

(No Model.)

C. NUHRING.
HOSE RACK.

No. 558,096.

Patented Apr. 14, 1896.

Fig. 1.

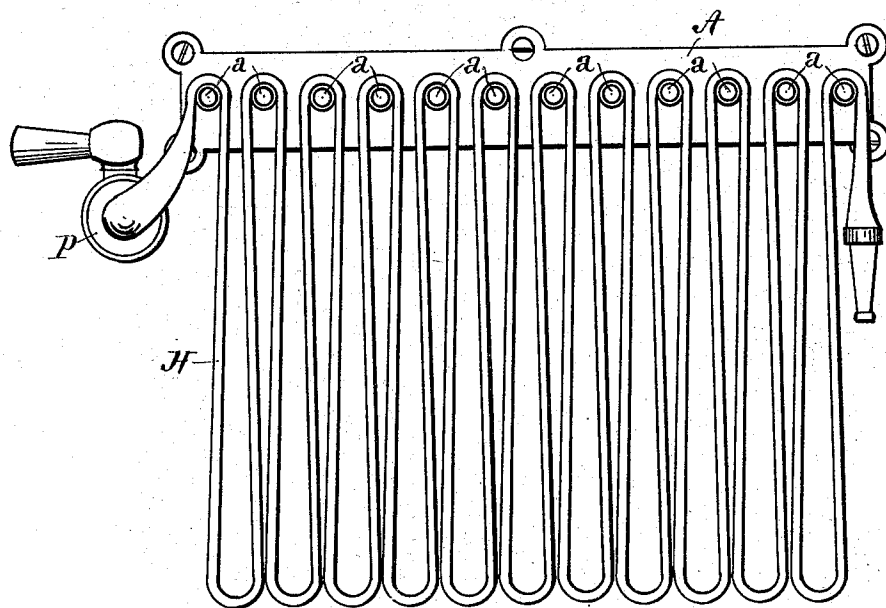


Fig. 3.

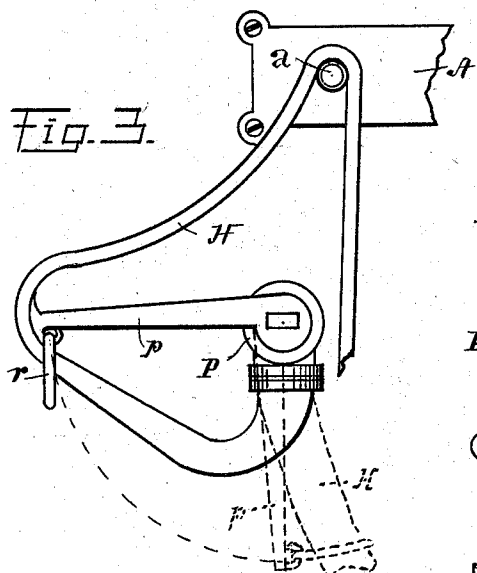


Fig. 4.

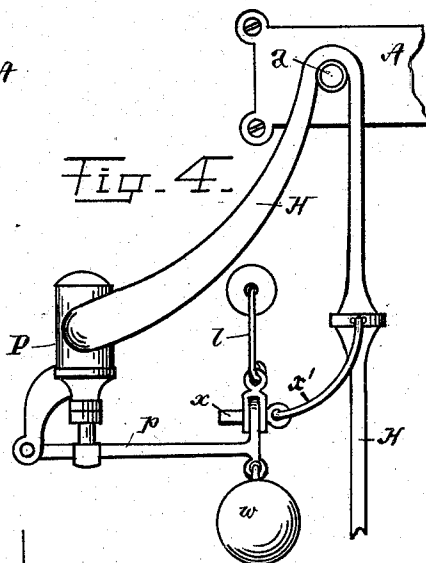
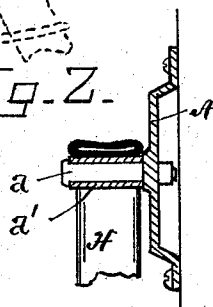


Fig. 2.



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UNITED STATES PATENT OFFICE.

CHARLES NUHRING, OF CINCINNATI, OHIO.

HOSE-RACK.

SPECIFICATION forming part of Letters Patent No. 558,096, dated April 14, 1896.

Application filed July 8, 1893. Serial No. 479,883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES NUHRING, a citizen of the United States, residing at Cincinnati, Hamilton county, Ohio, have invented new and useful Improvements in Hose-Racks, of which the following is a specification.

My invention relates to the class of hose-racks intended for buildings, vessels, &c., for the storage and retention of a hose for immediate use in case of fire. As in such cases the hose is frequently left untouched for long periods of time, it is extremely necessary that every precaution be used to prevent decay or deterioration; and one of the objects of my invention is to furnish a cheap and simple storage device free from the objection applicable to many or most of the devices for this purpose—namely, the packing together of the hose in close contact with insufficient ventilation and also the “kinking” of the hose at folds.

My device in respect to this feature consists of storage-rack designed to be attached to a vertical wall in immediate proximity to the water-plug, to which the hose is intended to be permanently attached, having a series of studs arranged to support the hose in independent folds of natural curvature without close bends or “kinks,” each fold being freed from any other than its own weight and open to perfectly free circulation of air.

A further feature of the invention consists in the disposition and form of the studs, whereby the entire length of hose can be instantly detached from the rack by the operator by a simple motion and without strain upon the hose.

A still further feature of the invention consists in the combination of the hose thus mounted with the water-plug handle in such relation that the detaching of the hose from its holding-rack for use automatically turns on the flow of the water, so that the apparatus, as a whole, may be instantly available in case of need.

Lastly, I have aimed at extreme simplicity of construction, so that the general mode of use may be obvious and the results sure, even when handled by ignorant persons or those under excitement in emergencies.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a general view of my improved hose-rack in simplest form ready for use. 55
Fig. 2 is a cross-section of the rack, showing construction. Figs. 3 and 4 are views showing modes of constructing the attachment of the hose with the fire-plug for automatic operation. 60

Referring now to the drawings, A designates a bracket or plate adapted to be secured against a vertical wall or otherwise maintained, as shown, and *a a* pins or studs projecting at right angles from the front face 65 of the bracket. The bracket is preferably horizontally elongated and the studs arranged equidistant in a substantially horizontal line. A convenient construction is a cast-metal bracket or plate with a recessed back, 70 as shown in Fig. 2, with studs *a* in the form of bolts screwed into the face of the bracket or inserted through the same and held by nuts seated at the rear in the recess. The studs may be also provided with rollers *a'*, of wood or 75 metal, but in cheaper forms of the device the bracket and studs may be cast as one or wholly formed of wood.

The bracket is preferably placed adjacent to and a little above the water-plug, as shown 80 in Fig. 1, and the hose H, which is permanently attached thereto, is led upward to the first stud of the series, in order that no moisture resulting from leakage of the plug may collect in the hose. The line of hose is dropped 85 in a natural loop from the first stud of the series, thence carried over the second, thence in like manner to the third, and so on until the entire line of hose is supported upon the studs with intervening loops in free and natu- 90 ral curves. Thus supported, it is easily and instantly detached by seizing the nozzle and pulling the hose directly forward off the studs.

The attachment for automatic actuation of the fire-plug I have shown in two forms, in- 95 volving substantially the same principle—namely, the release of a weight by the drawing of the hose out and thereby turning on the water supply.

In Fig. 3 the hose H is carried from the plug 100 P laterally outward along and through a ring *r*, attached to the extremity of the handle *p*,

which is shown in a horizontal closed position, and thence upwardly and back over the plug to the rack A *a*. In the position shown in full lines the disposition of the hose holds the plug closed; but upon being released from the last holding-stud of the bracket it falls down into the position shown in dotted lines, and by its weight draws with it the handle *p* into a vertical position and opens the plug.

10 In Fig. 4 the plug P is shown as a piston or gate valve held in closed position by a link *l*, to which the end of the weighted handle *p* is attached by a sliding pin *x* and the latter connected by a cord or chain *x'* to the hose H.

15 As the latter is pulled out, the pin *x* is thereby withdrawn and the weight *w*, suspended upon the arm *p*, drops, dragging the arm down and opening the valve.

20 The bracket A may be placed at any desired angle or even vertical when necessary, or it may be omitted and the studs secured directly in the face of the wall.

I claim as my invention and desire to secure by Letters Patent of the United States—

2 The combination of an elongated wall-plate, provided with a series of short fixed studs projecting therefrom, a water-plug adjacent thereto, provided with a controlling-valve, a hose attached to the plug and maintained in consecutive independent folds or loops upon the studs, and an attachment between the last fold of the hose and the handle of the controlling-valve in such relation that upon throwing off the hose the movement of the last fold off its stud actuates the controlling-valve, substantially as set forth.

3 In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CHARLES NUHRING.

Witnesses:

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