A. M. WATERWORTH.

Hose-Support.

No. 212,876. Patented Mar. 4, 1879.

Fig. 1

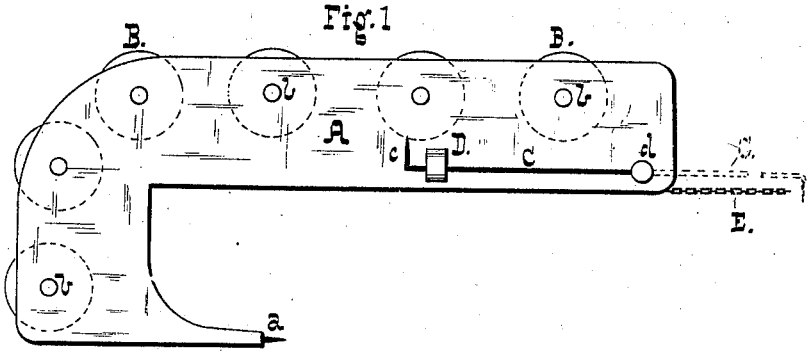



Fig. 2.

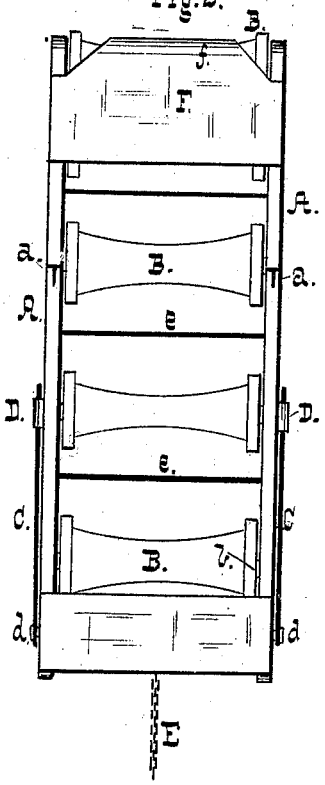
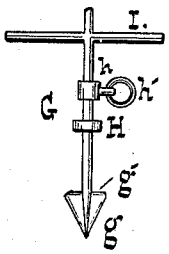



Fig. 3.




Witnesses,

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# UNITED STATES PATENT OFFICE.

ALEXANDER M. WATERWORTH, OF BALTIMORE, MARYLAND.

## IMPROVEMENT IN HOSE-SUPPORTS.

Specification forming part of Letters Patent No. **212,876**, dated March 4, 1879; application filed January 17, 1879.

*To all whom it may concern:*

Be it known that I, ALEXANDER M. WATERWORTH, of Baltimore city, State of Maryland, have invented certain new and useful Improvements in Hose-Supports; and I hereby declare the same to be fully, clearly, and exactly described as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of the device; Fig. 2, a bottom plan of the same; and Fig. 3, a side elevation of the anchor.

My invention is designed to supply a need which has long been felt, and which has been the source of incalculable loss and destruction of property by fire. It is customary, in all cases where it is practicable, to direct one or more streams of water upon a burning building from an elevated point, generally from the roof of an adjacent house, as from such a place the water may be directed fairly upon the burning material after the roof has fallen in, and not be allowed to merely fall upon it in the form of spray, as is the case when the stream is delivered from a nozzle held in the street below.

In preparing to play upon the fire from the roof of a neighboring building it has been usual heretofore to lower a rope therefrom, which being made fast to the hose-nozzle, the latter was drawn up over the eaves by the firemen on the roof. Two serious obstacles were encountered, occasioning in every case considerable delay, and frequently the bursting of the hose. These obstacles arose from the difficulty of hauling the heavy hose over the sharp edge of the eaves and from the tendency of the hose to bend at a sharp angle and wholly or partially collapse at the roof-edge. Of course in the latter case the hose necessarily burst as soon as the stream was delivered from the engine. The device illustrated in the accompanying drawings completely obviates these difficulties, enabling the hose to be readily drawn over a sharp edge—such as a window-sill, the rounds of a ladder, or the eaves of a house—without the possibility of bending the hose at such an angle as to in any degree affect the delivery of the stream.

My invention consists in a device for accomplishing the ends set forth, constructed as hereinafter described, and possessing points of novelty not here necessary to enumerate, as they are made the subjects of claims based upon the following description.

In the accompanying drawings, A A are the side pieces of the device, constructed, preferably, of hard wood, bound with metal, and of the shape shown, the recurved ends being furnished with sharp metal points *a a*. Between the side pieces are mounted, on rods *b b*, a series of concave rollers, B B, disposed in a curve, as shown, and affording a practically continuous support for the hose. To the sides of the device are pivoted, at *d d*, metallic rods C C, whose ends *c c* are bent at right angles and sharpened. Catches D serve to hold the rods in position at the sides of the device. E is a chain or rope, made fast to the end of the apparatus for a purpose hereinafter explained.

F is a plate, whose front edge, *f*, extends partially around the lower roller, and is designed to prevent the hose-nozzle from catching behind the roller as it is drawn up. Cross-rods *e* serve to brace the device. G is the hose-anchor, consisting, essentially, of a T-shaped metallic bar, having a swiveling collar, *h*, and ring *h'*, and a fixed collar, H. At the lower end of the anchor is a triangular blade, *g*, sharpened on all its edges, and having its upper corners, *g'*, rounded, as shown.

Such is, in general terms, a description of the construction of the device. Its mode of operation is as follows: Being laid in position upon the roof-edge, the device is hooked over the eaves and retracted until the points *a a* enter the wood-work. The rods C are then thrown back, as shown in dotted lines, and their points *c* are driven into the roof by a blow from an ax. In default of facility for doing this latter the chain E is made fast to a chimney or other projecting point, or is held by a fireman. A rope is, meanwhile, lowered to the street and made fast to the hose-nozzle, and, being led over the rollers B B, the hose is hauled up onto the roof. The anchor G is next driven through the sheathing of the roof, the blade *g* being, of course, laid in the direction of the grain—*i. e.*, parallel to the street. When the blade *g* has pierced the sheathing the anchor is turned at right angles by means of the cross-bar I, and the hose-strap is made fast to the ring *h'*, thus relieving the firemen

from holding the hose, and, indeed, dispensing with the services of all except the two who hold the nozzle. If desired, a ratchet and pawl may be fitted to the rollers B and frame A, so as to prevent reverse rotation of the rollers. To remove the anchor it is again turned until its blade registers with the cleft through which it entered, when it may be readily withdrawn. To facilitate this withdrawal the upper edges of the blade are sharpened and its corners rounded.

It is obvious that a curved gutter adapted for attachment, as described, would be equally within the scope of my invention. Rollers, however, disposed in a curve are far preferable by reason of the diminished friction.

When used on a window-sill the points *a* are hooked inside, and the chain or rope E is hauled taut and secured in the street below. When used on a ladder the points *a* are hooked over a round and the rope is secured to a lower round.

The device as a whole is simple in construction, light, and portable, and obviously thoroughly efficient in use.

I am aware that it is not new, broadly, to use a roller mounted in a frame adjustably secured to the eaves for the purpose of facilitating the drawing of a hose over the eaves of a building, and such I do not claim.

What I claim as new is—

1. In combination with the frame A, having points *a* and rollers B, the rods C, substantially as described.

2. In combination with the frame A and rollers B, the plate F, substantially as described.

3. The hose-anchor G, having all its edges sharp, and provided with the blade *g* and cross-bar I.

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Witnesses:

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