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CLOTHESLINE REEL

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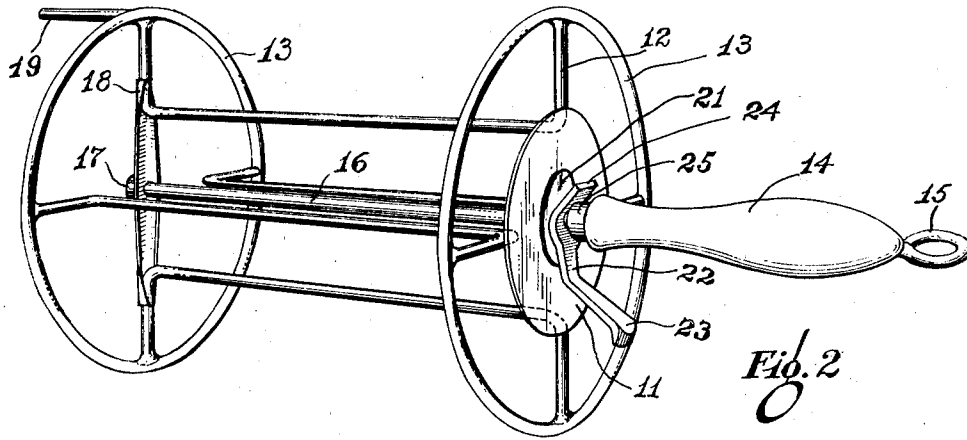


Fig. 2

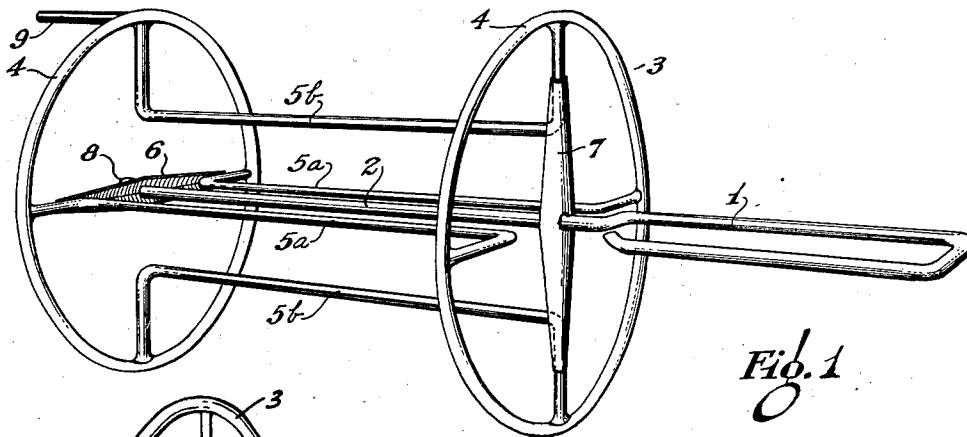


Fig. 1

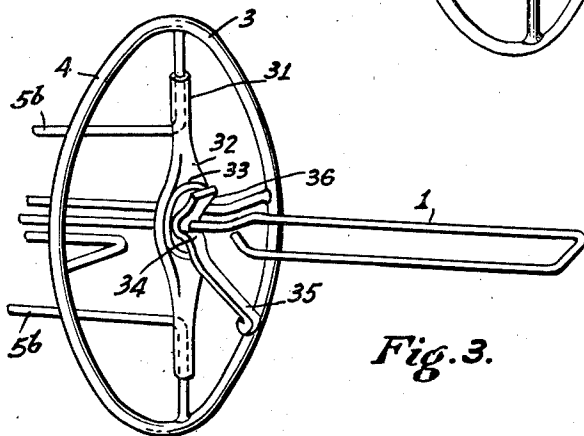


Fig. 3.

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CLOTHESLINE REEL

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5 Claims. (Cl. 242—96)

This invention, as indicated, relates to a clothes-line reel. More particularly, it comprises an apparatus adapted to be constructed principally of wire and to provide a light serviceable device which will be inexpensive to manufacture, and adapted for continued use over a long period of time.

Various types of simplified forms of clothes-line reels have been designed, but in substantially all cases the devices either have involved expensive mechanical steps of providing and assembling a large number of parts, or have been of such peculiar construction as to involve difficulties of operation, or have failed to provide adequate strength.

The present invention, as has been indicated, utilizes as the basic material for its construction wire of suitable stiffness to provide a thoroughly rigid construction and yet at the same time of sufficient lightness to permit easy handling even when equipped with a full quantity of clothes-line.

The device reduces to a minimum the actual number of parts needed to form the central and end portions of the reel, as well as the supporting member therefor. In one form of the construction a brake is provided which comprises but a single element and which is automatically self-positioning. The structure may be put together by welding operations at a minimum of expense and is thoroughly rigid so as to withstand a long period of service.

To the accomplishment of the foregoing and related ends, said invention, then, consists of the means hereinafter fully described and particularly pointed out in the claims, the annexed drawing and the following description setting forth in detail certain structures embodying the invention, such disclosed means constituting, however, but several of various forms in which the principle of the invention may be used.

In said annexed drawing:

Figure 1 is a perspective view showing one form of construction embodying the principles of the invention;

Figure 2 is a view similar to Figure 1, showing a modified form of construction wherein a self-positioning brake member is used; and

Figure 3 is a fragmentary perspective view similar to the right-hand portion of Figure 1, showing a modified form of construction of such end portion of the structure with a channel plate of an enlarged central area and having a friction member and self-positioning brake member adjacent the handle,

As is clearly shown in Figure 1 of the drawing, the supporting member for the reel is preferably formed of a single length of wire bent backwardly upon itself at one end so as to provide a loop serving as a handle 1, with the other portion thereof in the form of a shaft 2 which extends a distance slightly greater than the full length of the reel.

The reel proper is constructed of two end members 3, 4, in the form of circular endless loops of wire which are connected to each other by means of shallow U-shaped members 5a, 5b, turned outwardly and secured by welding at their ends to the inner sides of said circular end members. Four such members are shown in the drawing, and the bearings for the reel upon the shaft 2 are provided by connecting opposite pairs of said U-shaped members 5a by means of a channel-shaped plate 6 centrally apertured to engage upon the shaft, and providing a similar channel plate 7 at the opposite end of the reel connecting with the alternate U-shaped members 5b, said channel-plate 7 likewise being centrally apertured to engage upon the shaft 2. After the reel is positioned upon the shaft, the end of the spindle portion 2 is upset so as to provide an enlarged terminal member 8 at the end of the spindle to hold the reel in position. A short straight wire is preferably welded to the outer face of the end member opposite the handle, so as to provide a crank member 9 with which to wind up the reel.

The device shown in Figure 2 is substantially similar to that shown in Figure 1, with the exception that the channel-plate at the handle end of the structure is eliminated, and a disk 11 is provided, which is secured to the U-shaped members 12 which connect the circular end members 13, 14. The disk is preferably secured to the spoke-like portions of the U-shaped members by means of spot welds at the points of contact.

In place of the supporting member being in the form of an integral looped portion of wire, as shown in Figure 1, it is in the form of a wood or composition handle member 14 having a supporting eye 15 at one end, and carrying a spindle 16 at the other end, which is formed with a terminal enlargement 17 beyond the channel-plate 18 at the outer end of the reel. The reel is provided with a crank bar 19 whereby it may be turned when the handle is firmly supported. The disk 11 is centrally apertured to receive the spindle of the supporting member.

Engaged loosely over the spindle outwardly of

the disk is a brake plate 21 in the form of a large washer and a brake bar 22 in the form of an angularly shaped metal strip having an operating portion 23 providing a finger rest whereby the bar may be pressed toward the handle and the braking portion 24 of the bar brought into braking contact with the brake plate 21 which frictionally engages the disk 11. A metal ferrule 25 is preferably engaged upon the inner end of the handle to prevent undue wear at such point.

Through the use of the mechanism just described, the rate of paying out of the clothesline may be readily controlled and the line maintained fairly taut during the process of stringing the same between two or more points of support. It will be noted that the brake bar 22 is self-positioning in that the heavier operating portion 23 of the same will always be in the lower position while the braking portion of the bar will be vertically above the same.

In addition to supplying a brake member on a device of the structure shown in Figure 2, such brake member may be applied to a structure of substantially the form shown in Figure 1, by modifying the channel plate 7 of Figure 1 to broaden the same adjacent its central area to provide a braking surface at such point. Such structure is shown in Figure 3, wherein the channel plate 31 is secured at its ends to the U-shaped members 5b by welding or the like, and is provided with a broadened central area 32 against which a washer or brake plate 33 positioned on the handle 1 engages, said handle carrying outwardly of said brake plate a brake bar 34 in the form of an angularly shaped metal strip having an operating portion 35 providing a finger rest whereby the bar may be pressed toward the handle and the braking portion 36 of the bar brought into braking contact with the brake plate 33 which frictionally engages with the broadened central area 32 of the channel plate 7.

Other modes of applying the principle of my invention may be employed instead of those explained, change being made as regards the structure herein disclosed, provided the means stated by any of the following claims or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention:

1. An apparatus of the character described having in combination a handle, a spindle secured adjacent one end of the handle, a reel engaged on said spindle, means for preventing substantial longitudinal movement between said reel and said spindle, said reel comprising combined body and spoke members, the spoke portions being at right angles to the body portions, and members in the form of plates superimposed upon the spoke portions of said combined body and spoke members and welded thereto thereby connecting a plurality of said spoke members adjacent each of the ends of said apparatus and providing bearings for said reel upon said spindle.

2. An apparatus of the character described having in combination a handle, a spindle associated therewith, a reel engaged on said spindle, said reel comprising circular end members, combined body and spoke members connecting said

end members, a channel member connecting a pair of said spoke members adjacent one end of said apparatus, the intermediate spoke members being free of connection thereto, and a second channel member connecting an opposite pair of said spoke members adjacent the other end of said apparatus, the intermediate spoke members being free of connection thereto, said channel members providing bearings for said reel upon said spindle.

3. An apparatus of the character described having in combination a handle, a spindle associated therewith, a reel engaged on said spindle, said reel comprising circular end members, combined body and spoke members connecting said end members, a channel member connecting a pair of said spoke members adjacent one end of said apparatus, the intermediate spoke members being free of connection thereto, and a disk member superimposed upon the spoke portions of said combined body and spoke members and welded thereto at the opposite end of said apparatus, said channel and disk members providing bearings for said reel upon said spindle.

4. An apparatus of the character described having in combination a handle, a spindle associated therewith, a reel engaged on said spindle, said reel comprising circular end members, combined body and spoke members connecting said end members, a channel member connecting a pair of said spoke members adjacent one end of said apparatus, the intermediate spoke members being free of connection thereto, a centrally enlarged channel member connected to an opposite pair of the spoke members at the opposite end of said apparatus, the intermediate spoke members being free of connection thereto, said channel members providing bearings for said reel upon said spindle, an annular friction plate engaged over said spindle outwardly of said centrally enlarged channel member, and means for bringing said friction plate and centrally enlarged channel member into braking engagement.

5. An apparatus of the character described having in combination a handle, a spindle associated therewith, a reel engaged on said spindle, said reel comprising circular end members, combined body and spoke members connecting said end members, a channel member connecting a pair of said spoke members adjacent one end of said apparatus, the intermediate spoke members being free of connection thereto, a centrally enlarged channel member connected to an opposite pair of the spoke members at the opposite end of said apparatus, the intermediate spoke members being free of connection thereto, said channel members providing bearings for said reel upon said spindle, an annular friction plate engaged over said spindle outwardly of said centrally enlarged channel member, and a braking bar engaged over said spindle outwardly of said annular friction member, said braking bar having an outwardly extended portion adapted to serve as a lever for bringing the opposite portion thereof in friction applying relation to said annular friction plate and centrally enlarged channel member.

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