Oct. 16, 1934. R. C. LONGVALL 1,976,952

SPINDLE MOUNTING

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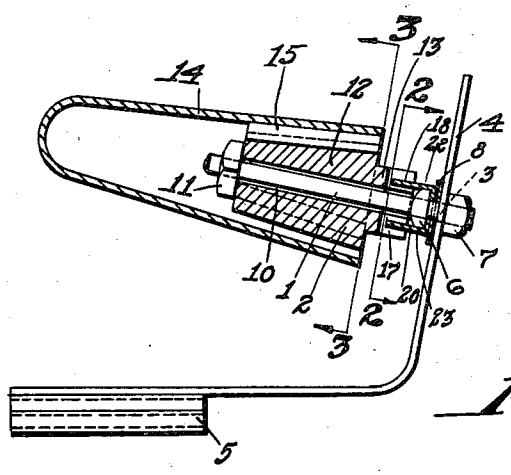


Fig. 1.

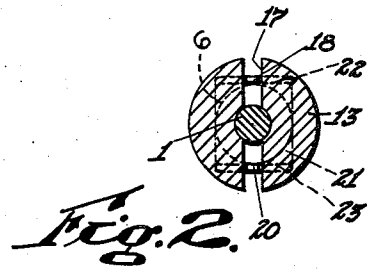


Fig. 2.

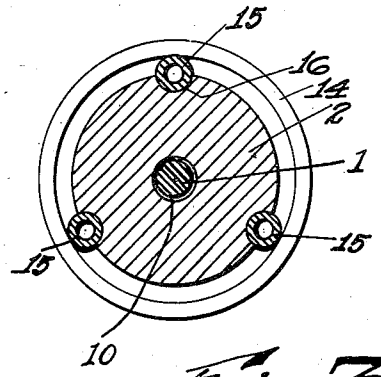


Fig. 3.

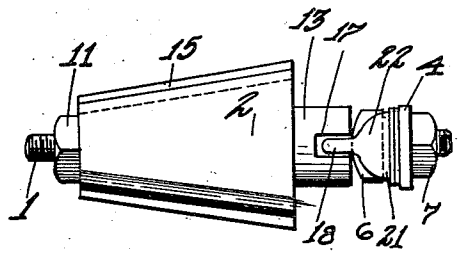


Fig. 4.

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SPINDLE MOUNTING

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3 Claims. (Cl. 242—130)

The present invention relates to a spindle mounting particularly adapted for supporting holders for yarn packages in proper position on a creel, so that the holders will not turn or move axially of the spindles.

According to the invention, a holder for a yarn package is held against removal from a spindle by an abutment thereon, while projections secured against angular movement relative to the spindle support, extend into slots formed in the holder to prevent turning of said holder on the spindle. The above and other features of the invention will appear from the following description in connection with the accompanying drawing, in which:—

Fig. 1 is a side elevation, partly in section, of a holder embodying the invention.

Fig. 2 is a section along the line 2—2 of Fig. 1, looking in the direction of the arrows.

Fig. 3 is a section along the line 3—3 of Fig. 1, looking in the direction of the arrows.

Fig. 4 is a plan view of the parts shown in Fig. 1, with the cone removed from the holder.

Like reference characters refer to like parts in the different figures.

Referring to Fig. 1, the spindle 1 on which the conical holder 2 is mounted extends through an opening 3 in a support 4 which forms a part of the creel, said support, in the construction shown, being secured to a horizontal slide on the creel, not shown, by slideways 5. The spindle 1 extends from the support 4, and is maintained in proper position relative thereto by nuts 6 and 7 which engage the screw threaded end of the spindle on opposite sides of the support 3, and between which the support is clamped, with one or more fiber washers 8 between one of the nuts 6 and said support to prevent the transmission of vibrations from the support to the spindle and to hold the nuts 6 and 7 against loosening.

The conical holder 2 which is of wood, or other fibrous material, has an axial bore 10 therethrough which receives the spindle 1 and a nut 11 on the outer end of the spindle 1 forms an abutment which engages the outer end of the holder 2 to clamp said holder on said spindle against axial movement. The conical portion 12 of the holder is spaced from the support 4 by a cylindrical portion 13 extending from the large end of said conical portion, the purpose of which will presently appear. The conical portion 12 of the holder receives the large end of a hollow cone 14 on which a yarn or thread is wound and the cone 14 is suitably held on said conical portion 12, by short lengths of rubber tubing 15, Fig. 3, mounted in slots 16 in the surface of the conical portion in a manner disclosed in Remington Patent No. 1,740,784 issued December 24, 1929.

The present invention provides with the elements above described, or with similar elements, a means to lock the holder 2 positively against rotation. According to the invention, the cylindrical portion 13 is provided with a deep transverse slot 17, Figs. 1 and 2, which receives elongated projections 18 and 20 on a U-shaped locking member 21. The central portion of the member 21 extends between the nut 6 and the washers 8 and is clamped against the support 4 by the nut 6, the opposite ends 22 and 23 of the member 21 being bent at right angles into engagement with parallel faces of the nut 6. The ends 22 and 23 of said member project beyond the outer surface of the nut 6 and are narrowed, as shown in Fig. 4, to form the projections 18 and 20 which are loosely received in the slot 17. The member 21 is locked against turning movement relative to the spindle 1 and the support 4 when the nuts 6 and 7 are tightened, and the projections 18 and 20 thus support the conical holder 2 against rotation on the spindle. Even should the nut 11 become loosened, the projections 18 and 20 are sufficiently long to engage the slot 17 in spite of longitudinal movement of the holder on the spindle.

I claim,

1. In a device of the character described, a support, a spindle carried by said support, a member having a cylindrical bore for the reception of the spindle, said member being mounted on said spindle between said support and an abutment on said spindle, a slot in said member, and a locking member secured against movement relative to said support and extending substantially parallel to said spindle in spaced relation thereto for engagement in said slot in said member, at a point remote from the cylindrical bore therein.

2. In a device of the character described, a support, a spindle carried by said support, a locking nut on said spindle for engagement with said support to lock said spindle against movement relative thereto, a conical member arranged to support a hollow cone having a yarn package wound thereon, said member having a cylindrical bore for the reception of the spindle, and being mounted on said spindle between said locking nut and an abutment carried by the outer end of the spindle, a radial slot in the end of the conical member adjacent the locking nut, and a locking member secured between said locking nut and

the support, the end of said locking member extending in parallel relation to the spindle and in spaced relation thereto for engagement with said slot at a point remote from the cylindrical bore of said conical member.

3. In a device of the character described, a support, a spindle carried by said support, a locking nut on said spindle for engagement with said support to lock said spindle against movement relative thereto, a conical member arranged to support a hollow cone having a yarn package wound thereon, said member having a cylindrical bore for the reception of the spindle, and being mounted on said spindle between said locking nut and an abutment carried by the outer end of the spindle, a radial slot in the end of the conical member adjacent the locking nut, and a locking member clamped between said locking nut and the support to prevent movement of said member, the ends of said locking member being bent up into engagement with opposed faces of the locking nut, with the portions of said ends extending beyond the surface of the locking nut narrowed and extending in parallel relation to the spindle for engagement in said radial slot.

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