C. R. ROBINSON.

PORTABLE HOLDER FOR HOSE NOZZLES.

APPLICATION FILED MAR. 14, 1908.

929,019. Patented July 27, 1909.

Fig. 1.

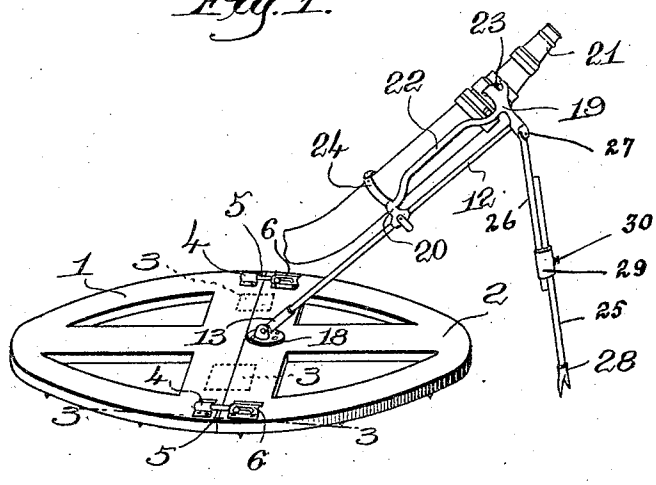


Fig. 2.

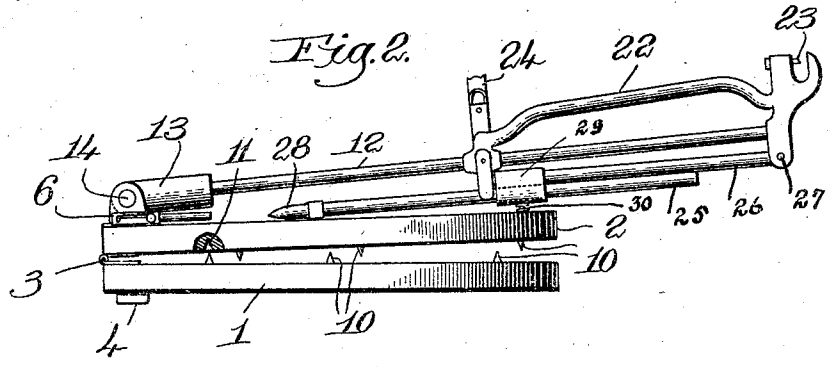


Fig. 3.

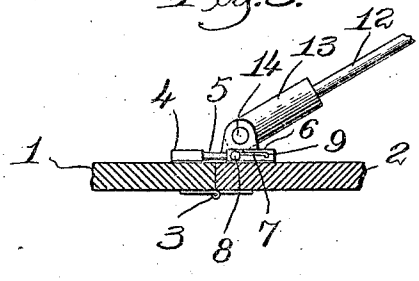
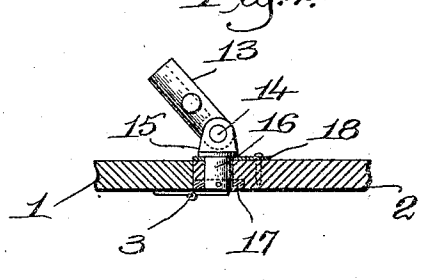


Fig. 4.



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UNITED STATES PATENT OFFICE.

CYRUS R. ROBINSON, OF CONCORD, NEW HAMPSHIRE.

PORTABLE HOLDER FOR HOSE-NOZZLES.

No. 929,019. Specification of Letters Patent. Patented July 27, 1909.

Application filed March 14, 1908. Serial No. 421,236.

To all whom it may concern:

Be it known that I, CYRUS R. ROBINSON, a citizen of the United States, and resident of Concord, county of Merrimack, State of New Hampshire, have invented an Improvement in Portable Holders for Hose-Nozzles, of which the following description, in connection with the accompanying drawing, is a specification, like numerals on the drawing representing like parts.

This invention has for its object the production of a novel and efficient nozzle holder particularly adapted for use in connection with fire hose, so constructed and arranged that one man can easily manipulate and control the nozzle, and which can be set at any desired angle, the holder taking up and resisting the thrust of the stream.

I have so constructed the holder that when not in use it can be folded or collapsed to very small dimensions, to be readily stowed in a hose wagon or other piece of fire apparatus.

For high pressure streams of from 250 to 300 pounds and upward, the control of the nozzle, unassisted, demands the strength and skill of several men, but by means of my novel holder the thrust is taken by a platform or base which rests upon the ground, roof, or other supporting surface, the base being provided with suitable prongs which grip the surface firmly.

By a simple and adjustable device the weight of the nozzle and adjacent portion of the hose is sustained, and the nozzle can be set to any desired angle, the sustaining device being swiveled to the base so as to be movable in various radial directions.

The various novel features of my invention will be fully described in the subjoined specification and particularly pointed out in the following claims.

Figure 1 is a perspective view of a nozzle holder embodying one form of my invention, ready for use, and with the nozzle in place; Fig. 2 is a side elevation of the apparatus, collapsed or folded for transportation; Fig. 3 is a sectional detail on the line 3—3, Fig. 1, taken through the base when extended, to show the means for locking the base in its extended or operative position; Fig. 4 is a detail of the swivel connection between the base and the nozzle sustainer.

In the present embodiment of my invention I provide a collapsible base, shown herein as comprising two substantially semicircular members 1, 2 pivotally connected at their straight edges by suitable hinges 3, located at the under sides of said members so that when the base is extended the straight edges abut, as shown in Figs. 1 and 3.

The base members may be conveniently made of heavy planking, suitably held together, and from 3 to 4 feet in diameter when extended for use, presenting a flat platform of relatively large area, but whose shape may be square, oblong or of other desired outline.

In order to positively lock the base in extended position I have herein shown keepers 4 on the upper face of one member, to be entered by bolts 5 slidably mounted in tubular housings 6 fastened to the other member.

As shown in Fig. 3 the housing has a slot 7 through which extends the shank of the bolt-head 8, a notch 9 at each end of the slot serving to engage the shank and hold the bolt in extended or retracted position.

When the bolts are shot into the keepers 4, as in Fig. 1, the base is locked in its extended position, as will be manifest.

Holding prongs 10 project from the under face of each base member, to enter the supporting surface, such as a street or alleyway, a flat roof or other support on which the base may be placed, the prongs being so placed that, when the base is collapsed by folding one member upon the other, as in Fig. 2, the prongs on the member 1 will not interfere with the prongs on the member 2.

If desired sockets, as 11, may be made in one member to receive the prongs on the other.

By the construction shown the prongs are inclosed and protected when the base is collapsed for transportation or storage, and when the base is extended for use the greater the downward thrust upon the base the more firmly will the prongs engage the supporting surface and prevent movement of the base.

Upon the base I mount the nozzle-sustainer, comprising a longitudinally-rigid sustainer bar 12 detachably secured at one end in a socket 13 pivoted at 14, see Fig. 4, between ears 15 on a stud 16 rotatably mounted in one of the base members, as 2, close to the center of the extended base. A swivel connection is thus provided between the base and the nozzle-sustainer so that the

latter can be vertically or radially adjusted at will. A collar 17 on the lower end of the stud 16 holds it in place and a plate 18 fastened to the member 2 serves as a bearing for the upper end of the stud. Clips 19, 20 are fastened to the free end of the bar 12, the former to receive the nozzle 21, Fig. 1, bent side bars 22 connecting the clips forming therewith a sort of cradle in which the adjacent part of the hose is held, a latch 23 securely locking the nozzle in the clip 19, while a strap 24 holds the hose in the clip 20, substantially as in my U. S. Patent No. 479841, dated Aug. 2, 1892. A longitudinally extensible leg, shown as composed of two rods 25, 26, is pivotally connected at 27 to the sustainer-bar 12 and depends therefrom, the lower rod 25 preferably having a bifurcated, sharpened foot 28 to enter the supporting surface for the base and thereby hold the bar 12 and the nozzle in desired angular position. A coupling 29 rigidly secured to the rod 26 has the rod 25 slidably extended through it, and held in adjusted position by a set-screw 30.

When the apparatus is in use the sustainer-bar is adjusted radially to the proper position, and by means of the leg its angle is properly maintained, the leg supporting the weight of the nozzle and attached hose. The thrust is transmitted by the bar 12 to the base and by it distributed over a relatively large area, so that the labor of holding up the nozzle and resisting the thrust is performed wholly by the apparatus described. One man can, therefore, easily control the nozzle and direct operations with very little exertion no matter how great the pressure or how large the stream may be. The greater the thrust the more firmly will the base resist it, as will be manifest, and in whatever direction the sustainer-bar be placed it will be seen that one half of the base opposes and resists any slip or movement due to the thrust of the stream.

When the base is collapsed the sustainer bar and leg fold together upon the base, as shown in Fig. 2, so that the apparatus is readily transported or stored, it being understood that the hose and nozzle are detached from the sustaining means when not in use.

My invention is not restricted to the precise construction and arrangement shown and described as the same may be varied or modified in different particulars without departing from the spirit and scope of my invention as set forth in the annexed claims.

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

1. In apparatus of the class described, a two-part collapsible base of large area when extended, connecting hinges on the under sides of the base members, holding prongs projecting from the under side of the base to enter the supporting surface when the base is extended, said base being provided with sockets to receive the prongs when the base is collapsed, a nozzle-sustainer, a socket centrally and permanently connected with the base, and rotatable and angularly movable with relation thereto, the nozzle-sustainer being detachably held in the socket, and a leg connected with and to maintain the sustainer in desired position.

2. In apparatus of the class described, a base composed of two substantially semicircular members, hinges on the under sides thereof to pivotally connect them, holding prongs on their under sides, slide bolts and keepers on the upper sides of and to lock said members in extended position, and an adjustable nozzle-sustainer detachably mounted on the upper side of the base adjacent the center thereof.

3. In apparatus of the class described, a base composed of two substantially semicircular members hinged together at the under side of their straight edges, manually operated locking members mounted on the upper sides of and to maintain said members extended to form a flat support, holding prongs on the under sides of said members, a tubular socket, a stud permanently connected with and rotatable on the base adjacent its center, a pivotal connection between the socket and stud, a sustainer-bar detachably held in the socket and provided with means to lock and hold a nozzle, and a longitudinally-extensible leg pivotally connected with the free end of said bar, to maintain the latter in adjusted angular position.

4. In apparatus of the class described, a collapsible base comprising two members pivotally connected at their under sides and foldable one upon the other when not in use, locking bolts on the upper sides of and to maintain said members extended in operative position, a nozzle-sustainer, a tubular socket in which said nozzle-sustainer is detachably held, a swivel connection between the socket and the base and permanently attached to the latter, and a supporting leg for the free end of the sustainer, the latter and the leg being foldable upon the base when collapsed.

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

CYRUS R. ROBINSON.

Witnesses:
HENRY F. HOLLIS,
LILLIAN C. THOMPSON.