G. R. SHEPHERD.

ATTACHMENT FOR TWIN FAUCETS.

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1,231,305.

Patented June 26, 1917.

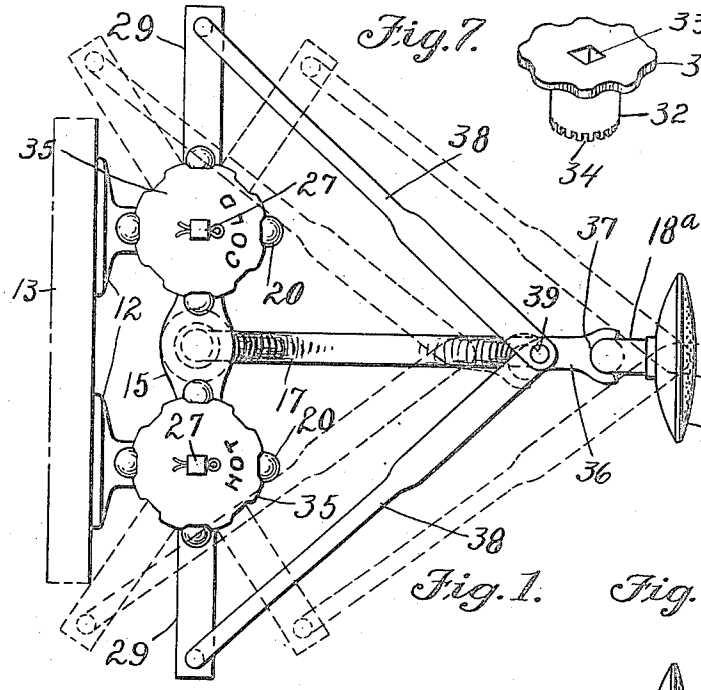


Fig. 1.

Fig. 7.

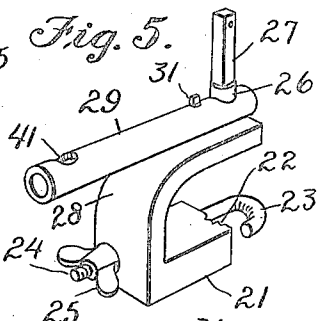


Fig. 5.

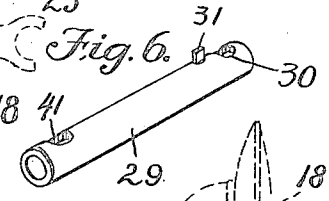


Fig. 6.

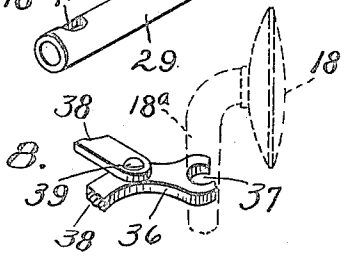


Fig. 8.

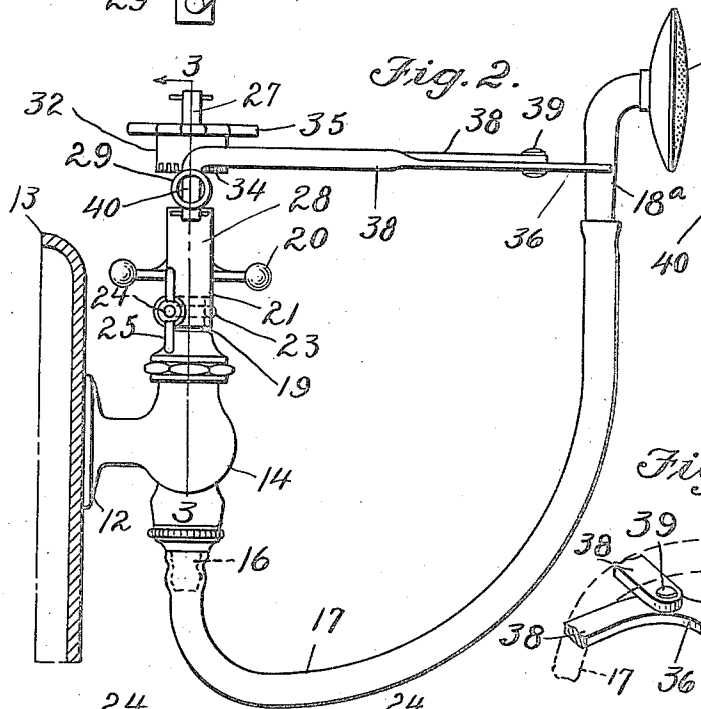


Fig. 2.

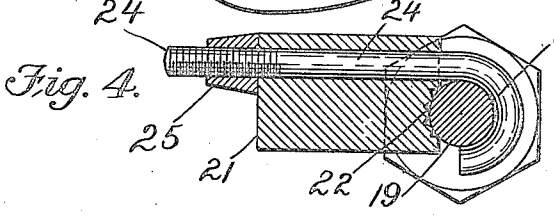


Fig. 4.

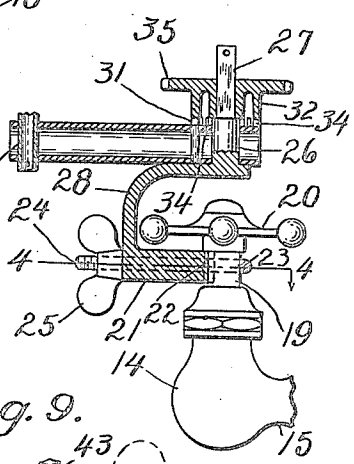


Fig. 9.

Fig. 3.

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Att'ys.

UNITED STATES PATENT OFFICE.

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ATTACHMENT FOR TWIN FAUCETS.

1,231,305. Specification of Letters Patent. Patented June 26, 1917.

Application filed February 3, 1917. Serial No. 146,394.

To all whom it may concern:

Be it known that I, GEORGE R. SHEPHERD, a citizen of the United States, residing at Brookline, in the county of Norfolk and State of Massachusetts, have invented new and useful Improvements in Attachments for Twin Faucets, of which the following is a specification.

This invention relates to twin faucets supplying hot and cold water to a bath tub, usually through a single outlet, the faucets being arranged side by side and having the usual manually rotatable stems. A flexible hose, such as a length of rubber tubing, terminating in a sprinkler head is often connected with the outlet of the twin faucets to direct numerous small jets of water upon a bather. Heretofore this hose has been loose and free to move in all directions, and has been manually supported and directed by the user, who has to manipulate and adjust the faucets independently to secure the desired mixture of hot and cold water.

My invention has for its object to provide an attachment adapted to be conveniently and detachably secured to the stems of twin faucets, and including a rest adapted to support a hose and a sprinkler head at a suitable height, with the head facing in a predetermined direction, said attachment permitting opposite movements of the rest and sprinkler head in a predetermined path, and being so organized that movement of the rest in either direction will turn the faucet stems simultaneously in opposite directions, and thereby increase the flow through either faucet and decrease the flow through the other.

To these and other related ends the invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings forming a part of this specification,—

Figure 1 is a top plan view, showing the attachment embodying the invention applied to the twin faucets of a bath tub.

Fig. 2 is a side elevation of the same.

Fig. 3 is a section on line 3—3 of Fig. 2.

Fig. 4 is a section on line 4—4 of Fig. 3, looking downward.

Fig. 5 is a perspective view of one of the stem extensions hereinafter referred to, and a lever arm engaged therewith.

Fig. 6 is a perspective view of the lever arm detached.

Fig. 7 is a perspective view of a displaceable handle hereinafter referred to.

Fig. 8 is a fragmentary perspective view, showing the rest constructed as shown by Figs. 1 and 2.

Fig. 9 is a view similar to Fig. 8, showing said rest provided with an extension.

The same reference characters indicate the same parts in all the figures.

In Figs. 1, 2, and 3 of the drawings, I have shown portions of a twin faucet casing, namely, the base portion 12, attached to the wall of a bath tub 13, the body portions 14, and the connecting portion 15, the latter being provided with a nipple 16 constituting the outlet of both faucets and adapted to be engaged in a well known manner with a length of flexible tubing 17, to the outer end of which is connected a sprinkler head 18.

The faucet casing and the valve mechanism associated therewith may be of any well known construction, and therefore do not require illustration of the concealed parts. The flexible conduit 17 and sprinkler head 18 constitute a well known conduit communicating with the faucet casing and adapted to deliver numerous jets of water.

The stems 19 of the faucets extend parallel with each other and are provided with suitable handles 20 whereby they may be rotated to open or close the faucets, as usual.

The preferred embodiment of my improved attachment shown by the drawings, includes two stem extensions adapted to be detachably secured to the faucet stems 19 below the handles thereof, and to project above said handles, a rest movable in a predetermined path relatively to the faucets and adapted to engage the conduit, which includes the sprinkler head and rest-carrying means organized to support the conduit and permit its movement in a predetermined path, and also to turn the stem extensions and the faucet stems engaged therewith, simultaneously, in opposite directions, when said rest is moved relatively to the faucets, and thereby simultaneously increase the flow through either faucet and decrease the flow through the other.

Each stem extension, as here shown, includes a base 21, one end of which forms a preferably serrated jaw 22, adapted to bear on one side of a faucet stem 19, said base being provided with a movable jaw 23, pref-

erably serrated, and adapted to bear on the opposite side of said stem, and means for adjusting the movable jaw, said means including a stem 24 extending through a socket in the base 21 and having a screw-threaded portion, and a wing nut 25 engaged with said threaded portion.

Each stem extension also includes a stud composed of a cylindrical lower portion 26, and a squared upper portion 27, said stud being substantially in alinement with a faucet stem 19 engaged by the jaws, as shown by Fig. 3.

The base and stud of the extension are preferably connected by the intermediate neck 28, said neck and base forming a recess which receives a portion of the stem handle 20.

Engaged with each stem extension is a lever-arm 29, the lever-arms of the two extensions extending oppositely, as indicated by Fig. 1, so that the arms are adapted to simultaneously turn the stem extensions and the faucet stems engaged therewith, in opposite directions, to increase the flow through either faucet, and decrease the flow through the other.

In accordance with my invention I provide means for detachably engaging the lever-arms 29 with the stem extensions, so that each extension, and the faucet stem engaged therewith, may be turned independently to fully close the faucets and to independently adjust the same and provide for a greater flow through one than through the other. To this end I provide each lever-arm 29 with a circular socket 30 (Fig. 6) adapted to turn loosely on the cylindrical portion 26 of the corresponding stem extension, the lever-arm being provided with a clutch part 31, here shown as an upwardly projecting tooth. I also provide the stud of each stem extension with an annular member or sleeve 32 having a squared socket 33 adapted to slide on the squared portion 27 and constantly engaged therewith, so that the member 32 and the stud extension necessarily rotate together. The member 32 is provided preferably with a plurality of clutch parts formed by making notches 34 in its lower end, either of said notches being adapted to engage the clutch part 31. The member 32 is also provided with a handle portion 35, whereby it may be manually turned. When the clutch part of the member 32 is engaged with the clutch part 31 of the arm 29, the stem extension and arm are interlocked, and necessarily turn together. When the member 32 is slightly raised, the clutch parts are separated and the stem extension and the faucet stem engaged therewith, are adapted to be turned independently.

36 represents a rest adapted to support the outer end portion of the hose 17 and the sprinkler head 18, said rest being preferably a metal arm provided with a socket 37 which may be open at one side and slightly tapered, to receive and engage a correspondingly tapered tubular neck 18ª connecting the head 18 with the hose 17.

The lever-arms 29 form elements of means connecting the stud extensions with the hose rest 36, other elements of said means being embodied in links 38 jointed to the outer ends of the lever-arms 29 and converging therefrom to a meeting point, where they are pivotally connected at 39, the rest 36 being preferably an extension of one of said links, as shown by Fig. 9. The links 38 may be jointed to the lever-arms 29 by means of studs 40 formed by bending the links near their outer ends, said studs entering sockets 41 in the lever-arms 29.

The described construction and arrangement of the elements of said connecting means enable said means to support the rest 36 at a predetermined height, and permits forward and backward movements of the rest in a predetermined path, as indicated by dotted lines in Fig. 1. When the rest is moved in one direction, the links 38 and arms 29 turn the stem extensions and the faucet stems simultaneously in opposite directions, and thus simultaneously increase the flow through one faucet, and decrease the flow through the other.

It will now be seen that the sprinkler head is supported to deliver water in a predetermined direction and at a predetermined height, and that the user, by moving the rest in one direction or the other, can at once proportion the mixture of hot and cold water, as may be desired. Each faucet stem may be independently turned to close the corresponding faucet, or to adjust the flow therethrough by raising the clutch member 32 and then turning the stem.

My improved attachment may be made of a relatively small number of parts, and these parts may be of relatively simple and inexpensive construction. For example, the lever-arms 29 may be short lengths of tubing, as indicated by Figs. 2, 3, 6 and 7, and each stem extension may be cast, or otherwise formed in a single piece.

The rest 36 may be provided with an extension, as shown by Fig. 9, said extension including a tapered shank 42 adapted to enter the socket 37, and a fork 43 adapted to engage the hose, or the tubular neck connecting the sprinkler head with the hose.

As implied in the foregoing description and in the following claims, I am not limited to the specific mechanism of the preferred embodiment of my improvements shown by the drawings, except as otherwise required in certain of the more limited claims.

I claim:

1. A hose-supporting and guiding stem-turning attachment for twin faucets, com-

prising a pair of faucet stem extensions having means for engaging two faucet stems, a hose rest, and connecting means engaged with said extensions and rest and supporting the rest for movement in a predetermined path, said means having provisions for turning the stem extensions and faucet stems engaged therewith, simultaneously in opposite directions when the rest is moved in either direction, and thereby simultaneously increasing the flow through one faucet and decreasing the flow through the other.

2. A hose-supporting and guiding stem-turning attachment for twin faucets, comprising a pair of faucet stem extensions having means for engaging two faucet stems, oppositely projecting lever-arms engaged with said extensions, a hose rest, and connections between said rest and lever-arms, adapted to support the rest, permit movement thereof in a predetermined path and communicate motion from the rest to turn the arms, stem extensions, and faucet stems, simultaneously in opposite directions and thereby simultaneously increase the flow through either faucet and decrease the flow through the other.

3. A hose-supporting and guiding stem-turning attachment for twin faucets, comprising a pair of faucet stem extensions having means for engaging two faucet stems, a hose rest, and connecting means engaged with said extensions and rest and supporting the rest for movement in a predetermined path, said means having provisions for turning the stem extensions and faucet stems engaged therewith, simultaneously in opposite directions when the rest is moved in either direction, and thereby simultaneously increasing the flow through one faucet and decreasing the flow through the other, the said connecting means and stem extensions being provided with coöperative clutch parts which are separable, to permit the turning of the stem extensions and the stems engaged therewith, independently of the connecting means.

4. A hose-supporting and guiding stem-turning attachment for twin faucets, comprising a pair of faucet stem extensions having means for engaging two faucet stems, a hose rest, and connecting means engaged with said extensions and rest and supporting the rest for movement in a predetermined path, said means having provisions for turning the stem extensions and faucet stems engaged therewith, simultaneously in opposite directions when the rest is moved in either direction, and thereby simultaneously increasing the flow through one faucet and decreasing the flow through the other, the said connecting means and stem extensions being provided with coöperative clutch parts which are separable, to permit the turning of the stem extensions and the stems engaged therewith, independently of the connecting means the clutch parts carried by the stem extensions being provided with handles whereby the said extensions and faucet stems may be independently turned.

5. A hose-supporting and guiding stem-turning attachment for twin faucets, comprising a pair of faucet stem extensions having means for engaging two faucet stems, oppositely projecting lever-arms engaged with said extensions, a hose rest, and connections between said rest and lever-arms, adapted to support the rest, permit movement thereof in a predetermined path and communicate motion from the rest to turn the arms, stem extensions, and faucet stems, simultaneously in opposite directions and thereby simultaneously increase the flow through either faucet and decrease the flow through the other, said lever-arms and stem extensions being provided with coöperative clutch parts which are separable, to permit the stem extensions, and stems engaged therewith, to be turned independently of the lever-arms.

6. A hose-supporting and guiding stem-turning attachment for twin faucets, comprising a pair of faucet stem extensions having means for engaging two faucet stems, oppositely projecting lever-arms engaged with said extensions, a hose rest, and connections between said rest and lever-arms, adapted to support the rest, permit movement thereof in a predetermined path and communicate motion from the rest to turn the arms, stem extensions, and faucet stems, simultaneously in opposite directions and thereby simultaneously increase the flow through either faucet and decrease the flow through the other, said lever-arms and stem extensions being provided with co-operative clutch parts which are separable, to permit the stem extensions and stems engaged therewith, to be turned independently of the lever-arms, the clutch parts carried by the stem-extensions being provided with handles whereby said extensions and stems may be turned independently of the lever-arms.

7. An attachment for twin faucets, comprising a pair of faucet stem-extensions having means for detachable engagement with the stems of said faucets, a movable rest adapted to support a hose connected with said faucets, and connecting means between said rest and stem extensions, organized to movably carry said rest and turn the stem extensions and the faucet stems engaged therewith, simultaneously in opposite directions when the said member is moved relatively to the faucets, and thereby simultaneously increase the flow through one faucet and decrease the flow through the other.

8. An attachment for twin faucets, comprising a pair of faucet stem extensions having means for detachable engagement with the stems of said faucets, a movable rest adapted to support a hose connected with said faucets, connecting means between said rest and stem extensions, organized to movably carry said rest and turn the stem extensions and the faucet stems engaged therewith, simultaneously in opposite directions when the said member is moved relatively to the faucets, said connecting means including terminal members normally free to turn loosely on the stem extensions, and provided with clutch parts, and independently movable manually operable handles shiftable on the stem extensions, and adapted constantly to turn in unison therewith, said handles being provided with complemental clutch parts which are separable from the clutch parts on the said terminal members to permit independent operation of the stem extensions, and are engageable with the last-mentioned clutch parts to operatively connect the terminal members with the stem extensions.

9. An attachment for twin faucets, comprising stem extensions detachably engageable with the stems of said faucets, a movable rest adapted to support a hose connected with said faucets, and rest-carrying means including lever-arms engaged with said extensions and projecting oppositely therefrom, and connections between said arms and said rest, said carrying-means being organized to turn the stem extensions and faucet stems engaged therewith, simultaneously in opposite directions when said rest is moved relatively to the faucets, and thereby simultaneously increase the flow through either faucet and decrease the flow through the other.

10. An attachment for twin faucets, comprising stem extensions detachably engageable with the stems of said faucets, a movable rest adapted to support a hose connected with said faucets, and rest-carrying means including lever-arms engaged with said extensions and projecting oppositely therefrom, connections between said arms and said rest, said carrying-means being organized to turn the stem extensions and faucet stems engaged therewith, simultaneously in opposite directions when said rest is moved relatively to the faucets, and thereby simultaneously increase the flow through either faucet and decrease the flow through the other, said lever-arms being provided with clutch parts, and manually operable handles constantly engaged with and movable on said stem extensions, and provided with complemental clutch parts adapted to engage the clutch parts on said arms to cause said simultaneous turning of the faucet stems by movement of said rest, and to be disengaged to permit independent turning of the faucet stems by said handles.

11. An attachment for twin faucets, comprising stem extensions, each including a base forming a clamping-jaw adapted to bear on one side of a faucet stem, and provided with a movable clamping-jaw adapted to bear on the opposite side of said stem, and with means for adjusting said movable jaw, a stud substantially alined with the stem between said jaws, and provided with a cylindrical lower portion and a squared upper portion, a movable rest adapted to support a hose connected with said faucets, rest-carrying means organized to turn the stem extensions and faucet stems engaged therewith, simultaneously in opposite directions, and including lever-arms adapted to turn loosely on said cylindrical stud portions and projecting oppositely therefrom, and connections between said arms and said rest, the lever-arms being provided with clutch parts, and manually operable handles having squared sockets constantly in slidable engagement with said squared stud portions, and provided with complemental clutch parts adapted to be engaged with and disengaged from the clutch parts on said arms.

12. An attachment for twin faucets, comprising stem extensions each including a base forming a clamping-jaw adapted to bear on one side of a faucet stem, and provided with a movable clamping-jaw adapted to bear on the opposite side of said stem, and with means for adjusting said movable jaw, a stud substantially alined with the stem between said jaws, and provided with a cylindrical lower portion and a squared upper portion, and a neck connecting said base and stud, said neck and base forming a recess adapted to receive a portion of the faucet stem handle, a movable rest adapted to support a hose connected with said faucets, rest-carrying means organized to turn the stem extensions and faucet stems engaged therewith, simultaneously in opposite directions, and including lever-arms adapted to turn loosely on said cylindrical stud portions and projecting oppositely therefrom, and connections between said arms and said rest, the lever-arms being provided with clutch parts, and manually operable handles having squared sockets constantly in slidable engagement with said squared stud portions, and provided with complemental clutch parts adapted to be engaged with and disengaged from the clutch parts on said arms.

13. An attachment for twin faucets, comprising stem extensions, each including a base forming a clamping-jaw adapted to bear on one side of a faucet stem, and provided with a movable clamping-jaw adapted to bear on the opposite side of said stem,

and with means for adjusting said movable jaw, a stud substantially alined with the stem between said jaws, and provided with a cylindrical lower portion and a squared upper portion, a movable rest adapted to support a hose connected with said faucets, rest-carrying means organized to turn the stem extensions and faucet stems engaged therewith, simultaneously in opposite directions, and including lever-arms adapted to turn loosely on said cylindrical stud portions and projecting oppositely therefrom, and connections between said arms and said rest, the lever arms being provided with clutch parts, and manually operable handles having squared sockets constantly in slidable engagement with said squared stud portions, and each provided with an arcuate series of complemental clutch parts, either of which is adapted to engage a clutch part on one of the lever arms.

14. An attachment for twin faucets, comprising stem extensions detachably engageable with the stems of said faucets, lever-arms engaged with said extensions and projecting oppositely therefrom, links jointed to the outer ends of said arms and converging therefrom, to a meeting point where they are pivotally connected, and a rest carried by said links and having a socket adapted to engage a tapered member associated with a hose connected with said faucets, said lever-arms and links constituting rest-carrying means organized to turn said stem extensions and faucet stems connected therewith, simultaneously in opposite directions when said rest is moved relatively to the faucets.

In testimony whereof I have affixed my signature.

GEORGE R. SHEPHERD.