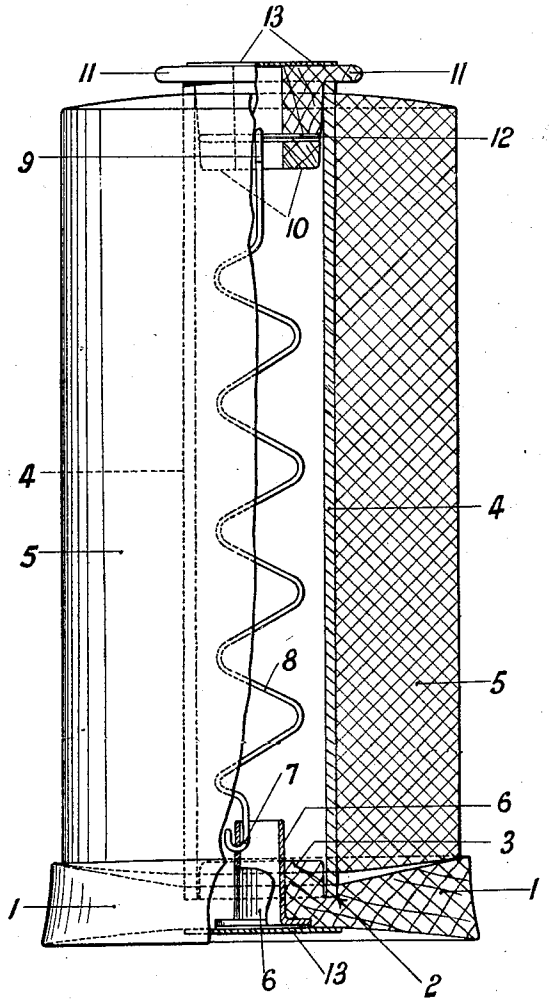
Dec. 20, 1927. 1,653,520

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COP OR CONE HOLDER OR STAND FOR USE IN THE UNWINDING OF YARNS AND THREADS

Filed Dec. 31, 1926



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Patented Dec. 20, 1927. 1,653,520

UNITED STATES PATENT OFFICE.

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COP OR CONE HOLDER OR STAND FOR USE IN THE UNWINDING OF YARNS AND THREADS.

Application filed December 31, 1926, Serial No. 158,196, and in Great Britain February 18, 1926.

The article of manufacture forming the subject of this invention is an improved cop or cone holder or stand for cops or cones of cotton, silk and other yarns or threads, being intended for use as an adjunct to any machine or contrivance which consumes yarns or threads supported by some form of stand or the like.

The object of the invention is to provide a construction of holder or stand whereby the cop or cone will be protected from damage of any description and which permits the free unwinding of yarn or thread from start to finish, as well as providing suitable surfaces for the secure attachment of trade marks and other labels or tickets.

The improved stand comprises three principal parts, viz:—

(1) A bottom disc with flanged tube.

(2) A centre spring.

(3) A top disc with plain staple.

The bottom disc may be of wood, light sheet metal, cast metal or other suitable material, being preferably of general cylindrical contour, concaved on both end faces, the top faces being formed near the centre with an annular recess the inner wall of which projects above the concavity to form a boss over which the tube centre is fitted in the assembly of the stand.

A flanged tube is fitted into the bottom face of the said disc, the flange being substantially flush with the said face. The tube projects above the face of the boss and a hole bored in the tube provides a means of attaching the same to a hook formed on the bottom end of the spring centre.

The centre spring comprises a metallic wire helix, bent at its top and bottom ends to form hooks, the helix being of such diameter as to have freedom within the interior of the tube on which the cop or cone is wound.

The top disc may consist of a boss and flange with a staple driven into the boss.

The method of assembly is as follows:—

The bottom hook of the spring centre is inserted in the hole bored in the tube fitted into the bottom disc.

A wound cone or cop is then passed over the spring centre, the tube forming the core of the cop or cone registering itself on the boss formed on the bottom disc.

The top disc is then placed in position, with its boss entering the tube or cone, and the top hook of the spring centre engaged with the staple.

The figure of the accompanying drawing is a part elevation part section of a cop or cone holder according to the invention, the holder being shown assembled.

1 denotes the bottom disc of general cylindrical contour, concaved on both end faces, the top face being formed near the centre with an annular recess 2 the inner wall of which projects above the concavity to form a boss 3 over which is fitted, in the assembly of the holder, the tube centre 4, on which the cop 5 is wound.

A flanged tube 6 is fitted into the bottom face of the disc 1, the flange being about flush with the bottom face. The tube 6 projects above the face of the boss 3 and a hole bored in the tube provides a means of attaching the same to a hook 7 formed on the bottom end of the spring centre 8.

The spring 8 comprises a metallic wire helix, bent at its top and bottom ends to form hooks 7 and 9, the helix being of such diameter as to have freedom within the interior diameter of the tube 4.

The top disc 10, 11 consists of a boss 10 and flange 11 with a staple 12, driven into the boss, presenting a means of attaching the disc 10, 11 to the hook 9.

The method of assembly is as follows:—

The hook 7 is inserted in the hole bored in the tube 6.

With the disc 1 inverted, the tube 4 on which the thread is wound is then passed over the spring centre 8, the tube 4 registering itself on the boss 3.

The disc 10, 11 is then placed in position, with the boss 10 entering the tube 4 and the hook 9 engaged with the staple 12, it being understood that to effect engagement of the hook 9 with the staple 12 the spring 8 must first be stretched by engaging the hook 9

with a manually operable hook-like implement.

The spring centre 8 now forms a connecting link between the top and bottom discs, the tension being such as to impart rigidity to the assembled structure.

It will be seen that with the bosses 2 and 10 entering the tube 4, the tube is re-inforced so that liability to crushing of cops or cones through rough treatment in transit may be obviated.

The bottom face of the disc 1 being concave, rings of thread are unable to find their way underneath the holder when in use on a flat surface.

The concave formation of the top face of the disc 1 similarly prevents a ring of thread (which may fall to the base of cop or cone) from finding its way between the bottom of the cop or cone and the top concave surface of the disc and causing breakage.

The top and bottom discs present suitable surfaces for the attachment of tickets 13 which will remain on the holder until all the thread on the tube is used.

The tube 6 provides a means of support for the holder when it is required to be mounted on a bobbin pin or projecting rod of any description, either in a perpendicular position or at any desired angle, to permit the holder to turn freely as the thread is being unwound therefrom.

The holder may be used over and over again, if desired.

I claim:—

A cop or cone holder or stand comprising two spaced coaxial end discs, one disc being concaved on both end faces and having on its face adjacent to the second disc an annular recess the inner wall of which is presented by a boss, a boss, the upper end of which is flush with the upper edge of the concaved disc, the other face of said disc being adapted to receive a ticket, and the second disc consisting of a boss and flange, said second disc having a ticket-receiving outer face, a flanged tube penetrating the boss of said first disc and having an orifice, a staple secured to said second disc, a cop tube on which the cop or cone is wound, the ends of said cop tube surrounding said bosses, said cop tube being unsupported otherwise than at its ends, and a tension spring connected at one end to said staple and at the other end engaging said orifice.

In testimony whereof I have signed my name to this specification.

WILLIAM HERBERT SUTTON.