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REEL

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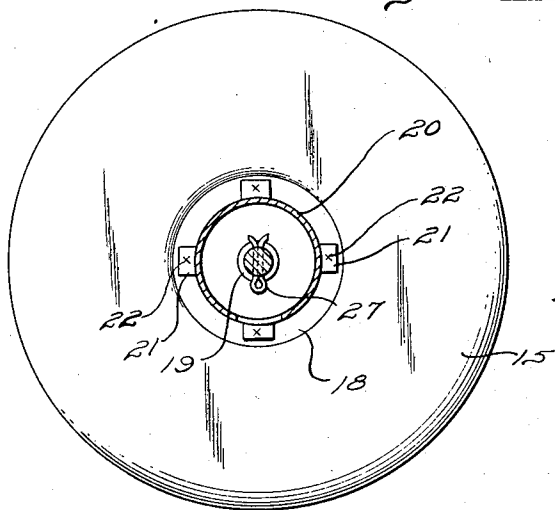
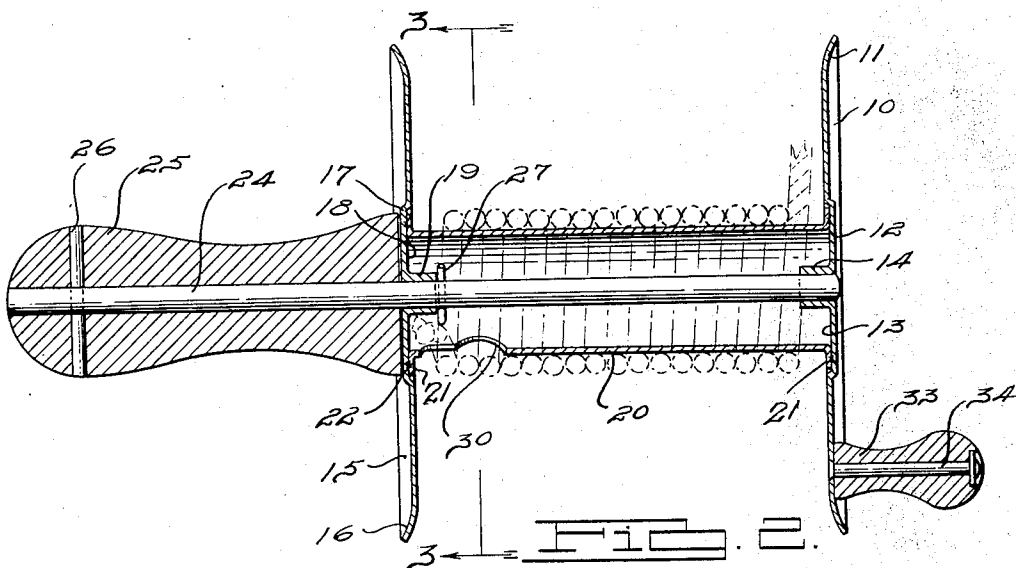
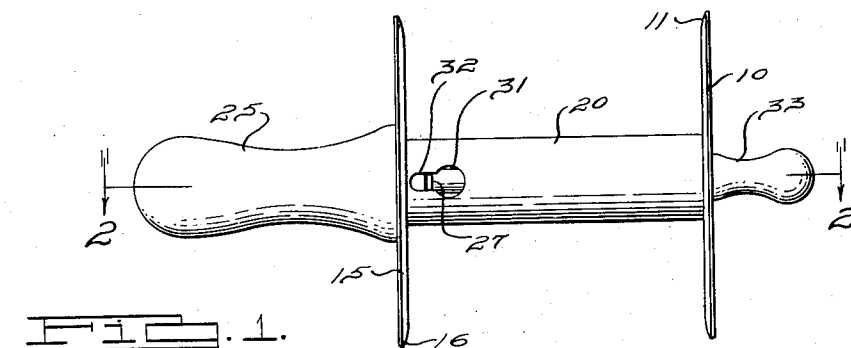


FIG. 3.

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REEL

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2 Claims. (Cl. 242—100)

The invention relates to reels and it has particular relation to a reel for a clothesline.

The principal objects of the invention are to provide a reel of simple construction, which can be manufactured very economically; to provide a reel which can be at least largely manufactured from sheet metal; to provide a reel upon which a clothesline, for example, may be wound without engagement with sharp edges or protuberances; to provide a reel which can readily be manipulated and carried manually; and to provide a reel which can be easily rotated by one hand while holding the reel in the other hand.

For a complete understanding of the invention reference may be had to the accompanying drawing forming a part of the specification, wherein:

Fig. 1 is a side view of a reel constructed according to one form of the invention;

Fig. 2 is a cross sectional view on a larger scale, taken substantially along line 2—2 of Fig. 1;

Fig. 3 is a cross sectional view taken substantially along line 3—3 of Fig. 2.

In manufacturing the reel, a circular metal plate or disc 10 is formed from sheet metal or other suitable material by stamping or otherwise forming the plate from a sheet of such material. During the formation of the plate, or afterwards, its outer edge is flared as indicated at 11, and a central portion is pressed outwardly from that side of the plate from which the flared outer edge projects. Depressing the central portion 12 of the plate in this manner, provides a circular recess 13 in one side of the plate. Centrally of the depressed portion, the plate has a cylindrical bearing portion 14 which projects from that side of the plate having the recess 13.

A second plate or disc 15 identical to plate 10, similarly is formed from sheet metal or other suitable material and likewise has a flared outer edge 16, a centrally depressed portion 17 providing a recess 18 in one side of the plate, and a cylindrical bearing portion 19 formed centrally of the depressed portion and projecting from the recessed side of the plate.

The plates are interconnected by means of a metal barrel 20 and in assembling the plates with the latter, the former are disposed at opposite ends of the barrel with the recesses 13 and 18 in the plate facing each other, and the flared edges 11 and 16 on the plates disposed in outwardly diverging relation. As best shown by Fig. 3, each end of the barrel 20 is provided with outwardly projecting, radially disposed flanges 21 disposed in circumferentially spaced relation, although it

should be understood that a single, annular flange may be used instead of a plurality of circumferentially spaced flanges. The end faces of the flanges 21 and the end surfaces of the barrel 20 engage the base surfaces of the recesses 13 and 18 in the plates 10 and 15 respectively, with the inner side surface of each flange substantially flush with the adjacent surface of the plate outwardly of the recess. The outer peripheral edges of the flanges 21 are disposed closely adjacent to the side walls of the recesses as best shown by Fig. 3, for preventing exposure of the edges of the flanges in an undesirable manner. Each of the flanges 21 is rigidly secured to the depressed part of the plate which it engages, preferably by spot welding as indicated at 22.

A shaft 24 is journaled in the cylindrical bearing portions 14 and 19 on the plates 10 and 15, and at the outer side of plate 15, the shaft is provided with a handle 25 which is secured to the shaft by means of a pin 26 extending radially through the handle and through the shaft. The inner end of the handle 25 substantially contacts with the outer surface of the depressed portion 17 on plate 15, but it and the shaft are freely rotatable with respect to the plate. At the inner end of the cylindrical bearing portion 19 on plate 15, the shaft is provided with a cotter pin 27 extending through an opening therein for normally preventing removal of the shaft in a direction outwardly of the outer face of plate 15. It is apparent that the cotter pin 27 and the inner end face of handle 25 disposed closely adjacent to the outer surface of the depression 17 in plate 15 maintain the shaft and handle assembled with the barrel 20 and both plates 10 and 15, and prevents axial movement of the shaft with respect to the plates and barrel while permitting the plates and barrel to rotate with respect to the handle and shaft. In assembling the shaft and handle with the plates 10 and 15 and the barrel 20, the end of the shaft opposite the handle 25, is inserted through the bearing 19, barrel 20, and bearing 14, from the outer side of plate 15, and then when the shaft is in its proper position, the cotter pin 27 is inserted in the opening in the shaft provided for the pin, through a slot 30 formed in the wall of the barrel 20 adjacent the plate 15. This slot as best shown by Fig. 1 has a circular portion 31 and a smaller elongate portion 32.

A handle 33 is eccentrically mounted on the outer side of plate 10 by means of a rivet pin 34 and is utilized for turning the plate about the

shaft 24, and consequently turning the barrel 20 and plate 15 at the same time.

When the reel is used for winding a clothesline thereon, it is apparent that one end of the line may be provided with a knot that can be inserted through the relatively large circular portion 31 of the bayonet slot 30, and then the line adjacent the knot moved axially into the elongate slot 32 and when the line is so positioned, the wall of the barrel around the smaller portion 32 of the slot prevents removal of the knot and hence retains the end of the line connected to the barrel. Then the handle 25 may be grasped by one hand and the reel turned on shaft 24 by grasping handle 33 and moving it about the axis of the shaft. It is apparent that the barrel and end plates 10 and 15 unitarily associated therewith, are free to rotate on the shaft 24 and hence may be turned easily in this manner for winding the clothesline on the outer surface of the barrel. It is also apparent that the outwardly diverging, flared edges 11 and 16 on the plates 10 and 15 facilitate entry of the clothesline between the plates and around the barrel 20, thereby avoiding engagement of sharp edges on the plate with the clothesline during the reeling operation. Since the flanges 21 at the ends of the barrel 20 are substantially flush with the adjacent end faces of the plates 10 and 15, the clothesline will not engage any sharp edges or protuberances at the ends of the barrel.

It should be apparent that a reel of the character described can be manufactured economically and easily because of the simplicity of parts and the ease with which they may be assembled and connected together. It also should be apparent that the barrel and end plates may be readily formed of sheet metal by stamping or otherwise, as will be well understood in the art and that the shaft and handle 25 may be easily assembled with the barrel and plate and secured thereto against axial movement by the cotter pin 27 which is readily accessible through the bayonet slot 30. Moreover a reel of the character described can readily be manipulated manually

as well as carried manually because the handle 25 may be grasped by one hand while the handle 33 can be grasped by the other hand and the barrel and end plates rotated on the shaft 24 merely by moving the handle 33 around the axis of the shaft. A reel of this character is very durable as will readily be appreciated.

Although only one form of the invention has been illustrated and described in detail it will be apparent to those skilled in the art that various modifications may be made without departing from the scope of the appended claims.

I claim:

1. A reel comprising a pair of metal plates each plate having its outer edge flared outwardly with respect to the plane of that plate, said plates having central portions depressed towards remote sides of the plates to provide recesses within the planes of the plates, a barrel extending between the plates and having end portions disposed in the recesses and secured to said central portions, a handle concentrically mounted on one end plate at the outer side thereof, and a second handle eccentrically mounted on the outer side of the other end plate.

2. A reel comprising a pair of metal end plates, each plate having its outer edge flared outwardly with respect to the plane of that plate and in diverging relation with respect to the plane of the other plate and said plate having central portions depressed toward remote sides of the plates to provide recesses within the planes of the plates, a barrel extending between the plates and having outwardly directed flanges on their ends disposed in the recesses formed in the plates, said flanges having their inner side surfaces substantially flush with the inner side surfaces of the body of the plate, said flanges being rigidly secured to said central portions to provide a unitary construction of plates and barrel, a handle concentrically mounted on the outer side of one of the plates and a second handle eccentrically mounted on the outer side of the other plate.

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