

No. 608,651.

Patented Aug. 9, 1898.

E. CLIFF.
HOSE RACK.

(Application filed Feb. 8, 1898.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 2.

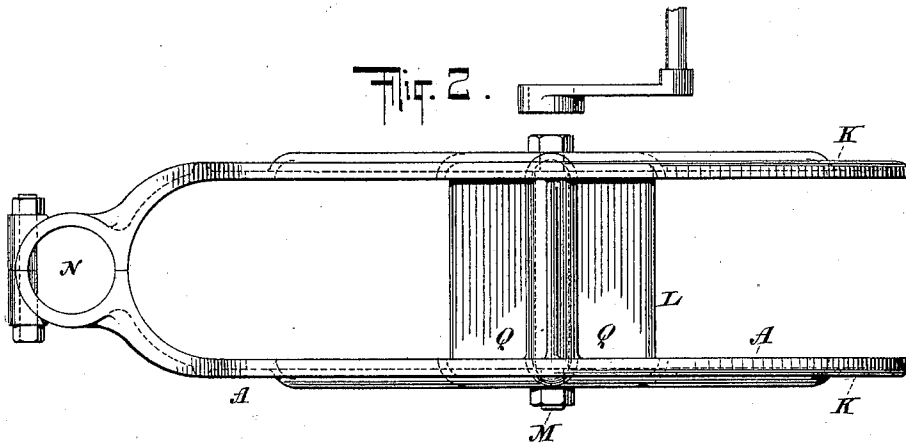
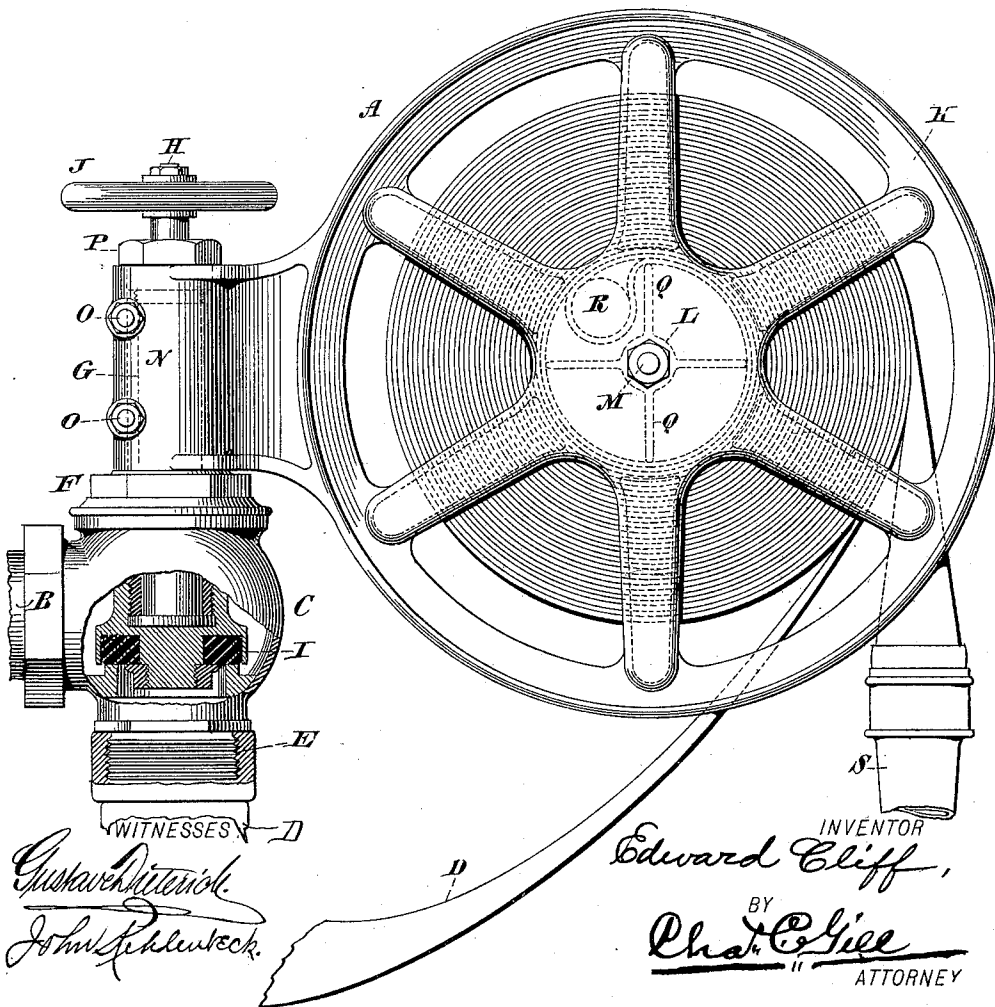


Fig. 1.



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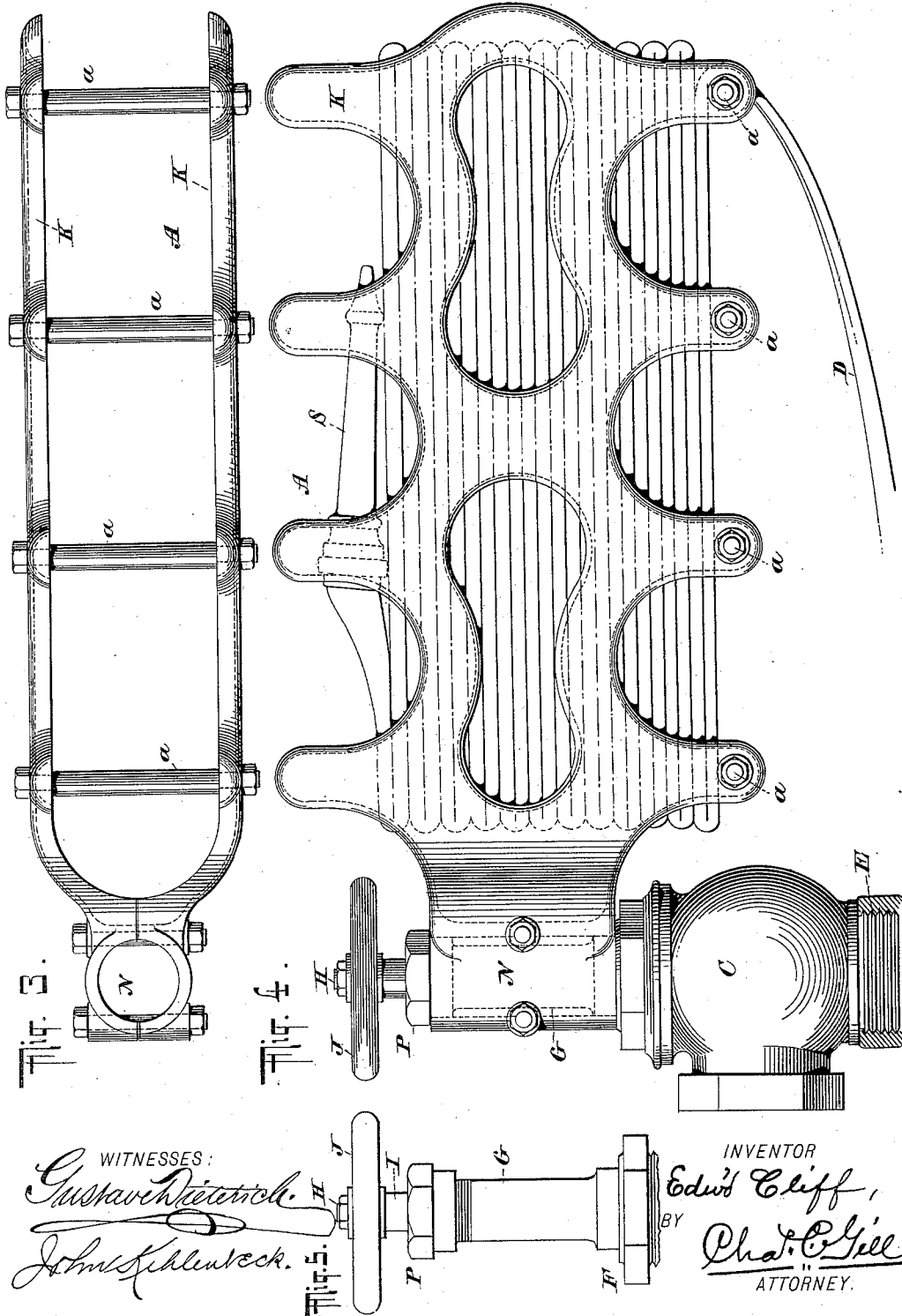
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UNITED STATES PATENT OFFICE.

EDWARD CLIFF, OF NEWARK, NEW JERSEY.

HOSE-RACK.

SPECIFICATION forming part of Letters Patent No. 608,651, dated August 9, 1898.

Application filed February 8, 1898. Serial No. 669,589. (No model.)

To all whom it may concern:

Be it known that I, EDWARD CLIFF, a citizen of the United States, and a resident of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Hose-Racks, of which the following is a specification.

The invention relates to improvements in hose-racks of the character adapted for use in buildings having a fixed water-supply; and it consists in the novel features and combinations of parts hereinafter described, and particularly pointed out in the claims.

The invention embraces, in addition to certain novel features in the rack proper, the direct combination and relation of the rack with the valve-casing of the water-supply apparatus, whereby important results are attained and a greatly-improved and more efficient apparatus is provided.

The invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation, partly broken away, of a hose-rack and water-supply apparatus embodying the invention. Fig. 2 is a top view of the hose-rack detached from the water-supply apparatus, the hose being omitted. Fig. 3 is a detached top view of a modified form of hose-rack embracing a portion of the invention. Fig. 4 is a side elevation of same applied to the water-supply apparatus; and Fig. 5 is a detached side elevation of the upper portion of the valve-casing and shows exposed the tubular post or sleeve through which the valve-stem passes and from which the rack is pivotally supported.

In the drawings, referring to Figs. 1 and 2, A designates the hose-rack, B the supply-pipe for water, and C the valve-casing, to which the hose D at one end is connected and which supports the rack A. The water-supply pipe B is the usual fixed water-supply pipe found more particularly in tall buildings, and upon the end of this pipe is screwed in the usual manner the valve-casing C, having at its lower side the nozzle E, to which, by the usual coupling, the hose D is applied. Upon the upper side of the bonnet F of said

valve-casing C is the vertical sleeve G, and through this sleeve the stem H, carrying the valve I, passes in the usual manner. The valve-stem H carries the wheel or handle J and when moved vertically elevates the valve I from its seat in order that the water from the pipe B may pass through the discharge-nozzle E and enter the hose D. When the valve-stem H is lowered by being turned in the customary way, the valve I will be forced downward upon its seat and, as shown in Fig. 1, cut off the supply of water from the nozzle E and hose D. The valve I, with its stem H, is of usual form, construction, and operation and is ordinarily known as the "Jenkins" valve. The sleeve G, through which the valve-stem H passes, constitutes a post upon which the rack A is secured and which permits of said rack A being turned laterally to one side or the other, as may be preferred.

The rack A (shown in Figs. 1 and 2) comprises the two corresponding sides K K and central hub L, the latter being secured upon the bolt M, which passes transversely through said sides K. The sides K correspond with one another, as above described, and at their outer ends are separated from one another, while at their inner ends said sides K come together and form the vertical cylindrical sleeve N, which passes upon the vertical sleeve or post G of the valve-casing, being there retained in proper position by means of the transverse bolts O O and nut P, this nut P being the ordinary gland-nut by which the valve-stem H is packed. The two sides K K of the rack A (shown in Figs. 1 and 2) are held together simply by the central bolt M and the aforesaid bolts O O, and said sides at their inner ends are semicylindrical, as more clearly illustrated in Fig. 2, and come together to form the complete sleeve N.

The bolt M supports the hub L, and the latter preferably is formed with wings Q, upon which the hose D is wound and which, in the manner shown and described in Letters Patent of the United States granted to me on the 6th day of July, 1897, and numbered 585,861, admit of the folding of the hose at about its center upon a core R, as indicated in Fig. 1, preparatory to the winding of the hose in double layers upon the hub L.

In applying the hose D to the apparatus made the subject hereof the coupling end of the hose is applied to the discharge-nozzle E of the valve-casing C, and thereupon the hose, at about its center, is folded upon the core R and applied to the space between two of the ribs Q of the hub L, and thereupon the hose is wound in double layers upon said hub L, the discharge-nozzle S of the hose being left in convenient position to be grasped in case of necessity. The hub L may be rotated to facilitate the winding of the hose upon itself by any convenient means at hand, such as a key or wrench applied to the head of the bolt M, as indicated in Fig. 2.

In the construction presented in Figs. 1 and 2 the inner opposite faces of the sides K K in line with the hub L are recessed, as indicated by dotted lines in Fig. 2, to receive the ends of the hub L for the purpose of preventing any portion of the hose from wedging between the ends of said hub L and the said sides K K.

With the use of the apparatus illustrated in Figs. 1 and 2 the attendant in case of fire will by means of the wheel or handle J open the valve I and then grasp the discharge-nozzle S and run toward the fire, whereby the hose D in double layers will be withdrawn from the rack A and fall below the same free of said rack, but directly connected with the valve-casing C in line with the natural flow of water from said casing. The fact that the hose D hangs directly downward from the casing C when in use and directly in line with the discharge-nozzle E from said casing has the effect of preventing the hose from becoming tangled as the layers fall from the rack A and also of insuring the full unimpeded flow of water from the casing C into the hose D. The rack A and valve-casing C are usually placed at a reasonable height above the floor, and hence when the discharge-nozzle E is at the side of the casing C instead of at the bottom thereof the weight of the hose hanging across the outlet from said discharge-nozzle E would partially close the latter or cause the water to expend a part of its force in swelling the hose directly outward from the valve-casing C and maintaining the weight of the depending hose with the water therein. To remedy such objection in existing devices at present in use, I apply the discharge-nozzle E at the lower side of the casing C and thereby provide means whereby during the use of the hose the latter will hang directly downward from said nozzle in line with the natural discharge of the water into said hose. After the use of the apparatus in the extinguishing of a fire the valve I is closed in the usual way and the water is allowed to fully drain from the hose D, and thereafter the hose, at about its center, will be doubled upon the core R and restored to the hub L between the sides K K of the rack A for future use.

The post or sleeve G, connected with the valve-casing C, and the sleeve N, formed as

a part of the rack A, enable the ready application of the rack A to the valve-casing and also permit the rack A to be turned in either direction close against the wall of the building when not in use and to be turned outward in the direction of the fire when in use. The sleeve N is in line with the vertical center of the valve-casing C and obtains its full support from said valve-casing, and thus the various appliances heretofore used for supporting the hose-racks upon the walls of buildings are dispensed with and an apparatus is presented which may be conveniently applied and removed with the minimum amount of labor and expense and without disfiguring the building. By bringing the inner end of the rack A within the vertical plane of the valve-casing C said rack may be brought close to the wall of the building and when turned laterally against said wall need not project substantially beyond the outer vertical plane of the casing C. The upper surface of the bonnet F of the casing C directly receives and supports the lower edges of the sleeve N, as illustrated in Fig. 1, and furnishes a suitable bearing-surface for the lower end of said sleeve.

The invention is not limited in every instance to the placing of the discharge-nozzle E upon the lower side of the valve-casing C instead of upon the vertical side of said casing; but a portion of the invention is confined to the arrangement of the nozzle E upon the lower side of the valve-casing C in the combination embracing the rack and hose.

In Figs. 3 and 4 the rack A is formed of the two corresponding sides K K, coming together at their inner end to form the sleeve N and being separated at their outer end; but in the form of construction shown in Figs. 3 and 4 the sides K K are not circular, as illustrated in Figs 1 and 2, but are of elongated form and are connected at their lower edges by the bolts a, upon which the hose D is folded back and forth, as illustrated in Fig. 4. The valve-casing C in Fig. 4 is exactly the same as the valve-casing shown in Fig. 1, and the difference between the apparatus of Fig. 1 and that of Fig. 4 consists simply in the outline given to the opposite sides K K of the rack and in the fact that in the apparatus of Fig. 1 a hub is provided upon which to wind the hose, while in the construction presented in Fig. 4 the hose instead of being wound upon a hub is arranged in layers upon the bolts a a. The apparatus shown in Fig. 4 possesses all of the conveniences of the apparatus illustrated in Fig. 1, with the exception of the advantages due to the fact that in the device of Fig. 1 the hose may be wound upon a hub or reel between the sides of the rack.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The water-supply apparatus having the valve-casing provided with the downwardly-extending outlet-nozzle and vertical post, com-

5 bined with the hose-rack pivotally mounted at its inner end on said post, and the hose coupled at one end to said nozzle and thence supported on said rack; substantially as set forth.

10 2. The water-supply apparatus having the valve-casing provided with the outlet-nozzle and vertical tubular post through which the valve-stem passes, combined with the hose-rack having a sleeve on its inner end engaging said post, and the hose coupled at one end to said nozzle and thence supported on said rack; substantially as set forth.

15 3. The water-supply apparatus having the valve-casing provided with the outlet-nozzle and vertical post, combined with the hose-rack in two longitudinal parts bolted together and forming at their inner end the vertical sleeve engaging said post, and the hose cou-

pled at one end to said nozzle and thence supported on said rack; substantially as set forth. 20

4. The water-supply apparatus having the valve-casing provided with the downwardly-extending nozzle, combined with the hose-rack supported at its inner end directly from 25 said casing and having between its sides the revoluble hub, and the hose coupled at one end to said downwardly-extending nozzle and thence while doubled at about its center wound upon said hub; substantially as set 30 forth.

Signed, at New York, in the county of New York and State of New York, this 7th day of February, A. D. 1898.

EDWARD CLIFF.

Witnesses:

CHAS. C. GILL,

E. JOS. BELKNAP.