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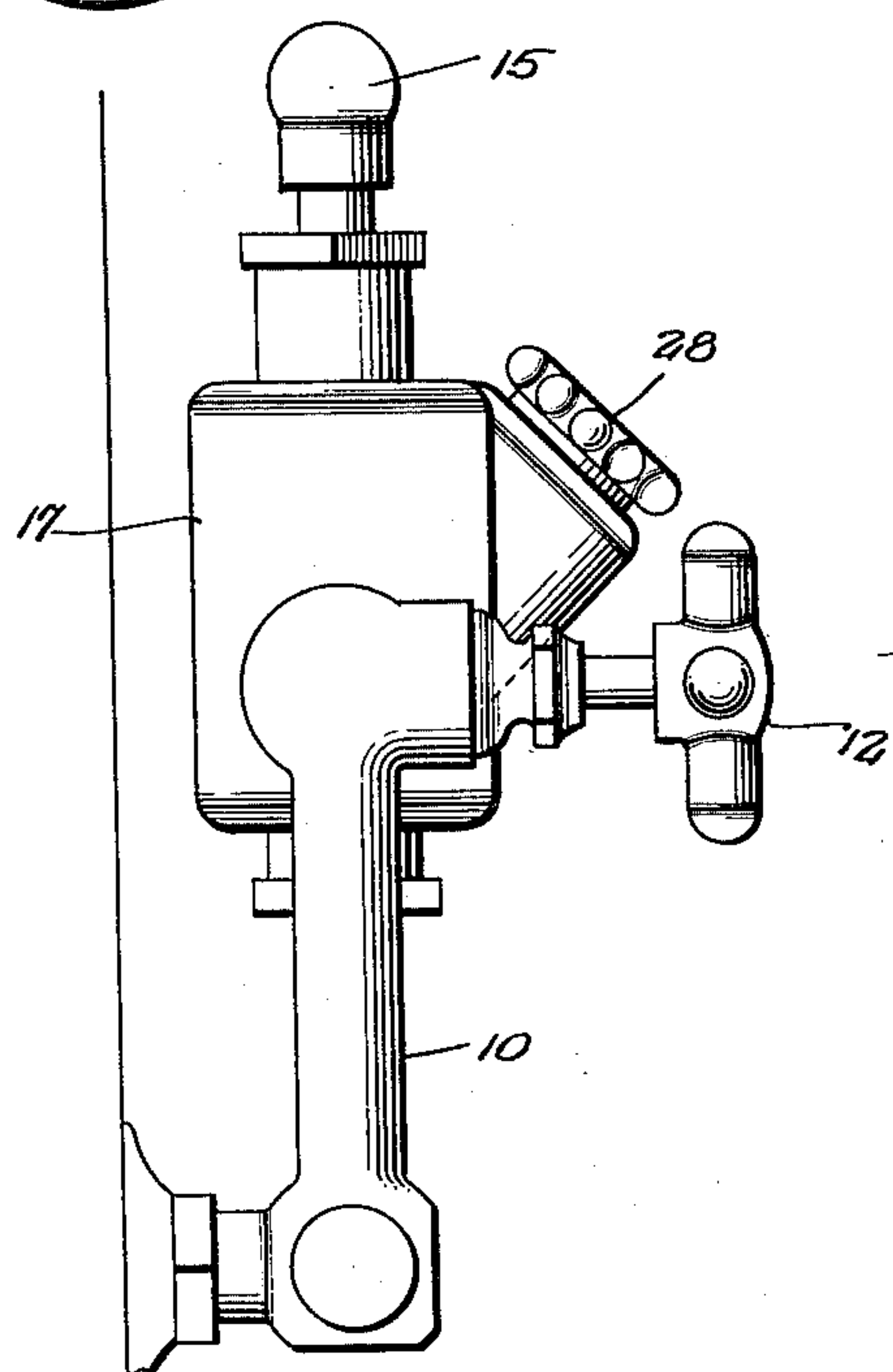
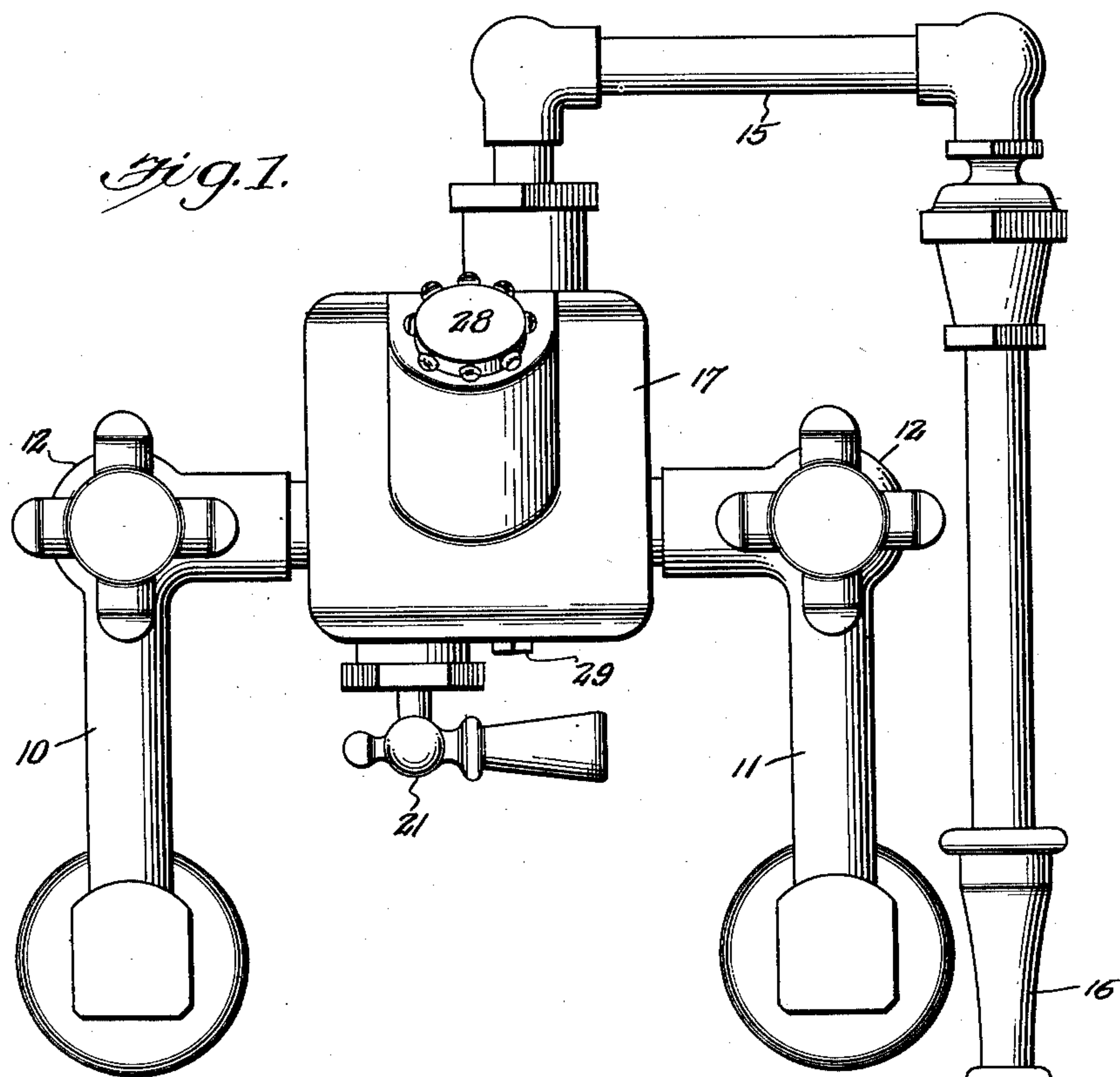
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SOAP DISPENSING FAUCET

Filed Aug. 21, 1928

2 Sheets-Sheet 1



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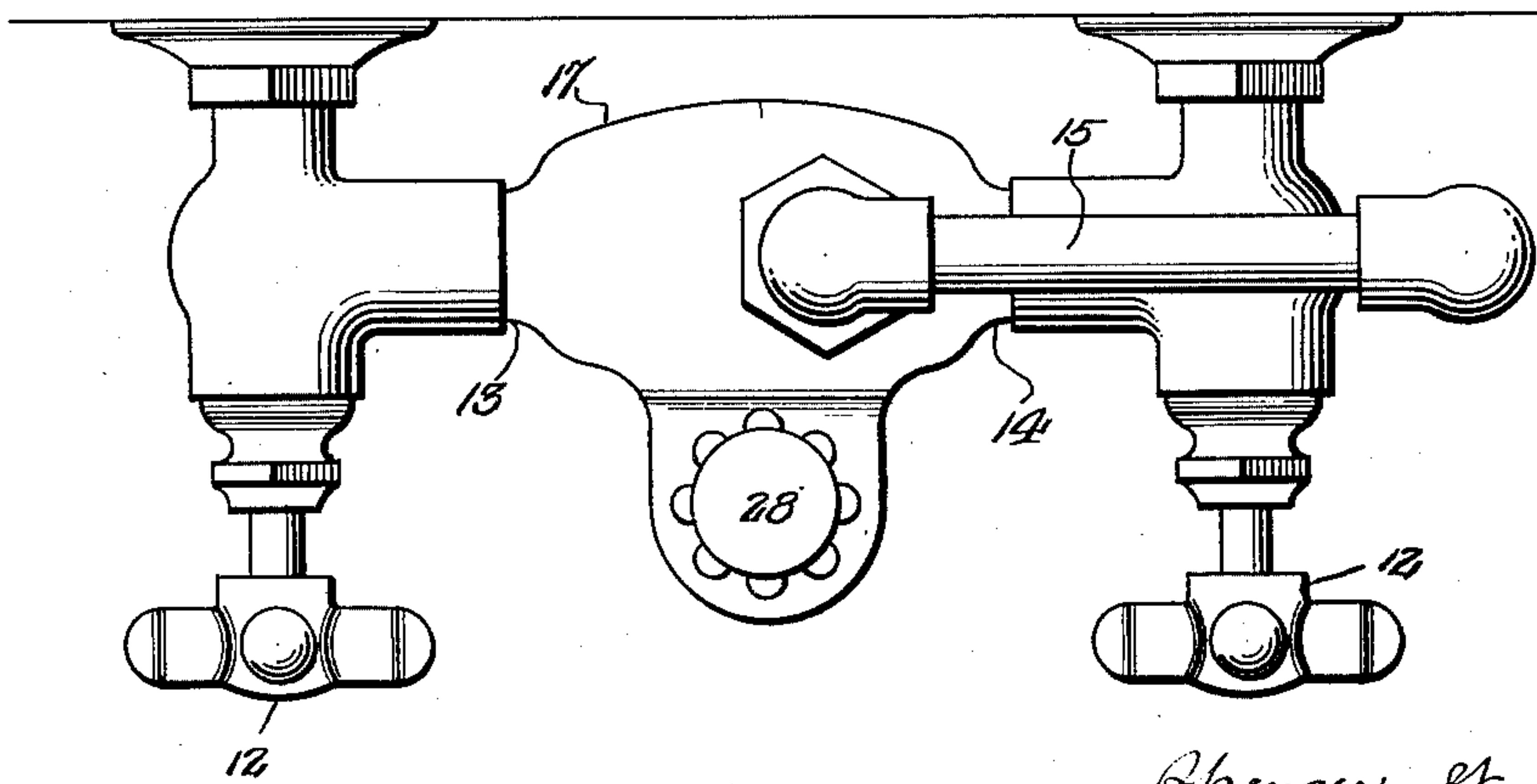
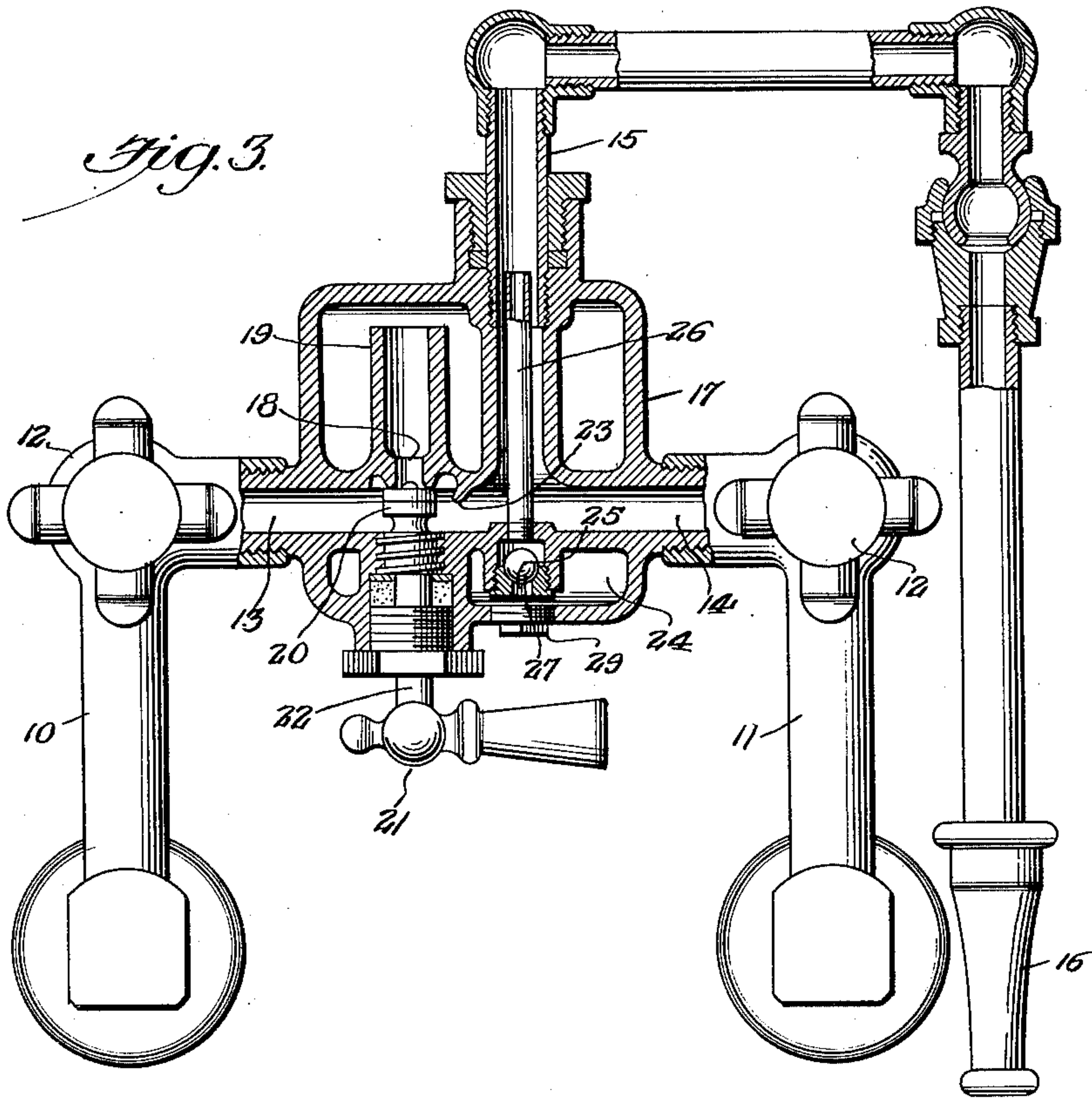


Fig. 2.

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SOAP-DISPENSING FAUCET

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This invention relates to improvements in soap dispensing devices or faucets which may either be installed as an attachment to the ordinary water faucet or may be used in lieu of the ordinary household water faucet.

Soap dispensing devices, and particularly dish-washing attachments of various designs, have heretofore been proposed for attachment to household water faucets, but in most instances the construction has been such that pure water, without any trace of soap therein, can not be drawn through the attachment, and for this reason, such prior constructions are attachments only, and do not permit of the faucet itself being dispensed with. The principal object of the present invention, therefore, is to produce a device from which either soapy or clear water may be discharged, the clear water discharged from said device being totally untainted by trace of soap, whereby the faucets ordinarily found at sinks may be dispensed with, if desired. This is important, because the cost of installation of the device is greatly reduced, due to the fact that special faucets for use with the device are not necessary. In installing the device in the ordinary house, the faucets can be removed, and the present device attached to the water pipes, the faucets or substitutes therefor being discarded. In this way, the cost of the faucets to be used with the device is eliminated.

With these and other objects in view, the invention consists in certain novel details of construction and combinations and arrangements of parts, all as will be hereinafter more fully described and the novel features thereof particularly pointed out in the appended claims.

In the accompanying drawings,
Figure 1 is a front elevational view of the device installed at a sink;
Fig. 2 is a top plan view thereof;
Fig. 3 is a vertical sectional view through the soap container; and
Fig. 4 is an end view.

In the preferred installation of the present device, the faucets are dispensed with and vertically disposed pipes 10, 11 are connected to the pipes projecting from the rear of the

sink through which the hot and cold water is supplied. Pipes 10, 11 are provided with valves 12 for controlling the flow of water therethrough and at their upper ends they communicate with supply connections 13, 14, both of which communicate with the discharge connection 15 of the device. At the upper end of the discharge connection 15 there is attached a suitable connection carrying any desired form of nozzle 16 through which water may be sprayed on articles to be washed in the sink below said nozzle. Preferably, the nozzle 16 and its connection are supported through universal joints with universal couplings, whereby the nozzle may be manipulated to spray articles, such as dishes and the like, in various portions of the sink.

The supply connections 13, 14 extend horizontally through the container 17 for the soap which is to be used when soapy water is to be discharged through nozzle 16 for washing the dishes. In order to supply soapy water for this purpose, there is a port 18 in one of the supply connections, and extending upwardly from said port 18 there is a tubular member 19 which projects in rather close proximity to the upper wall of container 17.

Port 18 is controlled by a valve 20 that may be seated or unseated manually by operation of a handle 21 mounted on the exterior end of the stem 22 of said valve. As will be understood, by opening valve 20 a portion of the water passing through the supply connections is diverted through port 18 to the upper portion of container 17 from which it will percolate through the soap or other cleansing agent in the container. In the present instance, pipe 10 is the hot water pipe and as it is the hot water that is usually used with the soap, supply connection 13 has in the interior thereof a depending lip 23 to facilitate diversion of water into the container 17.

In order that water entering container 17 and passing through the soap may have access to discharge pipe 15, one of said supply connections 13, 14 is formed with a valve chamber 24 in whose lower surface there is a port 25 and in whose upper surface there is an

aperture in which is mounted a short length of pipe or tubing 26 that extends up into the discharge connection 15 a considerable distance above said supply connections.

5 Within valve chamber 24 there is a valve 27 that normally seats by gravity so as to close port 25, but when matter is diverted through container 17, the pressure thereof is sufficient to unseat said valve 27, thereby per-
10 mitting the water which has soap in solution therein, to pass upwardly through pipe 26, from which it will discharge through the discharge connection 15 and the nozzle.

15 With the present construction, if soapy water is desired, valve 20 is opened, depending upon the strength of the solution wanted, and that portion of the water diverted into container 17 will find its way through the soap therein and through port 25 and pipe 26
20 into the discharge pipe 15 where it will intermingle with the remaining water which has passed directly through the supply connections 13 and 14 to said outlet connection 15.

25 After the dishes or other objects being washed are cleansed, so that clear water is wanted to rinse them off, valve 20 is closed and the pressure on valve 27 being relieved, said valve will return to its normal position and close port 25. Under these conditions, no
30 water is admitted to the chamber 17. By utilizing the gravity control valve 27, manual manipulation of one valve only is required when changing from soapy or clear water or vice versa, as the gravity controlled valve will
35 be automatically seated and unseated, depending upon the position of the manually controlled valve.

40 While the present device is illustrated in a form adapted for installation at a sink, to serve as a double faucet, it will readily be appreciated that the device can be just as easily utilized in connection with the hot water faucet only. The only alteration that need
45 be made would be to eliminate the supply connection at 14.

50 The valve mechanism of the present device has been found so effective in actual use that the ordinary faucets may be dispensed with because the water flowing from discharge
55 nozzle 16, when valve 20 is closed, carries no trace whatever of soap, so that it is susceptible of any desired use and is not limited for use only in the rinsing of previously washed dishes. The water being absolutely free of
60 all traces of soap, it can be used as drinking water. In view of this, it is believed that the present device is more properly termed a soap-dispensing device, as distinguished from a dish-washing attachment that is to be used in connection with the usual water faucet.

65 The receptacle or soap container may be formed in its upper surface with a filling opening provided with a closure 28. An opening, closed by a plug 29, is also provided

in the bottom of the container in order to facilitate assembly of the device.

It will also be understood that the present device is not limited to the single use specifically referred to in the foregoing description. 70 For instance, the device may be used in lavatories, showers and the like and by substituting proper disinfecting material for soap in container 17, the device may be utilized for disinfecting or sterilizing purposes in hos- 75 pitals, etc.

What is claimed is:

1. In a soap dispensing device, the combination of a casting having a soap contain- 80 ing chamber, valve controlled water supply connections for hot and cold water at opposite ends of said casting extending through said chamber, a discharge pipe intermediate the ends of the casting extending through said chamber and communicating with said sup- 85 ply connection, said connection and discharge pipe being formed as a part of said casting, inlet and outlet valves for diverting a portion of the water from said supply connec- 90 tions through the chamber to said discharge passage, and means for preventing the pas- sage of water from said discharge passage through the outlet valve of said chamber.

2. In a soap dispensing device, the combi- 95 nation of a soap container or chamber, valve controlled water supply connections for hot and cold water at opposite ends of said container extending through said chamber, a dis- 100 charge pipe intermediate the ends of the container extending into said chamber and communicating with said connection, inlet and outlet valves for said chamber communicat- 105 ing with said supply connection and discharge pipe, respectively, for diverting hot and cold water from said supply connections through the container to said discharge pipe, the outlet valve for said chamber preventing the passage of water from said discharge pipe back into said chamber.

3. In a soap dispensing device, the combi- 110 nation of a soap container or chamber, valve controlled hot and cold water supply connections formed integrally with the walls of said container at opposite ends thereof and extending through said chamber, a discharge 115 pipe intermediate the ends of said container extending into said chamber and communicating with said supply connection, means for diverting a portion of water from said sup- 120 ply connections through said chamber to said discharge pipe, and means for preventing a reverse flow of water from said discharge pipe back into said chamber.

4. In a soap dispensing device, the combi- 125 nation of a soap container or chamber, valve controlled hot and cold water supply connections formed integrally with the walls of said chamber at opposite ends thereof and ex- 130 tending into the interior of said chamber, a discharge pipe intermediate the ends of said

chamber extending into the interior of said chamber and communicating with said supply passage, there being inlet and outlet ports for said chamber communicating with said supply connection and discharge pipe, respectively, means for controlling the flow of hot and cold water from the supply connections through said inlet port into the interior of said chamber, and means for preventing the flow of water from said discharge pipe reversely through the outlet port back into said chamber.

5. In a soap dispensing device, the combination of a container having a soap chamber therein, hot and cold water supply connections at opposite ends of said container extending into the interior of said chamber, a water discharge pipe intermediate the ends of the container extending into said chamber and communicating with the water supply connection, inlet and outlet ports in the walls of said supply connections communicating with the interior of said container, a valve controlling said inlet port, a pipe mounted in the wall of said supply connection through which water passing through said outlet port will be delivered to the interior of the discharge pipe, and means for preventing the reverse flow of water through said outlet port.

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