No. 828,562. PATENTED AUG. 14, 1906.

G. M. MELVEN.

HOSE REEL.

APPLICATION FILED NOV. 16, 1905.

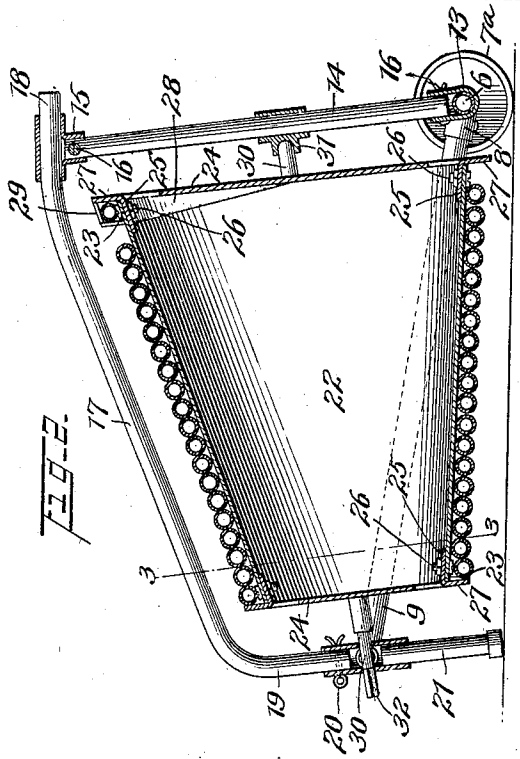


FIG. 2.

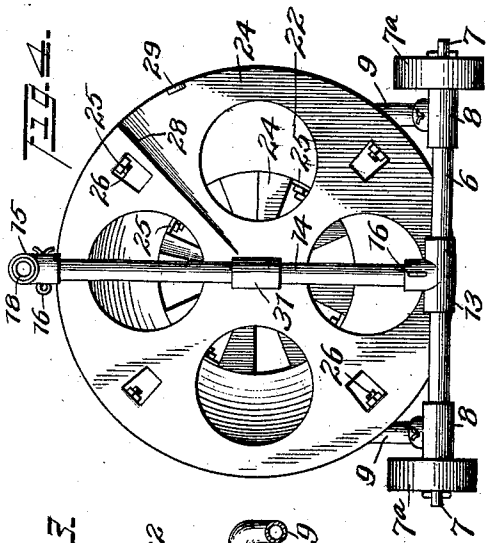


FIG. 4.

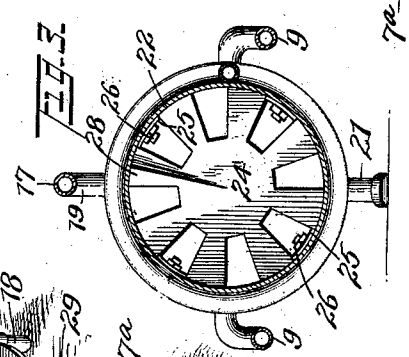


FIG. 3.

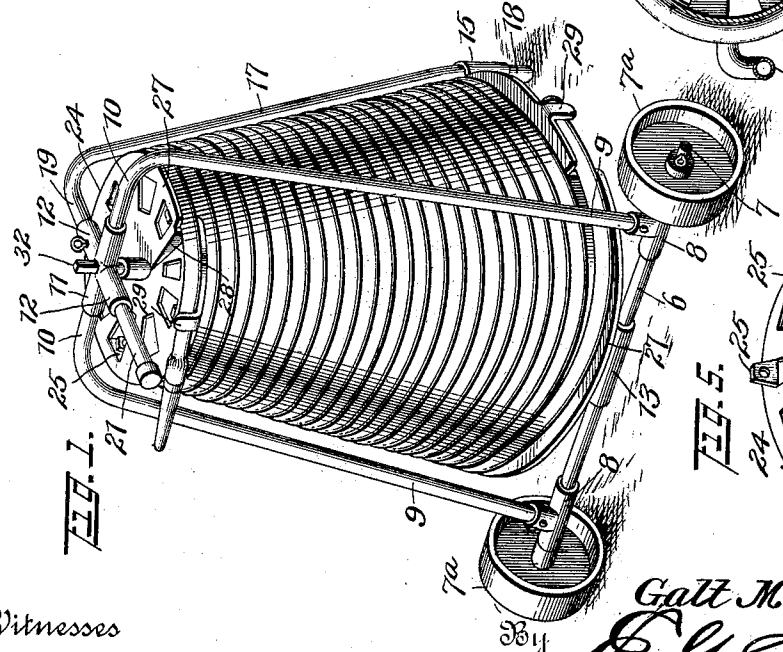


FIG. 1.

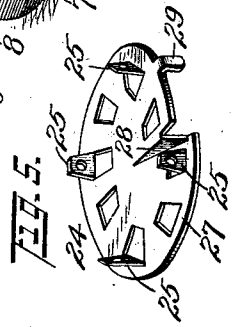


FIG. 5.

Witnesses

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HOSE-REEL.

No. 828,562. Specification of Letters Patent. Patented Aug. 14, 1906.

Application filed November 16, 1905. Serial No. 287,696.

To all whom it may concern:

Be it known that I, GALT MILLER MELVEN, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Hose-Reel, of which the following is a specification.

This invention relates to means for holding water-hose when not in use.

One of the principal objects is to provide a novel and simple structure upon which hose may be readily wound and which can be so placed that the water will drain completely from the hose.

A further object is to provide a collapsible or knockdown structure that will when taken apart occupy comparatively little space, so that it may be more compactly shipped or stored.

The preferred embodiment of the invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of the reel with the hose thereon and showing the same in position to allow the water to drain through the hose. Fig. 2 is a longitudinal sectional view through the same, showing the structure in position for the hose to be reeled thereupon or taken therefrom. Fig. 3 is a cross-sectional view on the line 3 3 of Fig. 2. Fig. 4 is an end elevation of the structure as shown in Fig. 2. Fig. 5 is a perspective view of one of the drum-heads.

Similar reference-numerals designate corresponding parts in all the figures of the drawings.

In the embodiment illustrated an axle 6 is employed, the ends 7 of which constitute journal-spindles for wheels 7^a. Connected to the axle 6 just inside the wheels by couplings 8 are standards 9, having their outer ends inwardly turned, as shown at 10, and connected by a coupling 11, this structure therefore forming a substantially U-shaped frame. The coupling 11 is provided with transverse oppositely-extending nipples 12.

Secured to the axle 6 between the couplings 8 by means of another coupling 13 is a cross-bar 14, disposed in angular relation to the standards 9 and carrying at its outer end a T-coupling 15. The cross-bar 14 is detachably secured to the couplings 13 and 15, its ends being inserted into the nipples thereof and fastened in place by cotter-pins 16 or other suitable holding devices. A central leg-standard 17 has one end passed through the T-coupling 15 and projects beyond the same, forming a foot 18, the other end being offset, as shown at 19, and inserted into one of the nipples 12 of the coupling 11, being detachably secured thereto by a cotter 20 or other suitable device. This leg-standard also has an extension portion 21 projecting from the other coupling 12 and constituting a foot that is disposed in angular relation to the foot 18 and at the other end of the frame thus formed.

Journaled in the above-described frame is a winding-drum, which consists of a hollow, preferably tapered, shell 22, which shell is preferably provided at its ends with extensions 23. Heads 24 are detachably secured to the ends of the shell by means of inturned ears 25, formed from the material of the heads, said ears being fastened to the shell by bolts or other suitable devices 26. It will be observed that the heads project beyond the shell-walls, forming flanges 27, one end of each flange being disposed at the inner end of the extension 23 and the other end of said flange being located over or beyond the outer end of the extension. These heads, furthermore, have offset portions 28, which cover the extensions 23 of the shell, thereby forming passage-ways for the hose, as will be apparent by reference to Figs. 1 and 5. The heads are provided beyond the said passage-ways with holding-lips 29, constituting keepers for the ends of the hose, and said heads, furthermore, have central outstanding pintles 30, one of the pintles being journaled in a bearing 31, carried by the cross-bar 14, the other passing through the coupling 11 and having an angular terminal 32 for the reception of a turning-tool.

In winding a hose upon or removing it from the drum the structure is disposed in substantially horizontal relation with the frame resting upon the foot 21, as shown in Fig. 2. The hose directly adjacent to the nozzle is engaged behind the keeper-lip at the smaller end of the drum, and by turning said drum the hose will be wound properly thereupon, the opposite end of said hose being engaged by the keeper on the other head. If now the drum is placed in an upright position, it will be apparent that the water will pass freely through the hose and drain from the lower end thereof, thus avoiding the danger of rotting said hose by the water standing therein. For the purpose of shipment or storage it will be apparent that the frame

may be dismembered and compactly folded. Also the heads can be removed from the shell and a series of said shells can be telescoped one within the other. For these reasons it is preferable to have the drums tapered, though this formation is not absolutely essential. Thus it will be seen that a simple structure is provided on which hose can be properly kept and which when dismembered will occupy but very little space.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a hose-reel, the combination with an axle, of side standards connected thereto, a coupling connecting the standards, a cross-bar connected to the axle between the standards and having a coupling, another standard connected to the said couplings, and a drum journaled at one end on the coupling that connects the side standards and journaled at its other end on the cross-bar.

2. In a hose-reel, the combination with a support, of a drum journaled thereon, said drum including a shell having a portion at one end and on one side extending beyond the remainder of the shell at said end, and a head for the shell secured to the end of the same and located over the extension, forming a passage-way for the hose.

3. In a hose-reel, the combination with a support, of a drum journaled thereon, said drum including a shell having a portion at one end and on one side extending beyond the main body of the shell, and a head for the shell located at the end of the same and having a flange that extends beyond the drum and has a portion located at the inner end, and a portion located at the outer end of the extension, forming a passage-way for the hose.

4. In a hose-reel, the combination with a support, of a drum journaled thereon, said drum including a shell having a portion at one end and on one side extending beyond the main body of the shell, a head for the shell located at one end of the same and having portions located at the inner end of and also over the extension, forming a passage-way for the hose, and a keeper projecting from the head at one side of the extension, and in a direction longitudinally of the shell.

5. In a hose-reel, the combination with a collapsible support, of a tapering drum comprising a tapering hollow shell having extensions at its ends, detachable heads secured to the ends of the shell and projecting beyond the sides of the same, forming annular flanges, said flanges being located at the ends of the extensions to provide passage-ways at the ends of the drum for the hose, keeper-lips mounted on the heads, and pintles carried by the heads and journaled in the support.

6. In a hose-reel, the combination with an axle, of side standards connected thereto and having inturned ends, a coupling connecting the inturned ends of the standards and having oppositely-extending nipples, a cross-bar connected to the axle and having a journal-bearing and a coupling, another standard connected to the latter coupling and to one of the nipples of the first-mentioned coupling, a leg carried by the other nipple of said first-mentioned coupling, and a drum journaled at one end in the bearing of the cross-bar and journaled at its other end in the first-mentioned coupling.

7. In a hose-reel, the combination with an axle, of wheels journaled thereon, a substantially U-shaped frame mounted on the axle, a cross-bar connected to the axle, a leg-standard connecting the frame and cross-bar and projecting beyond the same, forming feet, and a drum journaled on the frame and cross-bar.

8. In a hose-reel, the combination with an axle, of wheels journaled on the ends of the same, a substantially U-shaped frame mounted on the axle and including a coupling, a cross-bar connected to the axle and having a coupling, a leg-standard detachably connected to the couplings, and a drum detachably journaled in the frame thus formed.

9. In a hose-reel, the combination with an axle, of wheels journaled on the ends of the same, standards coupled to the axle and having their outer ends connected, a cross-bar coupled to the axle between the standards and disposed in angular relation to said standards, couplings carried by the standards and cross-bar, a leg-standard connected to the couplings and projecting beyond the same forming feet, and a drum comprising a hollow shell and heads detachably secured thereto, the said heads having pintles journaled in the frame formed by the standards and cross-bar.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GALT MILLER MELVEN.

Witnesses:
H. K. Fox,
C. M. Melven.