

No. 819,582.

PATENTED MAY 1, 1906.

W. G. NEWTON.

COMBINATION SPRAY AND SHOWER ATTACHMENT FOR BATH TUBS.

APPLICATION FILED JUNE 27, 1904.

2 SHEETS—SHEET 1.

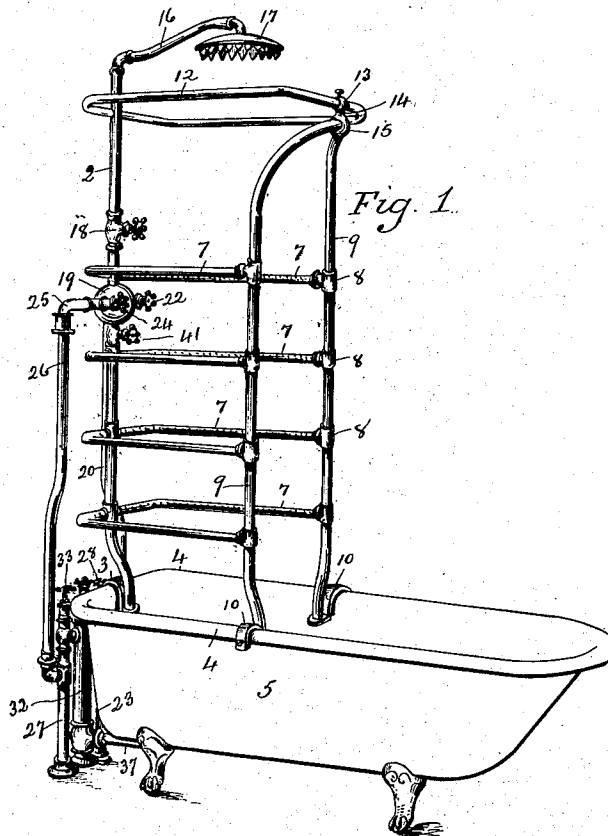


Fig. 1.

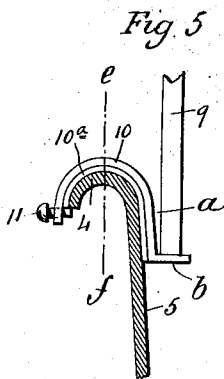


Fig. 5.

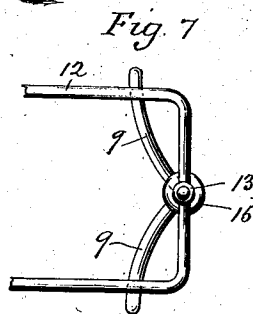


Fig. 7.

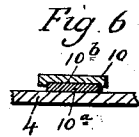


Fig. 6.

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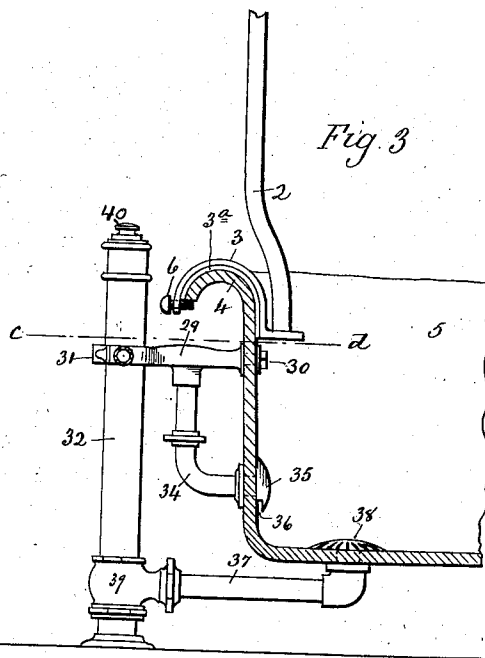
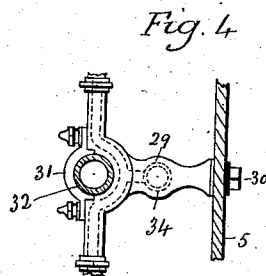
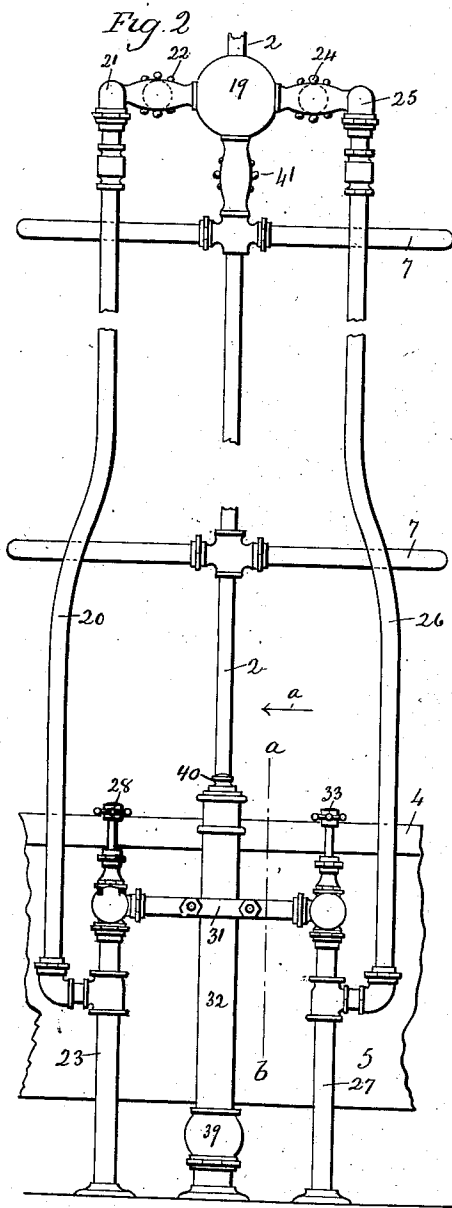
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2 SHEETS—SHEET 2.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM G. NEWTON, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO
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CUT, A CORPORATION.

COMBINATION SPRAY AND SHOWER ATTACHMENT FOR BATH-TUBS.

No. 819,582.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed June 27, 1904. Serial No. 214,221.

To all whom it may concern:

Be it known that I, WILLIAM G. NEWTON, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in a Combination Spray and Shower Attachment for Bath-Tubs; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters and figures of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of a bath-tub provided with my improved combination spray and shower attachment; Fig. 2, a broken detail view, in rear elevation, showing the vertical cold and hot water supply pipes employed to connect the mixing-ball of the attachment with the main cold and hot water supply pipes, which are located outside of the tub; Fig. 3, a broken view, partly in vertical section and partly in elevation, on the line *a b* of Fig. 2 and looking in the direction of the arrow *a*; Fig. 4, a broken view, in horizontal section, on the line *c d* of Fig. 3; Fig. 5, a broken view, partly in elevation and partly in section, showing the mode of saddling the lower end of one of the front supports upon the roll of the tub; Fig. 6, a view in transverse section on the line *e f* of Fig. 5 to show the groove in the inner face of the clip and the location of a cushion in the said groove; Fig. 7, a broken plan view showing the curtain-ring as supported upon the forwardly-curved pointed arch formed by the upper ends of the front supports.

My invention relates to an improved combination needle-spray and shower attachment for bath-tubs, the object being to produce a simple, compact, and convenient apparatus adapted to be applied to and removed from a bath-tub without drilling or even disfiguring the same.

With these ends in view my invention consists in a combination needle-spray and shower bath-tub attachment having certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In carrying out my invention as herein shown I employ an upright tubular rear sup-

port 2, constituting a water-supply pipe and furnished at its lower end with a clip 3, by means of which it is "saddled," so to speak, upon the roll 4 of the tub 5, upon which the clip is held against displacement by means of a set-screw 6 passing through its outer end in position to engage with the edge of the roll 4, as clearly shown in Fig. 4. By preference a cushioning-strip 3^a, of rubber, fabric, or other material, is placed between the clip 3 and the upper face of the roll 4, so as to prevent the latter from being marked or scratched by the clip. This support 2 supplies hot and cold water to a vertical series of horizontally-arranged tubular spray-arms 7, located one above the other, having their inner faces formed in the usual manner with minute perforations and furnished at their outer ends with vertically-arranged sleeves 8. Two upright front supports 9, passing upward through the said sleeves 8, support the outer ends of the spray-arms. Preferably these front supports will be made of tubes; but that is not necessary. At their lower ends they are furnished with outwardly-extending clips 10, resting upon the roll 4 of the tub 5 and held against displacement by means of set-screws 11 passing under and close to the edge of the roll, as shown by Fig. 5. By "saddling," so to speak, the rear and front supports of the attachment upon the roll of the tub I avoid drilling or disfiguring the tub from which the attachment may be removed and leave no marks of having been applied to it. Between the clips 10 and the roll 4 of the tub I preferably place cushioning-strips 10^a, corresponding to the strip 3^a before described.

As shown in Fig. 6, the lower face of the clip 10 is formed with a shallow groove 10^b for the reception of the cushioning-strip 10^a. This construction may also be applied to the clip 3, it being designed, of course, that the three clips 3 10 10 shall correspond. It is not necessary to employ cushions under the clips; but I prefer to do so in order to prevent the possibility of marking or scratching the roll of the tub by the clips, which are prevented from sliding upon the roll or from being displaced by means of the screws 6 and 11, with which they are provided. The said three clips have their inner ends made sufficiently long to permit the lower ends of the

said rear and front supports to be extended well below the roll forming the upper edge of the tub, for which purpose the lower ends of the said supports are inwardly offset, as clearly shown in Fig. 1. A narrow curtain-receiving space *a*, Fig. 5, is thus formed between the inner end of each clip and the lower end of the support carried by it. These narrow spaces *a* receive the lower edge of the curtain and permit the same to extend downward sufficiently far within the tub to prevent the bather from displacing or "flirting" it, so to speak, over the edge of the tub while he is taking his bath. If the lower edge of the curtain is confined in this way within the tub, no water will be allowed to escape on the floor. For supporting the lower ends of the said front and rear supports the inner end of each of the three clips is formed with a bearing-arm *b*, bent inwardly at a right angle, as shown in Figs. 1 and 5. By preference the outer ends of the clips will be made long enough to adapt them to receive a screw 11, arranged, as described, to engage with the edge of the roll of the tub. The extent to which the lower ends of the said rear and front supports are extended below the edge of the tub will depend, of course, upon the length given to the inner ends of the clips. This may be varied according to circumstances; but preferably the clips will be made so as to allow the supports to extend six or seven inches below the edge of the tub.

The front supports 9 9 form, as it were, a doorway for entrance into the space inclosed by the spray-arms 7. When the attachment is in use, this space is inclosed to prevent the water from spattering by means of a curtain, which is not shown, but which is suspended from an oblong curtain-ring 12, supported at its rear end by the upper end of the rear support 2 and at its outer end by its passage through a ball 13, connected by a short stem or neck 14 with a larger ball 15, receiving and connecting the upper ends of the front supports 9 9, which are curved inward and forward, so as to form what may be called a "forwardly-curved" pointed arch, whereby the support of the outer end of the curtain-ring 12 on the apex of the said arch is carried considerably beyond the vertical plane of the outer ends of the spray-arms 7 and the size of the space inclosed by the curtain thereby proportionately enlarged above what it would be if the front supports 9 9 were carried straight up in the ordinary way and independently connected with a circular curtain-ring at points sufficiently separated from each other to permit the bather to pass in and out. By bending the upper ends of the front supports not only inwardly but forwardly I am enabled to enlarge for the bather the space within the curtain, so as to give him more chance to move about without displacing the lower edge of the curtain, particularly with

respect to the length of the tub, which is the only direction in which his accommodation can be increased, because it is desirable to at all times limit the diameter of the space inclosed by the curtain to the width of the tub, so as to keep the lower edges of the curtain within the tub. Under my invention I render available more of the length of the tub without enlarging the width of the space inclosed by the curtain.

The merging of the two front supports into each other at the apex of the pointed arch results in the production, as it were, of a single support for the outer end of the curtain-ring, the entire support of which is thus reduced to two points, respectively located at its rear and front ends. This greatly facilitates the management of the curtain, the edges of which may be brought together on opposite sides of the ball 13. On the other hand, when the front end of the ring is supported in the usual way at the upper ends of the front supports at two separated points the application and manipulation of the curtain are much less convenient.

The extreme upper end of the rear support 2 is furnished with a slightly-curved shower-head arm 16, carrying a shower-head 17, which may be of any approved construction and which is located centrally above the curtain-ring 12, and therefore centrally above the space in which the shower descends. Hot or cold water is admitted to the said shower-head by means of a shower-cock 18, located in the support 2 at a point therein above the mixing ball or chamber 19.

Cold water is supplied to the mixing-ball 19 by means of a vertical supply-pipe 20, the upper end of which is connected with the said ball by an elbow 21 and a cold-water cock 22, and the lower end of which is connected with the main cold-water-supply pipe 23, which is supported on the floor and placed close to the foot of the bath-tub. Hot water is supplied to the said mixing-ball 19 through a hot-water cock 24, connected by an elbow 25 with the upper end of a vertical supply-pipe 26, corresponding to the pipe 20, and connected at its lower end with the main hot-water-supply pipe 27, which corresponds to the pipe 23 aforesaid, and is supported on the floor close to the foot of the bath-tub. The upper end of the main cold-water-supply pipe 23 is furnished with a cold-water cock 28 and connected with one end of a horizontally-arranged chambered yoke 29, Fig. 4, secured to the head of the tub by a bolt 30 and by a clamp 31 to the outer overflow-pipe 32, which is also supported upon the floor and located directly between the pipes 23 and 27. The upper end of the main hot-water-supply pipe 27 is furnished with a hot-water cock 33 and connected with the opposite end of the yoke 29, from which the "bell-pipe" 34 leads downward and passes into the tub, where it

terminates in the bell 35, from which water is discharged into the tub. The tub is also furnished with a waste-pipe 37, covered by a grate 38 and leading into the lower end of the outer overflow-pipe 32, which contains a vertically-movable inner overflow-pipe, (not shown,) but provided as usual with a valve located at its lower end and at its upper end with a knob-like handle 40, resting upon the upper end of the pipe 32. The rear support 2 is also furnished with a spray-cock 41, located below the mixing-ball 19 and controlling the flow of water to the spray-arms 7.

It will be readily understood from the foregoing description that cold and hot water are supplied to the tub under the control of the cocks 28 and 33 in the same manner as though the tub were not provided with my combination spray and shower attachment. It will also be understood that cold and hot water, or a mixture of both, are supplied to the shower-head 17 under the control of the shower-cock 18 and the cocks 22 and 24, the latter being used independently if hot or cold water alone is desired or in conjunction in case hot and cold water are to be mixed in the ball 19. When the shower-head 17 is being used, the shower-cock 18 must be opened and the spray-cock 41 closed. When the spray-arms 7 are to be used, the shower-cock 18 must be closed and the spray-cock 41 opened, after which hot or cold water, or a mixture of both, is admitted to the spray-arms 7 under the control of the cold-water cock 22 and the hot-water cock 24.

My improved attachment is not only simple, compact, and convenient, but economical of space and may be applied without disfiguring the tub or encroaching to any extent upon the space within the same, inasmuch as the cold and hot water supply pipes of the attachment are located entirely outside of the tub and "tapped" on, so to speak, to the main cold and hot water pipes employed to supply cold and hot water to the tub.

It is apparent that in carrying out my invention some changes from the construction herein shown and described may be made. I would therefore have it understood that I do not limit myself thereto, but hold myself at liberty to make such departures therefrom as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. In a combination spray and shower attachment for bath-tubs, the combination with a tubular rear support forming a water-supply pipe for the attachment, and two front supports, all of the said supports being adapted in length to extend down into a bath-tub below the roll thereof; of clips adapted to rest upon the roll of the tub upon which the attachment is thus saddled; the inner end of each of the said clips being extended downward into the tub and bent inwardly to form a bearing-arm to which the lower ends of the said supports are secured in position to form a space between their lower ends and the inner ends of the clips for the lower edge of the curtain.

2. In a combination spray and shower attachment for bath-tubs, the combination with a tubular rear support and two front supports, of horizontally-arranged tubular spray-arms located one above the other and supported by the said rear and front supports, and a curtain-ring supported by the said rear support and by the two front supports the upper ends of which are combined to form a single support for it.

3. In a combination spray and shower attachment for bath-tubs, the combination with a tubular rear support and two front supports, of horizontally-arranged tubular spray-arms located one above the other and supported by the said rear and front supports, and an oblong curtain-ring having its rear end supported by the said rear support and its front end supported by the upper ends of the two front supports which are inclined toward the head of the tub for the extension of the space inclosed by the curtain in the direction of the length of the tub, and which are also inclined toward each other to form a single support for the front end of the ring, whereby the curtained space is extended toward the head of the tub, and the front end of the ring supported at a single point.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM G. NEWTON.

Witnesses:

T. S. COLEMAN,
E. A. WRIGHT.