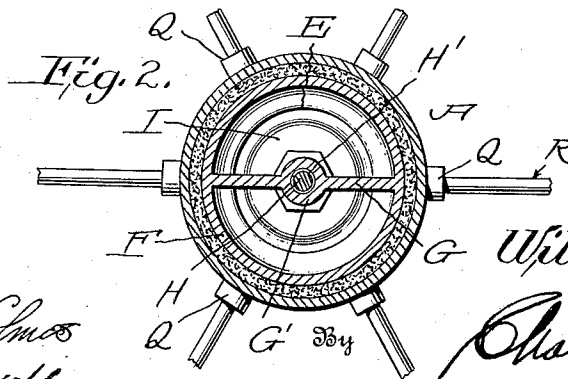
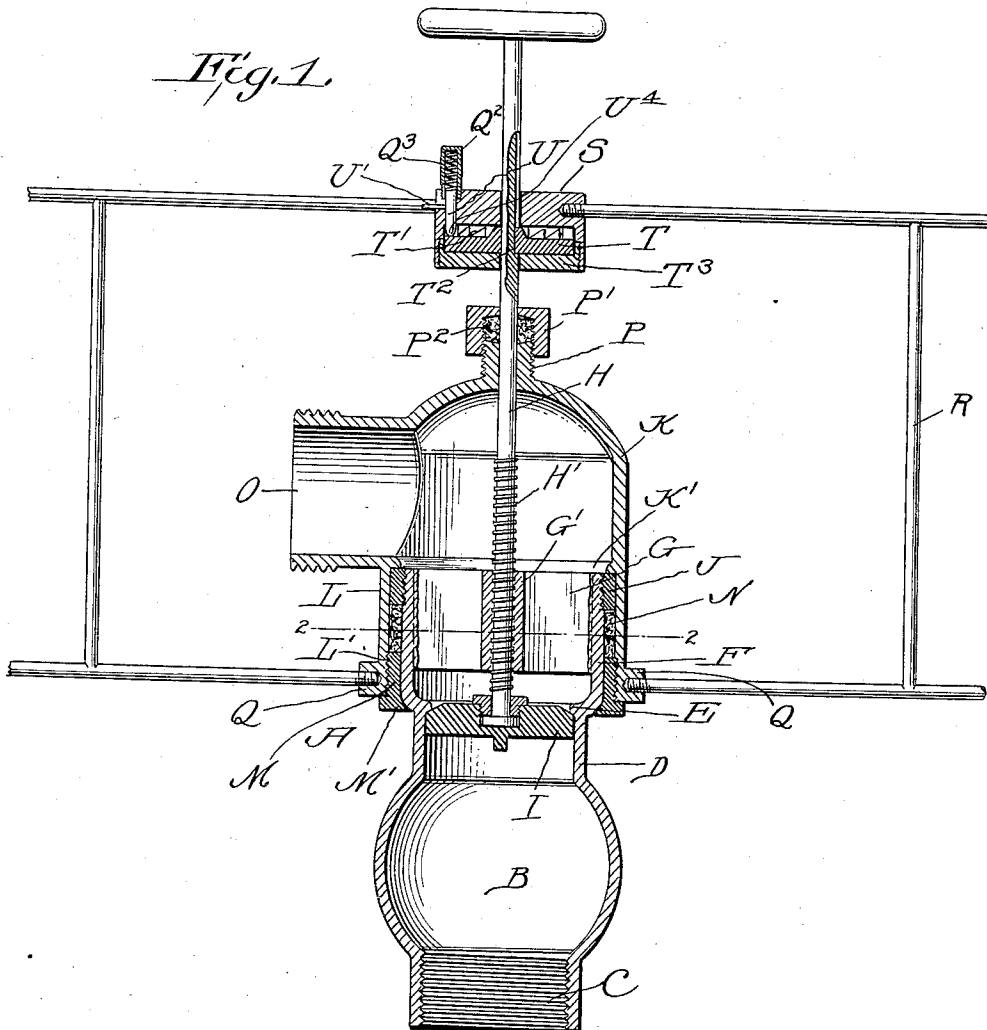


W. J. CLAY.
 REEL OPERATED HYDRANT.
 APPLICATION FILED DEC. 10, 1910.

1,041,743.

Patented Oct. 22, 1912



Witnesses

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WILLIAM J. CLAY, OF COTTON VALLEY, LOUISIANA.

REEL-OPERATED HYDRANT.

1,041,743.

Specification of Letters Patent.

Patented Oct. 22, 1912.

Application filed December 10, 1910. Serial No. 596,626.

To all whom it may concern:

Be it known that I, WILLIAM J. CLAY, a citizen of the United States, residing at Cotton Valley, in the parish of Webster and State of Louisiana, have invented a new and useful Improvement in Reel-Operated Hydrants, of which the following is a specification.

This invention relates to certain new and useful improvements upon my reel-operated hydrant upon which Letters Patent were granted me Sept. 7, 1909, No. 932,290, the object being to improve the general construction of the hydrant in such a manner that the valve will not be opened until the hose carried by the reel has been partially unwound therefrom.

A still further object of my invention is to provide a reel-operated hydrant which is composed of a very few parts which are so arranged and connected that the cost of manufacturing the same is greatly decreased, and at the same time a very effective hydrant is formed.

With these objects in view, the invention consists in the novel features of construction, combination and arrangements of parts, hereinafter fully described and pointed out in the claims.

In the drawings forming a part of this specification:—Figure 1 is a vertical section through my improved reel-operative hydrant. Fig. 2 is a section taken on line 2—2 of Fig. 1.

In carrying out my improved invention I employ a valve casing A which is provided with a globular portion B having an internally threaded neck C which is adapted to be secured on the end of a supply pipe not shown. The valve casing is provided with an intermediate contracted portion D forming a straight passage, and the upper edge of said contracted portion is provided with an integral annular flange E forming a valve seat. The upper end of the valve casing is enlarged as shown at F and is provided with oppositely disposed integral inwardly projecting arms G carrying an internally threaded nut G' in which is mounted the threaded lower end H' of a valve stem H which carries a detachable valve I at its lower end which fits snugly within the contracted portion D of the valve casing and is adapted to be seated on the valve seat E so

as to form a water tight joint between the globular portion of the casing and the enlarged portion.

The upper end of the enlarged portion F of the valve casing is externally threaded and on this is secured a bearing nut J on which is revolubly mounted a cap K which is provided with an annular internal bearing shoulder K' adapted to rest upon the bearing nut J in order to support the same in a vertical position, and in such a manner that the cap K can freely rotate thereon. The cap K is provided with a neck portion L which extends down over the enlarged portion F of the valve casing, and is provided with the internal threaded portion L' in which is secured a locking nut M which is provided with an annularly inwardly projecting flange M' at its lower end adapted to extend under the enlarged portion in such a manner that the cap will be prevented from moving vertically. Packing material N is arranged between the bearing ring J and nut M so as to form a water tight joint between the cap and valve casing, and in such a manner that the cap will be free to rotate thereon.

The cap K is provided with an externally threaded nipple O to which is adapted to be connected the end of a hose not shown, as will be later described. The top of the valve casing is provided with an apertured externally threaded boss P through which the valve H extends and over which is arranged a cap P' for holding the packing material P² in position around the stem in such a manner as to form a water tight joint so as to prevent the water from escaping around the valve.

The neck L' of the cap K is provided with an annular flange Q at its lower end forming the lower hub of a reel R which is provided with an upper hub S which is loosely mounted on the valve stem H in order to allow the same to turn freely thereon. The hub S is hollow, and arranged within the same is a disk T provided with a ratchet upper face T', and the bore of said disk is provided with an inwardly projecting key T² adapted to fit within a longitudinal groove formed in the upper portion of the valve stem in order to rotate the stem when said disk is rotated. The disk is secured within the hub by a nut T³ as clearly

shown in order to allow the same to be detached when desired, and the upper end of the valve stem is provided with a wheel for operating the same. A threaded bore is
 5 formed in the top of the hub S which communicates with a slot formed in the side through which extends the arm U' of the pin U which is slidably mounted within a hollow plug Q² secured in the bore, and arranged within the plug over the pin U is a
 10 coiled spring Q³ for normally holding the beveled lower end Q⁴ of the pin in engagement with the ratchet face of the disk so that when the wheel is turned in one direction the pin will be locked into engagement
 15 with the teeth of the ratchet in order to cause the valve stem to be rotated so as to open the valve.

From the foregoing description it will be seen that I have provided a reel-operative hydrant which is so constructed that the valve for controlling the supply of water is mounted in a straight bore of such a length that the same is not moved out of said bore
 25 until the reel has been operated a number of times, whereby the water will not be admitted to the hose carried by the reel until the same has been partly unwound therefrom.

30 What I claim is:—

1. A reel operated hydrant comprising a vertically arranged pipe adapted to discharge at its upper end, said pipe comprising an enlarged portion having immediately
 35 above the same a straight cylindrical portion of less diameter than the said enlarged portion, said straight portion having an inwardly extending annular valve seat at its upper end, a valve arranged in said straight portion and adapted to engage said seat, said valve being adapted to move downwardly into said enlarged portion, a hose reel mounted upon said pipe, and means connecting said reel with said valve for the
 40 purpose of moving the valve, the straight portion having such a length that a comparatively large number of turns of the

reel will be necessary to move the said valve from its seat into the said enlarged portion.

2. The combination with a valve casing 50 provided with a globular portion and a central contracting portion, of a cap provided with a neck mounted on said casing, a valve stem extending through said cap having a threaded portion, a nut carried
 55 by said casing through which said stem extends, a valve revolubly mounted on the lower end of said stem working in the contracted portion of said casing, a reel carried by said cap provided with means for 60 locking the same to the stem of the valve.

3. A reel operated hydrant comprising a valve casing having a globular portion and an enlarged portion, and a central contracted portion having an annular flange forming a valve seat, a valve slidably mounted in said contracted portion, bearing rings carried by the enlarged portion, a cap provided with a flange revolubly mounted on said bearing rings, a valve stem connected
 70 to said valve, a reel carried by said cap and means carried by said reel for locking the same to the valve stem for forcing said valve downwardly out of the contracted portion.

4. In a device of the kind described, the 75 combination with a valve casing having a central contracted portion terminating in an interior annular flange forming a valve seat, of a valve slidably mounted in said contracted portion, a valve stem connected to
 80 said valve provided with a threaded portion, a nut carried by the casing to receive said stem, a bearing ring mounted on said enlarged portion, a cap provided with a flange revolubly mounted on said ring, a nut carried by said cap co-acting with said valve casing for preventing a vertical movement of said cap, and a reel carried by said cap having means for locking the same to the valve stem.

WILLIAM J. CLAY.

Witnesses:

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