E. J. BLOOM.

LAVATORY FIXTURE.

APPLICATION FILED OCT. 12, 1914.

1,136,091.

Patented Apr. 20, 1915.

3 SHEETS—SHEET 1.

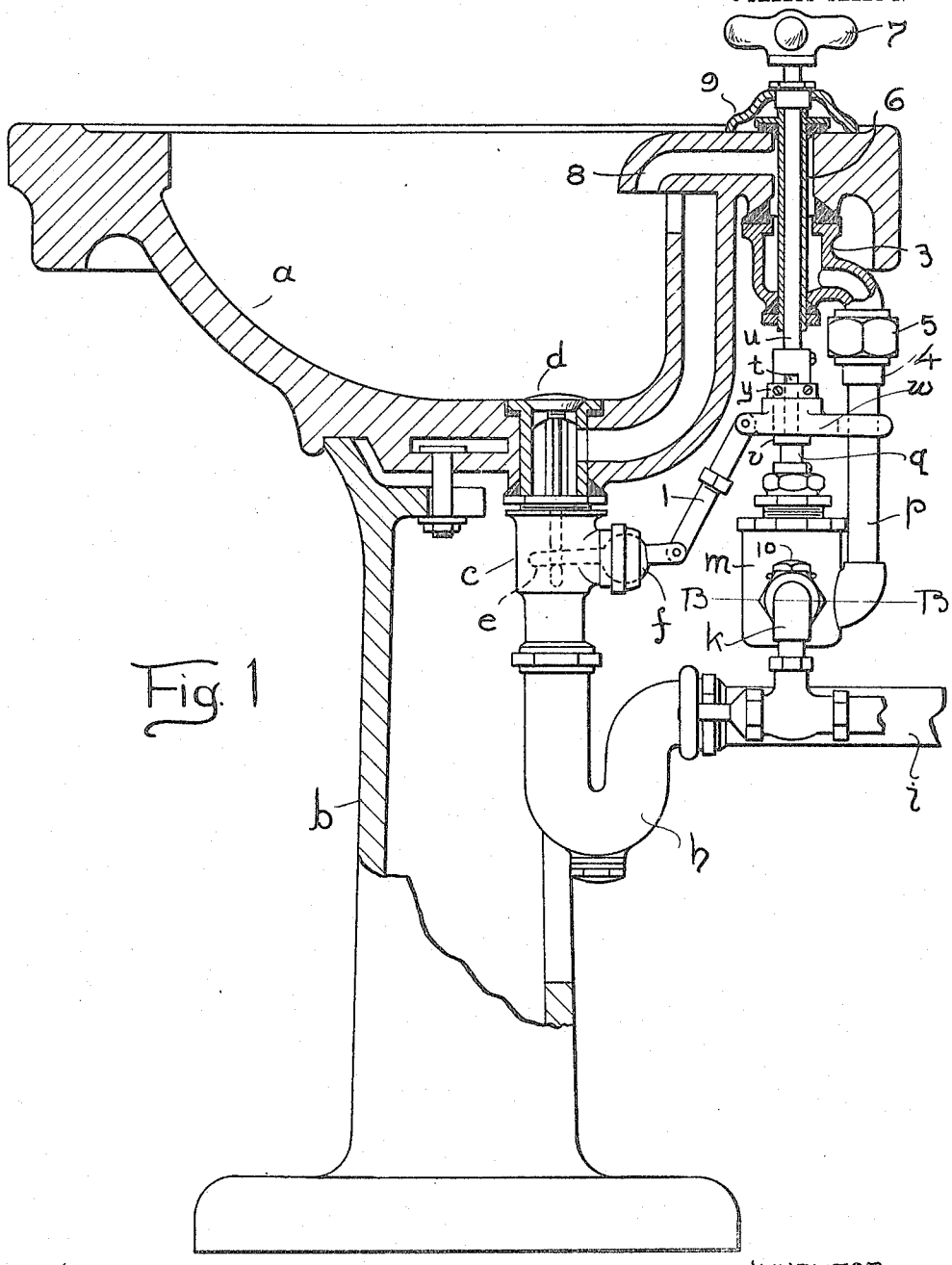


Fig. 1

WITNESSES

Robert N. Van Rodgers

Virginia C. Spratt

INVENTOR

Edgar J. Bloom

BY

Patzcmond A. Parsons

ATTORNEY

E. J. BLOOM.

LAVATORY FIXTURE.

APPLICATION FILED OCT. 12, 1914.

1,136,091.

Patented Apr. 20, 1915.

3 SHEETS—SHEET 2.

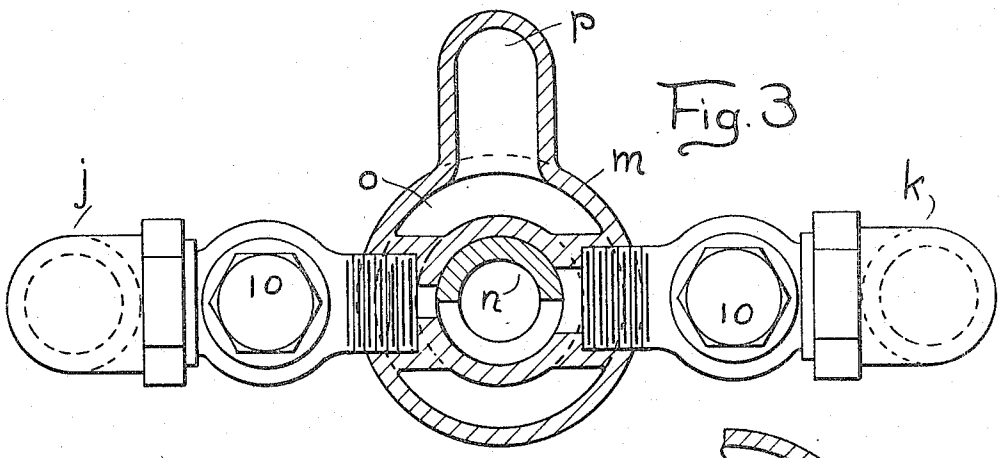


Fig. 3

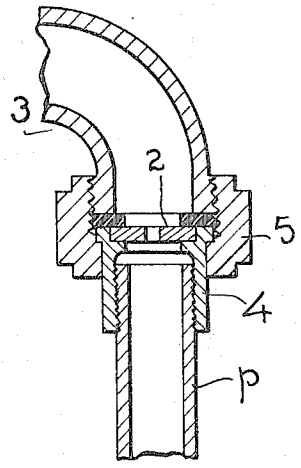


Fig. 4

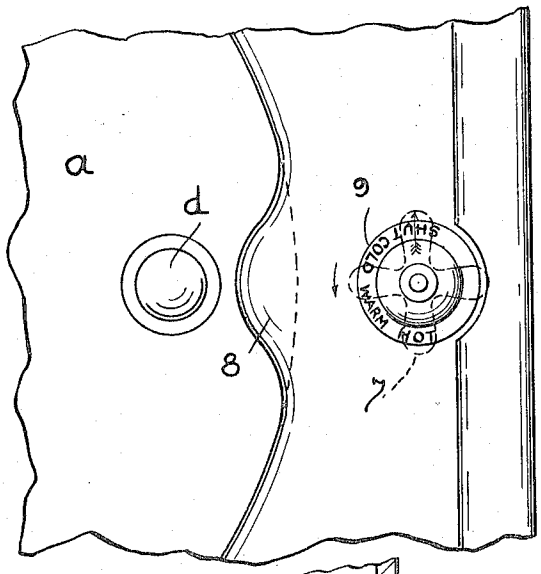


Fig. 2

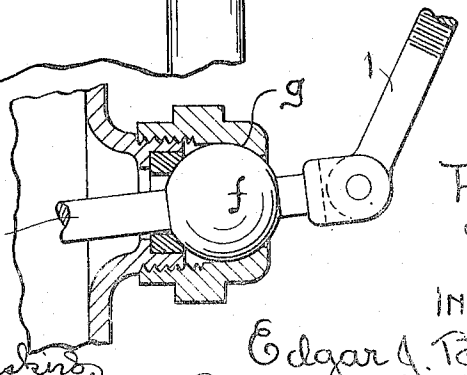


Fig. 5

WITNESSES

Robert N. Van Dusen

Virginia C. Sprott.

INVENTOR

Edgar J. Bloom

BY

Raymond A. Parker.

ATTORNEY

E. J. BLOOM.

LAVATORY FIXTURE.

APPLICATION FILED OCT. 12, 1914.

1,136,091.

Patented Apr. 20, 1915.

3 SHEETS—SHEET 3.

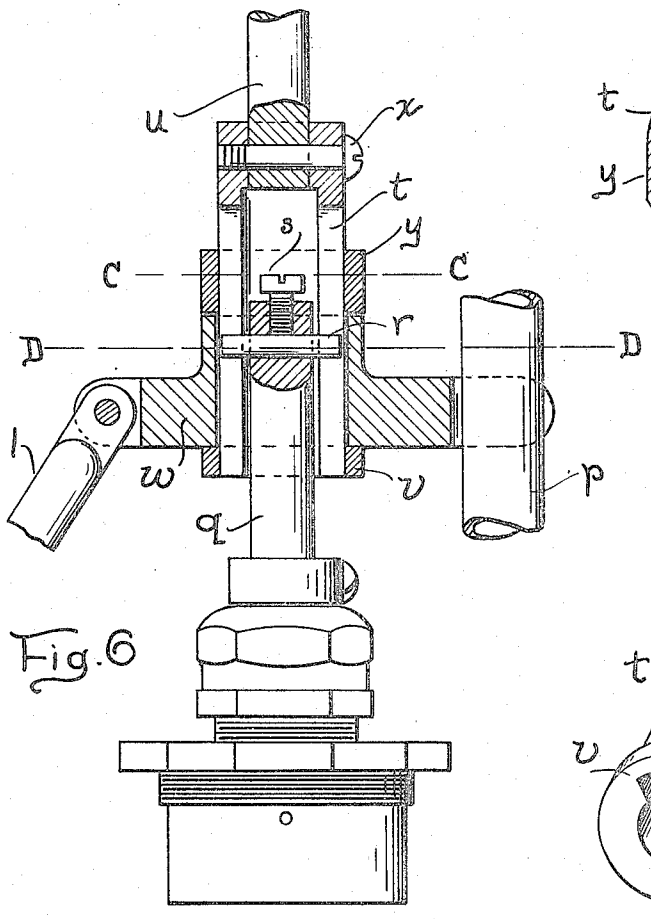


Fig. 6

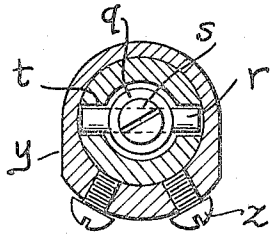


Fig. 7

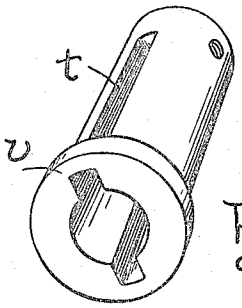


Fig. 9

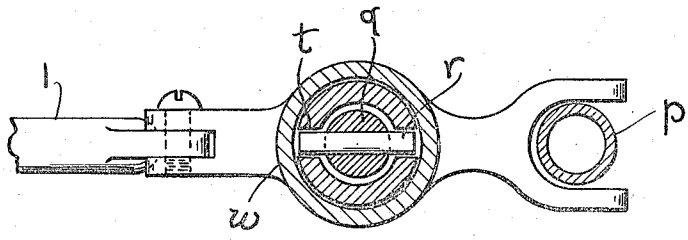


Fig. 8

WITNESSES

Robert F. Van Bodenstein

Virginia C. Spratt.

INVENTOR

Edgar J. Bloom

BY

Rabzemond A. Parker.

ATTORNEY

UNITED STATES PATENT OFFICE.

EDGAR J. BLOOM, OF TIFFIN, OHIO.

LAVATORY-FIXTURE.

1,136,091. Specification of Letters Patent. Patented Apr. 20, 1915.

Application filed October 12, 1914. Serial No. 866,230.

To all whom it may concern:

Be it known that I, EDGAR J. BLOOM, a citizen of the United States, residing at Tiffin, county of Senaca, State of Ohio, have invented a certain new and useful Improvement in Lavatory-Fixtures, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to hot and cold water mixers for lavatories and combined mixers and waste valves for lavatories. The features will more fully appear in the description hereinafter following.

In the drawings: Figure 1, is a vertical section of a lavatory showing the plumbing fixtures in elevation with the exception of one or two parts that are sectioned for the purpose of illustrating interior parts. Fig. 2, is a fragmentary top view of the lavatory. Fig. 3, is a section of the mixer on the line B—B of Fig. 1, showing the piping in elevation. Fig. 4, is a fragmentary section of the lead-away pipe from the mixer. Fig. 5, is a sectional detail of a lever and its connections which operate the waste valve. Fig. 6, is an enlarged sectional view of the selector devices that operate optionally the mixer and the waste valve. Fig. 7, is a section on the line C—C of Fig. 6. Fig. 8, is a section on the line D—D of Fig. 6. Fig. 9, is a detailed perspective of the slotted tubular end of the control rod.

The lavatory bowl is designated *a* and the pedestal *b*. At the bottom of the bowl the waste pipe *c* leads away from the bowl. The flow of the waste is controlled by the pop valve *d*. These pop waste valves are well known in the art so that I have not fully illustrated nor shall I fully describe the same. It suffices to say that they are forced up and down to open and close, respectively, the waste opening by means of a lever *e* passing through a slot in the lower end of the valve stem. This lever is fulcrumed on a ball *f* which fits tightly to the seat *g*. The waste pipe *c* flows into the customary trap *h* and thence through the conduit *i* to a soil pipe, not shown. The hot and cold water comes through the pipes *j* and *k* (Fig. 3) to a mixing valve chamber *m*. The check valves 10, 10 prevent the water backing up in the pipes or shooting across the mixer from one pipe through the other. The mixture of hot and cold water is regulated by the rotation of a part cylindrical valve *n*. The hot and cold water comes together inside of this valve *n* and is allowed to flow out of one end (not shown) of the valve into the mixing space *o* whence it flows into the lead-away pipe *p*. This structure is not detailed in the drawings or description because it has already been made the subject-matter of an application, Serial Number 808,675, and its detailed structure is no part of my invention.

My invention is operable with any type of mixing valve which is operated by a rotating spindle. Such a spindle is indicated at *q* and is shown leading into the mixer *m*. Referring to Fig. 6 in particular, it will be seen that the end of the spindle carries a cross pin *r* held in place by the set screw *s*. This cross pin protrudes at either side into the slot *t* of the tubular slotted terminal of the control rod *u*. This tubular slotted terminal terminates in a collar *v*. The yoke or slide *w* may be slid over the slotted tubular terminal of the control rod before that member is fastened to the control rod by the screw *x*. The ring *y* may be then fitted over the slotted tubular terminal and the same adjusted and secured in its proper place by the set screws *z*. This forms a structure that allows the control rod *u* to turn, thereby turning the mixer spindle *q* with it but leaving the yoke or slide *w* inactive; or if the control rod *u* is lifted or lowered, the collar and ring will lift and lower the slide or yoke *w*, leaving the mixer spindle *q* inactive. The yoke *w* slides upon the lead-away pipe *p* as a guide post. The other end of the yoke is connected with the end of the pop valve lever *e* by means of the two-bar extensible and contractible link 1.

In lavatories it is very desirable not to have the water splash in the bowl, that is, come out of the faucet with such force that it splashes and possibly slops over the side of the bowl. This difficulty is not a great one where there are separate hot and cold water faucets but where the mixer is used this presents quite an objection in lavatory use as the flow of the water must not be such as to splash into the bowl. I overcome this difficulty by constricting the lead-away passageway at some point between the mixing chamber and the delivery nozzle. I do this preferably by seating a disk 2 (Fig. 4) at

the joint between the lead-away pipe p and the union 3. The union 3 is a casting connected with the pipe p by a threaded sleeve 4 and coupling nut 5. This union 3 is provided with an axially disposed sleeve 6. Through this the control rod u passes to the top of the lavatory where it terminates in a hand wheel 7. The water passes through the union 3 into a discharge nozzle 8 which is part of the lavatory bowl.

It will readily be understood that by raising the control rod u the slide, or yoke, w is raised and this pulls the pop valve d down to the position shown in Fig. 1 by forcing the control rod u down. This forces the slide, or yoke, down and consequently raises the pop valve d and opens the waste pipe. By turning the control rod u the mixing valve n is operated to control the mixture. The character of control is made known to the operator by reason of the dial 9 on top of the lavatory (Fig. 2).

What I claim is:

1. The combination with a lavatory and a waste pipe, of a pop valve controlling said waste pipe, a hot and cold water mixer having a rotatable spindle by which it is operated, a control rod journaled so as to be capable of rotating and sliding movement, and a device attached to said control rod whereby turning of the control rod rotates the mixer spindle and sliding the rod reciprocates the pop valve.

2. The combination with a lavatory and a waste pipe, of a pop valve for controlling the same, a hot and cold water mixer for the water supply to the lavatory bowl, the said mixer being provided with a spindle whose turning controls the mixture, a control rod journaled to rotate or slide, a yoke or slide adjacent the end of the control rod, means on the end of the control rod for picking up the slide or yoke to reciprocate the same when the control rod is reciprocated and for picking up the spindle to rotate the spindle when the control rod is rotated and connections between the pop valve and the slide or yoke for raising or lowering the pop valve when the slide is reciprocated.

3. The combination with a lavatory and a waste pipe, of a pop valve for controlling the waste, a hot and cold water mixer for supplying the lavatory bowl, a control rod journaled to rotate and slide, a lever fulcrumed to raise and lower the pop valve, a slide or yoke adjacent the end of the control rod, a link connecting said lever with the yoke, and means on the end of the control rod for picking up the slide or yoke to reciprocate the same when the control rod is reciprocated and for picking up the spindle on the mixer to rotate the spindle when the control rod is rotated.

4. The combination with a lavatory and a waste pipe, of a pop valve, a mixer provided with a spindle whose rotation operates the mixer, means for conveying the mixed water from the mixer to the lavatory bowl, a control rod journaled to rotate and slide, a yoke or slide adjacent the end of the control rod, a cross pin in the end of the mixer spindle, a slotted tubular terminal attached to the end of the control rod and having a collar on its end for engaging with the slide or yoke and a ring held on the opposite side of the yoke, the said cross pin engaging in the slot of the terminal whereby rotation of the rod picks up the pin and rotates the spindle leaving the yoke inactive, while the sliding of the rod picks up the yoke, leaving the spindle inactive.

5. The combination of a lavatory and a waste pipe, of a pop valve for controlling the waste, a hot and cold water mixer having a spindle the rotation of which controls the mixing, a lead-away pipe for conveying the mixed water away from the mixer, said lead-away pipe running parallel with the spindle of the mixer, a control rod, a slide or yoke guided upon the lead-away pipe and connected with the pop valve so that the reciprocation of the slide operates the pop valve, and means on the end of the control rod for picking up and rotating the spindle when the rod is rotated and for picking up and reciprocating the slide when the rod is reciprocated.

In testimony whereof, I sign this specification in the presence of two witnesses.

EDGAR J. BLOOM.

Witnesses:
HAZEL YEAGER,
JAMES D. WATSON.