L. BORDWELL.

CLOTHES LINE REEL.

APPLICATION FILED APR. 17, 1914.

1,147,599. Patented July 20, 1915.

FIG. 1.

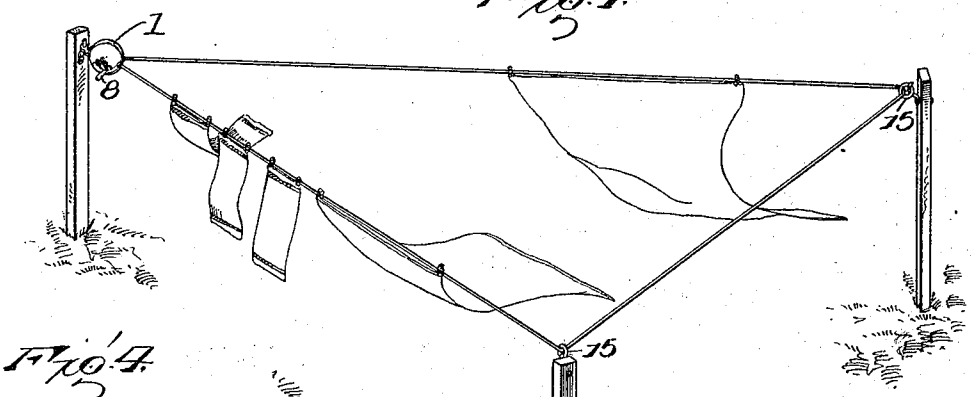


FIG. 4.

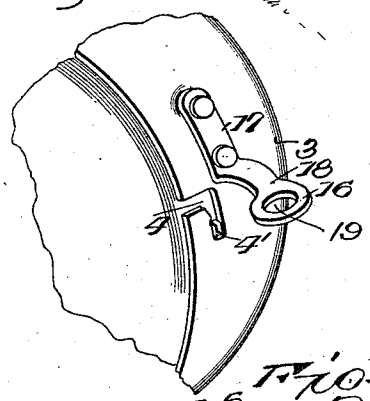


FIG. 2.

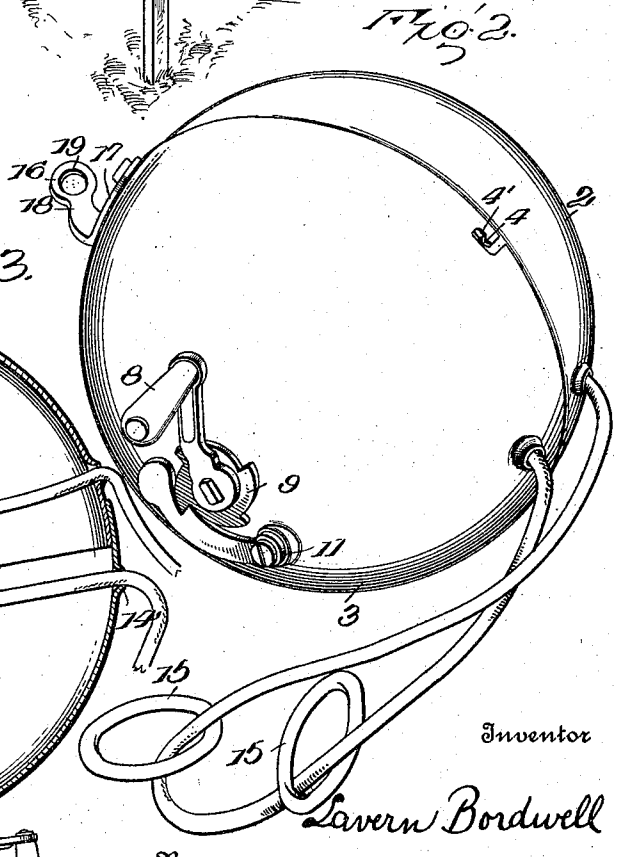
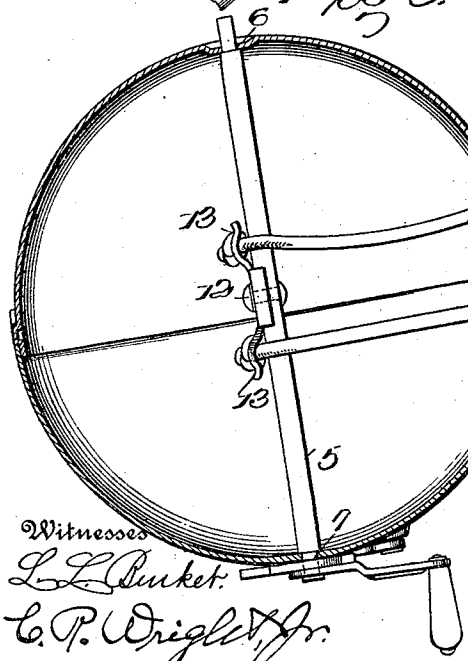


FIG. 3.



Witnesses

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CLOTHES-LINE REEL.

1,147,599. Specification of Letters Patent. Patented July 20, 1915.

Application filed April 17, 1914. Serial No. 832,490.

To all whom it may concern:

Be it known that I, LAVERN BORDWELL, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Clothes-Line Reels, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvements in clothes line reels, the primary object of which is to devise a reel of this type which is so constructed as to wind in and pay out clothes line without binding or bunching the same during the operation.

Another object of the present improvement is to provide a clothes line reel which consists of a casing containing the clothes line and a simple suspending means which needs no special coöperating elements, but which may be applied to any convenient hook, nail or the like.

A still further object of the present improvement consists in the improved means of attaching the clothes line to the winding elements of the reel.

A still further object of the present improvement consists in the special construction of the shell which consists of two relatively semi-spherical members and of an improved means of locking these members together.

In the accompanying drawings: Figure 1 is a perspective view showing my improved clothes line reel in operation. Fig. 2 is an enlarged perspective view of my improved reel. Fig. 3 is a cross sectional view of my device. Fig. 4 is a detail fragmental perspective view of the suspending elements and locking construction of my improved reel.

Referring now to the drawings in which like reference numerals designate similar parts; 1 represents the body portion or shell of my improved reel which comprises two relatively semi-spherical portions 2 and 3. These portions are locked together by means of bayonet slot connections 4 and 4′ made in the edges of the said members.

The winding mechanism of the reel consists of a shaft 5 which is positioned through the shell 1 at right angles to the joint of the members 2 and 3. It has bearings in the shell at points 6 and 7. A handle 8 is attached to one projecting end of the shaft 5. In order to hold the said crank and shaft in any desired position, a ratchet 9 is mounted on the shaft 5 adjacent the crank which is adapted to be engaged and held by a dog 10 pivoted to the shell by a pivot 11.

The clothes line is connected to the shaft 5 by means of a spring member 12 which is fastened to the shaft 5 intermediate its ends. This spring member has two outwardly projecting arms 13 on either side of its connecting point 12. The ends of the clothes line are knotted and slipped under these spring members as is clearly shown in Fig. 3. The lines 13 pass out through the shell through two openings 14. Rings 15 are carried by the line so that after the same has been reeled out, these rings form a connecting means for holding the line, as is clearly shown in Fig. 1.

The suspending means of the reel comprises a member 16 consisting of a flattened portion 17 bolted to the member 3 of the shell adjacent its edge and which has a portion 18 extending outwardly from the shell at right angles having in its end a hole or eye 19. It will be noted that this suspending means is arranged at the exact opposite side of the shell from the openings 14 through which the line is adapted to pass, so that a pull exerted on the line will have no tendency to dislodge the reel from its suspension place. The pull will be straight along the axis of the reel at right angles to the shaft.

The shell of the reel has been made of a spherical form for the reason that in winding the lines in on the shaft 5, the coil will be evenly distributed along the shaft. This will occur for the reason that when the line becomes bunched directly over the spring member 13, it will frictionally engage the inner surface of the shell and will be slid off away from the center and toward the end of the shaft. The sliding off

of the line will result in its even distribution throughout the length of the shaft.

Attention is also called to the arrangement of the openings 14 on either side of the joint of the two portions forming the shell. This arrangement will insure that each line be drawn in and wound on the shaft separate from the other and will not intermingle them, and consequently tangle the line within the shell. But the principal object of having the lines pass through openings located in the respective portions of the shell at points outside of the overlapping flanges, is to permit the two parts of the shell to be separated without disturbing the line.

Attention is also directed to the arrangement of the suspending means which, as has been pointed out, is arranged at the exact opposite side of the shell from the holes 14 through which the line passes, whereby the pull of the line will be in a direct line with the point of suspension.

Due to the arrangement of the crank and shaft and suspending means and feeding openings, none of these parts will conflict. In other words, these points are placed in a convenient relation to each other so that the line may be reeled in or out in a convenient manner, the crank not being at all in the way of the point of suspension or the lines themselves.

It will be noted that the means for attaching the clothes line to the shaft is a simple and effective means both for readily applying the line, and also for easily detaching the same from the shaft when it is so desired.

Having thus fully described my invention what I claim and desire to secure by Letters Patent is:

1. A reel comprising a spherical shaped receptacle, said receptacle composed of two semi-spherical members adapted to interlock, a winding mechanism within the receptacle including a shaft extending transverse the receptacle, suspension means carried by the receptacle, and a line having its respective ends connected to the shaft at opposite sides of its center one part of the line passing through one of the semi-spherical members, and the other part of the line passing through the other semi-spherical member, whereby the line is simultaneously wound and unwound from both ends and caused to assume a spherical shape within the receptacle, and whereby the semi-spherical portions may be separated without interfering with the lines.

2. A reel comprising a receptacle of a spherical shape, the said receptacle consisting of two semi-spherical members having overlapping edges and interlocking connections, a winding mechanism carried by the receptacle, said winding mechanism comprising a shaft having bearings in opposite sides of the receptacle, and a crank carried on one projecting end of the said shaft, a suspension means carried by the receptacle, the two semi-spherical members having oppositely arranged openings adjacent their overlapping edges, lines passing through the said openings and frictional means carried by the shaft for connecting the said lines thereto, the parts arranged as and for the purpose described.

3. A reel comprising a receptacle, of a spherical shape, consisting of two semi-spherical members, said members having overlapping edges and interlocking connections forming means for holding the said members together, a winding mechanism mounted within the receptacle, said winding mechanism comprising a shaft having bearings in oppositely arranged sides of the receptacle, a crank and ratchet carried by one projecting end of the said shaft, a dog adapted to engage the said ratchet, the two semi-spherical members having oppositely arranged openings adjacent their overlapping edges, suspension means arranged by the receptacle at the opposite side thereof from the openings, lines passing through the openings and connected to the shaft, said connection consisting of frictional means carried by the shaft.

4. A reel comprising a spherical receptacle consisting of two semi-spherical members having overlapping edges and interlocking connections forming means for holding the said members together, a winding mechanism consisting of a shaft passing through the receptacle at right angles to the overlapping edges of the two semi-spherical members, said shaft having bearings in the periphery of the receptacle, a crank and ratchet mounted on one end of the shaft, a dog adapted to engage the said ratchet, openings in the receptacle adjacent its overlapping edges, suspension means carried by the receptacle at the opposite side thereof from the said openings, lines passing through the openings and into the receptacle, and having their ends connected to the said shaft, said connection comprising a substantially U-shaped spring member riveted to the said shaft at its center, said spring member having spring arms in a line with the openings in the receptacle, the parts arranged as and for the purpose described.

5. A reel comprising a receptacle formed of two semi-spherical sections adapted to be fitted together to form a sphere, a winding mechanism including a shaft extending transverse the receptacle, the axis of the said shaft arranged so as to bisect the spherical receptacle in a line transverse the plane of the connections of the semi-spherical mem-

bers, and lines having one of their ends connected to the shaft, the said lines passing through openings in the receptacle in a line with their connections with the shaft, the said openings adjacent the joint between the two semi-spherical portions of the receptacle whereby the lines will be fed onto the shaft transverse the axis thereof and parallel to the line of connection between the two semi-spherical portions of the receptacle.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

LAVERN BORDWELL.

Witnesses:
O. F. BISHOP,
BESSIE LEVEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."