F. MOSSBERG.

BRAIDER SPOOL.

APPLICATION FILED FEB. 21, 1911.

1,040,384. Patented Oct. 8, 1912.

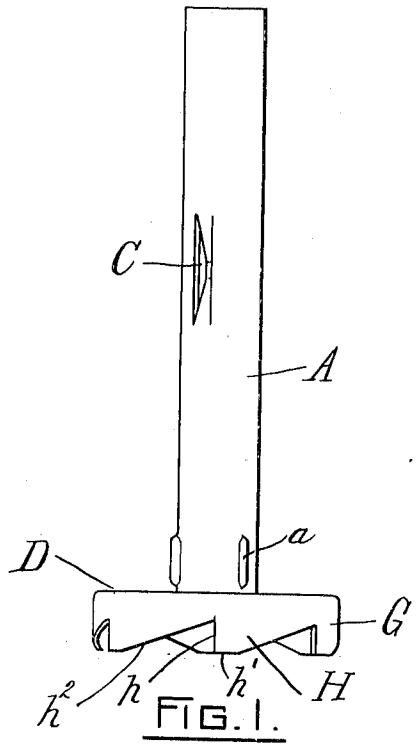

FIG. 1.

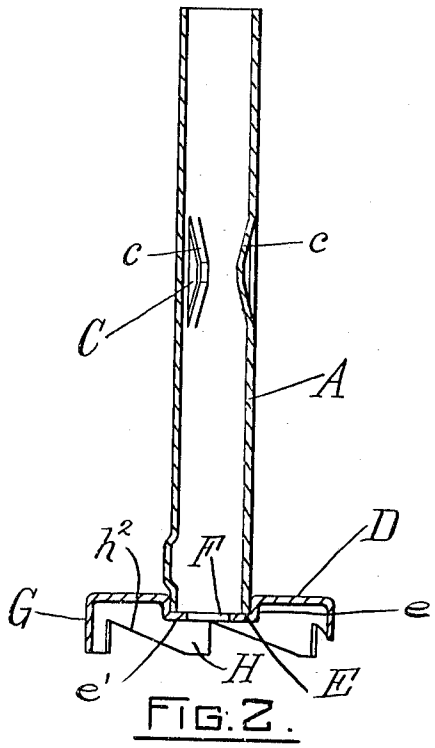

FIG. 2.

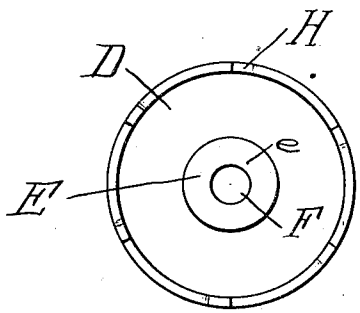

FIG. 3.

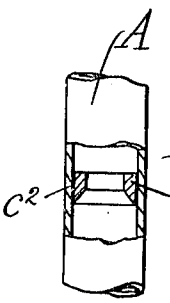

FIG. 5.

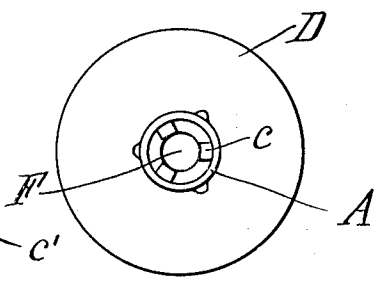

FIG. 4.

WITNESSES.

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FRANK MOSSBERG, OF ATTLEBORO, MASSACHUSETTS, ASSIGNOR TO FRANK MOSSBERG COMPANY, A CORPORATION OF RHODE ISLAND.

BRAIDER-SPOOL.

1,040,384. Specification of Letters Patent. Patented Oct. 8, 1912.

Original application filed July 7, 1909, Serial No. 506,296. Divided and this application filed February 21, 1911. Serial No. 609,953.

To all whom it may concern:

Be it known that I, FRANK MOSSBERG, a citizen of the United States, residing at Attleboro, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Braider-Spools, of which the following is a specification.

My invention relates to braider spools, and its principal objects are to increase the strength and durability of the same as well as render their construction inexpensive; further, to overcome the tendency to split which is characteristic of wooden spools.

The present application is a division of my pending application Serial No. 506,296 filed July 7, 1909.

To the above ends essentially my invention consists in such novel parts, materials, and combinations of parts as fall within the scope of the appended claims.

In the accompanying drawings which form a part of this specification, Figure 1 is a side elevation of a spool embodying my invention, Fig. 2 a vertical central section of the same, Figs. 3 and 4, bottom and top plan views respectively of the same, and Fig. 5, a sectional view of a ring shaped bearing in the tube.

Like reference characters indicate like parts throughout the views.

My novel braider spool consists of a vertical tube A of thin steel or other metal having adjacent its lower end interspaced longitudinally disposed ribs *a* bent or drawn outwardly from the material of the tube which ribs serve to assist the retention of the paper tube in position upon the spool tube. In an intermediate portion of the tube are longitudinal slits C, and the strips *c* between the incisions are inwardly bent to form bearing members or shoulders for a spindle. A head or base also of thin metal, comprises a circular disk or body D provided with a central circular depression E, the side wall *e* of which engages the exterior of the lower end of the tube A, while the bottom e^1 of the depression supports the end of the latter. After the tube A is forced into the depression or seat E it is retained therein by brazing, soldering, or electric welding. The portion e^1 of the seat is provided with a central opening F adapted to receive a spindle. The body of the base or head D is provided with a downwardly directed peripheral flange G having upon its lower margin a series of angular teeth H each comprising preferably a vertical, a horizontal, and an upwardly inclined edge *h*, h^1, and h^2 respectively.

In Fig. 5 is shown a modified form of spindle bearing comprising a ring c^1 provided with a chamfered margin to receive solder c^2 by which the ring is fixed to the wall of the tube A.

The described construction and connection of the metallic tube and head is particularly strong light and inexpensive.

What I claim is—

1. In a spool of the type set forth, the combination of a metal tube provided with longitudinally disposed interspaced ribs upon its lower portion expressed from the material of the tube, of a disk provided with a central depression in which the extremity of the tube adjacent the ribs is seated and provided with an opening, a downwardly directed peripheral flange upon the disk, and teeth upon the lower edge of the flange.

2. In a spool of the type set forth, the combination with a tube, of a disk provided with a central depression in which the tube is seated and said depression having a bottom wall against which the end of the tube bears, said bottom wall provided with an opening, a flange upon the disk provided with teeth, and a ring fixed in the tube above said opening.

3. In a spool of the type set forth, a base comprising a disk with central circular depression having an opening and a tube-supporting portion, said base having an annular depending portion with teeth, and a tube having one end extended within the depression and resting upon said supporting portion and secured within said depression.

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

FRANK MOSSBERG.

Witnesses:
HORATIO E. BELLOWS,
GEORGE H. MCLAUGHLIN.