

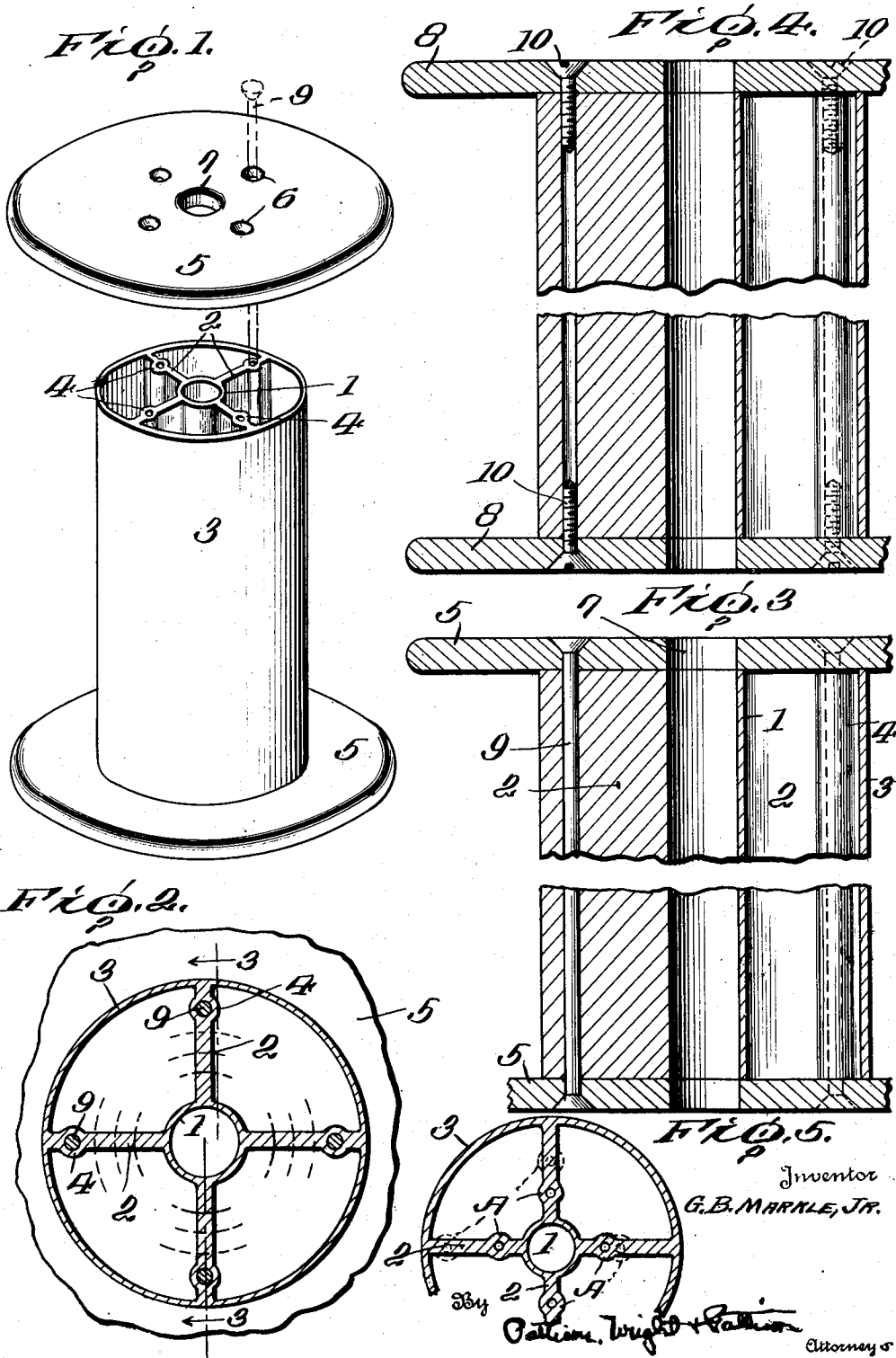
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BOBBIN, SPOOL, OR THE LIKE

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BOBBIN, SPOOL, OR THE LIKE

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This invention relates to certain new and useful improvements in bobbins, spools or the like, and more particularly to the barrel construction thereof, the object being to provide a bobbin or spool which is very light in weight yet very strong in construction, the barrel being formed integral with a central core by connecting webs which are provided with bores to receive head connecting members such as screws, rivets and the like.

Another object of my invention is to provide a bobbin which has integral inner bearing or hub so connected and formed integral with the shell of the barrel that a very strong and durable bobbin is formed in such a manner that the heads can be readily connected thereto.

Another object of my invention is to provide a bobbin in which the barrel and central core or hub are connected together by webs or fins having bores to receive head securing members in the form of screws or rivets, said fins or webs providing means for forming the bores to receive the head receiving members in various positions in respect to the central core.

With these objects in view:

Fig. 1 is a perspective view of a bobbin showing one of the heads in position to be attached thereto.

Fig. 2 is a transverse section through the barrel.

Fig. 3 is a longitudinal section through a bobbin partly broken away.

Fig. 4 is a similar longitudinal section through a bobbin showing different fastening means for the head, and

Fig. 5 is a detailed transverse section showing bores in different positions within the fins or webs whereby various diameters can be formed for securing the heads to the barrel by the fastening members.

In the embodiment of my invention as herein shown a barrel comprises a central tubular core 1 provided with radial fins or webs 2 carrying a shell 3 which forms the barrel proper, all of which are formed integral with one another and are preferably formed by extrusion of the material in a semi-fluid state through forming dies and is preferably formed of magnesium, aluminum or plastic, but it is of course understood that I do not wish to limit myself to the use of any particular kind of material, although I have found that the above material can be used with good results as I am able to construct a very light and strong barrel by the use of such materials.

The fins 2 are provided with longitudinal bores 4 and arranged against the ends of the bar-

rel 3 are heads 5 formed of any suitable material, but as here shown are of stainless steel. These heads 5 are provided with openings 6 registering with the bores 4 and a central opening 7 registering with the core 1 which forms a bearing or hub for the barrel and in which any suitable form of gudgeon can be inserted if desired. The openings 6 are countersunk or enlarged to form beveled sides to receive the heads of rivets 9 which extend through the bores so as to fasten the heads in position on the ends of the barrel. It will be seen that when the heads are in position on the barrel and the rivets have been passed through the openings and the bores of the fins the heads can be readily formed so as to fill the conical seats of the openings 6 so that a very smooth outer surface is formed.

In the view Figure 4 I have shown a bobbin constructed identical with that disclosed in Figures 1, 2 and 3 with the exception that the heads 8 are secured to the ends of the barrel by self-threading screws 10 as clearly shown.

It is of course understood that while I have shown rivets and screws in the various forms of bobbin here illustrated, various other fastening means could be used without departing from the spirit of my invention as it consists broadly of providing a barrel with an integral core connected thereto by web portions having bores to receive the fastening members.

While in the drawing I have shown the heads formed of stainless steel it is of course understood that the same can be formed of any other suitable material, and therefore I do not wish to limit myself to the use of any particular kind of material in forming the heads as I am aware that many changes can be made without departing from the spirit of my invention.

From the foregoing description it will be seen that I have provided a bobbin or spool with a barrel composed of an outer tubular shell and a central tubular core connected together by integral radial fins which are formed with longitudinal bores to receive head fastening members, and it will be apparent that by having radial fins connecting the core to the shell of the barrel that the bores can be placed in various positions between the core and the shell so as to secure various types of heads by the fastening members at various positions.

While in the drawing I have shown the construction of a bobbin in which the barrel is provided with four radial fins it is of course understood that a bobbin could be constructed with three radial fins or more than four radial fins

and therefore I do not wish to limit myself to the number of radial fins employed for connecting the core to the barrel.

By forming a barrel with an integral core connected together by fins of the same length as the barrel a very strong barrel is formed having means for supporting the head at its ends as the fins extend the full length of the barrel and as shown in Figure 5 bores A can be formed in the fins at any desired position.

I claim:

1. A bobbin or the like having a barrel formed by extrusion comprising an outer tubular shell and a central tubular core connected together by integral radial fins forming between each pair of fins unobstructed passages and provided with longitudinal bores and heads arranged against the ends of said barrel and connected to said fins by fastening members extending into said bores.

2. A bobbin or the like having a barrel formed

by extrusion comprising an outer tubular shell and a central tubular core connected together by integral radial fins forming between each pair of fins unobstructed passages, said fins being provided with longitudinal bores, heads arranged against the ends of said barrel provided with openings registering with the bores of said fins, and rivets extending through said heads and bores for connecting said heads to said barrel.

3. An integral extrusion formed barrel for bobbins or the like having a central hub comprising a tubular barrel wall and a central tubular core connected together by integral radial fins forming between each pair of opposing fins unobstructed passages extending the full length of the barrel, the fins being provided with longitudinal bores extending through the same to receive head fastening members.

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