W. A. BLOOM.

BASIN.

APPLICATION FILED APR. 10, 1908.

917,529. Patented Apr. 6, 1909.

Fig. 1.

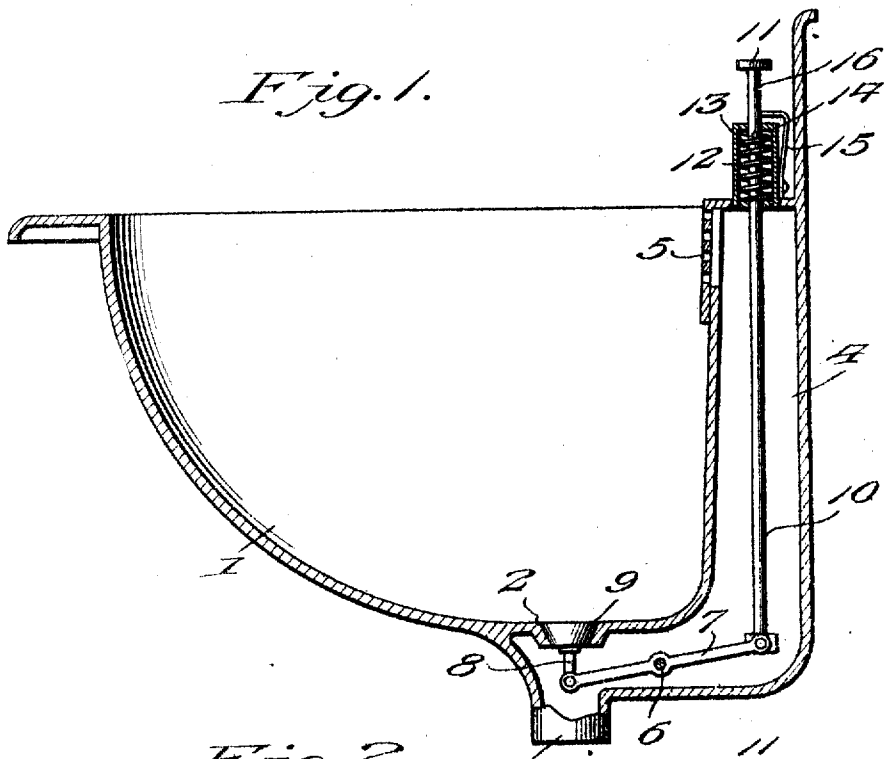
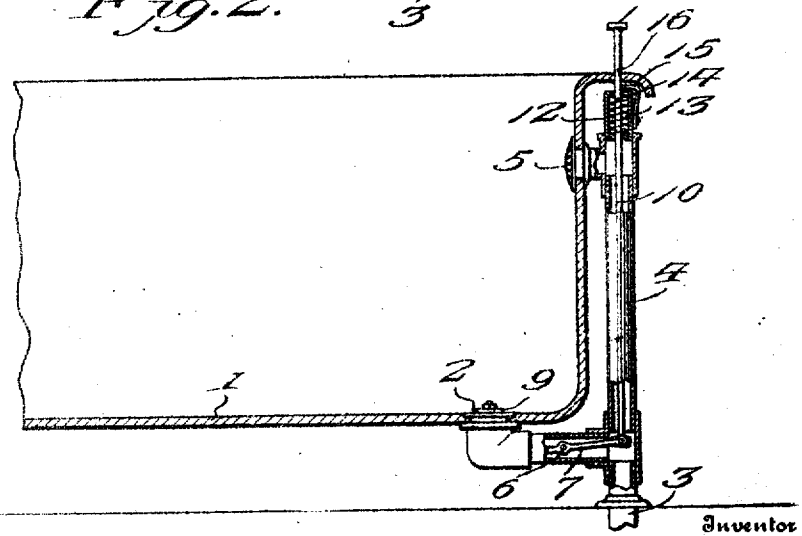


Fig. 2.



Witnesses

Edwin G. McKee

G. A. Elmore

Inventor

W. A. Bloom

By Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

WILLIAM A. BLOOM, OF ROCHESTER, NEW YORK.

BASIN.

No. 917,529. Specification of Letters Patent. Patented April 6, 1909.

Application filed April 10, 1906. Serial No. 310,990.

To all whom it may concern:

Be it known that I, WILLIAM A. BLOOM, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented new and useful Improvements in Basins, of which the following is a specification.

This invention relates to basins, being especially directed to an improved means for operating the drain pipe valve or stopper, and has for its objects to produce a comparatively simple, inexpensive device of this character wherein the valve will be maintained normally in closed position, one wherein the valve may be quickly opened when circumstances require to drain the basin, and one in which the valve operating means will be completely housed and sealed from view, and obstruction of the basin, by the same, obviated.

With these and other objects in view, the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings: Figure 1 is a vertical sectional view taken centrally through a basin from front to rear and showing the same equipped with a valve operating mechanism embodying the invention. Fig. 2 is a similar view showing the mechanism applied to a bath tub.

Referring to the drawings, 1 designates a basin of the usual or any preferred form having a discharge opening 2 leading to a drain pipe 3 adapted to communicate at its upper end with the lower end of an overflow pipe or duct 4 in turn having communication at its upper end with the basin through the medium of overflow openings or ports 5. Pivoted at its longitudinal center as at 6 in the lower portion of the duct 4 is a valve operating lever 7 to one end of which there is pivoted the stem 8 of a valve or plug 9 adapted to normally seat in and for closing the opening 2, there being pivoted to the other end of lever 7 a vertical push rod or element 10 having bearing adjacent its upper end, which is equipped with a head or button 11, in a tubular casing 12 connected with and extending upwardly from the upper end of duct 4, there being housed in the casing 12 a normally expanded spring 13 having bearing at one end on the bottom of the casing and at its upper end against an abutment in the form of a pin 14 extended transversely through the rod, the spring serving to lift the rod for actuating the lever 7 to maintain the valve 9 normally in closed position.

Secured exteriorly upon the casing 12 is an angular or hook shaped spring locking member or finger 15, the lower extremity of which serves for the passage of the rivet or fastening member 21 while the laterally extending upper extremity 22 of said locking member is adapted for engagement with a notch or recess 16 in the rod 10 for the purpose of locking or securing the latter in depressed condition for a purpose which will presently appear.

In practice, supposing the valve 9 to be seated in the opening 2 to cut off discharge of water from the basin and that it is desired to open the valve, the operator places his finger upon head 11 and depresses rod 10 against the action of spring 13, thus rocking the lever 7 on its pivot and raising the valves away from its seat, it being apparent that when the rod is pressed downward locking member 15 will spring into engagement with the notch or keeper 16 for locking the parts in such condition and with the valve. When it is desired to again close the valve the head 11 is grasped and the rod lifted whereupon the laterally extending portion 22 of the member 15 will yield upwardly and spring out of engagement with the notch or recess 16 and the spring 13 will expand for exerting pressure to maintain the valve in seated condition.

It will be readily seen that direct manipulation of the locking member 15 is not required under the construction herein described, which permits the laterally extending portion 22 of said locking member to automatically enter into engagement with the notch or recess 16 of the rod 10 when the latter is depressed or forced in a downward direction; to effect the release or disengagement of the rod 10 from the locking member it is only necessary to pull said rod in an upward direction, when the laterally extending portion 22 of the locking member will yield upwardly, and permit the disengagement to be effected.

The construction described is simple and inexpensive, and it is not found necessary to provide the casing 12 with notches or apertures through which dirt might enter into the casing and interfere with the operation of the spring contained in the latter.

The mechanism illustrated in Fig. 2 is identical in construction and operation with

that above described, except that the duct 4 is in the form of a pipe connected upon the vessel which is in the form of a bath tub, as distinguished from the construction shown in Fig. 1 in which the duct 4 is cast in one piece with the vessel or basin 1.

Having thus described my invention, what I claim is:

1. A device of the character described, comprising a receptacle provided with a drain pipe and having an opening leading thereto, an overflow duct communicating with the receptacle and pipe, a valve designed to close the drain opening, an operating lever pivoted in the overflow duct and connected with the valve, a substantially straight push rod provided with a notch and connected with the lever for operating the same, a casing through which the rod has sliding movement between its ends, a spring housed in the casing and about the rod and adapted to act upon the rod for maintaining the valve in closed position, and a spring locking strip secured at one end to the exterior of the casing and having a right angularly bent finger projecting inwardly over the top of the casing with its free end arranged to bear directly upon the rod and adapted to engage the notch therein to hold the valve in open position.

2. In a device of the class described, the combination of a receptacle having a projecting rim portion, a drain opening and an overflow opening, a drain pipe, an overflow duct independent of the receptacle and having a vertical portion in communication with said overflow opening and a horizontal portion connecting said vertical portion with the drain opening, a valve controlling said drain opening, a pivoted lever in the horizontal portion of the duct connected with the valve and extending at one end into the vertical portion of the duct, a casing mounted upon the upper end of the vertical portion of the duct and beneath the rim, a rod slidably mounted in said vertical portion of the duct and casing and through the rim and connected at its lower end with the lever, said rod being provided with a notch, a spring within the casing acting on the rod to hold the valve closed, and a spring locking strip secured at one end to the exterior of the casing and having a right angularly bent finger projecting inwardly over the top of the casing with its free end disposed between the casing and rim and arranged to bear directly upon the rod and adapted to engage the notch therein to hold the valve in open position.

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

WILLIAM A. BLOOM.

Witnesses:

JOSEPH E. PEO,

ELLSWORTH C. PLAYER.