Sept. 15, 1925. 1,553,326

H. V. RAU

RIBBON REEL

Filed Nov. 17, 1923

Fig. 1.

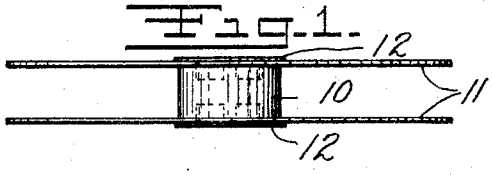


Fig. 2.

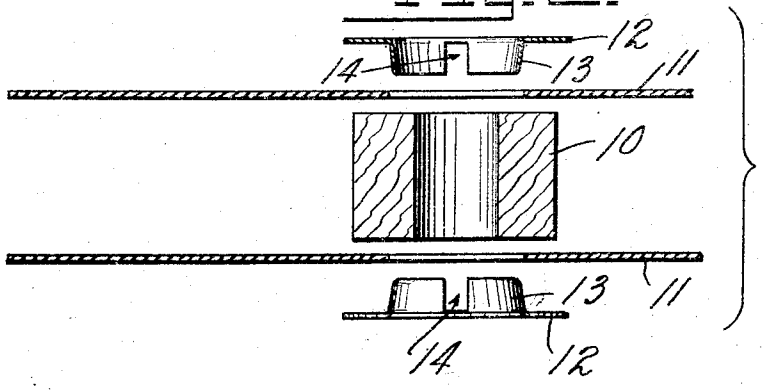


Fig. 3.

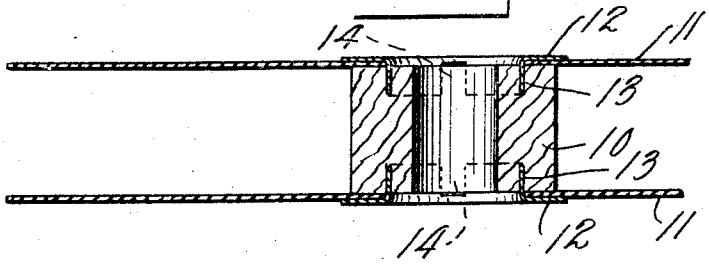
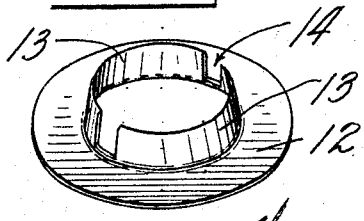


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY V. RAU, OF BROOKLYN, NEW YORK, ASSIGNOR TO EDWIN B. STIMPSON COMPANY, OF BROOKLYN, NEW YORK.

RIBBON REEL.

Application filed November 17, 1923. Serial No. 675,245.

To all whom it may concern:

Be it known that I, HENRY V. RAU, a citizen of the United States, residing at 385 Park Place, Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Ribbon Reels, of which the following is a specification.

This invention relates generally to the construction of ribbon reels.

It is a general object of the invention to provide an improved structure of this general nature in which a high degree of rigidity and relative simplicity of construction is attained. The invention includes the use of sleeve or thimble members provided with tapered split flanges adapted to be driven into the opposite ends of a reel hub member formed of wood or the like, the thimble members serving to clamp the reel side flanges in rigid engagement with the ends of the hub. The split and tapered seating flanges of the thimble members serve to provide a secure anchorage thereof in the material of the hub.

Other features of the invention will be hereinafter referred to.

In the drawings, in which a preferred form of the invention has been selected for illustration—

Figure 1 is a view in side elevation of an embodiment of the invention.

Figure 2 is a sectional view in disassembled relation and on an enlarged scale of the parts of the reel shown in Figure 1.

Figure 3 is a view similar to Figure 2 showing the parts in assembled condition.

Figure 4 is a perspective view of a flange-holding sleeve forming part of the invention.

Referring to the drawings for a more detailed description of the invention, a ribbon reel is shown in which a wood hub member 10 has side flange members 11 attached thereto by means of the thimbles 12.

The thimbles 12 consist of radially extending annular body portions from the inner margin of which extend substantially at right angles the flange members 13. The flanges 13 form what is in effect a split ring and are interrupted by the slots or gaps 14.

The flanges 13 are adapted to be driven into the ends of the hub member 10 as is clearly indicated in Figure 3 of the drawing. In order to securely anchor the flange members 13 in place in the hub member, the flanges are formed with a tapered or converging construction which expands into a cylindrical formation as the flanges are forced into the hub under the pressure of a tool. The expansion or spreading apart of the flange parts as they enter the wood is permitted by the presence of the slots 14 already referred to.

It will be seen that the flange members 13 when in position in the hub member tend to assume their original tapered formation and thereby grip or pinch the enclosed inner portion of the hub member to provide a secure anchoring engagement of the flanges with the hub to hold the reel flange members in position thereon. The flange members are formed of sheet metal of a suitable gage to provide the necessary spring tension to hold the members in place.

It will be seen that with the construction disclosed but five parts are required for the assembly of a complete reel and that the parts can be readily and quickly assembled in a simple operation in a punch press or the like. The anchoring flange portions 13 are adapted to be received and fitted in a central opening 15 in the reel flanges 11. This arrangement establishes and maintains a concentric relation between the reel hub members and its side flanges 11 as will be seen. The construction disclosed is not only an improvement upon reel construction heretofore known and used, but its assembly is achieved in a simple and expeditious manner. While the members 12 are shown as circular in formation, it will be clear that other shapes may also be effectively employed.

What is claimed is:

1. In a reel, a hub member formed of material into which flange anchoring devices may be driven, reel side flanges, and holding members for the reel side flanges, said holding members having an annular formation and provided with radially extending portions adapted to engage and hold the reel side flanges in position, and each of said holding members being provided with a split axially directed flange at the inner margin thereof, said flanges being adapted to be driven into the ends of the hub member.

2. In a reel, a hub member formed of material into which flange anchoring devices may be driven, reel side flanges, and hold-

ing members for the reel side flanges, said holding members having an annular formation and provided with radially extending portions adapted to engage and hold the reel side flanges in position, said reel side flanges being provided with centrally disposed circular openings of greater diameter than the diameter of the base of the hub, and each of said holding members being provided with axially directed flanges at the inner margin thereof, said axially directed flanges having a converging formation fitting within the openings in the side flanges and adapted to be driven into the ends of the hub member.

3. In a reel, a hub member formed of material into which flange anchoring devices may be driven, reel side flanges formed of rigid sheet material, sheet metal attaching members for the side flanges, said attaching members having an annular formation and provided with radially extending portions adapted to engage and hold the reel side flanges in position, and said holding members being provided with split tapered annular flanges at the inner margins thereof, said flanges being adapted to be driven into the ends of the hub member.

4. In a reel, a hub member formed of wood, reel side flanges formed of rigid sheet material and having centrally disposed circular openings therein of greater diameter than the diameter of the base of the hub member, sheet metal attaching members for the side flanges having an annular formation and provided with axially extending split annular tapered flanges fitting the circular openings in the side flanges and adapted to be driven into the ends of the hub member.

In testimony whereof I affix my signature.

HENRY V. RAU.