No. 624,240. Patented May 2, 1899.

R. ORFORD.

SPRAY ATTACHMENT.

(Application filed Nov. 10, 1898.)

(No Model.)

Fig. 1.

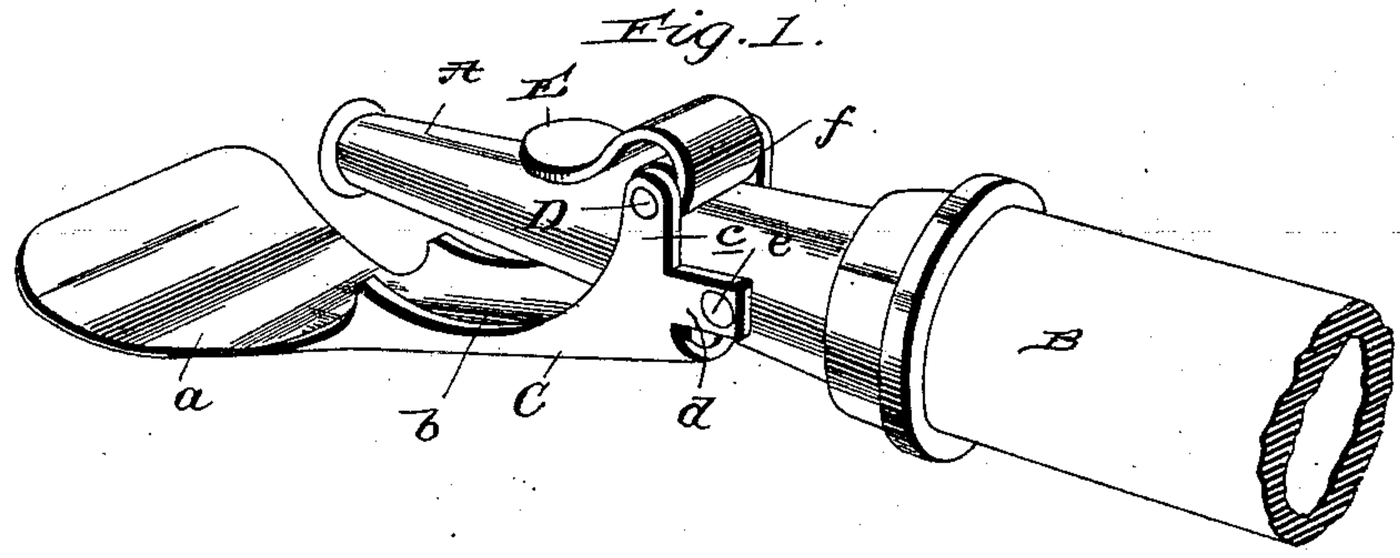
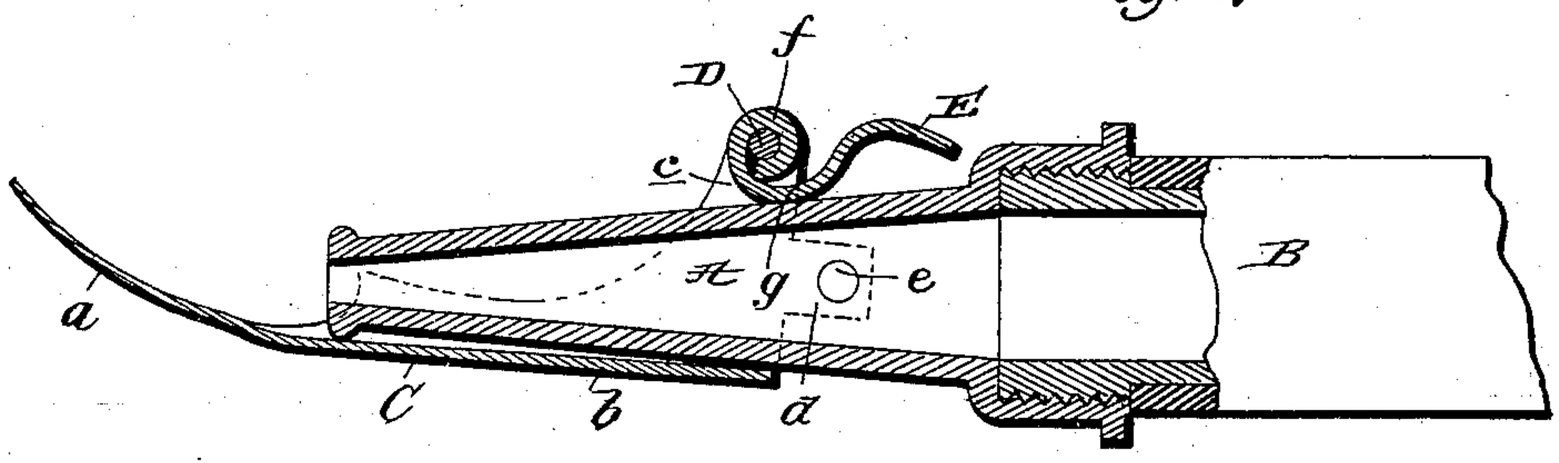


Fig. 2.



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UNITED STATES PATENT OFFICE.

RICHARD ORFORD, OF ST. JOSEPH, MICHIGAN.

SPRAY ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 624,240, dated May 2, 1899.

Application filed November 10, 1898. Serial No. 696,054. (No model.)

To all whom it may concern:

Be it known that I, RICHARD ORFORD, a citizen of the United States, residing at St. Joseph, in the county of Berrien and State of Michigan, have invented new and useful Improvements in Spray Attachments, of which the following is a specification.

My invention relates to that class of hose-nozzles which embrace a spray attachment and an adjustable device for fixing the attachment in its operative position when it is desired to throw a spray and for permitting it to assume an inoperative or idle position when it is desired to throw a solid stream.

The invention consists in the peculiar construction, novel combination, and adaptation of parts hereinafter described, and particularly pointed out in the claims appended.

In the accompanying drawings, Figure 1 is a perspective view of a nozzle equipped with my improvements and showing the spray attachment in its idle position and the nozzle adapted to throw a solid stream. Fig. 2 is a horizontal section with the spray attachment in its operative position—that is to say, in a position to spray the water.

Referring by letter to the said drawings, A is a nozzle at one end of a hose B, and C is my improved spray attachment. In the preferred embodiment of the invention the attachment is formed in one piece of suitable sheet metal, and comprises a broad upwardly and forwardly inclined forward portion *a*, which when the attachment is in its operative position is adapted to rest in advance of and in the same plane as the mouth of the nozzle, and a shank *b*, of concavo-convex form in cross-section, which is designed to receive the nozzle after the manner shown in Fig. 2. The shank is provided at its rear end with ears *c*, and these ears, which rise at opposite sides of the nozzle to a point above the same, are provided in turn with rearwardly-extending lugs *d*. These lugs *d* are pivotally connected by rivets *e* or other suitable means to the nozzle at opposite sides thereof, and hence it follows that the attachment is free to fall and assume the idle position shown in Fig. 1 and is adapted to be raised and secured in the operative position shown in Fig. 2.

D is a transverse pintle which is secured in the ears *c* and rests above the nozzle, and E is an eccentric lever designed to lock or secure the attachment in its operative position, and also designed to serve as a stop in limiting the downward movement of the attachment. This lever in the preferred embodiment of the invention is formed by a piece of sheet metal bent to form a barrel or eye *f* at one end for the reception of the pintle D and an eccentric portion *g*, designed to bear on the upper side of the nozzle and secure the attachment in its operative position.

Being located above the nozzle, the lever E may be quickly and conveniently manipulated, and hence it follows that when the spray attachment is in use and it is desired to throw a solid stream the attachment may be quickly released and permitted to assume the position shown in Fig. 1, or if a solid stream is being thrown and it is desired to throw a spray the attachment may be readily raised and secured in its operative position. It will be noticed that when the lever is placed in the position shown in Fig. 1 the attachment, by reason of gravity, will assume its idle position, while when the lever is moved into the position shown in Fig. 2 it will, by acting on the nozzle, raise the attachment in its operative position and secure it in such position. From this it follows that the operator has but to manipulate the lever in order to change the position of the attachment, and in consequence the changes may be made very quickly, which is a desideratum.

The nozzle and attachment are designed to be used to advantage on a garden or lawn hose, and, in fact, the specific embodiment of the invention herein disclosed is designed for such use, it being at once cheap, light, and efficient. The improvements are also calculated to be used to advantage on a fire-hose. This is due to the fact that the water striking against the portion *a* of the attachment is widely spread without creating back pressure in the hose and the further fact that the change from solid stream to spray may be instantly made, thus enabling a fireman to stand quite close to a fire without danger of being scorched.

It is obvious that when the improvements are designed for use on a fire-hose they will

be cast or otherwise suitably formed of brass or other suitable metal and be made sufficiently heavy to meet all requirements.

Having thus described my invention, what I claim is—

1. The combination of a nozzle, a spray attachment pivotally connected to the nozzle, and having ears disposed at opposite sides of the same, and an eccentric lever arranged between and connected with the ears and adapted to bear against the nozzle, substantially as specified.

2. The combination of a nozzle, a spray attachment comprising a broad and inclined forward portion and a concave shank arranged to receive the nozzle and having ears disposed at opposite sides of the nozzle and rearwardly-extending lugs on said ears pivotally connected to the nozzle, and an eccentric lever arranged between and connected with the ears and adapted to bear against the nozzle, substantially as specified.

3. The combination of a nozzle, a spray attachment formed of a single piece of sheet metal and comprising a broad and inclined forward portion and a concavo-convex shank arranged to receive the nozzle and having ears disposed at opposite sides of the nozzle and rearwardly-extending lugs on said ears, rivets pivotally connecting the lugs to the opposite sides of the nozzle, a pintle disposed transversely and secured in the ears of the attachment, and the eccentric lever having the eye or barrel receiving the pintle and the eccentric portion adapted to bear on the nozzle, substantially as specified.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

RICHARD ORFORD.

Witnesses:
ROSCOE T. DIX,
ALFRED O. FRENCH.