March 19, 1935. H. N. CROSS 1,994,454

DRINKING FOUNTAIN ATTACHMENT FOR WATER FAUCETS

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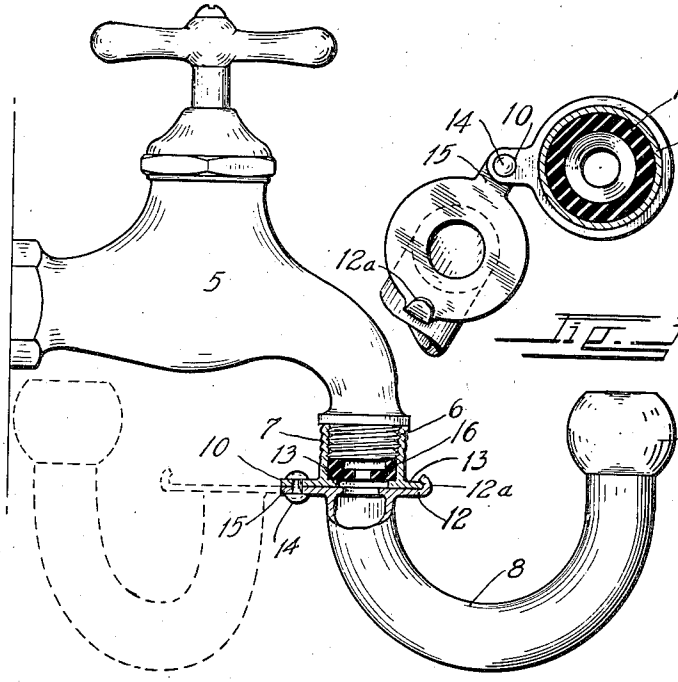


Fig. 1.

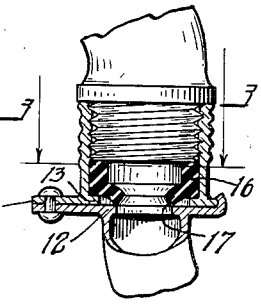


Fig. 2

Fig. 3.

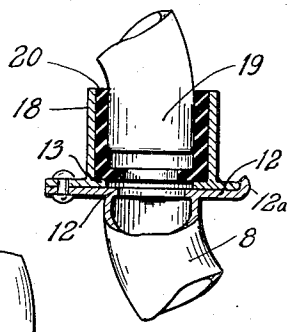


Fig. 4.

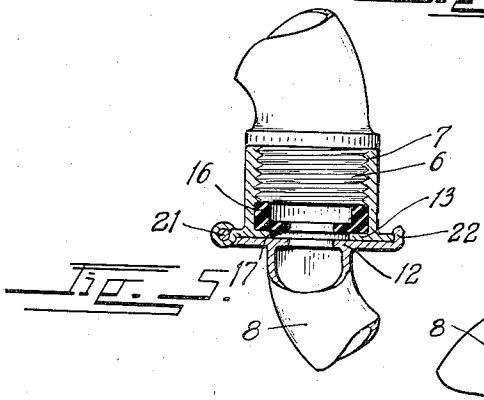


Fig. 5.

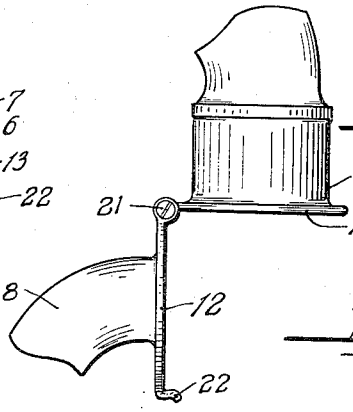


Fig. 6.

INVENTOR.
H. N. Cross
BY
Rollandet & Stratton
ATTORNEYS.

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DRINKING FOUNTAIN ATTACHMENT FOR WATER FAUCETS

Harry Norman Cross, Vancouver, British Columbia, Canada

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6 Claims. (Cl. 299—11)

This invention relates to attachments for water faucets, and more particularly to a device for converting a water faucet of conventional construction into a sanitary drinking fountain.

It is an object of the invention to provide an attachment of the above-stated character which is easily applied to an ordinary water faucet, for the purpose of utilizing the faucet as a drinking fountain, and which when thus applied, may be readily adjusted so as to render the faucet available for ordinary use.

Other objects reside in the provision of a self-sealing valve which provides an impervious juncture between the fixed and movable parts of the attachment, by water-pressure, and still further objects are to be found in details of construction and novel and useful arrangements and combinations of parts as will be fully disclosed in the course of the following description.

In the accompanying drawing, in the various views of which like parts are similarly designated,

Figure 1 represents a partially sectional elevation of a water-faucet with an attachment made in accordance with the present invention, in its operative relation thereto,

Figure 2 is an enlarged sectional elevation of the nozzle or discharge end of the faucet and the adjoining parts of the attachment, showing the operative position of the self-sealing valve included in the attachment,

Figure 3 is a section on the line 3—3 of Figure 2,

Figure 4 is a section similar to that of Figure 3, showing a modified means for securing the attachment at the end of the faucet,

Figure 5 is a sectional elevation of the end of the faucet and the adjoining member of the attachment, showing a modified construction of the latter,

Figure 6 is an elevation of the construction shown in Figure 5, with the movable member of the attachment in an adjusted position to render the faucet available for ordinary use,

Referring first to Figures 1 to 3 of the drawing, a faucet 5 of conventional form and construction, has a screw-threaded nozzle 6 which in ordinary use, may be employed for the attachment of a hose or other device.

This screw-threaded nozzle is utilized for the application of the present invention which to this end, comprises an interiorly screw-threaded collar-member 7 and a therewith movably connected U-shaped fountain-member 8, which terminates in the usual globular mouth-piece 9. The screw thread of the collar cooperates with that of the faucet to fix the attachment in place thereon, and the collar has at its lower end an outwardly projecting lug 10 for the hinged connection of the member 8.

The latter has at its end at which it connects with the collar, a flange 12 which in practice fits tightly against a similar flange 13 at the end of the collar, and the hinged connection of the members is established through the medium of a pivot pin 14 extending through alined apertures of the lug 10 of the collar-member 7 and a corresponding lug 15 on the movable member 8, the ends of the pin being clinched upon the outer surfaces of the lugs so as to permit of the member being turned in a horizontal plane to a position in which it clears the end of the fixed member as has been shown in broken lines in Figure 1, and in full lines in Figure 3.

A hook 12*a* on the flange 12 of the movable member embracing the flange 13 of the fixed member at a point opposite the hinge, aids in holding the movable member in its operative position with relation to the nozzle of the faucet.

In order to provide a watertight connection between the end of the faucet nozzle and the collar-member of the attachment, a washer 16 made of rubber or other flexible material, is placed between the end of the nozzle 6 and the flange 13 of the collar.

The washer has an integral inwardly projecting flange 17 which projects across the inner edge of the flange 13 of the collar, and which in practice provides a self-sealing valve to provide a watertight closure between the members of the attachment when the movable member is in its operative position.

The flexible flange is, as shown in Figure 2, pressed downwardly against the flanged end of the movable tube-member by the pressure of the water issuing through the nozzle when the faucet-valve is opened, and in this manner it automatically provides a leak-proof connection between the two members of the attachment.

It will be apparent that with the tubular member in its operative position, the faucet may be used as a sanitary drinking fountain. The washer safeguards against leakage in the above-described manner, and when it is desired to use the faucet in the ordinary manner, the tubular member is merely turned about its pivot to a position in which it clears the end of the nozzle.

In the construction shown in Figure 4, the collar is modified for its application to a plain faucet nozzle 19 without the use of a screw-thread. The collar 18 is made of larger diameter and the washer 20 is enlarged to occupy the collar

throughout the depth thereof, and it is interiorly proportioned to fit snugly over the end of the nozzle. Otherwise the construction of the attachment is similar to that hereinbefore described. In the form illustrated in Figures 5 and 6, the tubular member is hinged to the relatively fixed member, as at 21, to move about a horizontal axis instead of about a vertical axis, as in the first described construction.

A slightly resilient catch 22 on the movable member 8 opposite to the hinge, is sprung around the exterior portion of the flange 13 of the fixed member, to hold the tubular member in its operative position relative to the nozzle of the faucet.

Having thus described the attachment in different forms, it is to be understood that other modifications may be resorted to without departing from the scope of the invention.

The device as shown and described is advantageous in that it is readily applied to faucets of standard form and construction, in that it is self-alining, in that it is easily adjusted when it is desired to use the faucet in the ordinary manner, in that it is constantly sealed against leakage both by the resiliency of the washer and by the pressure of water in the faucet, and in that, in general, it combines simplicity of construction with practicability in use.

What I claim and desire to secure by Letters Patent is:

1. A drinking fountain attachment for water faucets, comprising a collar-member adapted to be applied to the nozzle of a faucet, a fountain-member normally fitted against the collar-member in register with the end of the nozzle, and movable with relation to the collar-member for adjustment to a position in which it clears said end of the nozzle, and a flexible washer in the collar-member for its watertight connection with the nozzle, having an inturned flange normally out of engagement with the fountain-member and disposed in the path of a flow of water thru the nozzle free to flex downwardly until arrested by the fountain-member, to automatically effect a watertight connection between the members under pressure of said flow.

2. A drinking fountain attachment for water faucets, comprising a collar-member having means for its fixed connection with the nozzle of a faucet and having a flanged end, a fountain-member normally in register with the nozzle and pivoted for radial displacement from the nozzle outlet and having a flanged end tightly fitted against the flanged end of the collar-member, and a yieldable washer in the collar member disposed in the path of a flow of water thru the nozzle free to flex downwardly, to automatically effect a watertight connection between the members by flexing contact with the flanged end of the fountain-member under pressure of said flow when the fountain-member is in its normal position.

3. A drinking fountain attachment for water faucets comprising a collar member and a fountain member normally in register for the flow of water from the one to the other and pivotally connected to permit of the fountain member being swung out of register with the collar member, the two members having cooperative means opposite to their pivot with relation to the water flow, and cooperating with the pivot to maintain a fluid tight joint between the members in their registering position.

4. A drinking fountain attachment for water faucets comprising a flanged collar member and a flanged fountain member normally in register for the flow of water from the one to the other, a pivotal connection between the flanges of the members, to permit of the fountain member being swung out of register with the collar member, and a hook on one member engaging with the flange of the other member at a point opposite to the pivotal connection with relation to the water flow, and cooperating with said connection to maintain a fluid tight joint between the members in their registering position.

5. A drinking fountain attachment for water faucets comprising a collar member and a fountain member having registering passages normally joined for the flow of water from one to the other, the fountain member being movable relative to the collar member to be swung out of register therewith, and a flexible washer secured in said collar member and projecting inwardly of said passages into the path of the waterflow and free to bend across the joint between the passages, into contact with the other member, under pressure of the water flow.

6. A drinking fountain attachment for water faucets comprising a collar member and a fountain member having registering passages normally joined for the flow of water from one to the other, the fountain member being movable relative to the collar member to be swung out of register therewith, and having an inwardly projecting edge at the injunction point of the two members and a flexible washer projecting inwardly of said passages into the path of the waterflow in advance of said edge, and normally spaced from said edge, to bend into engagement with the edge, under pressure of the water flow.

HARRY NORMAN CROSS.