

No. 718,995.

PATENTED JAN. 27, 1903.

W. FIELDING.
BOBBIN HOLDER.

APPLICATION FILED DEC. 11, 1901.

NO MODEL.

Fig. 1.

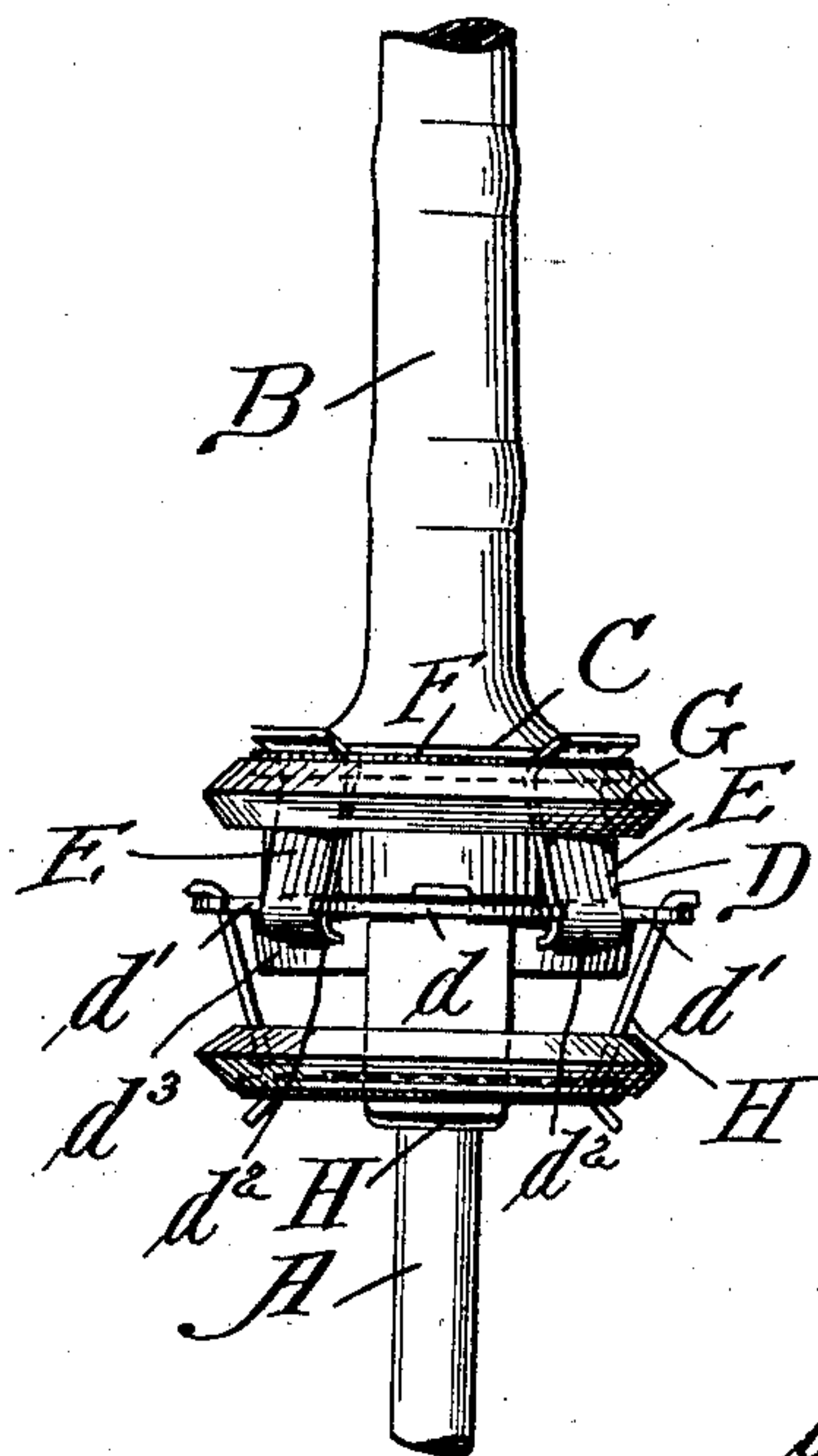


Fig. 2.

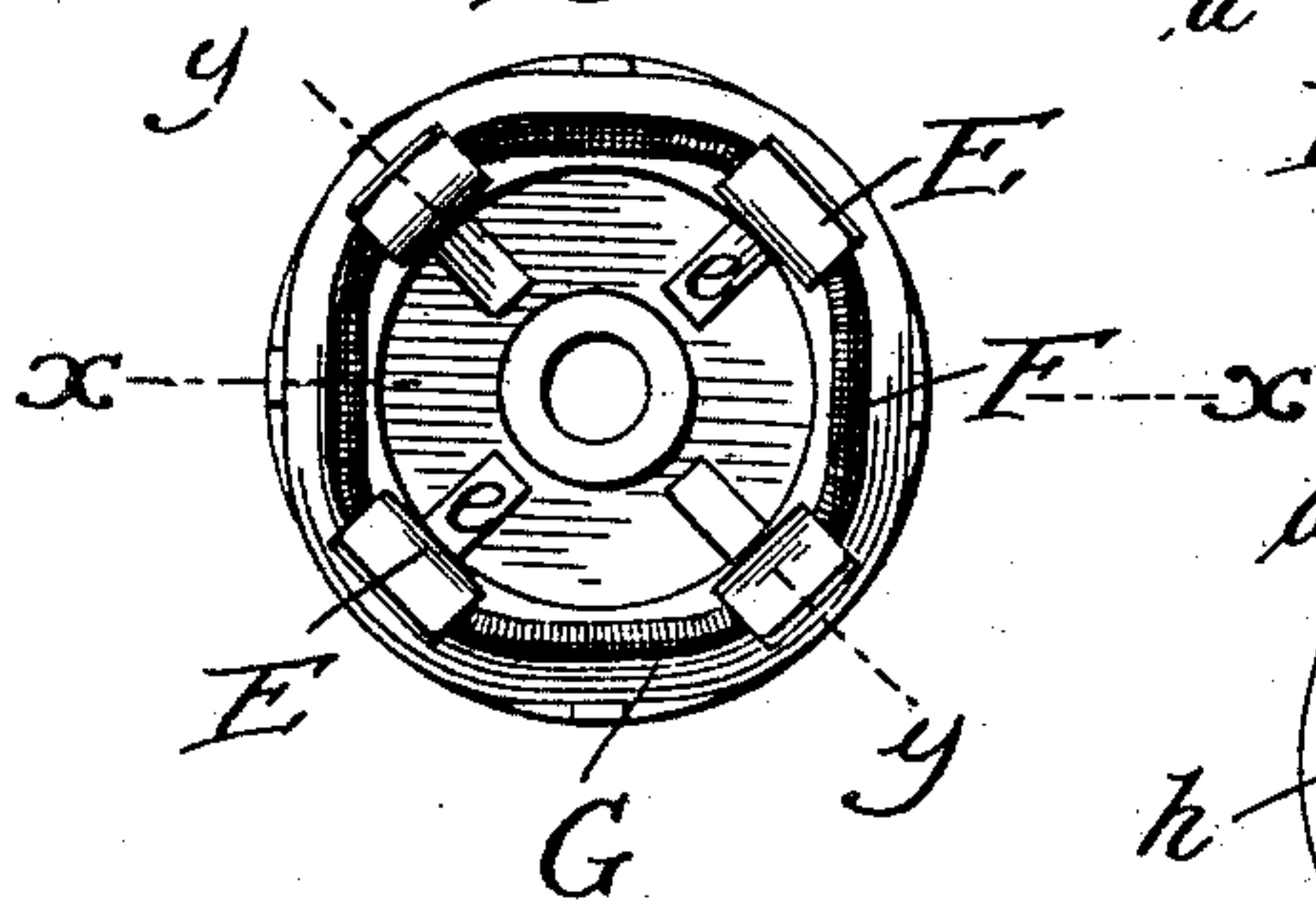


Fig. 3.

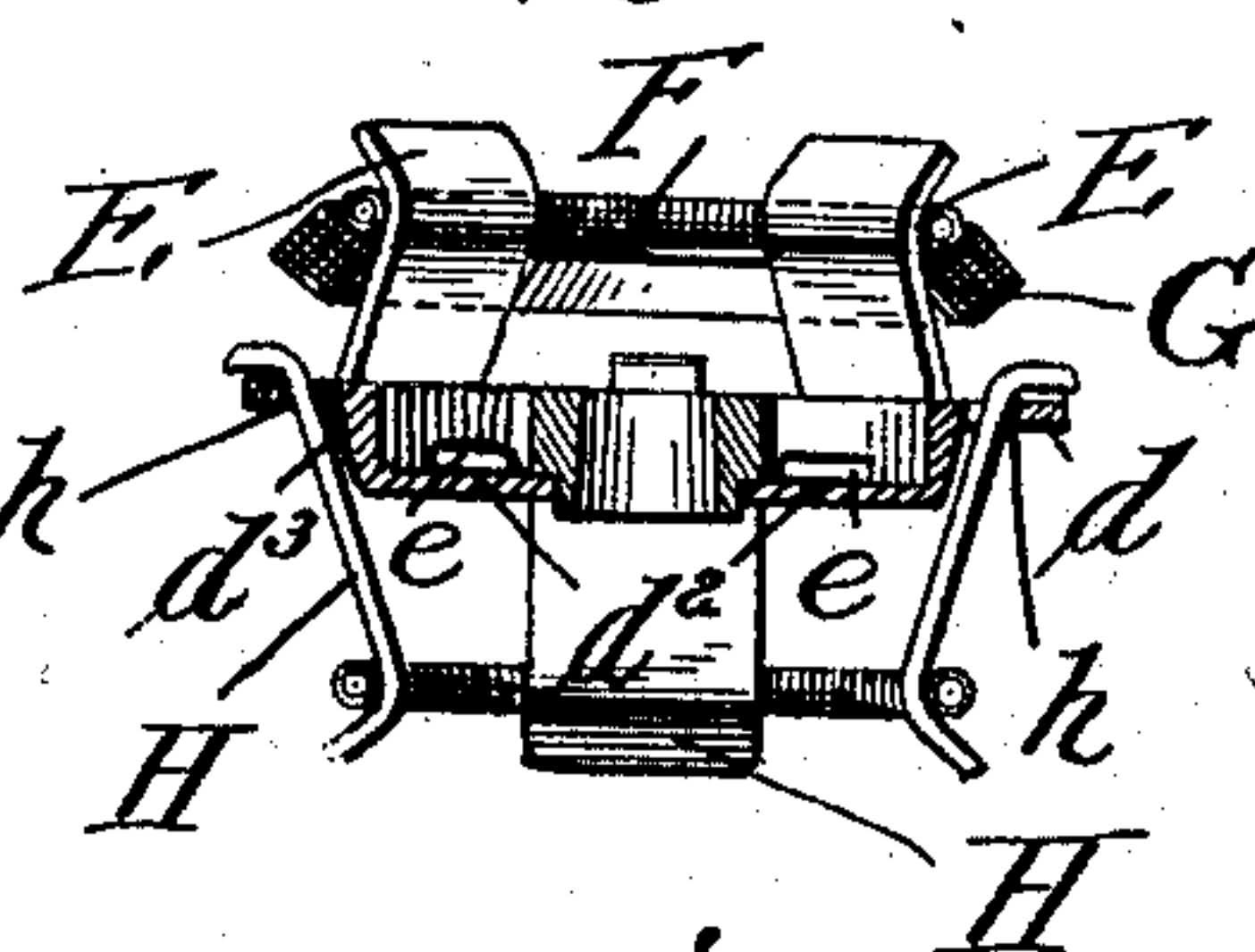


Fig. 4.

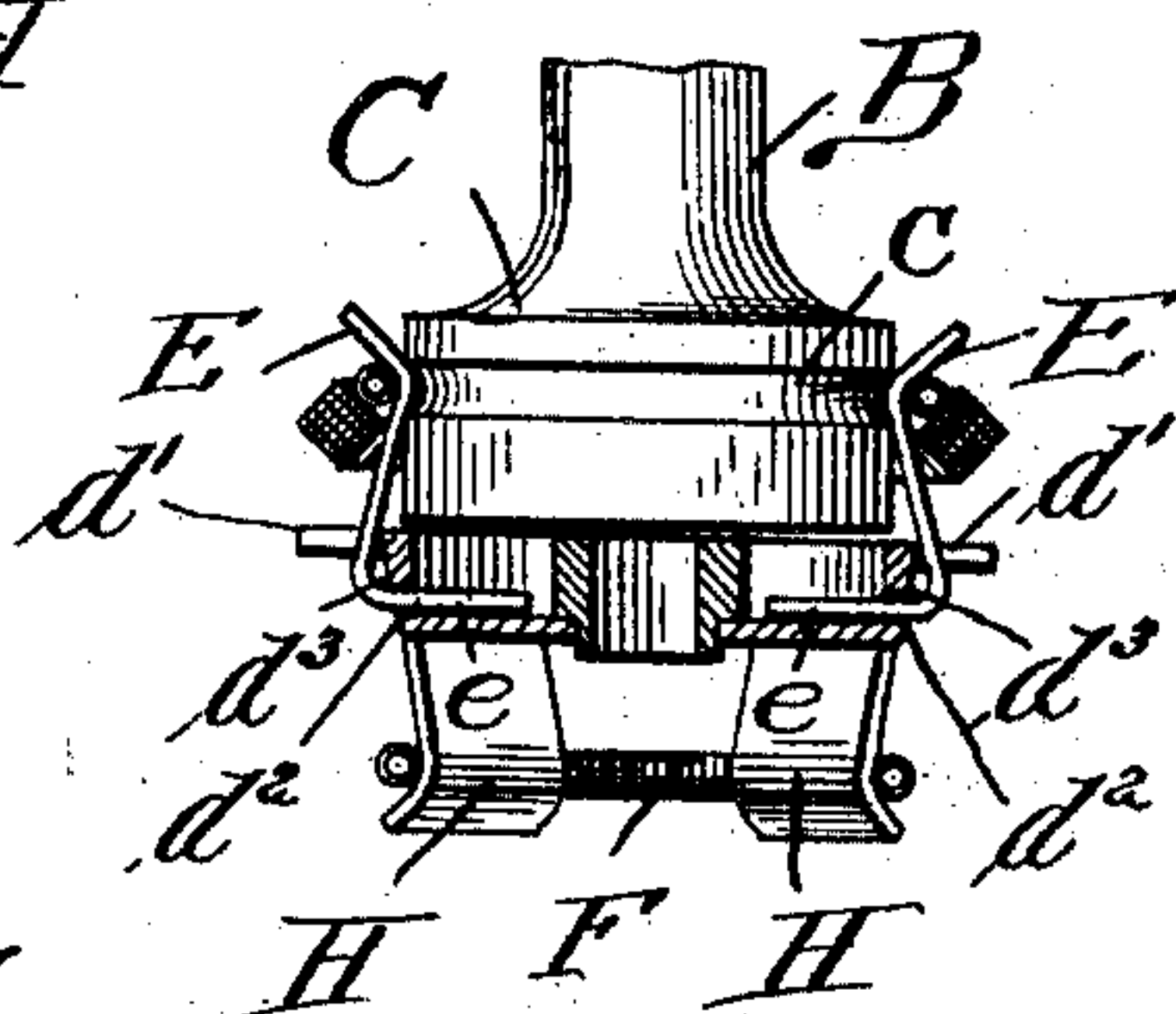
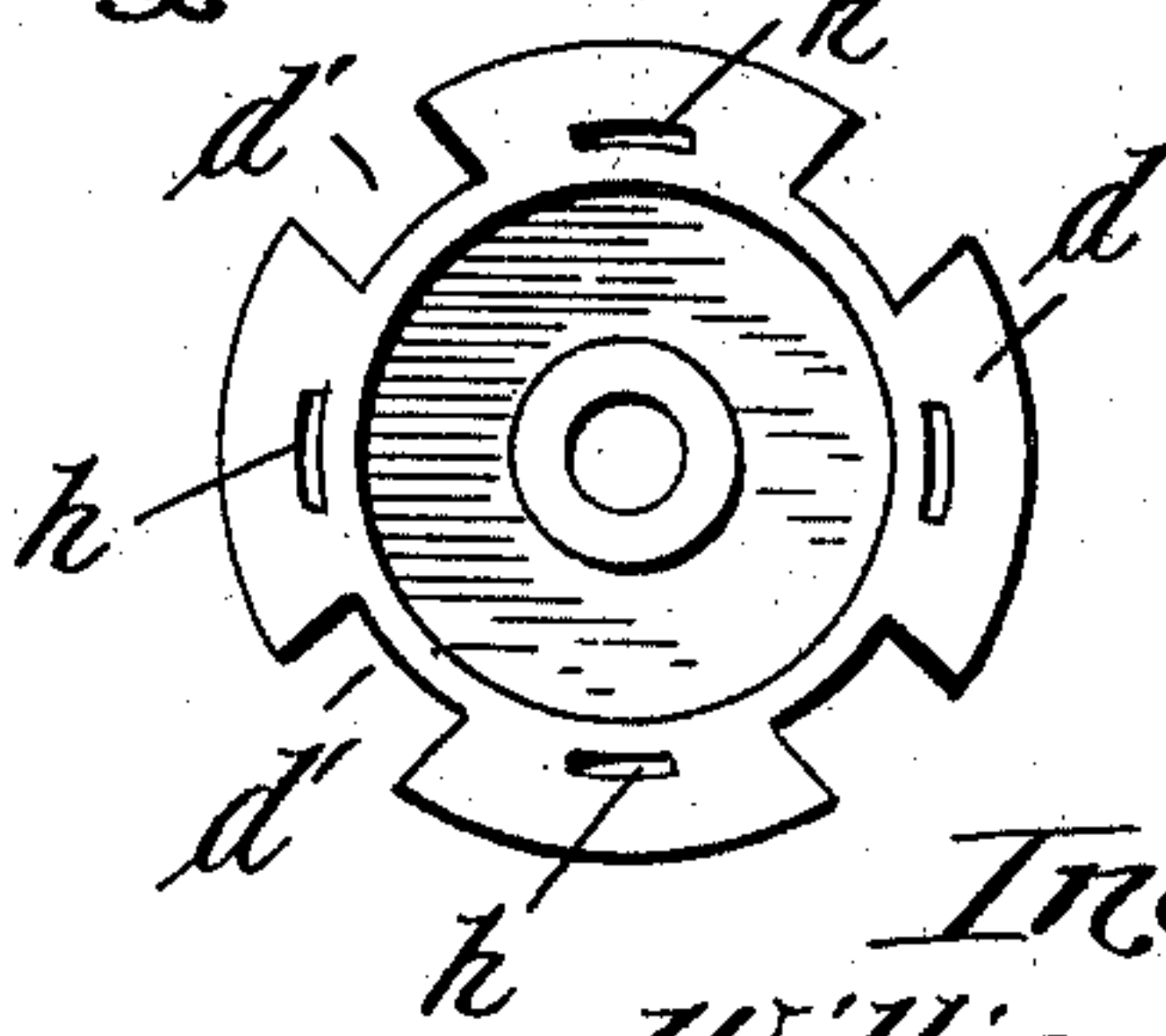


Fig. 5.



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UNITED STATES PATENT OFFICE.

WILLIAM FIELDING, OF LEWISTON, MAINE.

BOBBIN-HOLDER.

SPECIFICATION forming part of Letters Patent No. 718,995, dated January 27, 1903.

Application filed December 11, 1901. Serial No. 85,464. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM FIELDING, a citizen of the United States, residing at Lewiston, Androscoggin county, Maine, have invented certain new and useful Improvements in Bobbin-Holders, of which the following is a specification.

My invention relates to bobbin-holders more particularly adapted for use in connection with spindles of spinning-machines.

The object of the invention is to provide a simple, efficient, and suitable device for holding the bobbin firmly in its perpendicular position upon the spindle, the device being reversible and the parts removable, whereby they may be replaced when worn.

I have illustrated the invention in the accompanying drawings, in which—

Figure 1 is an elevation of the spindle with the bobbin-holder and bobbin thereon. Fig. 2 is a plan view of the bobbin-holder with the spindle and bobbin removed. Fig. 3 is a section of line *xx* of Fig. 2, and Fig. 4 is a section of line *yy* of Fig. 2. Fig. 5 is a detail plan view.

Like letters of reference indicate the same parts in the various views.

In the figures, A indicates the spindle, B the bobbin, and C the head of the bobbin, having an annular groove *c*.

D represents the bobbin-holder. This comprises a dish-shaped plate having an annular rim *d*, provided with a plurality of recesses or cut-away portions *d'*, preferably four in number, as shown. The annular wall *d*² is preferably slightly flared and is provided with recesses *d*³, located in line with the cut-away portions of the annular rim.

E represents clamping-arms having angular tongues *e*, which extend inwardly through the recesses in the wall of the dish and rest against the bottom thereof. The upwardly-extending portions of the arms are flared outwardly at their upper ends, forming sharp bends which engage the annular groove in the head of the bobbin. The arms are drawn inwardly to clamp and center the bobbin by the helically-coiled spring F, and I prefer to supplement the action of this spring by an

endless rubber band G, which insures the holding of the arms in position in the recesses and prevents displacement of the parts in case of breakage of the spring.

The annular rim of the bobbin-holder is provided with openings *h* intermediate of the cut-away portions, and a second set of bobbin-holding arms H are provided on the opposite side, which have outwardly-bent upper ends corresponding in shape to the arms first described. At their lower ends these arms are provided with angularly-bent tongues *h'*, which enter the openings *h*, before referred to. These arms H are encircled by a spring and a rubber band in the same manner as are the arms on the opposite side.

The bobbin-holder is secured to the upper end of the spindle preferably by a drive fit. By this construction it will be seen that in case of breakage of one of the arms it may be readily replaced, and when the arms upon one side of the supporting-plate are worn the bobbin-holder may be reversed upon the spindle, thus bringing a fresh set of arms into position to clamp the bobbin. Furthermore, it will be observed the arms are so held that all lateral play and looseness is prevented, the only movement permitted being toward and from the bobbin. The construction of the parts also is such that they may all be readily stamped from sheet metal, thus reducing the cost of production to the minimum without interfering with the efficiency of the device.

Having thus described my invention, what I claim is—

1. A bobbin-holder comprising a dish-shaped body portion having an annular rim with cut-away portions and recesses in the wall of said body, and bobbin-holding arms seated in said cut-away portions with angular tongues entering said recesses, substantially as described.

2. A bobbin-holder comprising a dish-shaped body portion having an annular rim with recesses therein and bobbin-holding arms having tongues entering said recesses and means for applying tension to said arms, substantially as described.

3. A reversible bobbin-holder comprising

a dish-shaped plate having a rim or flange provided with cut-away portions, bobbin-holding arms seated in said cut-away portions and extending to one side of the plate, said
5 arms having tongues entering recesses in the vertical wall of the plate, and a second set of bobbin-holding arms extending to the opposite side of the plate and having tongues en-

gaging recesses in the rim of the flange, substantially as described. 10

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

WILLIAM FIELDING.

Witnesses:

H. E. HOLMES,

FLORENCE M. RAILEY.