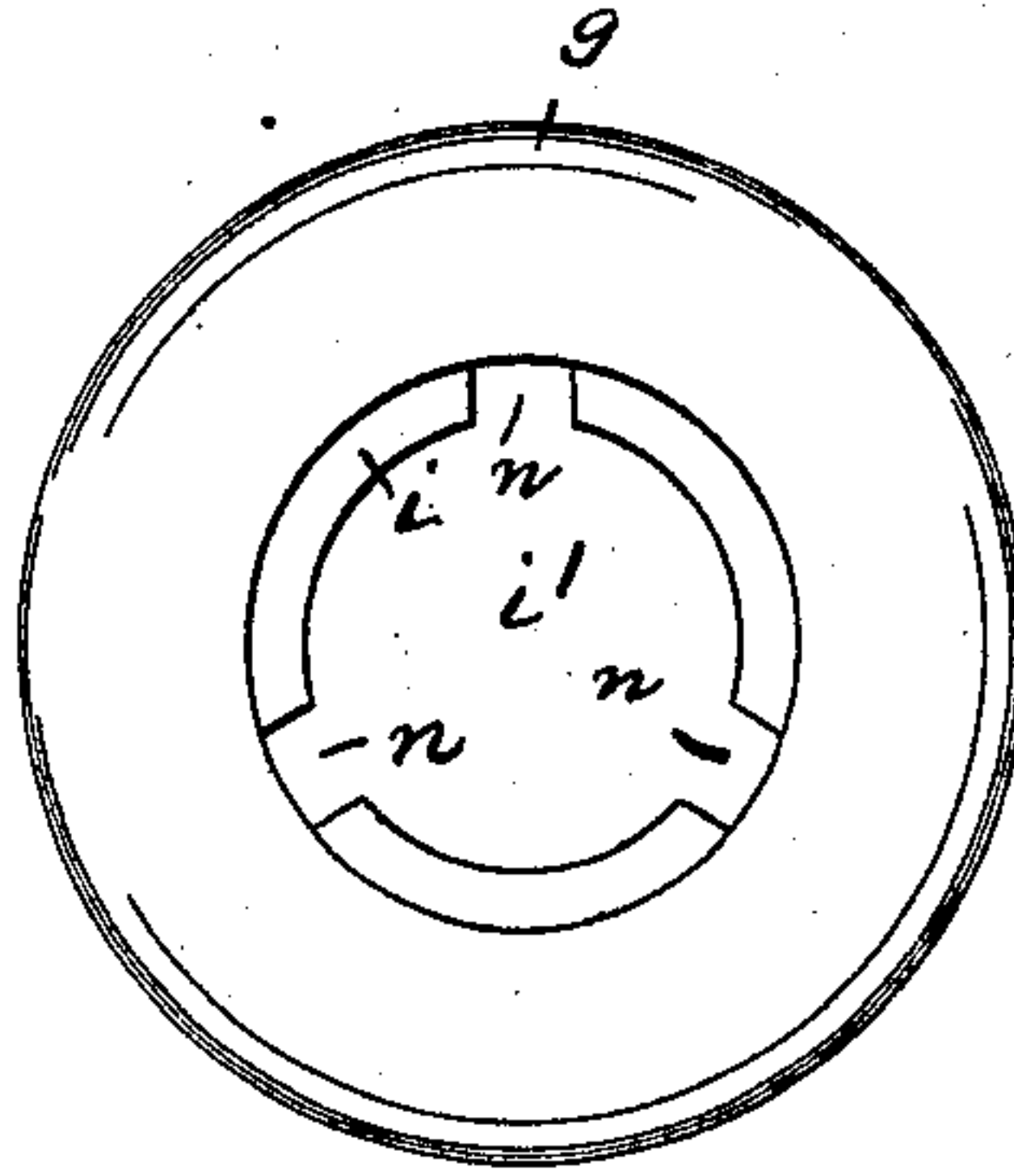


Fig. 6.

WITNESSES:

Jm. Drell.  
Robert J. Pollitt

INVENTOR:

Henry A. Mack

BY

Garner Steward  
ATTORNEYS



# UNITED STATES PATENT OFFICE.

HENRY A. MACK, OF WEATHERLY, PENNSYLVANIA, ASSIGNOR TO HARRY C. MACK, BERNARD F. MACK, AND H. CLARK BACON, OF SAME PLACE.

## BOBBIN.

SPECIFICATION forming part of Letters Patent No. 682,559, dated September 10, 1901.

Application filed March 8, 1901. Serial No. 50,320. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY A. MACK, a citizen of the United States, residing in Weatherly, in the county of Carbon and State of Pennsylvania, have invented certain new and useful Improvements in Bobbins; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in bobbins for silk and other filaments, and especially to that class of bobbins known as "fiber-flange" bobbins.

The object of the invention is to provide a fiber-flange bobbin with simple, strong, durable, and effective locking means between the barrel of the bobbin and the fiber flange to prevent the rotation of the latter on the barrel.

The invention consists in the improved bobbin, in the means for preventing relative rotation between the barrel of the bobbin and the fiber flange, and in the combination and arrangement of the various parts, substantially as will be hereinafter more fully described, and finally embodied in the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the several views, Figure 1 is an elevation of my improved bobbin, certain portions being broken away and others shown in section to better illustrate the nature of my said invention; Fig. 2, a view similar to Fig. 1, the bobbin having been turned for ninety degrees around its longitudinal axis and the fiber flange and head on one end of said bobbin having been removed. Fig. 3 is a perspective view of a portion of the barrel; Fig. 4, a top plan view of the fiber flange removed; Fig. 5, a central sectional view through Fig. 4; and Fig. 6, a view similar to Fig. 4, showing a slight modification thereof.

In said drawings, A represents the bobbin,

consisting of the cylinder or barrel *a*, the bushings *b*, and flanges *g*. The flanges *g* are penetrated by the central circular opening *i'* and are provided on their inner convex surface *h* with an annular recess *i*, adapted to be engaged by the end portions of the cylinder or barrel *a*, while their outer surface *f* is provided with an annular recess *i''*, adapted to be engaged by the head *c* of the bushing *b*.

On each end of the barrel *a* are arranged, as clearly shown in Figs. 2 and 3 of the drawings, outwardly-extending lugs or projections *m*, adapted to be engaged by and to fit into corresponding recesses or notches *n*, arranged in the flanges *g*. It may be well to remark that the lengths of said lugs or projections *m* should be about equal to the thickness of the central portion of the flanges *g*, so as not to interfere with the seating or bearing capacity of the head *c* of the bushing *b*. In Figs. 1 to 5, inclusive, the bobbin is illustrated with only two lugs or projections, while in Fig. 6 a modified form of the flange is shown having three notches or recesses adapted to be engaged by a corresponding number of lugs or projections on the barrel, and it will be manifest that any number of lugs or projections on the barrel and corresponding recesses in the flanges can be used without deviating from the spirit of my invention.

A bobbin constructed as above described and provided with the particular locking means will be strong, durable, and light in construction and will prevent relative rotation between the barrel and the flanges. It may be added that the bushings are secured into the barrel by glue or in any other desired manner.

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

A bobbin consisting of a cylindrical barrel provided at the end with outwardly-extending lugs or projections each having a thickness which corresponds with that of the barrel and being approximately as wide as thick, an annular flange abutting against the end of the barrel and provided with recesses

corresponding in shape to the shape of, and  
receiving, said lugs or projections, the inner  
surfaces of said lugs and the flange being  
substantially flush, and a bushing having a  
5 head and inserted in and snugly fitting said  
barrel and the flange, substantially as de-  
scribed.

In testimony that I claim the foregoing I  
have hereunto set my hand this 25th day of  
February, 1901.

HENRY A. MACK.

Witnesses:

ALFRED GARTNER,  
ROBERT J. POLLITT.