(No Model.)

J. McBOYLE. SPRAY ATTACHMENT FOR NOZZLES.

No. 533,367.

Patented Jan. 29, 1895.

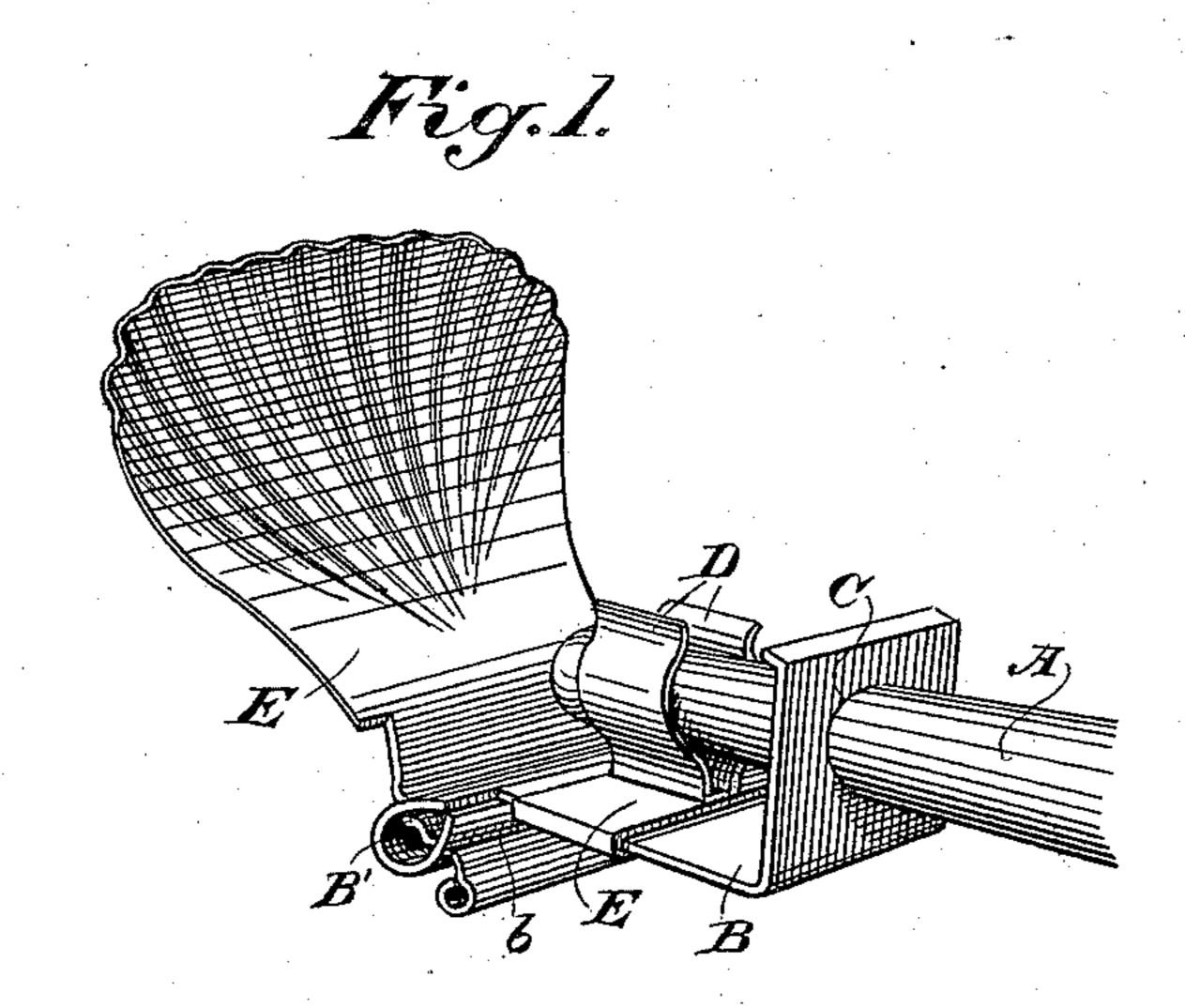
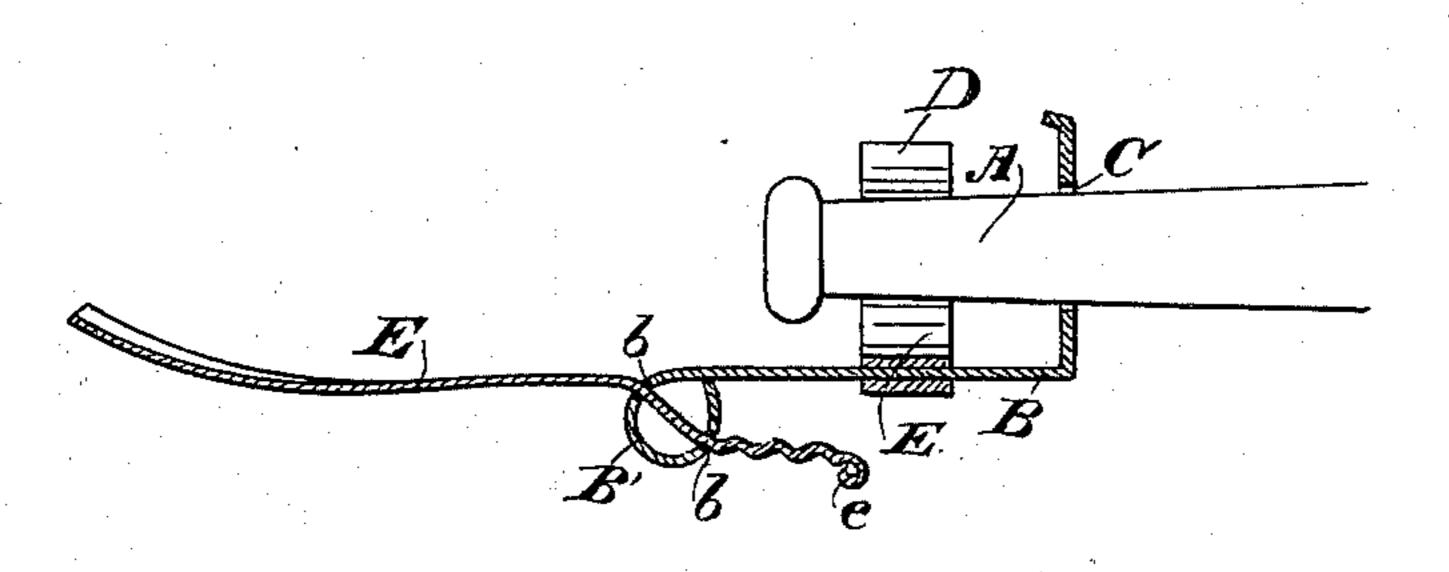


Fig. 2.



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UNITED STATES PATENT OFFICE.

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SPRAY ATTACHMENT FOR NOZZLES.

SPECIFICATION forming part of Letters Patent No. 533,367, dated January 29, 1895. Application filed August 11, 1894. Serial No. 520,051. (No model.)

To all whom it may concern:

Be it known that I, Joseph McBoyle, a citizen of the United States, residing in Oakland, county of Alameda, State of California, have 5 invented an Improvement in Spray Attachments for Nozzles; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a spray attachment 10 for nozzles of garden hose, and for attachment generally to nozzles from which a stream of water is ordinarily thrown in a solid form, and the attachment is designed to break the stream into a spray.

My invention consists in certain details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a view of my spray attachment. 20 Fig. 2 is a longitudinal section of the same.

The object of my invention is to provide a spray attachment which is easily attached to, or detached from a nozzle which is adjustable to suit varying lengths of nozzles, and a pe-25 culiarly constructed spray plate which is also made adjustable to vary the spread and direction of the spray.

A is the nozzle, of any usual or suitable construction adapted to discharge water which 30 arrives at it under pressure through a hose or other conveyer.

B is a plate bent at approximately right | angles, having a hole made through it, as shown at C, to fit over the end of the nozzle.

D is a spring clamp projecting from the slide E which is adapted to be moved upon that part of the plate B which stands at right angles with the part through which the nozzle projects, and this slide is movable to or 40 from the opening, so that the clamp may be correspondingly moved to allow it to clasp a longer or shorter nozzle, thus adjusting it to nozzles of varying lengths.

After introducing the nozzle through the 45 hole C, the front end of it is pressed down between the sides of the spring clamp, and the plate B is thus firmly secured to the nozzle. The front end of the plate is adapted to receive the spray plate E. In the present case, 50 the front end of the plate B is bent into the form of a roll as shown at B', and through the upper and lower part of the roll, slots b are

made into which the lower end of the spray plate E is introduced. This portion of the plate is corrugated transversely as shown, 55 and these corrugations will engage with the edges of the slots through which the plate passes, so that the plate will be held at any desired position when the current of water strikes against its upper part, the pressure of 60 the water retaining the corrugations in contact with the edges of the slots, and thus locking the plate in place. This corrugated portion of the plate is curved, as shown, so that by moving it up or down in the slots, the plate 65 will either be raised so as to stand more directly in front of and in line with the discharge of the nozzle, or it may be lowered by pushing it backward until the upper edge is entirely clear, and the water will be allowed 70 to pass out of the nozzle in a solid stream.

The lower end of the plate is bent or provided with a stop e to prevent its being en-

tirely drawn out of the slots.

That portion of the plate against which the 75 current of water strikes, is spread out into a sort of fan-shape, and is concaved as shown, so that the water striking it will be diverted from its line of discharge and at the same time spread out over the edges of the plate 80 so as to form a thin sheet or spray. In order to direct and still further separate the stream as it passes off the plate, I have shown the edge over which the water is finally delivered, as being channeled, corrugated, or serrated, 85 so that the serrations act as guides to direct the water in the direction in which these serrations radiate upon the edge of the plate.

By varying the positions of the plate, the direction and spread of the water after it 90 leaves the nozzle may be correspondingly varied, and the plate in its attachment is easily removed from the nozzle if desired.

Having thus described my invention, what I claim as new, and desire to secure by Letters 95

Patent, is—

1. A spray attachment for nozzles consisting of a perforated plate adapted to slip over the end of the nozzle, having the lower part bent at right angles with the perforated portion, a 100 spring clasp projecting upwardly from this part in line with the perforation, and adapted to clasp the end of the nozzle after it has been introduced into the perforation, and a plate

attached to the outer end thereof at an angle so that the stream from the nozzle is inter-

cepted and diverted thereby.

2. A spray attachment for nozzles, consisting of a bent plate having an opening formed in one portion through which the nozzle is inserted, a spring clasp into which the front end of the nozzle is fitted after it has been inserted into the opening, and a slide to which the spring clasp is attached, said slide being movable upon the plate to or from the opening to adjust it to different lengths of nozzles.

of a bent plate having an opening made through one portion through which the nozzle is introduced, a spring clasp connected with the other portion of the plate extending upwardly so as to clasp the front end of the nozzle, a slot made in the outer end of the plate and a spray plate adjustably fitted into said slot so as to project upwardly into line

with the stream from the nozzle.

4. A spray attachment for nozzles consisting of a bent plate having a perforation in one part for the reception of the nozzle, and a spring clamp connected with the other portion adapted to clasp the front part of the nozzle, a roll formed in the front end of the plate, having slots made in the upper and lower portion, a spray plate, the lower end of which passes through said slots and is corrugated transversely so that the corrugations engage the edges of the slot, the upper part

of the plate being curved and projecting upwardly into the line of discharge upon the 35 nozzle.

of a plate attachable to the nozzle having a roll formed at the front end, slots made in the upper and lower part of said roll, a concaved spray plate, the lower end of which is curved and corrugated transversely, and adapted to pass through the slots in the roll, the corrugations engaging the edges of the slots so as to raise or depress the plate and 45 change its angle with reference to the discharge from the nozzle, said plate being retained in either position by the pressure of water against it.

of a plate having slots and a clamp whereby it is attached to a nozzle, a spray plate having the curved transversely corrugated end adapted to engage slots in the front end of the connecting plate and having the outer 55 end concaved and diverging, the discharge end of said plate having corrugations or serrations formed in it for the direction of the

spray as it leaves the plate.

In witness whereof I have hereunto set my 50 hand.

JOSEPH McBOYLE.

Witnesses:

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S. H. NOURSE, H. F. ASCHECK.