June 5, 1923. 1,458,115

W. T. CALDWELL

HOUSING FOR FLEXIBLE SERVICE TUBES AND CABLES

Filed Oct. 1, 1921

Fig. 1.

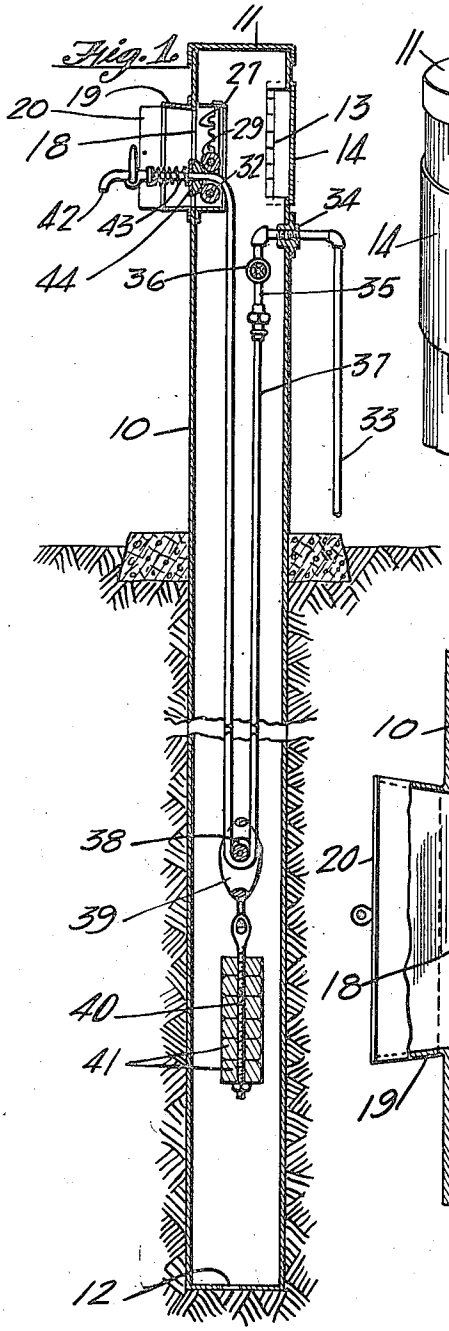


Fig. 2.

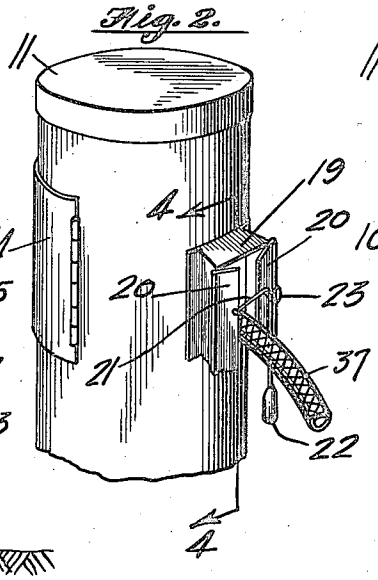


Fig. 3.

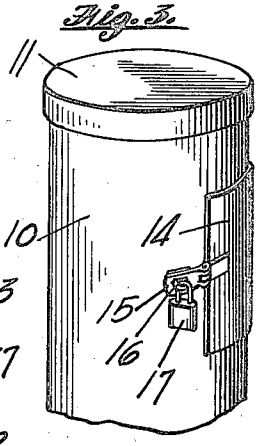


Fig. 4.

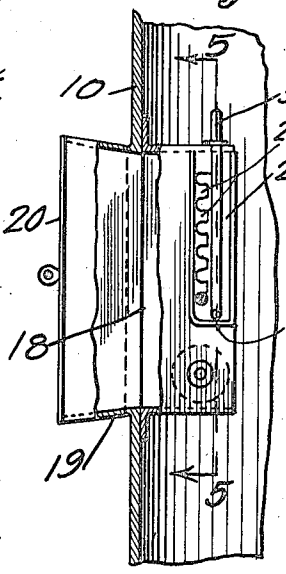
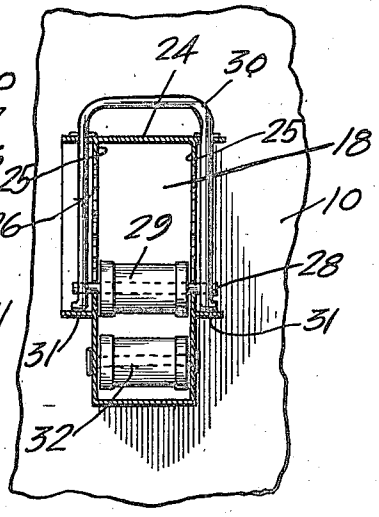


Fig. 5.



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UNITED STATES PATENT OFFICE.

WILLIAM T. CALDWELL, OF GLENDALE, CALIFORNIA.

HOUSING FOR FLEXIBLE SERVICE TUBES AND CABLES.

Application filed October 1, 1921. Serial No. 504,824.

To all whom it may concern:

Be it known that I, WILLIAM T. CALDWELL, a citizen of the United States, residing at Glendale, in the county of Los Angles and State of California, have invented new and useful Improvements in Housings for Flexible Service Tubes and Cables, of which the following is a specification.

My invention relates to a housing for flexible service tubes and cables; the principal objects of my invention being to provide a relatively simple and practical construction that will serve as a support and a housing for the air and water tubes that are utilized in garages and service stations for motor vehicles, to provide a support and housing that will hold tubes, cables and the like in convenient position where they may be readily withdrawn when used; and further to provide the housing of the device with means whereby it may be locked to prevent the unauthorized use or removal of the inclosed flexible tubes and cables.

With the foregoing and other objects in view, my invention consists in certain novel features of construction and arrangement of parts that will be hereinafter more fully described and claimed and illustrated in the accompanying drawings, in which:

Figure 1 is a vertical section taken through the center of a flexible tube and cable housing of my improved construction.

Fig. 2 is a perspective view of the upper part of the housing and showing the opening through which the tube or cable passes during its movement into and out of the housing.

Fig. 3 is a perspective view of the upper portion of the housing and showing the means utilized for locking the door or opening in the upper end thereof.

Fig. 4 is an enlarged vertical section taken approximately on the line 4—4 of Fig. 2.

Fig. 5 is a vertical section taken on the line 5—5 of Fig. 4.

Referring by numerals to the accompanying drawings which illustrate a practical embodiment of my invention, 10 designates a vertically disposed tubular housing preferably constructed of sheet metal and which may be conveniently located in a garage or service station, and as illustrated in Fig. 1, it is desirable, although not essential, that the lower part of the housing be extended downwardly into the ground so that the upper portion projects a short distance, for instance three or four feet above the ground.

The upper end of the housing is closed by a fixed cap 11, and the lower end is provided with one or more openings 12 which will permit the ready escape of any water that might otherwise accumulate in the bottom of the tube. Formed in the upper portion of the wall of the tube is an opening 13 that is normally closed by a hinged door 14, and the latter being provided at its free edge with a hinged hasp 15 that is adapted to receive an eye or staple 16 that is secured to the body of the housing, and to lock the hasp and door in closed positions, the shackle of a suitable padlock 17 is inserted through the eye or staple 16.

Formed in the wall of housing 10, preferably at a point opposite the opening 13, is an opening 18, and secured to the housing around said opening is a short outwardly projecting housing 19, the opening at the outer end of which is closed by a pair of outwardly swinging doors 20 that are hinged at their outer edges to the forward edges of the side walls of housing 19. Secured to the central portion of one of these doors is a flexible member 21, preferably a chain or cable, the free end of which carries a weight 22, and said chain or cable is adapted to overlie a pin or hook 23 that projects outwardly from the outer face of the opposite door 20.

Secured to the inner face of housing 10 and disposed about the opening 18 is a substantially rectangular frame 24 having inset side walls 25, and formed in the latter are vertically disposed slots 26, and extending laterally from each slot on one side thereof is a series of notches 27. These notches are adapted to receive the trunnions or ends of a shaft 28 that carry a roller 29, the latter being positioned between the walls 25, and to retain the shaft in a pair of the notches 27, the legs of an inverted U-shaped retaining member 30 are inserted through the top of frame 24, the lower ends of which legs rest on flanges 31 that project outwardly from the side walls below the slots and notches therein. By virtue of the construction thus described, roller 29 is made vertically adjustable in the upper portion of housing 24.

Journaled between the lower portions of the side walls 25 is a roller 32 that co-oper-

ates with roller 29 in providing an antifriction bearing for the flexible tube or cable that is contained within the housing.

Where the housing is utilized for containing an air or water tube, the air or water supply pipe 33 is connected to a fitting 34 that is arranged in the wall of housing 10 preferably at a point just below opening 13, and connected to said fitting within the housing is a short depending pipe section 35 in which is located an ordinary valve 36. Detachably connected to pipe section 35 is one end of a flexible tube 37 that normally hangs downward within the housing 10 thereby forming an elongated U-shaped loop, the lower portion of which passes beneath a pulley 38 that is journaled in a block 39. Detachably connected to block 39 is a depending screw threaded rod 40 on which is screw seated a series of counterbalancing weight sections 41.

The end of the flexible tube 37 opposite the end that is connected to pipe sections 35 passes between rollers 29 and 32 and extends outward through housing 19, and the outer end of said flexible tube carries a suitable faucet 42 or pneumatic tire filling valve. Secured to the inner end of said faucet is one end of a compression spring 43 that surrounds the flexible tube that is immediately adjacent to said nozzle, and the inner end of said spring is connected to a ring 44 that is loosely arranged on the flexible tube. This ring 44 is preferably formed of rubber or the like, and when the flexible tube is out of service and positioned within the housing 10, said ring bears directly against the rollers 29 and 32, as illustrated in Fig. 1.

The counterbalancing weights 41 normally retain the main body portion of the flexible tube within the housing 10, and when so positioned the faucet 42 projects a short distance beyond the doors 20, and to use the flexible tube the faucet is engaged and pulled outwardly thereby pulling the body of the flexible tube upwardly through the housing and between the rollers 29 and 32, thus the faucet may be drawn to a position a considerable distance away from the housing, and when the desired amount of flexible tube has been drawn out it will be prevented from rearward movement into the housing by the action of doors 20 which act as restraining devices, inasmuch as their free edges engage the flexible tube on opposite sides thereof, and said doors being drawn into engagement with said tube by weight 22 that is connected to chain or cable 21 and which latter passes over pin 23.

To permit the return of the flexible tube to the interior of the housing it is only necessary to lift weight 22 a short distance and swing the doors 20 outwardly away from engagement with the flexible tube, and the counterbalancing weights 41 will now act to draw the flexible tube into the housing.

When it is desired to lock the housing and prevent the removal or unauthorized use of the flexible tube, inverted U-shaped member 30 is withdrawn and roller 29 is elevated a sufficient distance to permit the end of the flexible tube carrying faucet 42 and ring 44 to be drawn into the upper portion of the housing after which the faucet is secured to a suitably located hook or other support within the housing and the door 14 is locked by the engagement of a padlock. With the parts so arranged it will be impossible to withdraw the flexible tube and faucet from the housing.

My improved housing is particularly designed for supporting and containing flexible tubes that are utilized for supplying water and compressed air to motor vehicles and the like and for supporting and containing the cables or conductors of extension electric lamps, and in some instances it may be found advantageous to arrange all of the flexible tubes and cables within a single housing.

My improved construction affords a relatively simple and convenient arrangement for supporting and holding the flexible tubes and cables, greatly facilitates the handling of the tubes and cables, retains the same in comparatively clean condition, and provides means for locking the tubes and cables against use and removal by unauthorized persons.

It will be understood that minor changes in size, form and construction of the various parts of my improved housing for flexible service tubes and cables may be made and substituted for those herein shown and described without departing from the spirit of my invention, the scope of which is set forth in the appended claims.

I claim as my invention:

1. A housing for flexible service tubes and cables comprising an elongated housing provided with an opening through which a contained flexible member is adapted to pass, and separable antifriction rollers arranged within said housing adjacent to said opening.

2. A receiver for flexible service tubes and cables comprising an elongated housing provided with an opening through which a contained flexible member is adapted to pass, antifriction rollers arranged within said housing adjacent to said opening, and a pair of outwardly swinging doors adapted to close said opening and to engage the flexible member passing therethrough.

3. The combination with a housing, of a supply pipe leading thereto, a flexible tubular member connected to said supply pipe and normally contained within said housing, a counterbalancing weight carried

by the flexible tube within said housing, there being an opening in said housing through which the flexible tube is adapted to pass, and automatic means comprising a door for gripping the extending part of the tubular member.

4. The combination with a housing, of a supply pipe leading thereto, a flexible tubular member connected to said supply pipe and normally contained within said housing, a counterbalancing weight carried by the flexible tube within said housing, there being an opening in said housing through which the flexible tube is adapted to pass, and a pair of selfclosing doors normally closing said opening.

5. The combination with a housing, of a supply pipe leading thereto, a flexible tubular member connected to said supply pipe and normally contained within said housing, a counterbalancing weight carried by the flexible tube within said housing, there being an opening in said housing through which the flexible tube is adapted to pass, antifriction rollers arranged within the housing adjacent to the opening therein and adapted to support the flexible tube during its movement through said opening, and a stop collar on said member to engage the said rollers.

6. The combination with a housing, of a supply pipe leading thereto, a flexible, tubular, valved member connected to said supply pipe and normally contained within said housing, a counterbalancing weight carried by the flexible tube within said housing, there being an opening in said housing through which the flexible tube is adapted to pass, doors normally closing said opening, and antifriction rollers arranged within the housing adjacent to the opening therein and adapted to support the flexible tube during its movement through said opening, said rollers being separable to admit insertion of the valved end of said member.

7. The combination with an elongated housing, of a supply pipe leading thereto, a flexible tube arranged within said housing and connected to said supply pipe, a counterbalancing weight connected to said flexible tube for normally retaining the same within said housing, there being an opening formed in said housing through which the flexible tube is adapted to pass, and door-like elements for engaging said tube and holding the withdrawn portion against return movement into the housing.

In testimony whereof I have signed my name to this specification.

W. T. CALDWELL.