June 12, 1951 W. O'KEEFE 2,556,937

GUIDE ASSEMBLY FOR REELS

Filed Dec. 7, 1950 2 Sheets-Sheet 1

Fig. 1

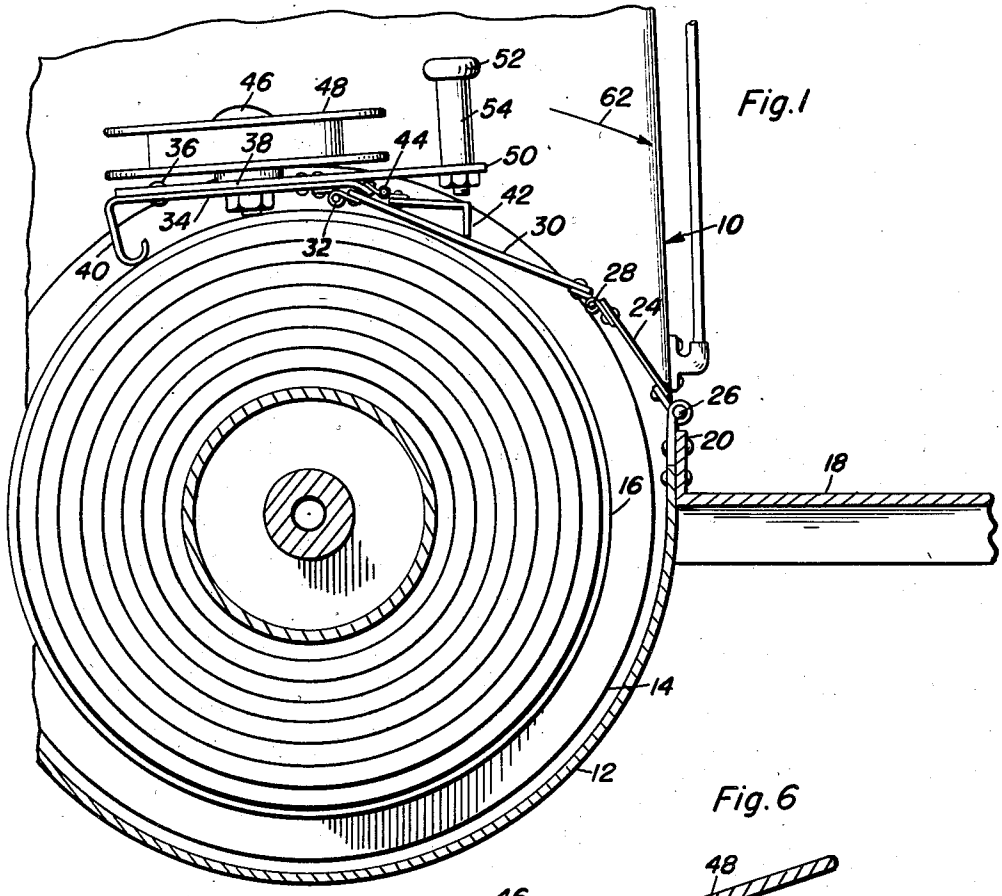
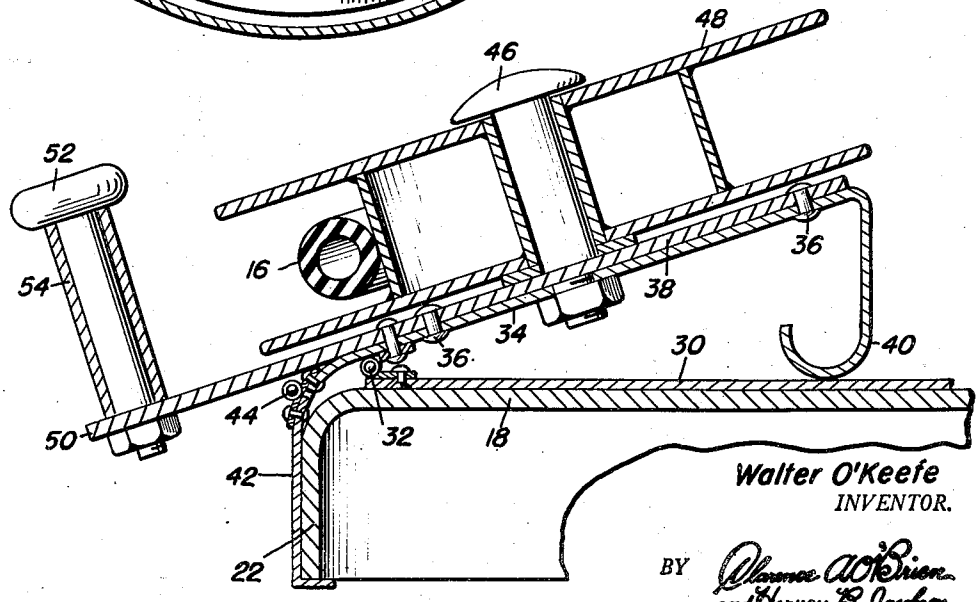


Fig. 6



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GUIDE ASSEMBLY FOR REELS

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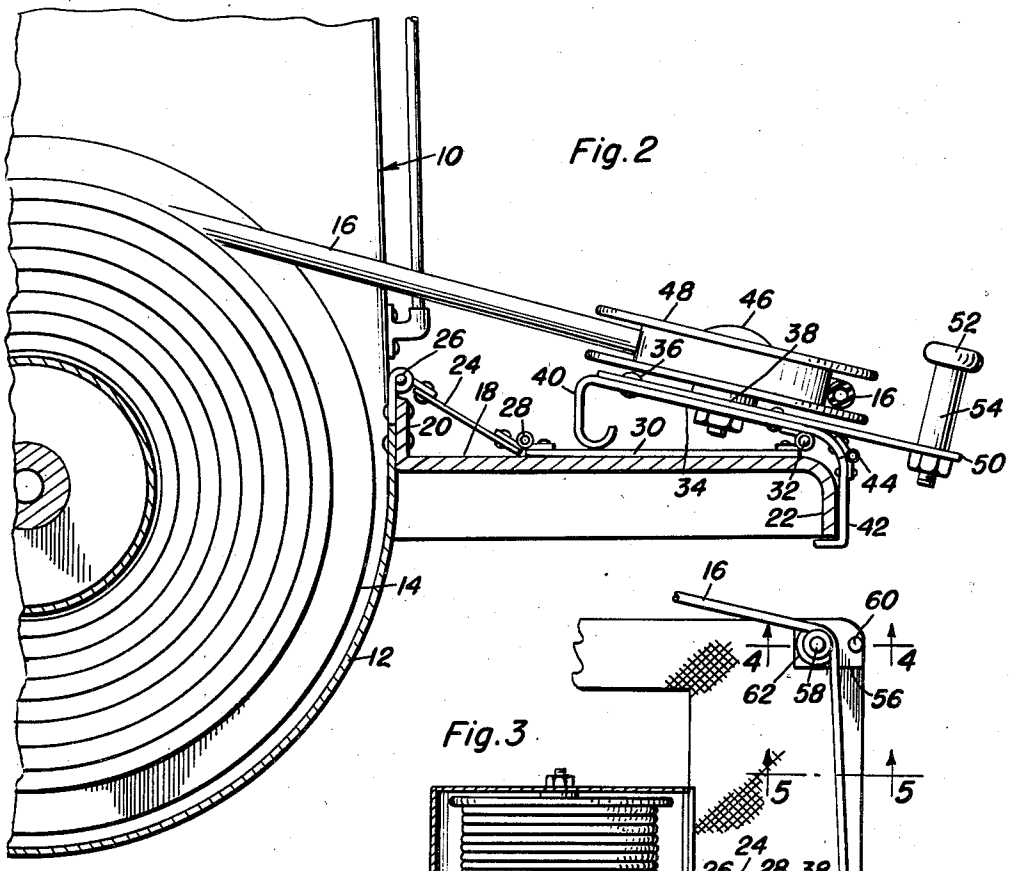


Fig. 2

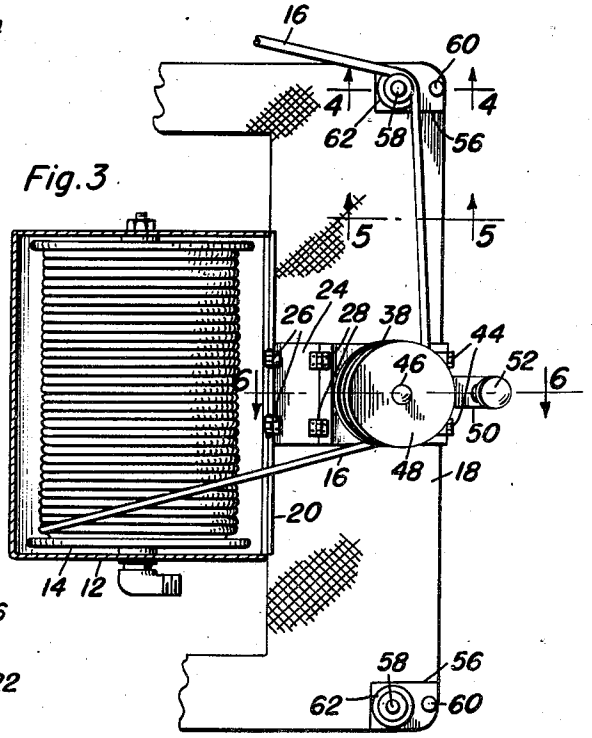


Fig. 3

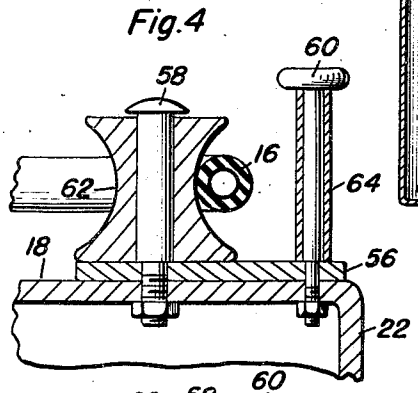


Fig. 4

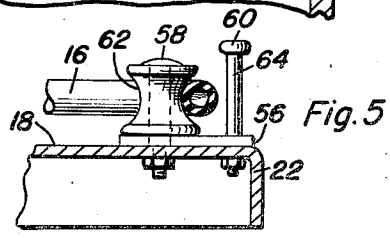


Fig. 5

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GUIDE ASSEMBLY FOR REELS

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Application December 7, 1950, Serial No. 199,637

3 Claims. (Cl. 242—87)

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This invention relates to new and useful improvements and structural refinements in guide assemblies for reels, more particularly hose reels such as are commonly mounted on fire trucks, and the principal object of the invention is to enable the hose to be unwound and pulled away from the reel in any desired direction without twisting, kinking or injuring the same.

The above object is achieved by the provision of a guide assembly which is mounted on the fire truck adjacent the hose reel, preferably adjacent the usual platform or step which is provided at the rear of the truck behind the hose reel, the guide assembly being shiftable from an inoperative position on the reel to an operative position on the platform, while sets of guide rollers are provided at the ends of the platform to engage the hose after it leaves the guide assembly.

Some of the advantages of the invention reside in its simplicity of construction, in its efficient and dependable operation, and in its adaptability to economical manufacture.

Although the invention as disclosed herein is primarily intended for use with hose reels on fire trucks, it is to be understood that the invention may also be employed with cables, windable on winch drums, or the like.

With the above more important objects and features in view and such other objects and features as may become apparent as this specification proceeds, the invention consists essentially of the arrangement and construction of parts as illustrated in the accompanying drawings, in which:

Figure 1 is a vertical sectional view of the hose reel in a fire truck, showing the invention in its inoperative position;

Figure 2 is a sectional view, similar to that shown in Figure 1, but illustrating the invention in its operative position;

Figure 3 is a fragmentary vertical sectional view of the subject shown in Figure 2;

Figure 4 is a sectional detail, taken substantially in the plane of the line 4—4 in Figure 3.

Figure 5 is a sectional detail, taken substantially in the plane of the line 5—5 in Figure 3; and,

Figure 6 is a sectional detail, on an enlarged scale, taken substantially in the plane of the line 6—6 of Figure 3.

Like characters of reference are employed to designate like parts in the specification and throughout the several views.

Referring now to the drawings in detail, the general reference character 10 designates the

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rear end of a fire truck provided with a housing 12 accommodating a rotatable reel 14 on which is wound a length of hose 16, the fire truck also being provided with a horizontal platform 18 which extends transversely of the hose reel and usually serves to accommodate two or more firemen in a standing position.

It is to be noted that the platform 18 has an upturned flange 20 at its forward edge and a downturned flange 22 at its rear edge, while the invention resides in the provision of a guide assembly for the hose 16, as will be presently described.

The guide assembly embodies in its construction a strap 24 which is connected by a hinge 26 to the upturned flange 20 and is also connected by a further hinge 28 to a second strap 30 which, in turn, is connected by hinged means 32 to one end portion of a strip 34.

This strip is secured by suitable rivets 36 to the underside of a plate 38, and the other end portion of the strip 34 is downturned and arcuated so as to provide a hook-shaped rest 40.

Moreover, a hook-shaped keeper member 42 is connected by hinged means 44 to the strip 34 adjacent the hinged means 32, and it will be noted that the plate 38 carries an upwardly projecting stud 46 on which is rotatably mounted a guide roller or pulley 48. Moreover, the plate 38 is provided with an extension or tongue 50 carrying a second, upwardly projecting stud 52 on which is rotatable a tubular guide roller 54, the latter being spaced from the roller or pulley 48, as shown.

In addition to the foregoing, a pair of plates 56 are provided at the opposite ends of the platform 18 adjacent the downturned flange 22 and carry upstanding studs 58, 60 on which are rotatably mounted the perspective guide rollers 62, 64, as is best shown in Figures 3, 4 and 5.

When the invention is not in use, the guide means are disposed above the hose reel 14, in which instance, as shown in Figure 1, the straps 24, 30 extend into the hose reel housing and the rest 40 of the strip 34 engages the hose 16 which is wound on the reel, so that the device is quite inobstrusive.

However, when the invention is to be used, it is shifted outwardly or rearwardly from the hose reel housing as shown in Figure 1 by the arrow 62, so that it is disposed on the platform 18 as shown in Figure 2, wherein the strap 30 and the rest 40 are supported by the platform and the keeper member 42 engages the lower edge of the downturned flange 22, thus preventing the device from lifting.

The hose **16** may then be unwound from the reel **14** and extended so as to pass around the roller or pulley **48** and around either of the sets of guide rollers **62, 64**, depending upon the direction in which the hose is to be taken.

It will be apparent in this manner that the hose may be pulled from the reel without kinking or twisting, and if the use of the guides **62, 64** is not desired the hose may be taken rearwardly so as to engage the roller **48** as well as the roller **54**.

It is believed that the advantages and use of the invention will be clearly apparent from the foregoing disclosure and accordingly, further description thereof at this point is deemed unnecessary.

While in the foregoing there has been shown and described the preferred embodiment of this invention it is to be understood that minor changes in the details of construction, combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

Having described the invention, what is claimed as new is:

1. The combination of a frame, a rotatable reel mounted in said frame and having a flexible element windable thereon, a horizontal platform secured to said frame transversely of said reel, and guide means for said element, said guide means comprising a shiftable plate, a set of straps hingedly connected to said plate and to said platform whereby the plate may be shifted from an inoperative position on said reel to an operative position on the platform, a guide pulley and a guide roller rotatably mounted on said plate to engage said element when extended from the reel, and sets of guide rollers provided at the opposite ends of said platform.

2. The device as defined in claim 1 together with a keeper member provided on said plate and engageable with said platform to sustain the plate thereon.

3. The combination of a frame, a rotatable reel mounted in said frame and having a flexible element windable thereon, a horizontal platform secured to said frame transversely of said reel and having an upturned flange and a downturned flange at the respective inner and outer edges thereof, and guide means for said element, said guide means including a first strap hinged to said upturned flange, a second strap hinged to the first strap, a plate provided on the underside thereof with a strip having a downturned end portion affording a rest, said second strap being hinged to said strip at a point remote from said rest, whereby said plate may be shifted from an inoperative position wherein said rest engages the element wound on said reel to an operative position wherein said rest engages said platform, a guide roller rotatably mounted on said plate to engage said flexible element when extended from said reel, and a hook-shaped keeper member hinged to said strip at a point adjacent said second strap and engageable with said downturned flange, whereby to sustain said plate on said platform.

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No references cited.