

T. E. BEARDSLEY & P. E. CARMODY.
TIME FAUCET.

APPLICATION FILED JAN. 14, 1908.

927,706.

Patented July 13, 1909.

Fig. 1.

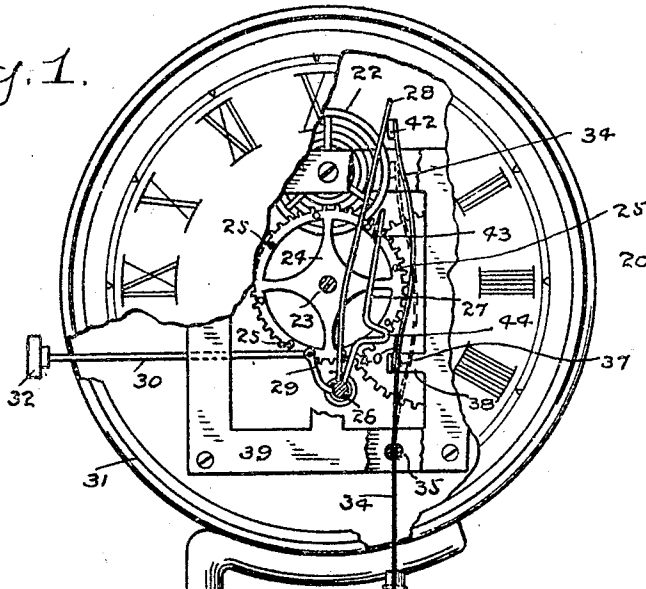
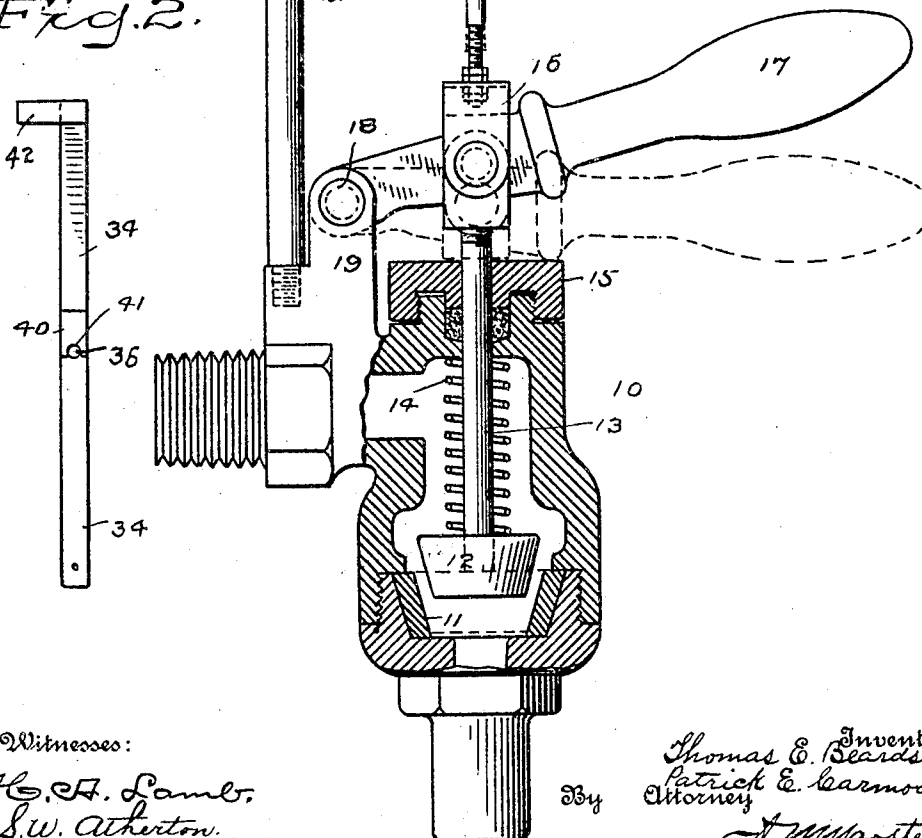


Fig. 2.



Witnesses:

H. A. Lamb,
S. W. Atherton.

By Thomas E. Beardsley and
Patrick E. Carmody
Attorneys
J. W. Wooster

UNITED STATES PATENT OFFICE.

THOMAS E. BEARDSLEY AND PATRICK E. CARMODY, OF ANSONIA, CONNECTICUT.

TIME-FAUCET.

No. 927,706.

Specification of Letters Patent.

Patented July 13, 1909.

Application filed January 14, 1909. Serial No. 472,258.

To all whom it may concern:

Be it known that we, THOMAS E. BEARDSLEY and PATRICK E. CARMODY, citizens of the United States, residing at Ansonia, county of New Haven, State of Connecticut, have invented a new and useful Time-Faucet, of which the following is a specification.

This invention has for its object to provide a simple and inexpensive time faucet adapted for general use in connection with bath tubs, wash bowls, sinks, etc. and especially adapted for use in hotels, barber shops and other public baths, that will act to shut off the water at a predetermined time and thus render it impossible for the tub to overflow and cause damage to ceilings below.

With these and other objects in view we have devised the simple and novel structure of which the following description in connection with the accompanying drawing is a specification, reference characters being used to indicate the several parts:

Figure 1 is a view partly in elevation and partly in vertical section illustrating the construction and operation of our novel time faucet; and Fig. 2 is an elevation of the spring arm detached.

10 denotes the faucet as a whole, which may be of any ordinary or preferred construction, preferably of course a compound faucet in which the hot and cold water is mixed. The details of construction of any special form of faucet, however, are not illustrated as specifically they form no portion of the present invention.

The essential features of the faucet are a valve seat, indicated by 11, a valve indicated by 12 and having a stem 13 and a spring indicated by 14 which bears against the valve and acts to normally retain it in the closing position. The stem extends upward through the cap of the faucet, indicated by 15, and is provided with a yoke 16 in which an operating lever 17 is pivoted, the short arm of the lever being pivoted as at 18 to an arm 19 extending from the body of the faucet.

20 denotes a clock movement as a whole which is carried by a standard 21 extending upward from the faucet.

The special style of clock or arrangement of the train is wholly unimportant so far as the present invention is concerned. We have therefore only illustrated the elements of the train which are essential to the operativeness of the present invention.

22 denotes the balance wheel, 23 the center shaft and 24 the center wheel carried thereby. The center wheel is provided in the face of its rim with pins 25, the purpose of which will presently be explained.

26 denotes an oscillatory controlling shaft which is journaled in the frame of the train and has extending therefrom a releasing arm 27, a retaining arm 28 and a controlling arm 29 to which a push rod 30 is pivoted. The push rod extends outward through the case of the clock movement, which is indicated by 31, and is provided with a head 32 for convenience in operation.

33 denotes an adjustable rod which extends upward from the yoke and has secured to its upper end a spring arm 34. This spring arm slides vertically through a guide 35 and is provided with a hole 36 which is adapted to receive a pin 37 which projects from an arm 38 extending from any suitable portion of the frame of the movement, the frame as a whole being indicated by 39. The spring arm is preferably provided with a bearing plate 40 having a recess 41, registering with hole 36, which bears upon the pin and imparts rigidity to the engaging portion of the arm. At the upper end of the spring arm is an arm 42 which normally engages the balance wheel and locks it against movement. When the operating lever is raised, the spring arm is raised with it and arm 42 engages retaining arm 28 and is carried out of contact with the balance wheel. This releases the clock movement which starts at once. At the upper end of releasing arm 27 is a head 43, formed in the present instance by curving over the end of the arm, which is adapted to be engaged by either of the pins 25 on the center wheel. The releasing arm is provided with a projection 44 which when the arm is engaged by one of the pins on the center wheel and the arm is carried forward, that is toward the right as seen in Fig. 1, engages the spring arm—in the present instance the bearing plate on said arm, forces the spring arm toward the right and disengages it from pin 37. The instant this disengagement takes place, spring 14 acts to return the valve to the closing position, which will be readily understood from Fig. 1, in which the valve and lever are shown in dotted lines in the closing position.

The operation is as follows: The normal or closing position of the valve and lever is indi-

cated by dotted lines in Fig. 1. To draw water, the operator raises the lever which raises the valve, rod 33 and the spring arm and also starts the clock movement. As soon as the recess in the bearing plate has passed pin 37 the resiliency of the arm will force said arm toward the left, as seen in Fig. 1, and will cause the pin to engage recess 41 in the bearing plate and hole 36 in the spring arm, thereby locking the spring arm, the lever and the valve in the raised position. As soon as a pin upon the center wheel engages releasing arm 27, said arm will be forced forward and will carry projection 44 against the spring arm, or the bearing plate if used, and will disengage said arm from pin 37. Spring 14 will then close the valve and return the lever to its normal position, as indicated by dotted lines. Should more water be required, the lever is again raised until the spring arm again engages pin 37, from which position the parts will be again disengaged by the engagement of the next pin on the center wheel with the releasing arm. Should it be required to stop the flow of water before the releasing arm is engaged by a pin on the center wheel, the operator simply presses against head 32 and pushes rod 30 inward, the effect of which is to oscillate controlling shaft 26 and cause the projection on the releasing arm to disengage the spring arm from pin 37 in the same manner that it would be disengaged by one of the pins on the center wheel. In order to prevent the possibility of the spring arm coming in contact with the balance wheel and interfering with the clock movement, retaining arm 28 is provided which is engaged by arm 42 at the top of the spring arm, thereby retaining the spring arm against possible engagement with the balance wheel. Having thus described our invention, we claim:

1. In a faucet, the combination with a valve and a closing spring, of a spring arm connected to the valve and having a hole, a pin adapted to engage said hole to retain the valve in the raised position against the power of the spring, a releasing arm adapted to disengage the spring arm from the pin and a time movement adapted to act on the releasing arm at predetermined times.

2. In a faucet, the combination with a valve and a closing spring, of a spring arm connected to the valve and having a hole, a pin adapted to engage said hole to retain the valve in the raised position against the power of the spring, a releasing arm adapted to disengage the spring arm from the pin and a time movement having a wheel provided with pins either of which is adapted to engage the releasing arm and cause the latter to disengage the spring arm from the pin.

3. In a faucet, the combination with a

valve and a closing spring, of a spring arm connected to the valve and having a hole and a bearing plate with a recess registering with the hole, a pin adapted to engage said recess and hole, for the purpose set forth, a releasing arm having a projection adapted to disengage the spring arm from the pin and a time movement adapted to act on the releasing arm at predetermined times.

4. In a faucet, the combination with a valve having a stem and an operating lever pivoted to the stem, of a spring arm connected to the stem, means for retaining the spring arm, lever and valve at the raised position, a releasing arm adapted to engage the spring arm and a time movement having a wheel provided with pins either of which is adapted to engage the releasing arm.

5. In a faucet, the combination with a valve having a stem and an operating lever pivoted to the stem, of a spring arm connected to the stem, means for retaining the spring arm, lever and valve at the raised position, a releasing arm adapted to engage the spring arm, for the purpose set forth, a time movement adapted to act on the releasing arm at predetermined times and means for actuating the releasing arm independently of the time movement.

6. In a faucet, the combination with a valve having a stem and an operating lever pivoted to the stem, of a spring arm connected to the stem, means for retaining the spring arm, lever and valve at the raised position, an oscillatory controlling shaft having extending therefrom a controlling arm and a releasing arm adapted to engage the spring arm, a time movement adapted to engage the releasing arm and disengage the spring arm at predetermined times and a push rod pivoted to the controlling arm for actuating the releasing arm independently of the time movement.

7. In a faucet, the combination with a valve having a stem and a spring arm connected to the stem and having extending therefrom an arm 42, of means for retaining the spring arm and a valve at the raised position, an oscillatory controlling shaft having extending therefrom a releasing arm, a controlling arm and a retaining arm which is engaged by arm 42, for the purpose set forth, a time movement adapted to act on the releasing arm at predetermined times and a push rod pivoted to the controlling arm.

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

THOMAS E. BEARDSLEY.
PATRICK E. CARMODY.

Witnesses:

HENRY LIFTIZ,
WALTER E. LYON.