

S. L. CROSSING.
 SELF RELEASING HOSE RACK.
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970,188.

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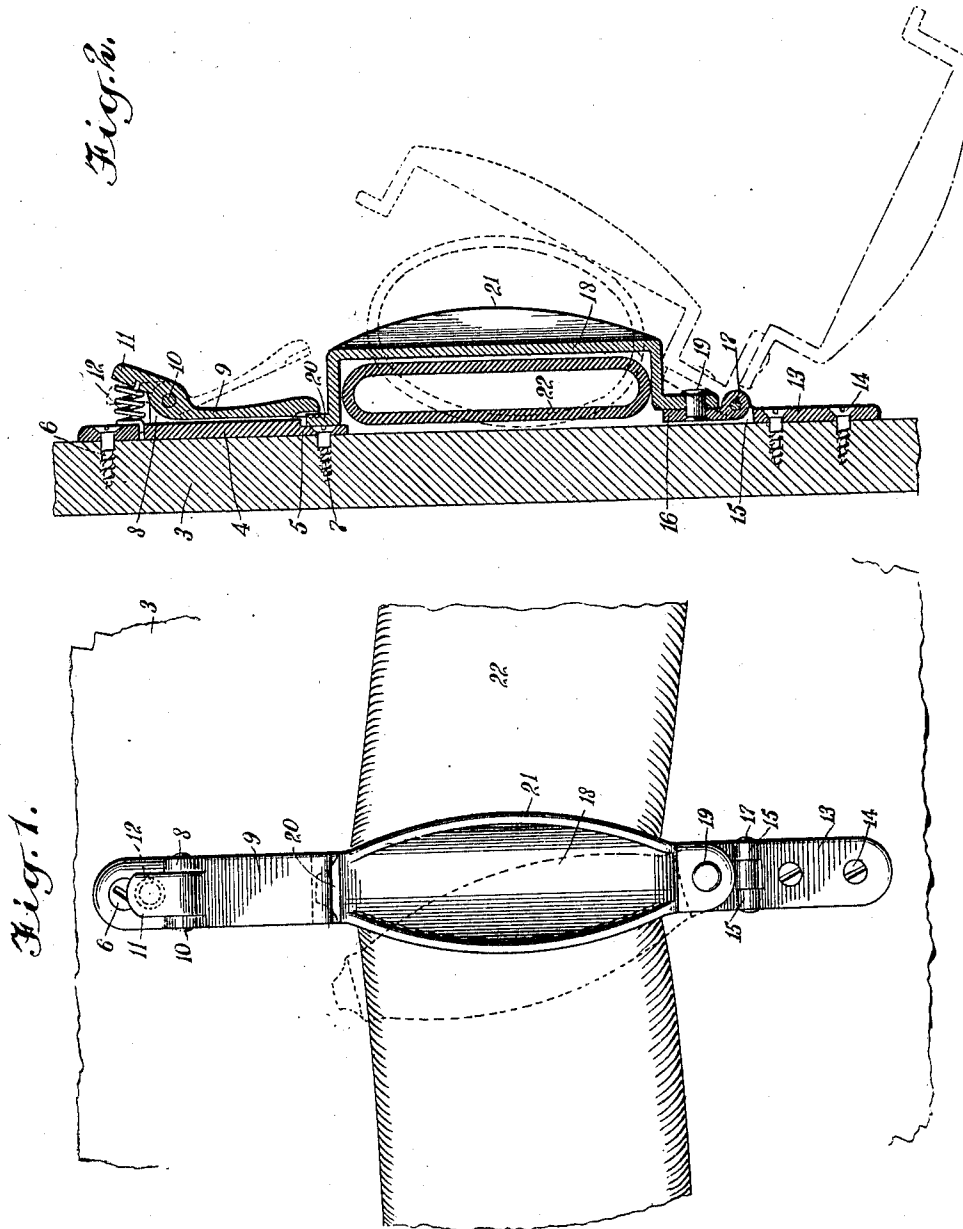


Fig. 1.

Fig. 2.

WITNESSES

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SAMUEL L. CROSSING, OF NEW YORK, N. Y.

SELF-RELEASING HOSE-RACK.

970,188.

Specification of Letters Patent. Patented Sept. 13, 1910.

Application filed October 22, 1909. Serial No. 524,032.

To all whom it may concern:

Be it known that I, SAMUEL L. CROSSING, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Self-Releasing Hose-Rack, of which the following is a full, clear, and exact description.

My invention relates to self-releasing hose racks—that is to say, to hose racks which temporarily support a line of hose in such manner that when water pressure is turned upon the hose, the hose detaches itself from the rack and is otherwise ready for use, for instance in extinguishing fires.

More particularly stated, my invention comprehends a rack having a movable hasp temporarily locked in secure position, and encircling or partially encircling the hose which, for the time being, lies flat, the hasp, however, being adapted to swing directly outward when the hose is distended in consequence of water pressure within it, the outward swinging of the hasp completely releasing the hose.

My invention further relates to means for so mounting the hasp that the latter may have a swinging movement in the general direction of the length of the hose independently of its swinging movement above mentioned, and may therefore be displaced so as to liberate the hose if pressure thereof be applied against one edge of the hasp; the hasp being mounted to swing so as to facilitate latching the device when assembling the hose therein.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the figures.

Figure 1 is a front elevation showing the rack as used to support the hose which, in this instance, normally lies flat against a vertical wall; this view also indicating, by dotted lines, one of the movements to which the hasp is subjected in order to liberate the hose; and Fig. 2 is a substantially central vertical section through the mechanism shown in Fig. 1 and indicates, by dotted lines, the movements of the hasp in liberating the hose.

Mounted upon a wall, ceiling or other support 3, hereinafter designated for convenience as a wall, is a metallic plate 4 pro-

vided with a shoulder 5 and secured upon the wall by aid of screws 6, 7. The plate 4 is provided with lugs 8 and journaled upon these lugs by aid of a pin 10 is a swinging jaw 9, this jaw being provided with a lug 11 extending obliquely away from the plate 4. Engaging this lug is a spiral spring 12 which also engages the plate 4. The pressure of the spiral spring 12, by pressing the lug 11 outwardly normally forces the jaw 9 inwardly—that is, toward the plate 4.

Disposed at a little distance from the plate 4 and in alinement therewith is a plate 13 secured to the wall by aid of screws 14. The plate 13 is provided with lugs 15. A plate 16 is by aid of a pin 17 journaled upon these lugs, and consequently is hinged with reference to the plate 13. A hasp 18 is, by aid of a pivot 19, connected with the plate 16, and is adapted to swing upon this pivot 19 as a center. It is also adapted to swing upon the pin 17 as a center but in a different direction. The hasp 18 is provided with a lug 20 for engaging the jaw 9 and is also provided with outwardly turned edges 21, and because of this shape is rounded upon its inner surface, as will be understood from the figures. A hose 22 is adapted to rest inside of the hasp 18, as indicated by full lines in the figures.

The parts are so arranged that if the hasp 18 be forced directly outward—that is, away from the wall 13—and swings upon the pin 17 as a center, the end of the hasp adjacent to the jaw 9 raises this jaw as indicated in dotted lines in Fig. 2. The hasp is thus released, and swinging down upon the pin 17 as a center assumes the positions indicated by dotted lines in this figure and thus liberates the hose. If, however, for any reason it should happen that the jaw 9 does not readily release the hasp, the pressure of the water within the hose tends to distend the hose and this distension is more pronounced upon one side of the hasp than upon another, for the reason that the water in passing through the hose necessarily travels in one direction only along its general length. Hence, the pressure of the hose necessarily exerts more or less side pressure upon the hasp. This causes the hasp to swing upon the pin 19 as a center, as indicated by dotted lines in Fig. 1. The lug 20 is thus moved in a plane parallel with the general plane of the jaw, so that the hasp is soon freed from the jaw 9 and swings out-

wardly and downwardly from the wall 3, thereby liberating the hose.

The operation of my device is as follows: The hose, being empty, is folded flat and placed within the hasp. There may be any number of these hasps and they are preferably spaced equidistant. So long as the hose is not to be used, it is thus neatly housed and occupies a minimum of space. The instant, however, water pressure is turned upon the hose, the hose begins to swell, as indicated, for instance, in Fig. 2, and when this occurs the hasp either swings straight outwardly from the wall or else moves a little sidewise, as indicated in Fig. 1, and then swings outwardly, in either case releasing the hose without any movement of any kind except such as is produced automatically by the water pressure. It will be noted that the hasp is so mounted to swing upon the pivot 19 as to facilitate latching the device while the hose is being assembled therein.

From the above description it will be noted that my device comprises among other things a hasp which is adapted to swing in either or both of two distinct planes crossing each other, and in either event is released by pressure within the hose.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A device of the character described, comprising a hasp for temporarily holding a hose while the latter is empty, said hasp being controllable by pressure within the

hose for swinging in either of a plurality of planes crossing each other.

2. A device of the character described, comprising a hasp for temporarily holding a hose while empty, said hasp being mounted to swing directly outward in a plane crossing said hose, and also journaled to swing in a plane parallel with the general direction of the length of said hose.

3. The combination of a plate, a hasp journaled relatively thereto and adapted to swing in a direction crossing the general direction of said plate, means for permitting said hasp to swing in a general direction parallel with said plate, said hasp being journaled upon two independent centers of rotation, and means controllable by pressure applied in different directions relatively to said hasp for releasing said hasp.

4. The combination of a hasp, means for mounting said hasp upon a wall or the like so as to allow said hasp to swing in a plurality of independent planes crossing each other, and a jaw engaging said hasp and normally restraining the same, said jaw being controllable by pressure applied to said hasp for the purpose of releasing said hasp from said jaw.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SAMUEL L. CROSSING.

Witnesses:

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