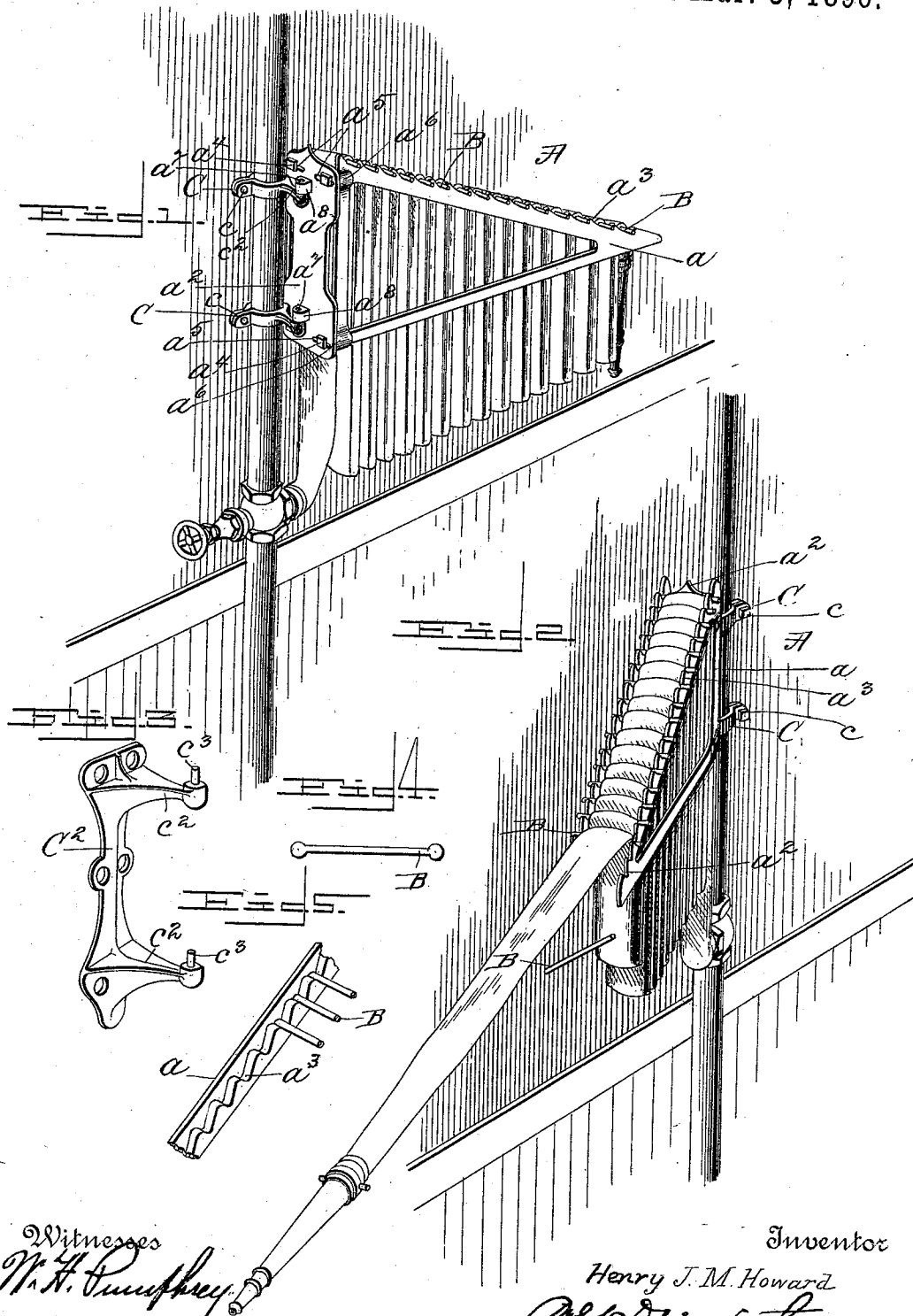


(No Model.)

H. J. M. HOWARD.
HOSE HOLDER.

No. 555,574.

Patented Mar. 3, 1896.



Witnesses
W. H. Humphrey
E. L. Parry

Inventor
Henry J. M. Howard
by R. S. Dyrenforth,
his Attorney.

UNITED STATES PATENT OFFICE.

HENRY J. M. HOWARD, OF WASHINGTON, DISTRICT OF COLUMBIA.

HOSE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 555,574, dated March 3, 1896.

Application filed March 9, 1894. Serial No. 503,035. (No model.)

To all whom it may concern:

Be it known that I, HENRY J. M. HOWARD, a citizen of the United States, residing at Washington, in the District of Columbia, have
5 invented certain new and useful Improvements in Hose-Holders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-
10 pertains to make and use the same.

This invention relates to hose-supporting racks or holders.

The object is to produce a light, strong and compact form of holder of large carrying
15 capacity and capable of accommodating hose of any width; furthermore, to afford facilities by which any portion or the entire length of hose on the rack may be readily removed or drawn therefrom and brought into service
20 free from entanglement, kinks, twists, &c., and also by which it may be quickly and easily replaced and compactly arranged in separately-supported loops, each of which is suspended out of contact to insure thorough dry-
25 ing; furthermore, to provide a bracket-mounting, by which the holder may be swung close in against a wall and occupy a minimum space, at the same time being capable of swinging freely about a vertical axis.

With these and other objects in view the invention consists, essentially, in a rack or holder comprising duplicate wings, arms, or plates arranged side by side, connected to-
35 gether, having their upper edges inclined and provided with a series of notches forming seats for loose rods to support hose in loops or festoons, and mounted to turn or swing. Fur-
40 thermore, the invention consists in the various novel details of construction, all as hereinafter described and claimed.

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

Figure 1 is a view in perspective of a hose rack or holder mounted on collar-brackets of
45 a supply-pipe and swung close in against the wall, which position it occupies when not in use, showing the duplicate wings, arms, or plates thereof adjustably fixed to an end plate, and the notches or seats formed in the upper
50 inclined face of the wings, arms, or plates, the carrying-rods upon which the hose is looped bridging the space between the wings,

with the ends thereof resting loosely in the notches or seats, and the supporting-bracket upon which the frame is swingingly mounted. 55
Fig. 2 is a similar view of a rack or holder in operative position, with a portion of the hose drawn therefrom, ready for service, showing the manner in which the supporting or
60 carrying rods are successively unseated as the hose is shed or drawn from the rack. Fig. 3 is a detail view of a common form of bracket generally used to mount the holder on a wall.
Fig. 4 is a detail view in elevation, showing a modified construction of the supporting or
65 carrying rod; and Fig. 5 is a detail perspective view showing a modified form of construction of the side plate, in which the notches are shrouded to protect the carrying-rods from
70 being accidentally dislodged.

In the drawings, A represents the rack or holder, comprising duplicate skeleton wings, arms, or plates *a a* arranged side by side and fixed laterally adjustable in an inclined position to an end plate *a²*. These wings, arms,
75 or plates, preferably triangular in form, are provided, at or adjacent to the upper inclined edge thereof, with a series of seats, notches, or slots *a³* and are connected to the end plate
80 by bolts *a⁴* passing through slots *a⁵* of the latter plate and entering threaded openings or sockets *a⁶* of the wings, arms, or plates. By this adjustable connection the distance between the wings may be readily and conveniently increased or decreased to adapt the
85 holder to any width of hose, as will be more fully explained.

B represents a plurality of supporting or carrying rods upon which the hose is hung in loops or festoons, and which are of suitable
90 length to bridge the space between the wings, arms, or plates, with the ends resting loosely in the seats, slots, or notches thereof, and forming, when properly placed in position, a series of detachable carriers arranged on a
95 descending incline.

C C represent split or sectional clamp-collars or collar-brackets of well-known construction, and now commonly employed to mount holders or racks on the stand or sup-
100 ply pipes. Each collar is provided with threaded bolts and nuts *c* by which it may be securely clamped at any desired height upon the pipe, also with a radial projecting arm *c²*

having its extremity turned up at a right angle and reduced to form a stud-spindle c^3 , which is designed to enter an opening or socket a^7 in the lug a^8 of the end plate a^2 .

Two of these collars are used and relatively fixed, as is shown in the drawings, to support the holder without undue strain on the bearings, and permit of a free swinging motion.

When the holder is to be located at a distance from the supply-pipe, a wall-bracket C^2 (shown in Fig. 3 of the drawings) is substituted for the form just described, and differs only in having both spindle-arms connected by and forming part of a flat back plate, which plate is secured to the wall by screws, bolts, or in any other suitable manner.

When the holder is to be swung from pipe-brackets, it is preferably mounted above to clear the valve, and in placing the hose upon the holder the carrying-rods are first removed and the inner portion of the hose, or that portion adjoining the coupling, is brought up between the wings in the form of a loop, and on reaching a point slightly above the notched faces a carrying-rod is passed through the loop and seated in the upper set of notches. The length of hose required to form the next looped portion will depend on the total length to be placed upon the holder and may be readily determined by trial or calculation. However, assuming that the length is known, the second loop is brought up between the wings and a rod inserted and seated in the next lowest set of notches, and so on until the entire length of hose has been stored or placed in position.

When the holders are to be placed on vehicles or vessels or located in factories or other buildings containing engines and other large machinery, it is possible that the continuous vibratory motion would tend occasionally to unseat one or more of the carrying-rods. To prevent occurrences of this character, the carrying-rods may be provided with terminal projections, as shown in Fig. 4 of the drawings, which, when the rod is placed upon the holder, would form stops and limit the lateral play thereof.

Another simple and perhaps more efficient construction is illustrated in Fig. 5 of the drawings, which consists in shrouding the wings or providing them with exterior guard-plates to limit the lateral play of the rods, and at the same time protect them from dislodgement by accidental blows.

To bring the hose into position for service, water is first admitted to the hose by turning on the valve of the supply-pipe and the nozzle grasped and carried toward the fire, drawing the hose from the rack, loop by loop, and

successively unseating the carrying-rods, which fall to the floor and may be collected whenever convenient. The pull on the hose, as it is drawn from the holder, serves also to cause the holder to swing freely around in the direction in which the hose is being drawn, thus materially facilitating the operation.

Among the numerous and important advantages of this rack or holder may be mentioned, first, the large carrying capacity and the readiness with which it may be increased or decreased by merely lengthening or shortening the pendent loops or festoons, or by utilizing but half of the number of carrying-rods and double-spacing them—that is to say, placing them in every second set of notches of the wings; secondly, the rapidity with which the holder may be brought into use and the hose drawn or shed therefrom without risk of binding, kinking, or entanglement, and, finally, the readiness with which the hose may be replaced and its peculiar arrangement upon the holder, in loops, each separately supported out of contact, with substantially its entire surface exposed to the air, by which a rapid and thorough drying is effected.

The pipe and wall-brackets herein described form no part of the present invention and may be changed, altered, or replaced by any other form desired.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a hose rack or holder, the combination with a supporting-bracket, of an end plate pivotally supported thereby and having slots formed therein at right angles to its length and in vertical and horizontal alignment, independent triangular wing-arms laterally adjustable in said slots, seats formed in the upper faces of said arms, and hose-carrying rods resting loosely in said seats, substantially as described.

2. The combination in a hose rack or holder consisting of a bracket for pivotally supporting the same, having radially-projecting arms with stud-spindles formed thereon at right angles, of an end plate having horizontally-arranged slots formed therein, triangular wing-arms, threaded sockets formed in said wing-arms, and bolts passing through the slots in the end plate and engaging the sockets of the wing-arms, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY J. M. HOWARD.

Witnesses:

E. H. PARRY,
JAS. L. BOWEN, Jr.