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GARDEN HOSE NOZZLE

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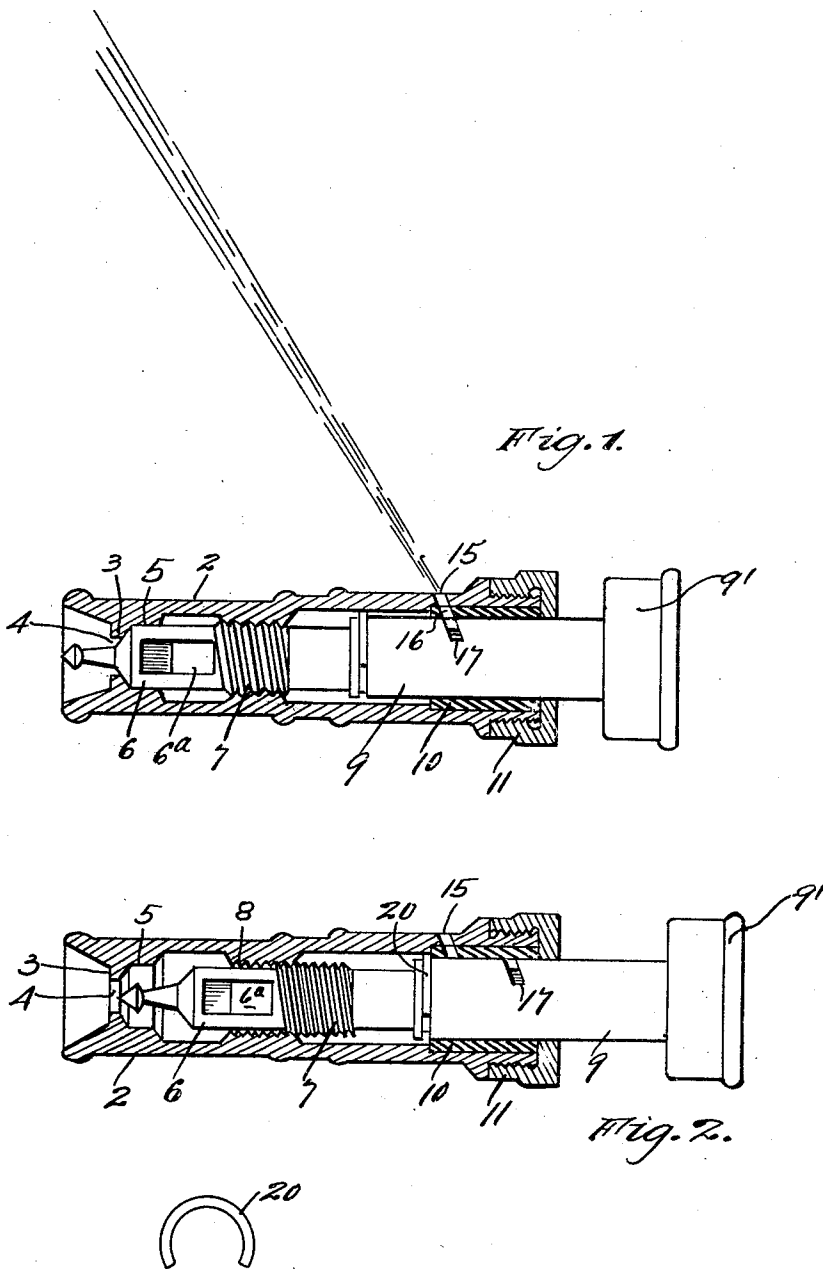


Fig. 3.

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GARDEN HOSE NOZZLE

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This invention relates to adjustable valve hose nozzles.

It is an object to provide a nozzle of this class with an isolated lateral discharge port whereby to enable the issue of a more or less fan-shaped, locally directable spray as distinguished from the solid stream or conical spray obtainable from the usual discharge, end port and valve parts of such nozzles.

10 A further object is to obtain this peculiar and isolated lateral spray without addition of any new parts whatsoever and to enable the selection of either the end or of the side discharge by normal and common operation of the parts, all without any material increase in cost of production and without any complication of parts.

20 This invention consists in certain advancements in this art as set forth in the ensuing disclosure and having, with the above, additional objects and advantages, and whose construction, combination and details of means, and the manner of operation will be made manifest in the description of the herewith illustrative embodiment; it being understood that modifications, variations and adaptations may be resorted to within the scope, principle and spirit of the invention as it is more directly claimed hereinafter.

30 Figure 1 is an axial section, about full size, with parts in lateral spraying adjustment.

Figure 2 is an axial section with parts in end spray adjustment.

35 Figure 3 is a plan of a lock loop for the parts.

40 The nozzle, for a garden hose, includes an outer shell 2 with a constricted bore shoulder 3 provided with a central port 4. This shoulder has a cylindrical bore 5 in which snugly fits a valve plug 6 whose body is provided with a screw-threaded part 7 engaged in internal threads 8 of the shell. The opposite end of the valve has a larger hollow body part 9, with a hose screw socket 9', embraced by a packing sleeve 10 which is sunk in the butt of the shell and through which the screw 7 is readily passable to its position. A butt gland 11 secures the packing in place.

50 In this class of nozzle water passes through the hollow valve body 9 to side ports 6^a in

its plug end 6, thence to the outlet 4 if the plug end is in retracted position, Fig. 2, with the plug clear of the bore 5; which is a feature of this invention.

The shell has a lateral kerf or slot 15 in constant register with a kerf of port 16 in the packing 10. The valve body 9 likewise has a kerf 17 which is so disposed as to register with the other kerfs 15—16 when the valve is screwed fully outward so that its plug 6 seats on the restrictive shoulder 3 and stops flow thereat. It will be seen, therefore, that a lateral spray will be caused to issue from the side port 15 of the nozzle when the parts are in this adjustment, Fig. 1.

Both ports 4 and 15 will be closed when the valve is screwed back to shift port 17 from ports 16—15 and still leave the plug 6 in closing relation in the bore 5, whose length is such as to provide for closing of port 17 without opening bore 5 to the shell chamber.

A stop collar 20 is provided in the valve body 9 to engage the near end of the packing 10, when the plug 6 has been moved back enough to fully open bore 5, leading to port 4.

What is claimed is:

1. A garden hose nozzle comprising means whereby it is adapted to be converted into a sprinkler and said means including a shell provided with a nozzle spray end having an interior constricted-port shoulder, a valve stem adjustably threaded in the bore of the shell and having a needle end movable into said port and the stem having a plug part in rear of the needle cooperable with said shoulder to shut off flow, the stem body slidably fitting in the shell, and the said body and the shell having registerable lateral discharge ports for the issue of water from the nozzle when the plug is seated on the shoulder to stop flow thereat the shell and body having an interposed packing cylinder with a side port registering with the side port in the body for lateral spray.

2. A garden hose nozzle including a shell provided with a nozzle spray end having an interior constricted-port shoulder, a valve stem adjustably threaded in the bore of the shell, the stem having a plug part in rear of the needle for closing on said shoulder to

shut off flow, the stem body slidably fitting in the shell, and the said body and the shell having registerable lateral discharge ports for the issue of water from the nozzle when
5 the plug is seated on the shoulder to stop flow thereat, and the shell having a bore fitting the plug to shut off end discharge at the same time that the lateral ports are closed by relative shift of the shell and the valve
10 stem body.

3. A garden hose nozzle including a shell provided with a nozzle spray end having an interior constricted-port shoulder, a valve stem threaded in the bore of the shell, the
15 stem having a plug part operatively closing on said shoulder to shut off flow, the stem body slidably fitting in the shell, and the said body and the shell having registerable lateral discharge ports for the issue of water
20 from the nozzle when the plug is seated on the shoulder to stop flow thereat, and the shell having a bore fitting the plug to shut off end discharge at the same time that the lateral ports are closed, the valve being ad-
25 justable from the shoulder to allow end flow while the lateral ports are in closed position.

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