W. A. SPEAKMAN.

LAVATORY SUPPLY VALVE.

APPLICATION FILED DEC. 19, 1907.

931,512.

Patented Aug. 17, 1909.

2 SHEETS—SHEET 1.

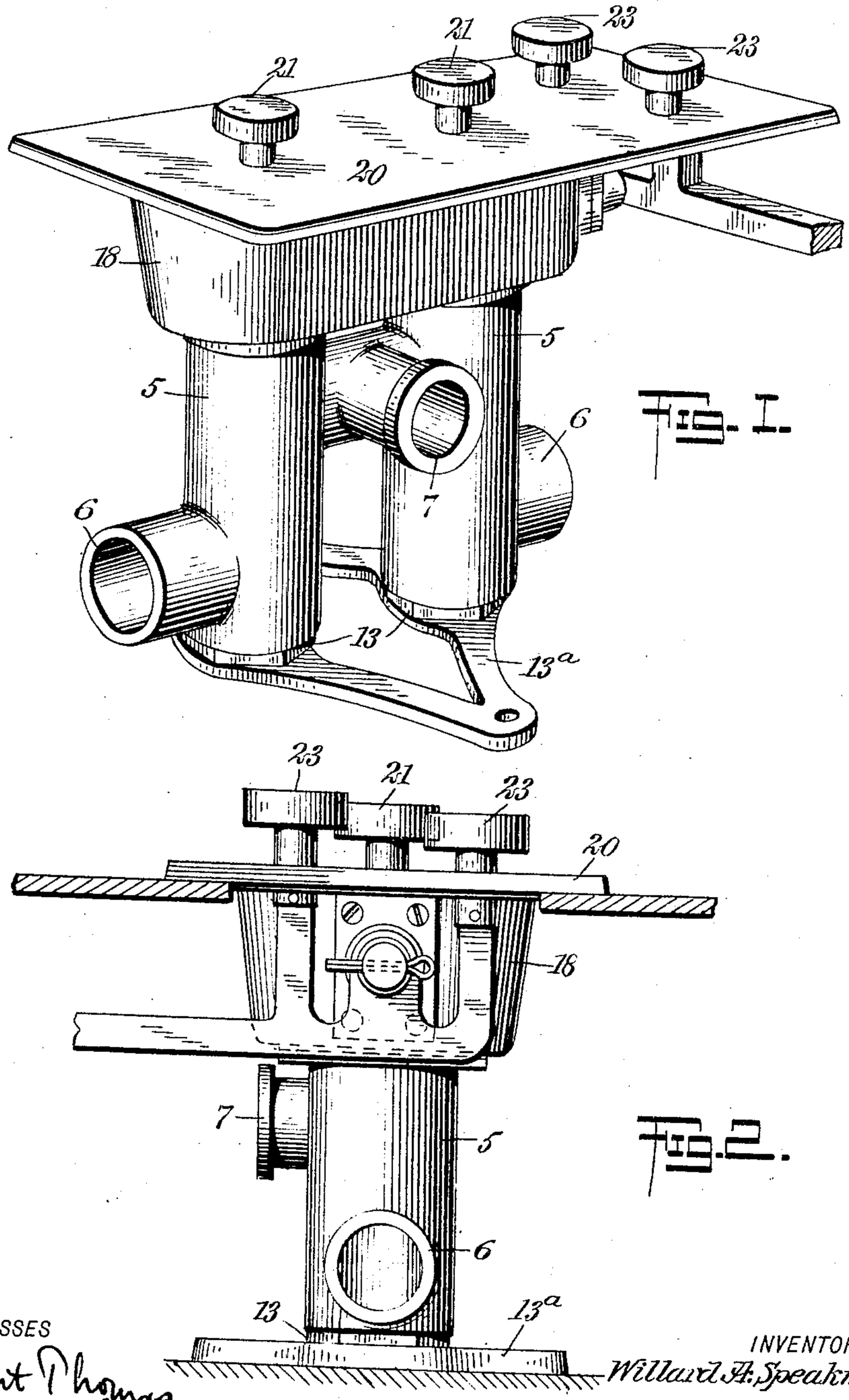

FIG. 1.

FIG. 2.

WITNESSES

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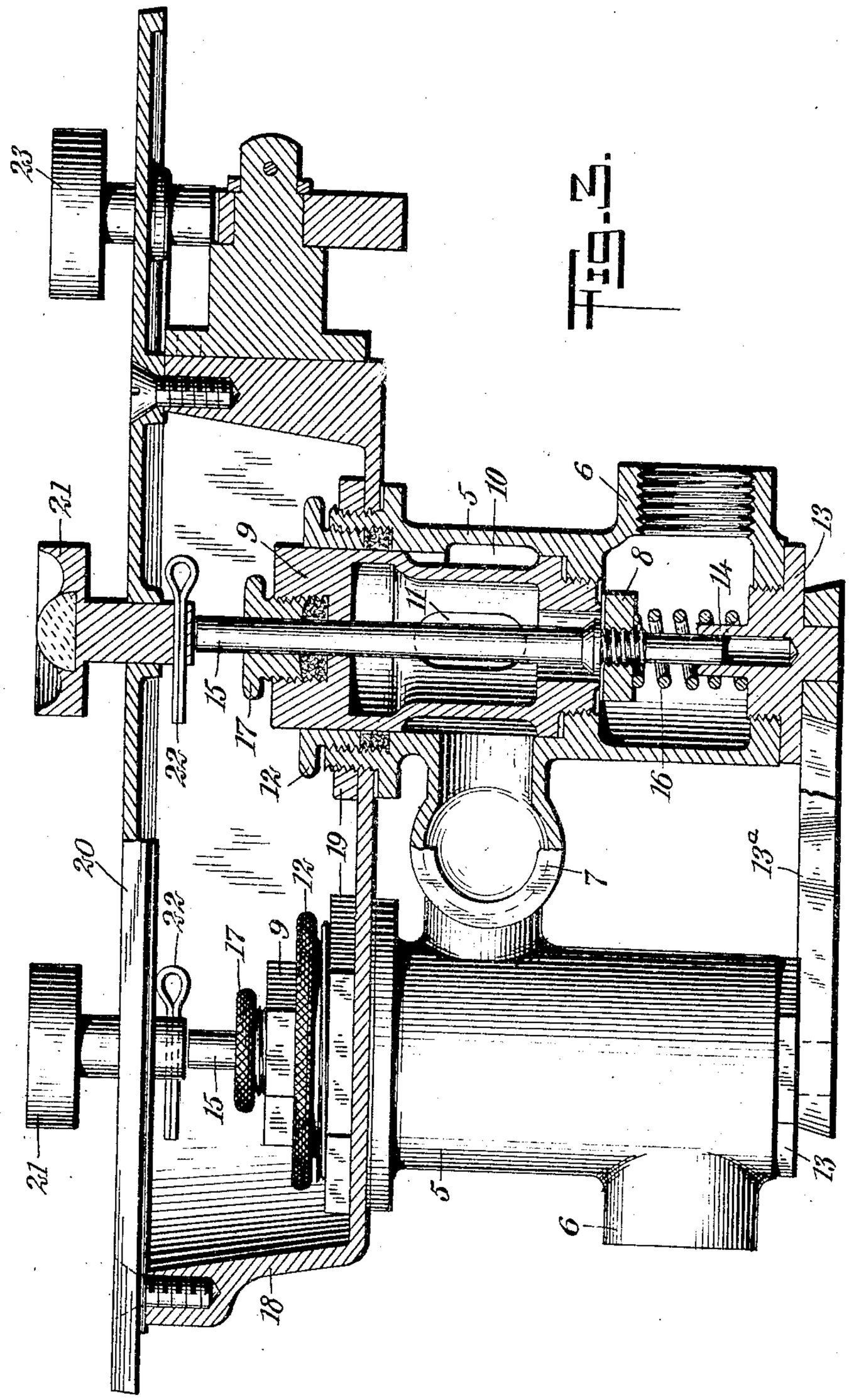

Fig. 2.

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UNITED STATES PATENT OFFICE.

WILLARD ALLEN SPEAKMAN, OF BRANDYWINE HUNDRED, DELAWARE.

LAVATORY SUPPLY-VALVE.

No. 931,512. Specification of Letters Patent. Patented Aug. 17, 1909.

Application filed December 19, 1907. Serial No. 407,183.

To all whom it may concern:

Be it known that I, WILLARD ALLEN SPEAKMAN, a citizen of the United States, and a resident of Silverside, Brandywine Hundred, in the county of Newcastle and State of Delaware, have invented a new and Improved Lavatory Supply-Valve, of which the following is a full, clear, and exact description.

This invention has reference to improvements in valves, particularly water supply valves for lavatories and other places wherein it is desirable that the valve be controlled by the feet; such, for example, as in hospitals, etc., where it is impractical for surgeons and others to control the flow of water to and from the wash bowl with their hands.

This invention contemplates the provision of valves of the above character for the control of the hot and cold water supplies, the valves being located when applied under the flooring, and having means for making a leak should one develop in the device first appear on the floor on which the device is placed.

The invention further resides in certain novel features of construction and combination of parts as will be hereinafter particularly set forth and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the lavatory supply valve constructed in accordance with my invention; Fig. 2 is a side elevation of the same, illustrating the manner in which it is applied to the flooring; and Fig. 3 is a front elevation of the device, partly in central vertical section.

The preferred construction of the invention embodies two valve casings 5, 5, each being divided into an upper and lower chamber, the lower chambers of which are respectively connected to the hot and cold water supplies through the inlets 6, and the upper chambers discharging into a common outlet 7. The passage of the water from the lower to the upper chamber in each casing is controlled by a valve 8, which seats over an opening in the lower portion of an inner cylindrical casing 9, received in the upper chamber. This casing 9, as clearly shown in Fig. 3, is threadedly connected to the valve casing at its lower end, and is of reduced diameter at its central portion to provide an annular space 10 between it and the valve casing 5. The inner cylindrical casing has a number of openings 11 formed in the body thereof, through which the water flows therefrom into the annular space. The upper portion of the casing 9 projects above the valve casing 5, with which it is made water tight by a packing gland 12. A plug 13 threaded into the lower end of the casing 5, is constructed with a tubular portion 14 on its inner face, in which is guided the lower end of the stem 15 of the valve 8, the latter being fixed to the stem in any suitable manner as, for example, as illustrated in Fig. 3, and is normally pressed to its seat by a spring 16, the latter being interposed between the valve head and the plug 13. The plugs 13 of the valve casings are constructed with reduced projecting portions, to which is attached a laterally-extending bracket 13ª, rigidly connecting the lower portions of the casings together, and providing means for securing this part of the device to a ceiling or other support. The valve stem 15 passes through the closed upper end of the inner cylindrical casing 9, and is made water tight therewith by the surrounding packing gland 17.

The upper ends of the valve casings 5 are externally threaded and flanged for receiving and seating a box 18, which is made water-tight with the casings by nuts 19 threaded on the upper ends thereof and pressing the bottom of the box against gaskets seated on the valve casing flanges. The sides of the box 18 are of such height as to project slightly above the tops of the valve stems, and are attached in any suitable manner, for example, as by the machine screws shown in Fig. 3, to a floor-plate 20, forming the top of the box.

Arranged directly over the valve stems 15, and disconnected therefrom, are foot-operated buttons 21, the shanks of which are slidable in openings in the floor-plate 20, and are provided with a cross-pin 22, or other equivalent device, underneath said plate, to prevent the buttons from being completely withdrawn. The floor-plate 20 is preferably extended to one side of the box for carrying suitable controlling means for withdrawing and closing the wash bowl plug, the said controlling means being also

actuated by foot-operated buttons 23, which are slidable through the floor-plate. This feature, however, forms no part of the present invention, but is merely shown to bring out the nature of the device as constructed in practice.

In the application of the invention, a suitable opening is provided in the flooring, preferably near the bowl or other receptacle to which the water is, or is to be, piped; the size of the opening being just sufficient to admit the box 18 and permit of the margin or projecting edges of the plate 20 seating on the top of the floor, as illustrated in Fig. 2, thus arranging the valve casings below the floor. After the casings are connected up to the hot and cold water supplies, and the outlets therefrom piped to the bowl, on depressing the buttons 21 with the feet, the flow of water through the valves is controlled. Should a leak develop about the valve stems or between the upper portions of the inner and outer casings of the valve, the water will collect in the box 18, and will after a time when the box fills, pass above the floor around the stems of the buttons 21. This will indicate to any one on the same floor that the valve is leaking, before the water drips to the floor below. By making the buttons 21 as a separate part from the valve stems there is no danger of the latter being bent or loosened by striking a blow on the side of the button, as by the foot.

The invention as shown and described while being the preferred practical embodiment of my invention, may obviously be modified in particulars falling within the scope of the claims annexed.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In a device of the character described, valve casings divided into upper and lower chambers having respectively inlets and a common outlet, a valve controlling communication between said chambers, having a stem, plugs threaded into the lower portions of the casings, having means for guiding the valve stems, a laterally-extended bracket for connecting the casings, rigidly attached to said plugs, a box connecting the upper portions of the casings and providing water-tight joints thereabout, a plate forming the top of the box, having the margin thereof projecting beyond the box, and foot-actuated buttons slidable in the plate above the valve stems for opening the valves.

2. The combination of a valve casing, a valve in the casing provided with a stem passing through the upper portion thereof, a box having a water-tight connection with the casing around the valve stem, a floor-plate closing the top of the box, and a foot-actuated device for operating the valve, disconnected from the valve stem and slidable in the floor-plate.

3. The combination of a valve casing having a valve, a water-tight box surrounding the upper portion of the casing, a floor-plate closing the top of the box, and means for actuating the valve, passing through the floor-plate.

4. The combination of valve casings, valves within the casings having stems passing through the upper portions thereof, a water-tight box surrounding the upper portions of the casings, a floor-plate covering the box, foot-actuated devices projecting above the floor-plate for operating the valve, and a bracket attached to the lower portions of the casings for securing them in a fixed position.

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

WILLARD ALLEN SPEAKMAN

Witnesses:
WILLIAM H. GIBBONS,
MARSHALL P. TINDALL.