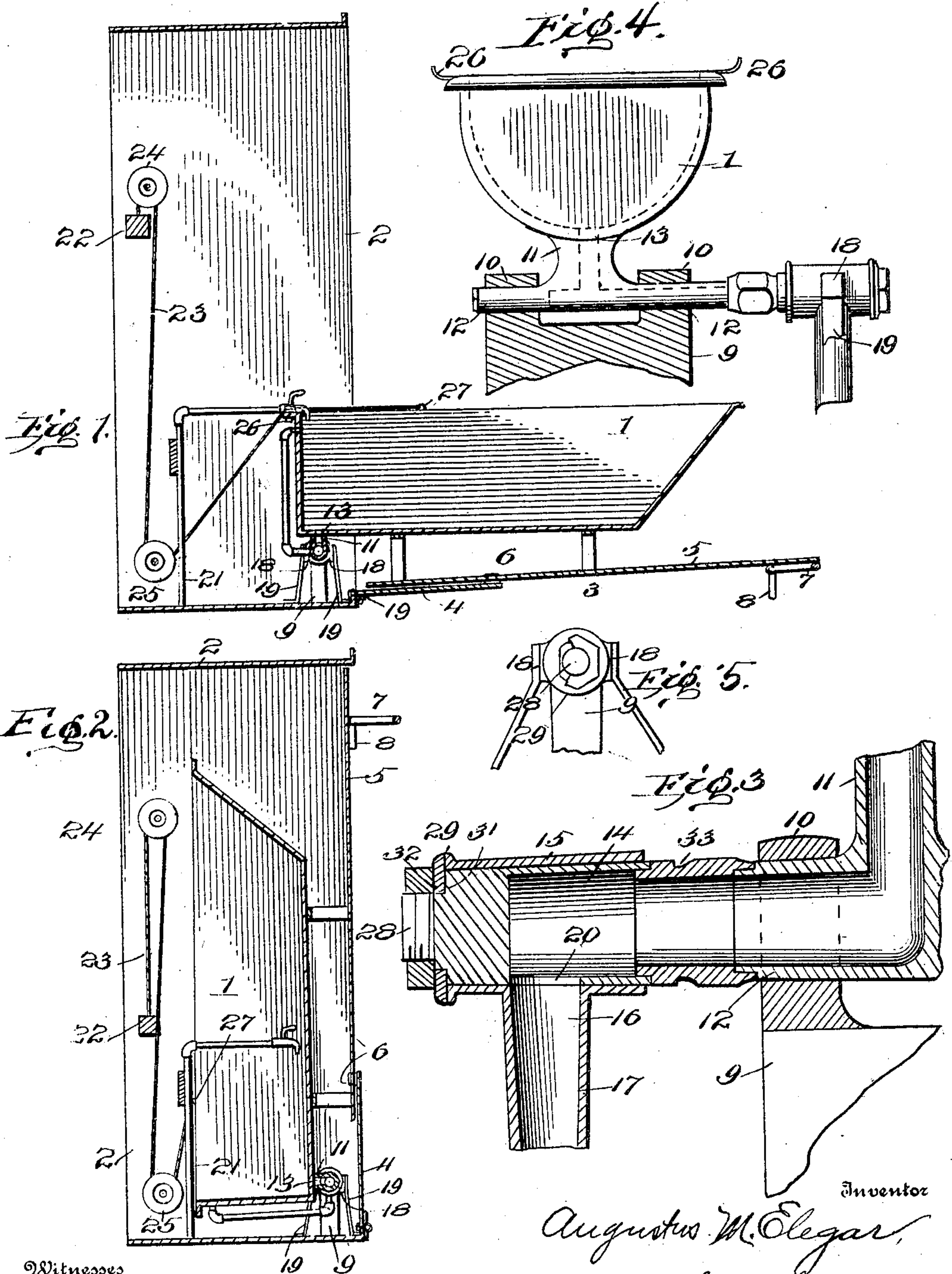


No. 822,355.

PATENTED JUNE 5, 1906.

A. M. ELEGAR.  
BATH TUB CABINET.  
APPLICATION FILED SEPT. 13, 1904.



Witnesses

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# UNITED STATES PATENT OFFICE.

AUGUSTUS M. ELEGAR, OF DENVER, COLORADO.

## BATH-TUB CABINET.

No. 822,355.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed September 13, 1904. Serial No. 224,348.

*To all whom it may concern:*

Be it known that I, AUGUSTUS M. ELEGAR, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented certain new and useful Improvements in Bath-Tub Cabinets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to bath apparatus, and has particular relation to bath-tubs which are capable of being lifted or folded out of the way when not in use.

The invention consists in a folding bath apparatus comprising an inclosing cabinet, a tub, a pivotal support for the said tub, and a valve controlling the outlet of the tub and operable by the movement of the tub.

The invention further consists in a folding bath apparatus comprising a closure having a folding front, a tub mounted upon said front, a pivotal support mounted beneath one end of the tub and carrying the weight of the tub and the folding front, and a drain-closing valve connected with the pivotal support of the tub and operable by the movement of the tub.

The invention also consists in certain other novel constructions, combinations, and arrangement of parts, as will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a central longitudinal sectional view through my improved bath apparatus and the cabinet for inclosing the same, the tub of the apparatus being shown in its lowered or unfolded position. Fig. 2 is a similar view of the parts in their folded position. Fig. 3 is an enlarged sectional view through the cut-off-valve mechanism which is operated by the movement of the tub. Fig. 4 is an end view of the tub, showing its pivotal supporting member and the valve adjacent thereto, the bearings and standard being shown in section. Fig. 5 is a detail view showing the valve in end elevation.

It is the object of the present invention to provide a bath apparatus which will occupy a comparatively small space in a compartment or dwelling, especially when not in use, and it is within the scope of the present invention to not only provide a folding apparatus or bath-tub, but to so connect the same with the sewerage outlet that the drain may be closed automatically upon the folding of

the tub and the escape of sewer-gas therefrom be guarded against.

I have illustrated in the accompanying drawings the preferable manner of constructing and arranging the parts and will proceed to describe my invention with relation thereto.

1 indicates a tub or bath of ordinary construction, and 2 a housing or cabinet into which the tub may be folded.

3 indicates a door or folding member which closes the front of the cabinet when the tub is folded. The tub is rigidly secured to the door, preferably by means of the ordinary standards or legs of the tub, the feet of which are bolted or riveted to the said door. The door 3 I usually make in two sections, one section, as 4, being hinged to the floor of the cabinet, while the other section, 5, has a sliding or telescoping connection with the section 4. The joint between the section 5 and the section 4 of the door may be made in any simple and convenient manner, and I usually employ short guideways or flanges 6, which are carried by the edge of the section 4 and overhang the adjacent edges of the sliding section 5. The door is provided with a handle 7, which is pivotally mounted on the outer face of said door, and the handle may also be provided with projecting end portions 8, which can be used as feet or supporting-standards for the free end of the door when it is in its lowered position.

The mounting of the tub in the cabinet forms an important feature of the invention, as does also the connection of the tub-support with the drain-controlling valve. Rising from the floor of the cabinet 2 is a standard or base 9, formed with bearings 10 at its upper end. The bearing portions of the standard are preferably somewhat separated, leaving a space between them. At the rear or inner end of the tub 1 upon the bottom thereof is a pivotal supporting member 11, which is provided with laterally-projecting trunnions 12, made to fit within the bearings 10. One of said trunnions is made hollow and connects with the discharge-outlet 13 in the tub. The outer end of the hollow trunnion is connected with a valve 14, which fits in a valve-casing 15, mounted adjacent to the tub-supporting standard 9. The valve-casing 15 is provided with a lateral outlet 16, which is connected by suitable piping 17 with the drain-pipe of the apparatus. The side walls of the casing 15 are preferably some



what thickened, as at 18, and connected with inclined braces 19, which extend to the floor of the cabinet 2. These braces hold the casing 15 firmly in place and not only prevent its turning when the valve 14 is moved within it, but relieve the pipe connection with the said casing of all strains that might be brought upon it. It will be observed that the axis of the valve 14 and the casing 15 is exactly concentric and coincident with the center of the trunnions 12, and therefore with the center of movement of the tub. The rocking of the tub upon its trunnions will therefore not injure or strain the parts of the cut-off valve.

The valve 14 is hollow, as shown in Fig. 3, and is formed with a lateral port or discharge-outlet 20, which is preferably made of about the size of the outlet 16 in the casing. The valve 14 is so connected with the trunnion of the tub that when the tub is in its lowered position the said valve 14 will have its discharge-port 20 opposite and coincident with the port 16 of the casing 15. It will therefore follow that when the tub is in its lowered or unfolded position the drain-pipe will be open and the contents of the tub can be emptied. Of course the usual plug or other discharge-stopping means is employed in the tub for holding water in the tub when it is used. As soon as such stopper or plug is removed the water will pass out through the valve 14 into the drain. The valve is made to fit snugly within its casing 15, so as to form a water and gas tight joint therewith.

In Fig. 3 of the drawings the preferable construction of the valve is illustrated. The casing 15 is open at one end, and the seat formed within the said casing is turned to fit with a perfect metal-to-metal contact upon the exterior surface of the valve 14. The said valve 14 is bored centrally from one end, the other end thereof being left closed, as shown in Fig. 3. Projecting from the closed end of the valve is a threaded portion 28. A washer 29 is slipped upon the threaded portion 28, and a nut 30 is applied thereto. The washer 19 is prevented from turning with respect to the valve by having a flattened surface 31, engaging a correspondingly-flattened surface 32 upon the threaded stem of the valve 28. By this means the washer will always turn with the valve and will not be moved with respect to the securing-nut 30. The open end of the valve 14 is provided with a union or connecting portion 33, which may be many sided on its outer surface, so as to be held by an ordinary wrench. The inner surface of the valve at its open end is made to fit upon the end of the hollow trunnion carried by the tub and may be brazed thereto or threaded thereon or may be secured thereto in any other desired or suitable manner. When the door is raised, the valve 14 will turn with it, closing the outlet

and preventing the escape of sewer-gas from the drain-pipe. By this construction the necessity of employing a trap in the drain of the tub is obviated.

The supply-pipes for delivering hot and cold water to the tub preferably project upwardly from the floor of the cabinet, as at 21, and the faucets extend forwardly a sufficient distance to overhang the rear end of the tub when it is in its lowered position. By setting the upright portions of the supply-piping well to the rear of the cabinet ample room is afforded for the movement of the tub without affecting the inlet-pipes and without the necessity of placing articulating joints in the pipes. The faucets will project into the tub when the tub is folded, and when it is lowered they will merely overhang the upper edge thereof in the usual manner.

In providing the folding tub of the character above set forth it is desirable to provide a counterbalance mechanism, so that the tub may be easily raised and lowered.

As shown in the drawings, I provide one or more weights or counterbalances 22, provided with supporting chains or cables 23, the said chains or cables extending upwardly over antifriction-rollers 24, preferably near each side of the cabinet and thence downwardly and about other antifriction-rollers 25, mounted near the floor of the cabinet. From this point the chains or cables pass upwardly to the end of the tub and over brackets 26, projecting from the tub, the ends of the said chains or cables being secured to eyes 27 or to any other suitable securing means. The counterweight is sufficient to approximately balance the weight of the tub and the door, so that very little force will be required in raising or depressing the tub and its door.

In mounting the tub, as above described, the arrangement of the parts is such that any of the tubs commonly found upon the market may be placed in the cabinet and connected with the drain without alteration. Since the supporting pivot member is concentric with the valve, it will always follow that any tub which is connected with said pivot member will have a movement about the same axis as the valve itself, and there will be no interference with the operation of said valve.

It will be observed from the above description that the mounting of the tub is comparatively simple, and the trunnion-support may be made of great strength, and the movement of the valve can be caused in exact coincidence with the movement of the tub. The drain will thus always be automatically controlled in accordance with the position of the tub, and when the tub is not in use the drain will be closed with a gas-tight joint, obviating the necessity for using a trap at this point.

Having now described my invention, what



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

1. A cabinet bath apparatus comprising a cabinet, and door for the same having a hinged portion and a sliding portion, a bathtub secured to the sliding portion, and means for pivotally supporting one end of the tub in the cabinet, the pivotal supporting means thus carrying the tub and the sliding section of the door.

2. A folding bath apparatus comprising a cabinet, having a hinged door, a tub mounted upon the said door, a pivotal support within the cabinet for holding the tub movably in place, and a telescoping portion interposed in the length of the door for permitting the por-

tion of the door which is secured to the tub to accommodate itself to the movement of the tub.

3. A folding bath apparatus, comprising a cabinet, a water-receptacle pivoted therein, a sectional door for closing the cabinet, a portion of the door being carried by the receptacle and a portion being hinged to the cabinet.

In testimony whereof I affix my signature in presence of two witnesses.

AUGUSTUS M. ELEGAR.

Witnesses:

WILLIAM F. CAMMERER,  
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