No. 675,060. Patented May 28, 1901.

M. G. GARTRELL & B. R. LEE.

FOLDING BATH CABINET.

(Application filed May 31, 1900.)

(No Model.)

Fig. 1.

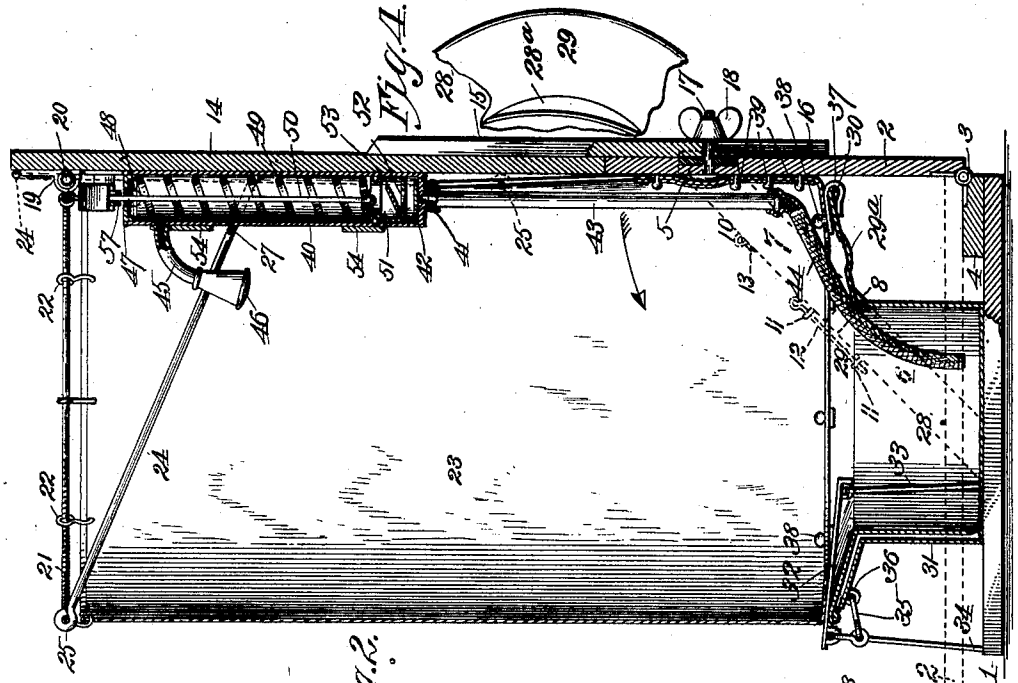


Fig. 2.

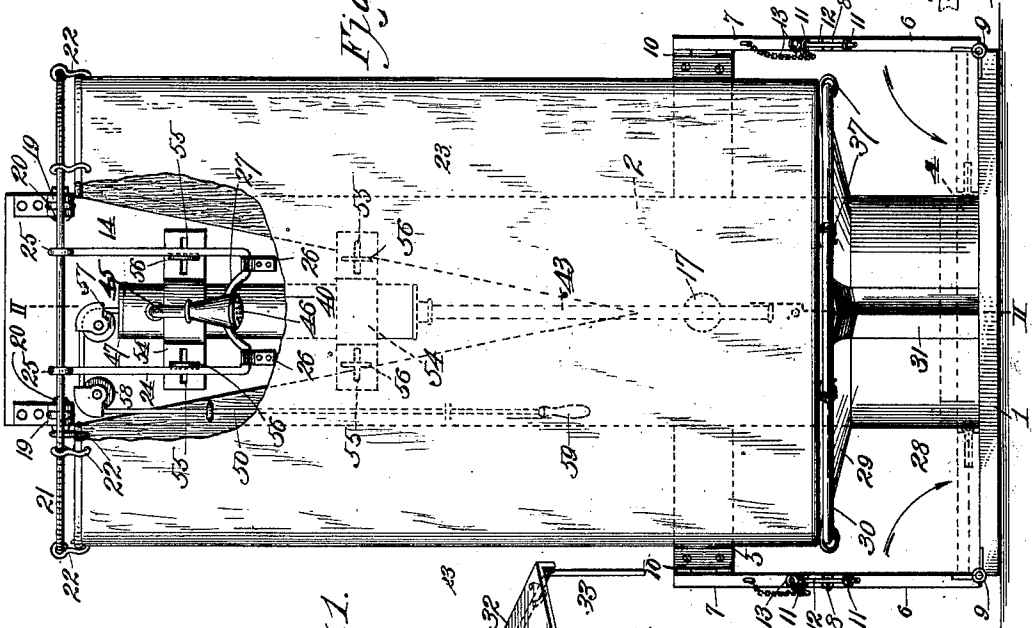
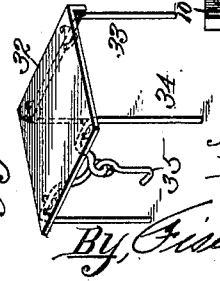


Fig. 3.



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UNITED STATES PATENT OFFICE.

MARY G. GARTRELL AND BELLE R. LEE, OF KANSAS CITY, MISSOURI; SAID GARTRELL ASSIGNOR TO SAID LEE.

FOLDING BATH-CABINET.

SPECIFICATION forming part of Letters Patent No. 675,060, dated May 28, 1901.

Application filed May 31, 1900. Serial No. 18,595. (No model.)

To all whom it may concern:

Be it known that we, MARY G. GARTRELL and BELLE R. LEE, citizens of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful Folding Bath-Cabinet, of which the following is a specification.

Our invention relates to folding bath-cabinets of that class which will enable one to enjoy the luxury of modern and convenient bath privileges who resides in a house devoid of waterworks.

One object is the provision of a bath-cabinet which can be manufactured and shipped at minimum expense, is of simple, strong, and durable construction, and can be set up or taken down quickly and easily and stored in a small space.

To this end the invention consists in certain novel and peculiar features of construction and combinations of parts, as will be hereinafter described and claimed, and in order that it may be fully understood reference is to be had to the accompanying drawings, in which—

Figure 1 represents a front view of a folding bath-cabinet, partly broken away, embodying our invention. Fig. 2 is a section taken on the line II II of Fig. 1. Fig. 3 is a detail perspective view of the seat, and Fig. 4 a plan of modified form of tub.

Referring to the drawings in detail, 1 designates the base or floor of the bath-cabinet, the same being of any desired and convenient configuration and size.

2 is a vertical standard forming the back of the bath-cabinet, the same being hinged at its lower end, as at 3, to the reinforce-strip 4, secured upon the base 1, in order that when said standard is folded or occupies its position for shipment there shall be a space between the same and the base equal to the thickness of reinforce-strip 4. The sides of the base are connected to the cross-bar 5, secured to the back of standard 2, by means of folding braces extending at an angle of about forty-five degrees to the connected parts, each brace comprising sections 6 and 7, hinged together, as at 8, with section 6 hinged to the base at 9, and section 7, as at 10, to the corresponding end of cross-bar 5, the arrangement being such that as standard 2 swings down in the direction indicated by the arrow, Fig. 2, said braces bend inwardly at hinge-points 8 until as said standard assumes the horizontal position (shown in dotted lines, Fig. 2) the brace-sections rest upon each other and fit snugly between said standard and the base. To lock the braces in their upright or operative position, and thus prevent the accidental collapse of the device, a pair of eyebolts 11 are secured to brace-sections 6 and 7, through which extend rods 12, attached by short chains 13 or other flexible connections to sections 7, by preference. These rods are withdrawn when it is desired to fold the device.

14 designates an extension for standard 2, said extension resting upon the upper end of standard 2 and having a pendent portion 15, fitting against the back of standard 2 and provided in its lower end with a slot 16, engaging bolt 17, extending through the standard and cross-bar 5, a clamping-nut 18 engaging the bolt and serving to clamp pendent portion 15, and consequently extension 14, firmly upon standard 2. By simply loosening said nut the extension can be easily removed.

Near the upper end of the extension and at opposite sides it is provided with brackets 19, and pivoted therein upon bolts 20 are the ends of a substantially circular wire frame 21, provided with pendent slidable hooks 22, to which is attached a flexible curtain 23. This pivoted or hinged curtain-carrying frame 21 is provided with an inclined brace 24, pivoted at its upper end, as at 25, to the frame and adapted at its lower end to rest in or upon supporting-brackets 26, secured to extension 14. This brace is by preference made of a single piece of wire and between supporting-brackets 26 is bent or bowed, as at 27, for a purpose which hereinafter appears.

28 designates a bath-tub of suitable dimensions and provided with an upward and outwardly flaring flange 29, terminating, by preference, in a roll 30, usually found at the edge of sheet-metal ware, said flange, of course, being provided to stiffen, strengthen, and give a finished appearance to the article. In this case it is for an additional purpose, as will

hereinafter appear. This flange serves to conduct the water dripping from the bather back into the tub and from the shower-bathing appliance hereinafter referred to. It is provided with an external spout 31, communicating with the tub near the bottom, the spout extending upwardly and to the outer edge of said flange. This construction provides for a convenient drainage of the tub, which is accomplished by simply tilting the tub in the proper direction.

The tub is provided with a seat, comprising the horizontal portion 32, provided with a hinged leg 33, resting upon the bottom of the tub adjacent to the side wall, and with a hinged outer leg 34, resting upon the base 1. This seat relieves the flange of the bather's weight, and consequently eliminates the chance of the tub being overbalanced or capsized, and in order to guard against the outer leg being dislodged it is linked to the tub by means of a hook 35, pivotally carried by the outer leg and detachably engaging staple or loop 36 of the tub. (See Fig. 2.)

The flange of the tub is of substantially the same diameter as the curtain-carrying frame, and the curtain is of such length as to fold inwardly upon said flange to insure that all water shall drain back into the tub. To make the connection secure, the lower end of the curtain is detachably connected to the tub, preferably by buttoning upon heads or buttons 38 on the slidable spring-clamps 37, sprung around or upon the bead 30 of said flange, as shown in Fig. 2.

The curtain by preference buttons at the back and is completely closed by buttoning its edges together near its lower end, as indicated at 39, the buttons projecting from standard 2, or it may be connected in any other suitable manner.

To enter or leave the tub, the curtain is unbuttoned at 39 and opened at one side by sliding hooks 22 and 37 around forwardly a suitable distance. Said hooks are then slid back to their original position and the curtain rebuttoned, as at 39.

As a further convenience the flange of the tub is preferably stamped to form a soap-receiving cavity 29^a.

In order that the occupant may take a shower-bath, if desired, a pump is provided, the same being constructed and supported in position as follows:

40 designates a pump, of cylindrical form, provided at its lower end with an inlet-opening 41, controlled by a flap-valve 42, and coupled to the lower end of the pump, by preference, is a pipe 43, to which a flexible pipe 44 is attached and adapted to have its discharge end immersed in the water of the tub or of an outside receptacle. (Not shown.)

Near the top of the pump is a spout 45, provided with a rose-nozzle 46, arranged to spray water down upon the occupant of the tub. The top of the pump is closed by a cap 47, provided with a packing-box 48, to prevent water from escaping up through the opening in the cap, through which flexible piston-stem 50 extends, said stem being preferably of wire or equivalent material. At its lower end the stem carries the piston 51, having an opening 52 and a valve 53, closing the same, preferably of the hinge type, as shown, and to depress the piston and recharge the pump a spring 49 is employed. This pump is arranged vertically of and near the top of the extension 14 and is welded or otherwise secured to straps 54, provided with horizontal slots 55, through which clamping turn-buttons 56, carried by the extension 14, are adapted to be fitted, said turn-buttons being turned at right angles to said slots, as shown in Fig. 1, in order to clamp the pump tightly and reliably in position.

Vertically above the pump is a pulley 57, and at one side of the same a second pulley 58, over which runs an extension of the piston-stem 50, the lower end of said extension having a handle 59 within convenient reach of the occupant of the tub. The pulleys are provided with guards or shields of the customary type to prevent the disengagement therewith of the flexible piston-stem. It is to be understood, of course, that in lieu of this flexible piston-stem the part working in the pump may be rigid, as usual, and the part working on the pulleys flexible, though in this case the distance between the piston and the pulley 57 would necessarily have to be great enough to allow for the reciprocation of the piston-stem.

Assuming that the apparatus is to be set up for use, the operator swings standard 2 to the vertical position shown, which operation automatically straightens out the folded braces 6 and 7, the latter being then secured against collapse by slipping the pin 12 through the alined eyes 11, projecting from said sections 6 and 7. The extension 14 is now fitted upon standard 2, with bolt 17 projecting through slot 16, and then clamped in this position by the wing-nut 18, engaging said bolt. At this time (when folded) the hinged frame 21 hangs pendently from pivot-bolts 20, and brace 24 has its bent end 27 upward and resting against the end of extension 14. The bar is now swung outward from said extension 14, and the pump is interposed between it and said extension and fitted upon the clamping turn-buttons 56, as hereinbefore explained, the latter being turned to secure the pump in such position. The frame 21 is now swung up to the horizontal position shown, and the brace 24 is swung downwardly and forwardly on pivot-points 25 until it has completed almost a circle and eventually assumes the position shown in the drawings, with its lower end resting upon supporting-brackets 26 and its bent portion 27 astride the pump. The curtain is now secured upon the hooks 22 of frame 21 and the tub placed upon base 1. The seat is fitted in operative position, as shown in Fig. 2, and the lower end of the cur-

tain buttoned to the sliding clamps 37, fitted upon the beaded edge of the tub, except at one side near the back or standard 2, where entrance is desired. The tub being now supplied with warm water, if desired, and a bucket of cold water for shower-bath purposes being arranged contiguous to the tub, or the tub may be subdivided, so as to contain both hot and cold water, if desired, (see cold-water compartment 28^a, Fig. 4,) the lower end of flexible pipe 44 is immersed in said cold-water compartment or in said contiguous receptacle. Entrance to the tub may be effected and the curtain completely closed and secured by buttoning its two edges together near the back, as shown. The occupant may now take a bath at leisure and with convenience, may either stand or sit, as desired, and may afterward take a shower-bath by grasping the handle 59 and pulling downward upon it, this action causing the piston to rise in the pump and draw or suck into the latter a charge of water on the first upward stroke, valve 42, of course, opening under the pressure of the water flowing up through pipes 44 and 43. When the handle is released, the spring 49 forces the piston down again, which action completely closes valve 42 and opens valve 53 to permit the water displaced by the descending piston to rise above the latter until the pump is filled. The second and all succeeding upward strokes of the piston thus find the pump charged with water, which charge is forcibly ejected in a spray down upon the bather in the tub, the valve 53, of course, closing as the piston rises.

Thus it will be seen that we have produced a folding bath-cabinet embodying the features of advantage enumerated as desirable in the statement of invention, and while the preferred embodiment of the invention is described and illustrated it is to be understood that we reserve the right to make all changes in the form, proportion, detail construction, and arrangement of the parts which will not be a departure from the spirit and scope or sacrifice any of the advantages of the appended claims.

Having thus described the invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a folding bath-cabinet, the combination of a base 1, a narrow back 2, hinged to the base, a cross-bar 5, hinged braces connecting the base with the ends of the cross-bar, a bolt securing the cross-bar to the back, an extension for the back having a vertical slot engaging said bolt, a clamping-nut engaging the bolt and said extension, a curtain-supporting frame 21, hinged to the upper end of and adapted to fold downward against the extension, a brace 24, pivoted to the frame 21, and adapted when the latter hangs downward to be swung upward to be folded against the extension, and brackets secured to the extension to support the free end of the brace when the frame 21 is approximately horizontal and said brace extends downward and rearward therefrom, all arranged substantially as described.

2. In a folding bath-cabinet, the combination of a base, a narrow back 2, hinged to the base, a cross-bar 5 secured to the back and projecting beyond the sides of the same, sectional braces hinged together and to the base and ends of said cross-bar, an extension which increases the height of the back, a pump secured to the front side of the same, a substantially circular frame 21 hinged to the extension, brackets 26 secured to the face of the extension at opposite sides of the pump, and an inclined brace pivoted to said hinged frame and supported upon said brackets, said brace being formed of wire bent or bowed at its free end in order to properly span or bridge the pump between said brackets, substantially as described.

3. In a folding bath-cabinet, the combination of a tub provided with an outwardly-projecting flange having a staple or loop 36 at its under side, and a seat extending inwardly from said flange and provided with hinged legs, a pair to rest upon the bottom of the tub, and a pair to rest upon the tub-support externally of the tub, and a hook 35 hinged to the external legs and adapted to engage the loop or staple of the tub, substantially as described.

4. In a folding bath-cabinet, the combination of a tub having an outwardly-projecting flange at its upper end with its outer edge beaded, a plurality of spring-clasps 37 engaging said beaded edge and provided with buttons 38 at their inner ends, and a curtain having its lower end turned inwardly upon the flange of the tub and provided with buttonholes engaging said buttons, substantially as described.

In testimony whereof we affix our signatures in the presence of two witnesses.

MARY G. GARTRELL.
BELLE R. LEE.

Witnesses:
H. C. RODGERS,
G. Y. THORPE.