No. 622,132. Patented Mar. 28, 1899.

J. M. DUNGAN.

HOSE AND NOZZLE HOLDER.

(Application filed Nov. 25, 1898.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 2.

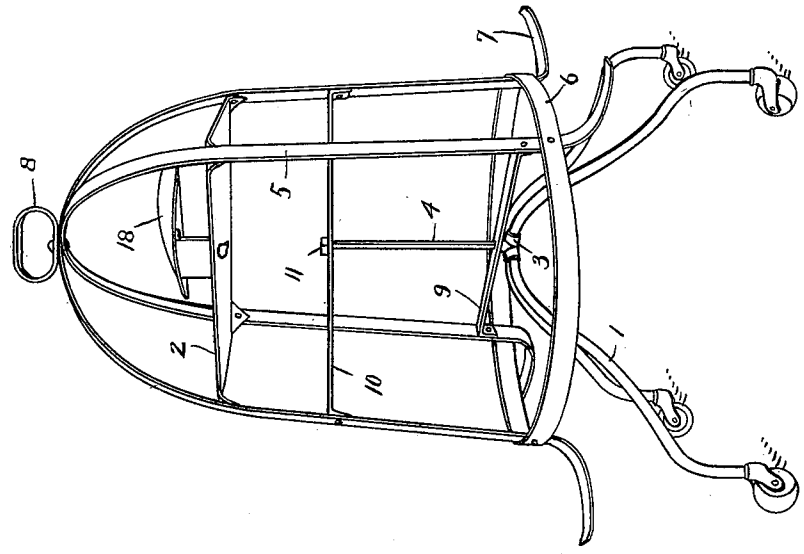
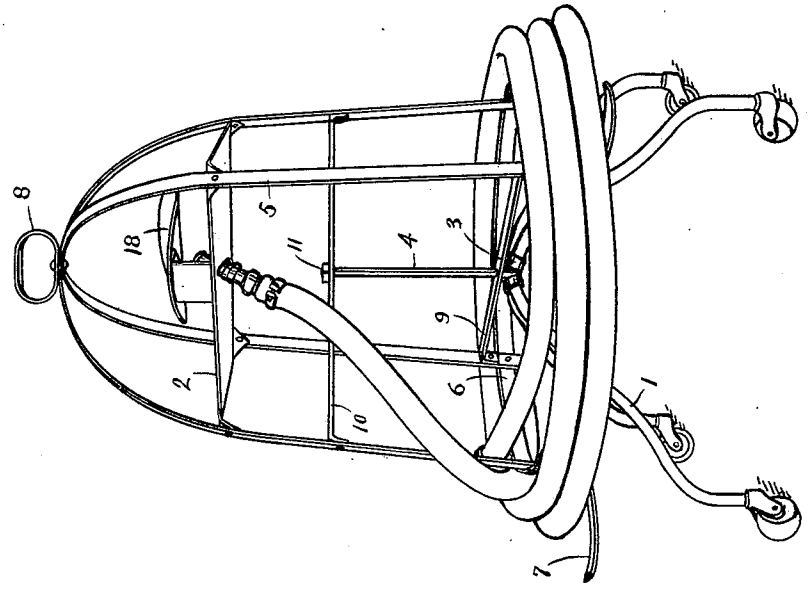


Fig. 1.



Witnesses
M. C. Buck
B. G. Lockwood

Inventor
James M. Dungan
By V. K. Lockwood
His Attorney.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 622,132. Patented Mar. 28, 1899.

J. M. DUNGAN.

HOSE AND NOZZLE HOLDER.

(Application filed Nov. 25, 1898.)

(No Model.) 2 Sheets—Sheet 2.

Fig. 3

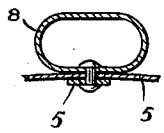


Fig. 6.

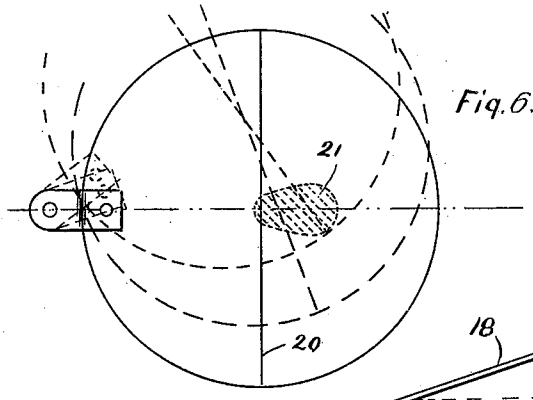


Fig. 4.

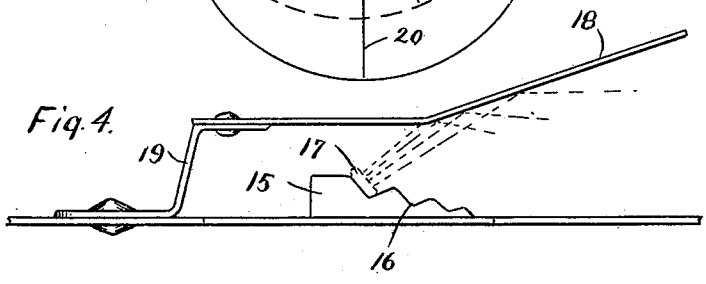


Fig. 5.

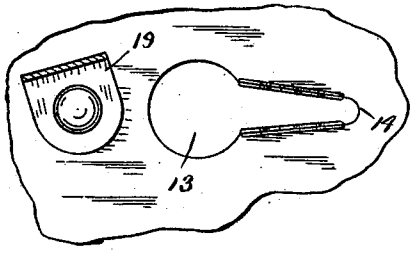
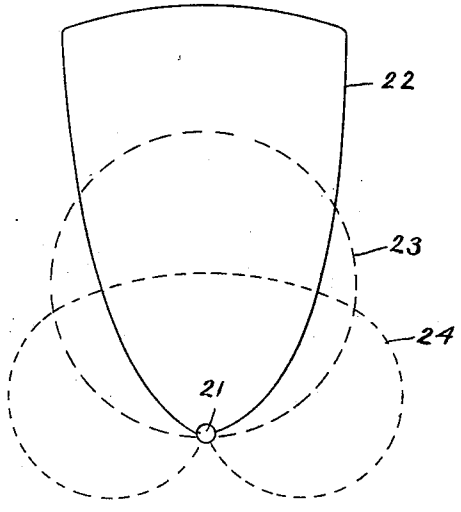


Fig. 7.



Witnesses
M C. Buck.
B. G. Lockwood.

Inventor
James M. Dungan
By W H Lockwood
His Attorney.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES M. DUNGAN, OF INDIANAPOLIS, INDIANA.

HOSE AND NOZZLE HOLDER.

SPECIFICATION forming part of Letters Patent No. 622,132, dated March 28, 1899.

Application filed November 25, 1898. Serial No. 697,426. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. DUNGAN, of Indianapolis, county of Marion, and State of Indiana, have invented a certain new and useful Hose and Nozzle Holder; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like figures refer to like parts.

My invention relates to a combined hose-holder, nozzle-holder, and spray for lawn-sprinkling purposes. The chief object is to combine these three features in one construction.

There are also several other objects had in view in making this invention. One is to have the hose, nozzle, and spray device always in position for use. The spray device is not attached to the nozzle, but to the hose and nozzle holding device. The spray device is adjustable independent of the nozzle and so acts that the hose and nozzle can be approached and manipulated without encountering the spray. By reason of its construction the scope or extent of the spray can be adjusted. The hose is held in horizontal coils on the hose-holder with the nozzle end elevated, so that when the hose is detached from the hydrant the water will run out readily and leave the hose dry. The hose does not have to be removed from the holder while in use excepting to cover the distance between the hydrant and the hose-holder.

The whole device is very simple and economical in construction, easy in operation, and extremely durable, as all parts are made of metal and there are no complex constructions to wear or break. It is light and can be easily carried or moved about.

The various features of my invention will more fully appear from the accompanying drawings and the description and claims following.

In the drawings, Figure 1 is an elevation of my hose and nozzle holder with the hose on. Fig. 2 is the same with the hose off. Fig. 3 is a section through the handle and its attachment. Fig. 4 is a side elevation of the nozzle-holder and spray-plate. Fig. 5 is a plan view of the central portion of the spray-plate. Fig. 6 is a bottom view of the spray-plate with the stroke of the stream shown and also the various positions of said plate in dotted lines. Fig. 7 is a diagram of the scope of the spray upon the lawn in the various positions of the spray-plate.

In detail, 1 is a base comprising four legs mounted in suitable casters 2. The legs are formed of pipe connected by the joint 3, from which a standard 4 extends upward. The hose-holding frame is rotatably mounted on the base and consists of two strips of metal 5, crossing each other centrally at right angles and being bent down like basket-stays, with their ends inclosed by the band 6, said ends being curved outward horizontally to form the hose-supporting arms 7. The extreme ends of the arms 7 are turned upward to prevent the escape of the hose. At the crossing of the bars 5 a handle 8 is pivoted, the pivot extending through the handle and said bars to unite them, but in such manner that the handle will readily turn. The frame is braced by the cross-pieces 9 and 10, which are centrally apertured to slip over the standard 4, so that the lower cross-piece 9 rests on the joint 3 and the upper cross-piece 10 is held from escape by the nut 11. These cross-pieces are so mounted on the standard 4 as to easily rotate. The hose-holding plate likewise braces the frame as its four corners are turned down and secured to the bars 5 in the upper portion of the frame. It is provided centrally with a hole 13, as shown in Fig. 5, from which to the point 14 the metal is cut, and on each side of such cut it is turned upward, as shown in Fig. 4, to form the nozzle-holding flanges 15. These flanges when turned up leave between them a V-shaped space or slot in which the nozzle is received. The flanges are provided with a series of notches 16, on which the head 17 of the nozzle rests when in place. With this arrangement it is seen that nozzles varying in size can readily be accommodated and held in the nozzle-holder. The nozzle thus wedges into place and is firmly held in the V-shaped slot and between the flanges 15.

The spray is effected by mounting the spray-plate 18 pivotally on the nozzle-holding plate 12, as shown in Fig. 4. The spray-plate as shown and used by me is round and riveted to a post or support 19, which is so pivoted to the nozzle-holding plate 12 as to be rotatable.

The spray-plate is centrally bent up at a rather sharp but very obtuse angle, as shown in Fig. 4, thus rendering the half that is secured to the post 19 horizontal and the other half inclined upward at a slight angle. Water from the hose strikes this plate and deflects therefrom in a spray. It is thus seen that the frame on which the hose is wound is rotary both in relation to the base and also with relation to the handle 8. Therefore the hose can be unwound by drawing the end of it away from the hose-holder, causing the frame to rotate on the base, or, on the other hand, after securing the hose to the hydrant one can carry or move the whole device to the place desired by means of the handle 8, and while it is being carried the frame will rotate and permit the hose to unwind. When the place for spraying is reached, the device is set on the ground, with the nozzle extending in the direction in which it is desired to spray. The nozzle need not be touched, and when the direction of spray is desired to be changed one turns the frame either by lifting it up by the handle or rotating the frame slightly. Since the nozzle is fixed in place pointing in one direction always with relation to the device, one can approach the device for any purpose without encountering the water.

The water from the nozzle, as has been stated, strikes the under side of the spray-plate and is deflected therefrom to the ground. The scope or extent of the spray can be readily adjusted as desired by slightly turning the spray-plate on its pivoted connection, as shown in Figs. 6 and 7. In Fig. 6 the spray-plate is shown in plain lines in its central position. The line 20 represents the angle or point in the plate. The part 21 represents the place where the water strikes the under side of the spray-plate. This is merely diagrammatical for the purpose of illustration. As there shown, when the spray-plate is in its central position the water will strike the upturned part of the spray-plate, as shown in Fig. 4, and will be deflected quite a distance, so that the extent of the spray will be much the shape of the plain line 22 in Fig. 7. In that figure the part marked 21 represents the strike of the water against the under side of the spray-plate, and the lines extending therefrom is the outline of the surface of the ground that is being covered by the spray. In the position just described the spray will be substantially evenly distributed over a surface about ten feet wide and twenty feet long.

By turning the spray-plate from the position shown in plain lines in Fig. 6 to the second position it is seen that a larger portion of the water strikes the horizontal portion of the plate, and in this way the spray is distributed over a wider surface, but does not extend quite so far, the outline of the ground covered by such spray being illustrated by the line 23 in Fig. 7. Turning said spray-plate into the third position (shown in Fig. 6) it is seen that about one half of the water strikes the horizontal portion and the other the inclined portion of the spray-plate. This causes the spray to extend about two-thirds of the way around the device and over a considerably-widened territory, although the forward throw is reduced, the outline of the ground covered by such spray being substantially as shown by line 24 in Fig. 7.

When it is desired to throw a solid stream instead of a spray, the spray-plate is turned around farther, so that the water from the nozzle does not strike it. It is seen from the foregoing description that in the matter of the spray the work of the device can be modified or set as desired by merely turning the spray-plate without touching the nozzle or the hose-holder and without getting wet. It makes an evenly-distributed spray also, the same amount of water being thrown over all parts of the ground, as the spray that goes out is like a sheet of water and like rain drops. When the spraying is finished, the hose is detached from the hydrant and is coiled on the frame by turning the frame with one hand. While it is thus being coiled on the reel and the end of the hose is on the ground, all of the water will run out of the hose and leave it dry. In all this process, too, it is observed the hose is never kinked. In fact, much of the time but a very small portion of the hose need be unwound. Since the hose is never kinked and is always drained dry and is never handled excepting while connecting it to the hydrant, its life is greatly prolonged in comparison with hose handled without reels or with reels where the nozzle-holder is independent of the reel. By having the nozzle-holder combined with the reel the nozzle end of the hose is never handled. By combining the spray device with the nozzle-holder and reel the nozzle is never handled while this device is in use. The only things handled in this device are the handle 8, the reel while it is being rotated, and the spray-plate. When one wishes to sprinkle by hand, the nozzle end of the hose can be readily removed from the nozzle-holder. It is seen, too, that this is a very simple construction, and being all made of metal and without any fine or complex parts it will wear a long time if in ordinary use. It can be made or used without the base, the inverted basket-like frame in such case resting directly on the floor or ground. I do not wish to limit myself to the precise form and construction of parts I have shown, as what is here shown is merely to illustrate the nature of my invention and to show the form and construction I have found preferable for embodying my invention.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A hose-holder comprising two or more inverted-U-shaped bars centrally crossing each other, and a handle so pivoted to said bars at the crossing as to secure them together, the lower ends of the said bars being extended outward to form hose-supporting arms.

2. A hose-holder comprising a wheel-mounted base, a standard extending upward centrally therefrom, two or more inverted-U-shaped bars centrally crossing each other, cross-bars connecting and bracing said U-shaped bars, one near the lower end of said bars and the other near the middle thereof and centrally perforated to fit over and rotate on said standard, and hose-supporting arms from the lower end of said U-shaped bars.

3. A nozzle-holder comprising a plate with a V-shaped slot therein for receiving and holding the nozzle.

4. A nozzle-holder comprising a plate with a slot therein formed by slitting the plate and turning upward the metal on each side of the slit to form flanges, said flanges being provided with oppositely-placed notches to receive and hold the nozzle.

5. A hose and nozzle holder comprising a base, a hose-holder formed of two or more inverted-U-shaped bars centrally crossing each other at the top and secured together at such crossing, the lower ends of said bars being turned outward to form hose-supporting arms, means for rotatably mounting said frame on the base, and a nozzle-holding plate secured within said frame between its ends by its corners to the said U-shaped bars and provided with a slot in it to receive and hold the nozzle.

6. The combination of a plate apertured to receive and hold the nozzle, and a spray-plate so attached thereto as to deflect the water as it issues from the nozzle.

7. The combination with a nozzle-holding plate, of a spray-plate pivotally mounted on the nozzle-holding plate, whereby it can be moved into or out of the path of the water as it issues from the nozzle.

8. The combination with a nozzle-holder, of a spray-plate so attached thereto as to deflect the water as it issues from the nozzle, said spray-plate being pivotally mounted on the nozzle-holder and having a horizontal portion and an inclined portion, whereby the deflection of the water may be varied by changing the position of the spray-plate.

9. The combination with a nozzle-holding plate apertured to receive and hold the nozzle, of a spray-plate provided with a post at one side pivotally mounted on the nozzle-holding plate so as to hold the spray-plate in the path of the water as it issues from the nozzle, said spray-plate consisting of a disk centrally bent and so mounted that the portion secured to the pivoted post will be horizontal and the outer portion inclined upward.

10. A hose and nozzle holder comprising a wheel-mounted base, a standard extending upwardly therefrom, two or more inverted-U-shaped bars centrally crossing each other at the top and with their lower ends turned outward to form hose-supporting arms, a handle so pivoted to said bars at the crossing as to secure them together, cross-bars connecting and bracing said U-shaped bars and centrally apertured to receive the standard from the base, a plate secured within said frame between its ends by its corners to said U-shaped bars and provided with a V-shaped slot therein to receive and hold the nozzle, and a spray-plate pivotally mounted on said nozzle-holding plate so as to be in the path of the water as it issues from the nozzle, substantially as set forth.

In witness whereof I have hereunto affixed my signature in the presence of the witnesses herein named.

JAMES M. DUNGAN.

Witnesses:
V. H. LOCKWOOD,
M. C. BUCK.