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DRINKING ATTACHMENTS FOR FAUCETS

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Fig. 1

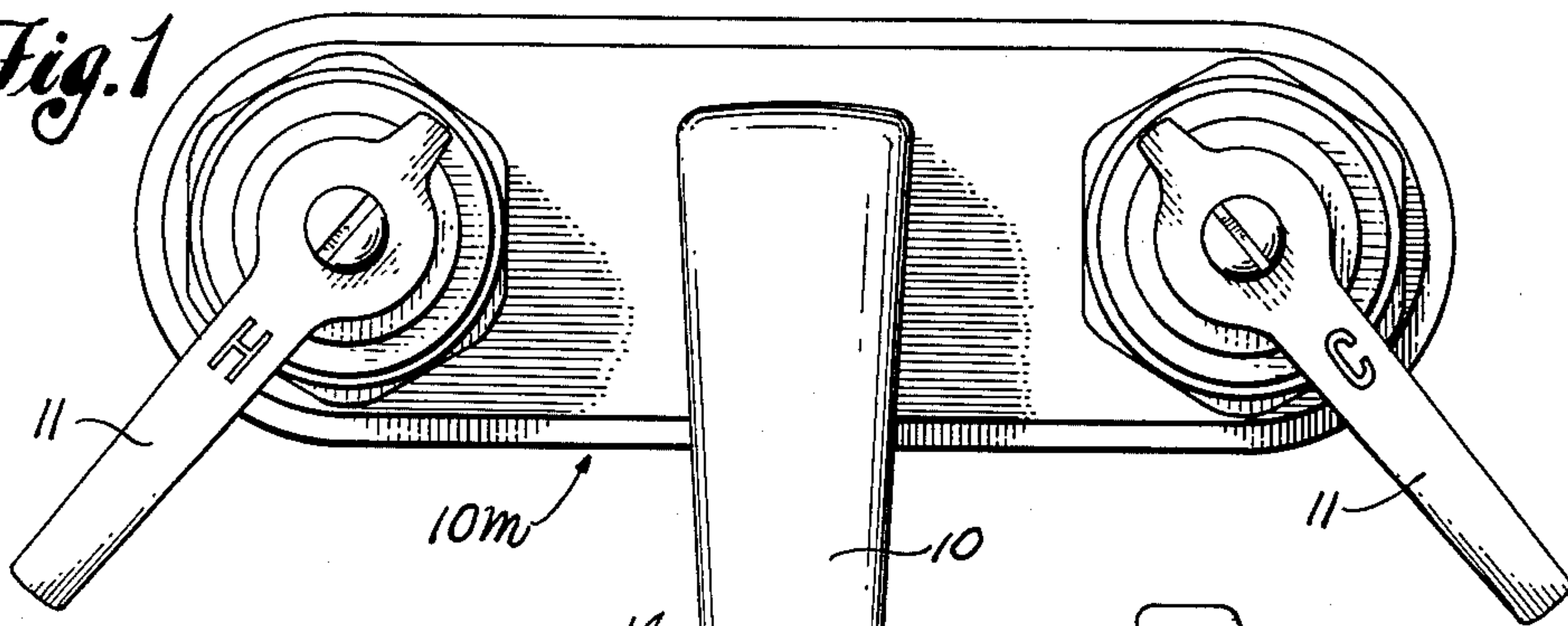


Fig. 4

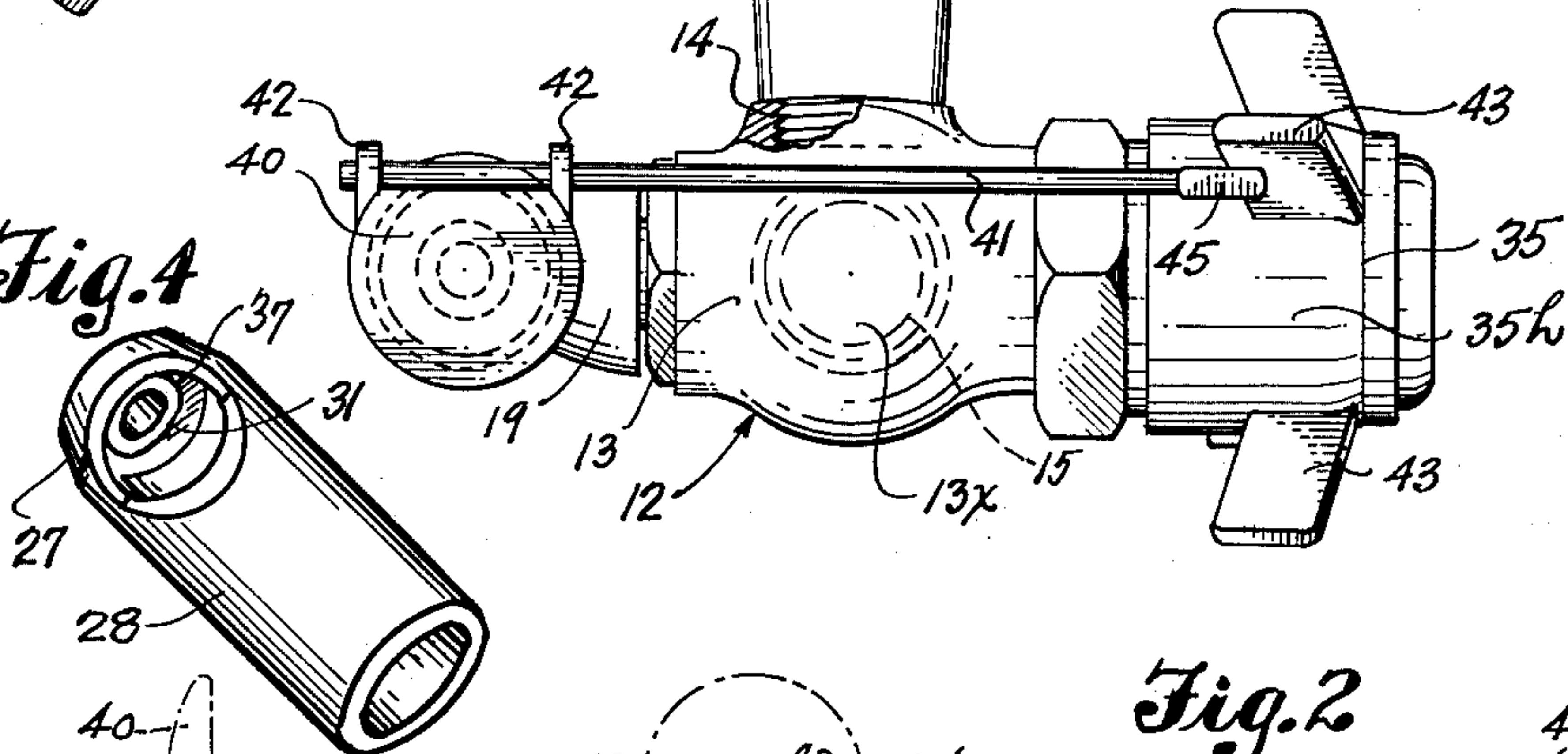


Fig. 3

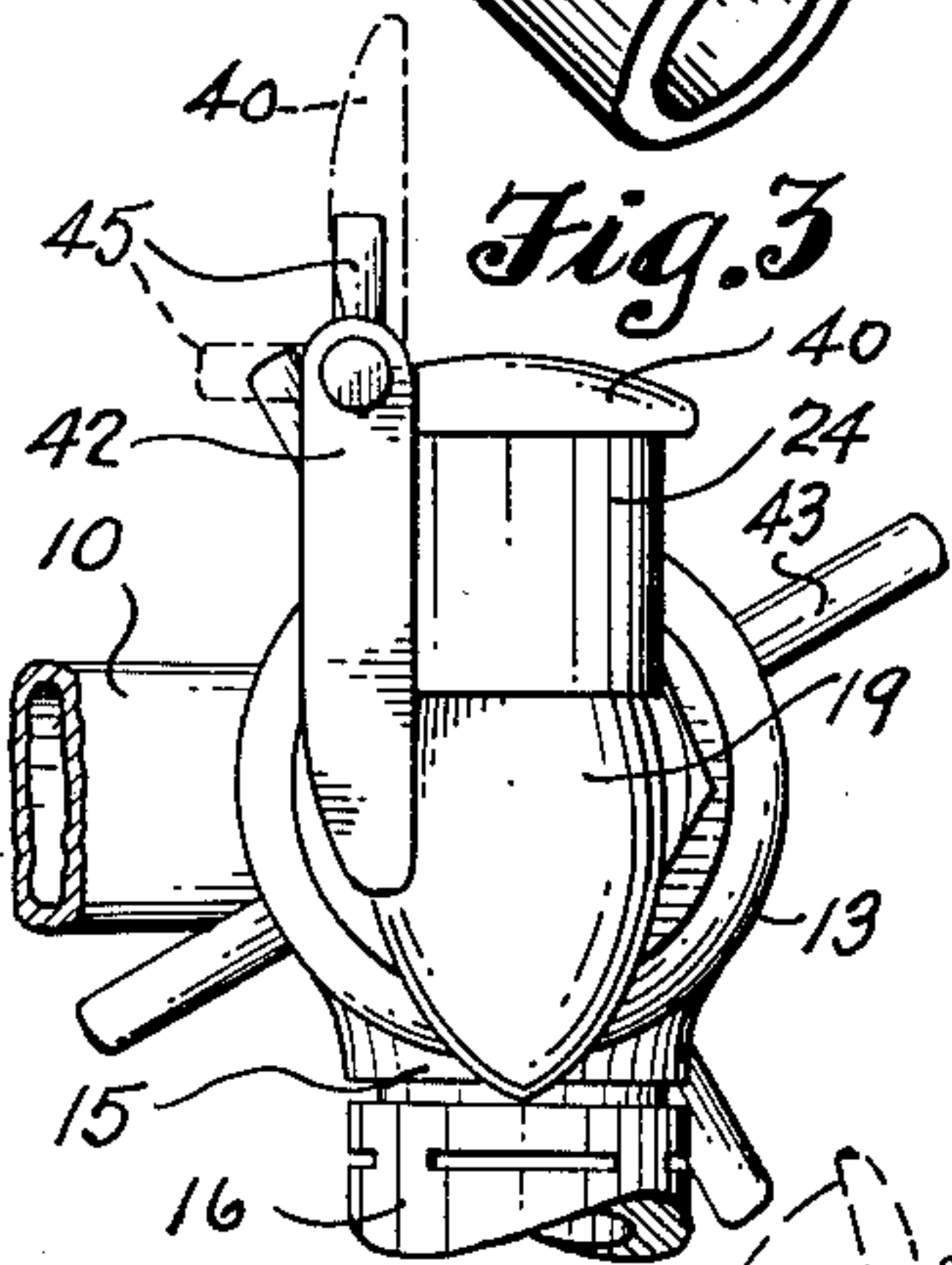


Fig. 2

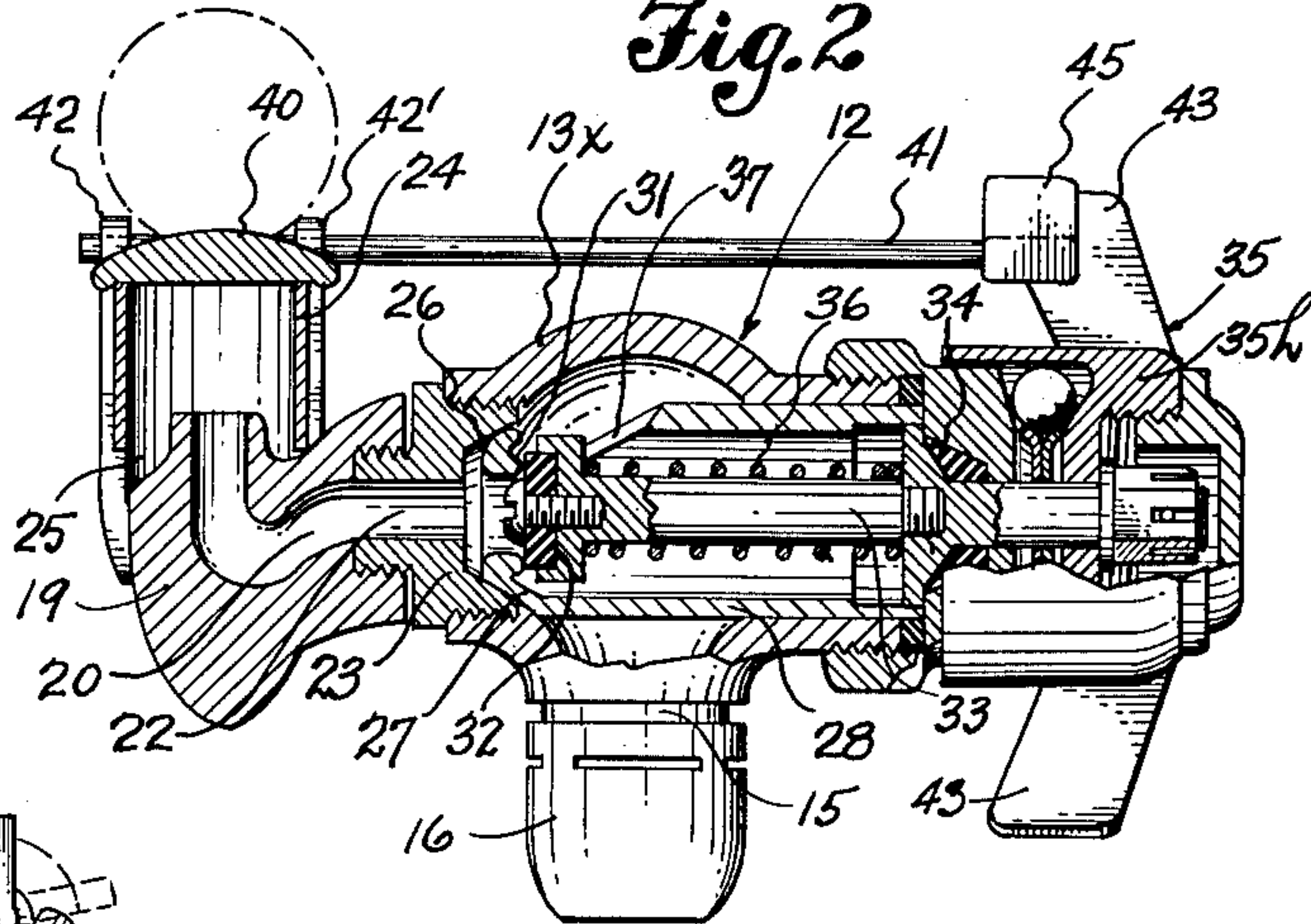
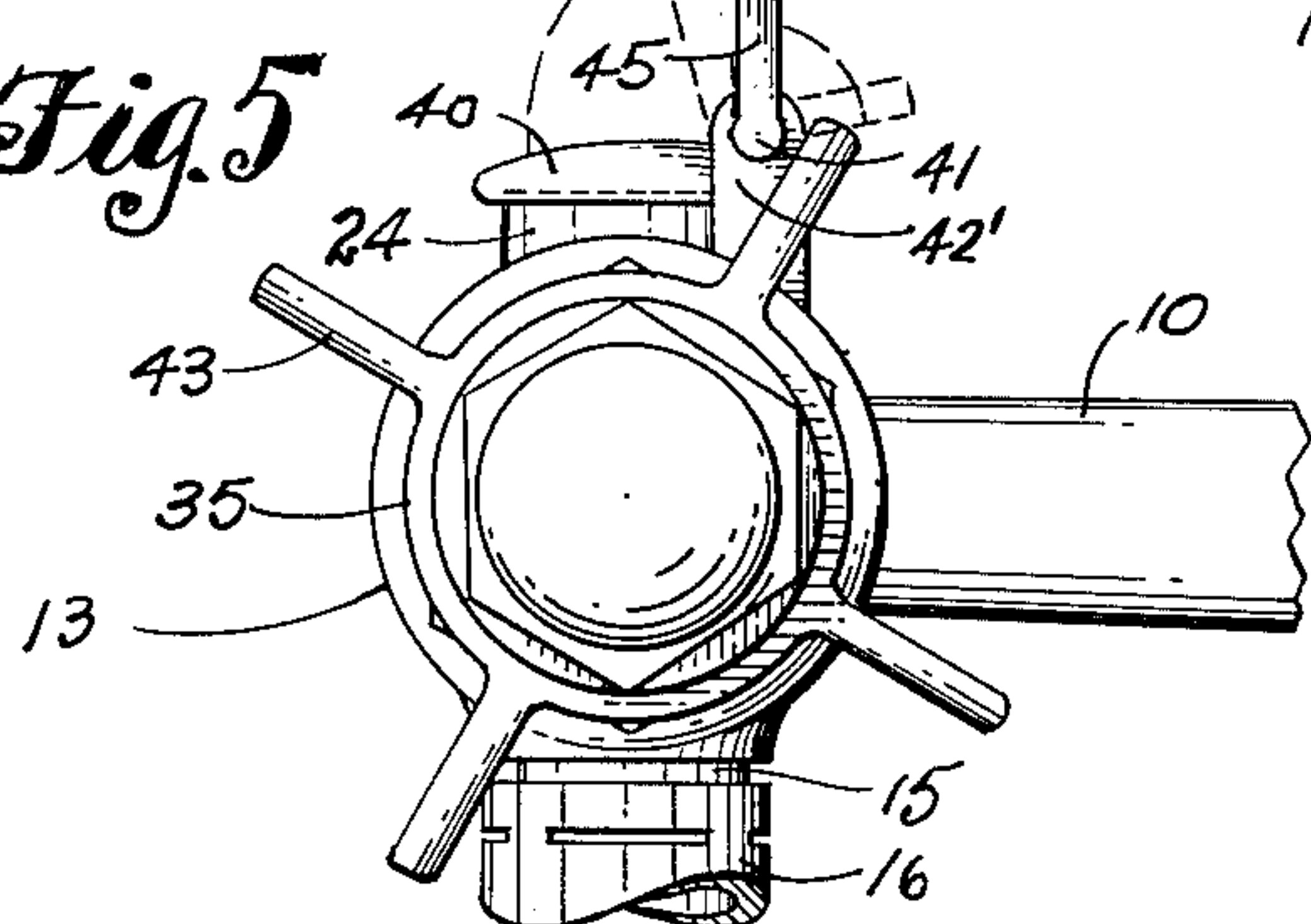


Fig. 5



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1

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DRINKING ATTACHMENTS FOR FAUCETS

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This invention relates to drinking fountain attachments for faucets as ordinarily used to control delivery of water, either hot or cold or a mixture of both, into basins, sinks and the like.

Specifically stated, the present invention resides in the provision of a drinking fountain attachment that may be applied to the discharge spout of the usual faucet without alteration in some instances and requiring only a relatively inexpensive and easily performed change or alteration in other instances and which fountain attachment embodies a chamber from which water for drinking, as from a bubble-up fountain, may be discharged under valve control after the faucet control valve is opened and water is flowing through the faucet spout.

It is the principal object of this invention to provide a drinking attachment as above stated that can be readily threaded onto most present day types of residential faucets; which is relatively inexpensive; which may be easily used by children at play ground installations without excessive waste of water; and which embodies an adjustable control valve that closes automatically when released from open position.

A further object of the invention resides in the provision of a novel fountain portion and a novel protective cover member for the fountain or drinking spout; the latter being especially desirable when the attachment device is used in connection with a faucet as applied to a wash basin or sink installation.

Further objects and advantages of the present invention reside in the specific details of construction of its parts and in their combination and mode of use as will hereinafter be fully described.

In accomplishing the above mentioned and other objects of this invention, I have provided the improved detail of construction, the preferred forms of which are illustrated in the accompanying drawings, wherein:

FIG. 1 is a top view of a mixing faucet having a drinking attachment of the present invention applied thereto.

FIG. 2 is an axial section of the attachment device with a part thereof shown in front end elevation.

FIG. 3 is a left hand end elevation of the attachment as shown in FIG. 2.

FIG. 4 is a perspective view of the tubular sleeve which is contained in the housing of the device, with parts broken away for explanatory purposes.

FIG. 5 is a right end view of the drinking device as seen in FIG. 2.

Referring more in detail to the drawings:

In FIG. 1, 10 designates the discharge spout of a typical mixing faucet 10m such as that employed for the delivery either of hot or of cold water or a mixture thereof into a basin or sink. The faucet is here indicated as having valve controlling handles 11 and 11' for regulating the delivery of water from hot and cold water supply lines to the spout 10.

The drinking attachment device of this invention is designated in its entirety in FIG. 1 by reference numeral 12 and it is shown to comprise a hollow, tubular casing or housing 13 with a sidewall opening into which a diametrically reduced outer end portion of the spout 10 is threaded in a water-tight joint. The housing 13 also is formed near one end with a somewhat enlarged bulbous portion 13x from which a short tubular discharge spout 15 is downwardly directed and onto the end of which

2

spout 15 a conventional form of aerator 16 is threaded. When either valve of the faucet 10m is opened, water will be delivered into the housing 13 and discharged from it through the spout 15 and aerator 16. In the event that the drinking fountain is to be used, a fountain control valve contained in housing 13 is then adjustably opened. This valve will be described in connection with a further description of the parts shown in FIGS. 2 and 3 that follows.

Threaded onto the left hand end of the housing or casing 13 as seen in FIGS. 1 and 2 is a fitting 19 formed with a water discharge channel 20. With the parts assembled as shown in FIG. 2 this channel 20 continues outwardly from a central axial bore 22, of a nipple forming plug 23 that is threaded axially, as shown in FIGS. 2 and 5 into the bulbous chamber of housing 13. The fitting 19 is threaded onto the nipple 23 and so adjusted that the outer end of water discharge channel 20 is directed upwardly into the lower end portion of a short cylindrical sleeve 24 that is supported vertically from the fitting 19 with substantial open drainage space between them at its lower end as at 25 in FIGS. 2 and 5. The diameter of sleeve 24 is substantially three times that of the discharge end of channel 20 which is axially centered in the sleeve.

The inner end surface of the nipple plug 23 provides an annular, tapered seat 26 about the inner end of bore 22 from and against which a conically tapered annular head 27 formed on the inner end of a tubular sleeve 28, seen in FIG. 4, and presently to be described, is seated. This head is formed internally with an annular valve seat 31 against which a valve head 32 on the inner end of a valve stem 33 may be adjusted to regulate flow of water to discharge channel 20. The outer end portion of valve stem 33 extends from the end of casing 13 through a packing gland 34 and at that end has a fixed connection with the hub portion 35h of a hand wheel 35 for effecting stem adjustment. A coiled spring 36 is applied under compression about the valve stem 33 between the head 32 and packing gland 34 and operates to adjustably open the valve for outflow of water through the discharge channels 22 and 20 in accordance with the turning of hand wheel 35.

The valve stem 33 and coil spring 36 are surrounded by the previously mentioned sleeve 28 which is fitted at its right hand end as seen in FIG. 2 in the tubular housing 13 and at its opposite end has its tapered end head 27 engaged tightly against seat 31. Adjacent that end, the sleeve contains a sidewall opening 37 through which water can flow from the housing 13, when valve head 32 is opened, into the plug passage 22 leading into the channel 20. When valve head 32 is opened, water is then discharged to channel 21 and upwardly therefrom through sleeve 24 for drinking and the rate of flow is controlled by adjustment of valve head 32 by hand wheel 35.

As a sanitary protective feature for the fountain portion of this device, I have provided a closure or cover cap 40 for the top end of the sleeve 24. This cap 40 is fixed to one end portion of a small diameter rod 41 that is rotatably mounted in supports 42-42' fixed to fitting 19 to extend to a position between adjacent radially extending spoke-like members 43 formed on the hub 35h of valve wheel 35 where the rod is equipped with an upwardly directed arm 45.

In using the faucet for a drinking purpose, after one or both of the faucet valves have been opened, the valve wheel 35 is first rotatably adjusted to unseat the valve head 32 from seat 31 thus to allow the desired outflow from channel 21. With the initial turning of the hand wheel 35, the operator also slightly rotates rod 41 by

3

finger pressure applied against the rod turning arm 45, as indicated in FIG. 5 thus to swing the cover member 40 upwardly and away from the top end of the sleeve as in FIG. 6. The stream of water discharged upwardly from channel 20 will then spout upwardly from the sleeve 24 and the drinker can consume what he desires without mouth contact with the sleeve or any part of the faucet. The overflow quickly drains into the basin or sink from the open lower end of the sleeve through passage 25.

In the event that the drinking attachment is to be applied to faucets with spouts which are downturned at their discharge ends the opening in the housing 13 for reception of the spout would be so located as to open upwardly from the top wall of the housing.

Such attachments can be easily and readily applied to domestic faucets without difficulty or material expense. They do not interfere with the normal discharge of water from spout 15 and aerator 16 and also afford convenience in drinking water directly from the faucet.

The provision of the closure cap 40 insures sanitary use of the device over a sink or basin.

What I claim as new is:

1. A drinking attachment for a water faucet of the character described; said attachment comprising a horizontally disposed housing, formed medially of its ends with a pressure chamber having a side wall inlet adapted for direct connection of the housing chamber with the faucet spout and having a downwardly directed discharge opening, a fitting applied to one end of said horizontally disposed housing formed with a water discharge channel leading from said pressure chamber and directed up-

4

wardly at its discharge end, a manually operable valve in said chamber for controlling outflow of water through said channel, a rotatable handle member for controlling said valve, located at the end of said housing opposite its fitting mounting end, a jet protecting sleeve mounted on said fitting in position for the upward discharge of water from said channel therethrough and a protective cap hingedly mounted on said fitting for closing over the upper end of said sleeve and having a handle extended therefrom to a position for its actuation by the hand in grasping the handle of said manually operable valve for its opening.

2. An attachment device, for a water faucet, according to claim 1 wherein the valve of said water discharge channel is mounted by a valve stem contained in said housing chamber coaxially thereof and is equipped at its inner end with a valve member and at its outer end with a valve adjusting wheel, and wherein a cylindrical tube is contained axially in said housing chamber to enclose said stem and valve and is formed with a water inlet port in a sidewall thereof for inflow of water to the water discharge channel.

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