

March 20, 1928.

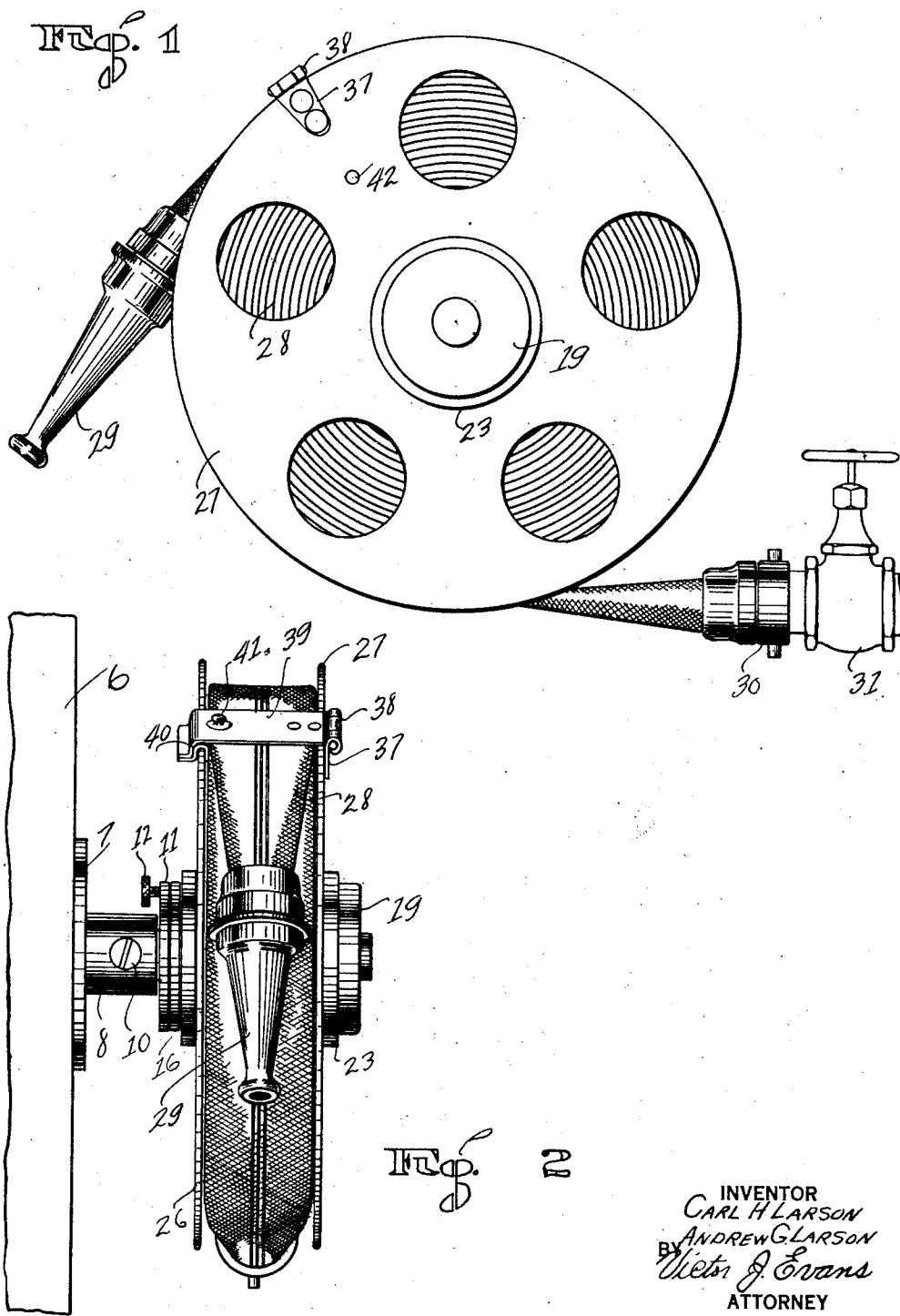
C. H. LARSON ET AL

1,663,410

HOSE REEL

Filed Aug. 9, 1926

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Fig. 3

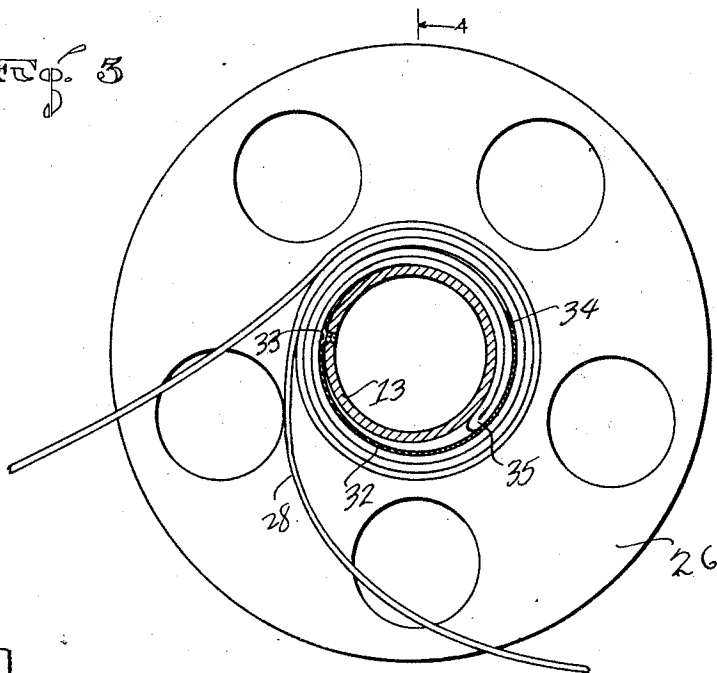
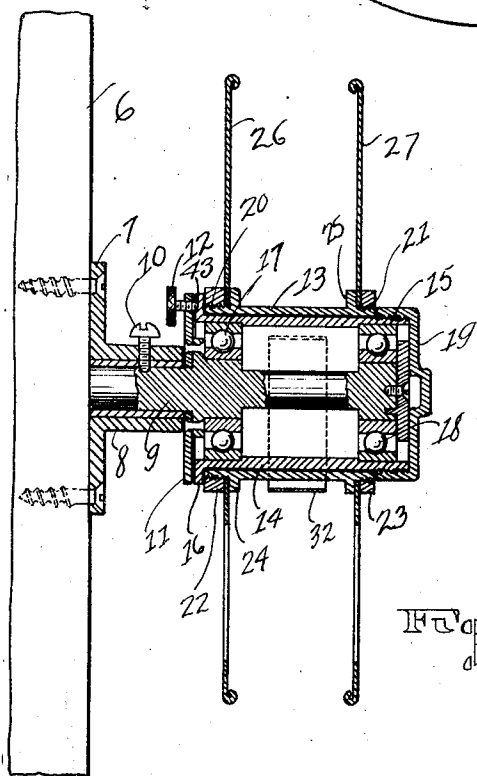


Fig. 5

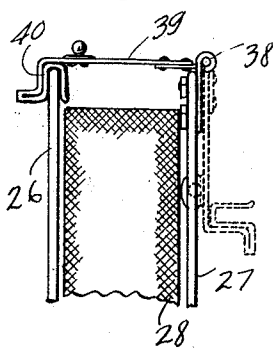


Fig. 4

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UNITED STATES PATENT OFFICE.

CARL H. LARSON AND ANDREW G. LARSON, OF SAN FRANCISCO, CALIFORNIA.

HOSE REEL.

Application filed August 9, 1926. Serial No. 128,222.

This invention relates to improvements in reeling devices and has particular reference to a fire hose reel adapted to be secured to a stationary support such as a wall for the purpose of readily winding or unwinding the fire hose.

The principal object of the invention is to provide a novel type of hose reel which embodies in its construction means whereby the hose can be unwound from the reel in a minimum amount of time.

Another object of this invention is to provide stop means in conjunction with the reel mechanism whereby the reel can be retained from unwinding by an unauthorized person.

An additional object is to provide a novel type of clamp mechanism associated with the hub of the reel so that a fire hose can be connected to the hub of the reel in a folded position and when thus connected, a full length of the hose will be presented without considerable loss of time.

A still further object of the invention is to provide in the hose reel, means whereby the hose can be quickly dried after being wound upon the reel, which means will allow air to permeate the reel so that the referred to drying action can be readily accomplished.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification, and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a side elevation of the hose reel secured to a faucet or hydrant,

Figure 2 is an end elevation of the hose reel mounted upon a wall bracket,

Figure 3 is a side elevation of one of the circular face plates of the hose, with the hub and clamping means being shown in section and illustrating the manner in which the hose is positioned about the hub,

Figure 4 is a transverse vertical section on the line 4—4 of Figure 3 illustrating to advantage the hub construction and its associated parts, and

Figure 5 is a fragmentary detail view of the retaining means for holding the nozzle of the hose in position.

In the accompanying drawings wherein for the purpose of illustration is shown a preferred embodiment of our invention, the

numeral 6 designates a wall or the like support which has secured thereto a bracket 7 equipped with a bushing 8 adapted to receive therein, one end of a shaft 9. A set screw as indicated at 10 is positioned in the bracket so that the shaft 9 can be detachably secured therein. The referred to shaft 9 carries thereon an annular plate 11 in which is positioned a locking screw 12 the purpose of which will be hereinafter explained.

The mechanism employed for permitting rotation of the hose reel 13 about the shaft includes a hub member 14 externally threaded at one end as at 15 and having a flange 16 at its opposite end. Within the hub the conventional ball bearings 17 and 18 are employed while an end cap 19 threadedly secured on the end 12 of the hub member completes the hub construction.

The hose reel 13 per se comprises an annular casing of a larger diameter than the hub member which is mounted on the casing and in frictional contact therewith and adapted to rotate with the hub member as a unit about the shaft 9. This casing is externally threaded at its extremity as at 20 and 21 for receiving thereon internally threaded annular rings 22 and 23 which together with spaced annular flanges 24 and 25 formed on the casing, retain therebetween perforated circular plates 26 and 27. Between the spaced plates 26 and 27 there is positioned a fire hose 28 equipped with the usual nozzle 29 and clamp 30, the latter in turn being connected to a hydrant 31.

It will be observed that the annular casing has secured on its outer periphery clamping means 32 which includes a thin strip of spring metal secured as at 33 to the hub and spaced therefrom as at 34 for the purpose of receiving the folded end 35 of the hose 28.

We also propose to employ a nozzle retaining means which includes a plate 37 having hingedly connected thereto as at 38 a metal strip 39, having a clamping end 40 for engaging the circular plate 26.

The operation of this retaining member is shown to advantage in Figure 5, the full line illustration of the member showing the same in an operative position, and the dotted line illustration disclosing the member in an inoperative position, wherein a tit 41 is receivable in a socket 42 in the end plate 19.

The clamping screw 12 before referred to is adapted to penetrate the plate 11 and to

be received in a notch 43 formed in the flange 16 of the hub so that rotary movement of the reel as a whole can be prevented when desired. This will eliminate the annoyance of an unauthorized person actuating the reel and causing an unwinding of the hose.

In assembling the device for operation, it is only necessary to secure the screws or any other fastening means in the wall 6, the screws serving to hold the bracket 7 in position. The shaft 9 is then inserted in the bracket and the set screw 10 actuated for holding the shaft locked therein. Actuation of the locking screw 12 to an inoperative position will allow the reel and the hub construction to move as a unit thereby carrying the hose in a rotary movement so that a desired reeling or unreeling of the hose can be quickly accomplished.

The clamping means 32 before referred to serve to retain there-between the end 35 of the folded hose so that the hose will readily unwind and thus a speedy use of the hose can be accomplished without loss of time when a fire hazard arises.

From the foregoing description taken in connection with the accompanying drawings, it will be evident that we have devised a compactly arranged reel which employs sim-

licity of construction, durability, efficiency in operation and a device which is highly serviceable in use.

It is to be understood that the form of our invention herewith shown and described is to be taken as a preferred example of the same and that various changes relative to the material size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claim.

Having thus described our invention, we claim:—

In combination with a support and a bracket secured thereto, of a shaft fixed in the bracket; a hub member rotatable on said shaft, a casing mounted on said hub member and rotatable therewith, means carried by said casing for retaining thereon a portion of hose, said means comprising a curved resilient metal strip secured at one end to the outer periphery of said casing and spaced at its free end from said casing for receiving a folded section of the hose.

In testimony whereof we affix our signatures.

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