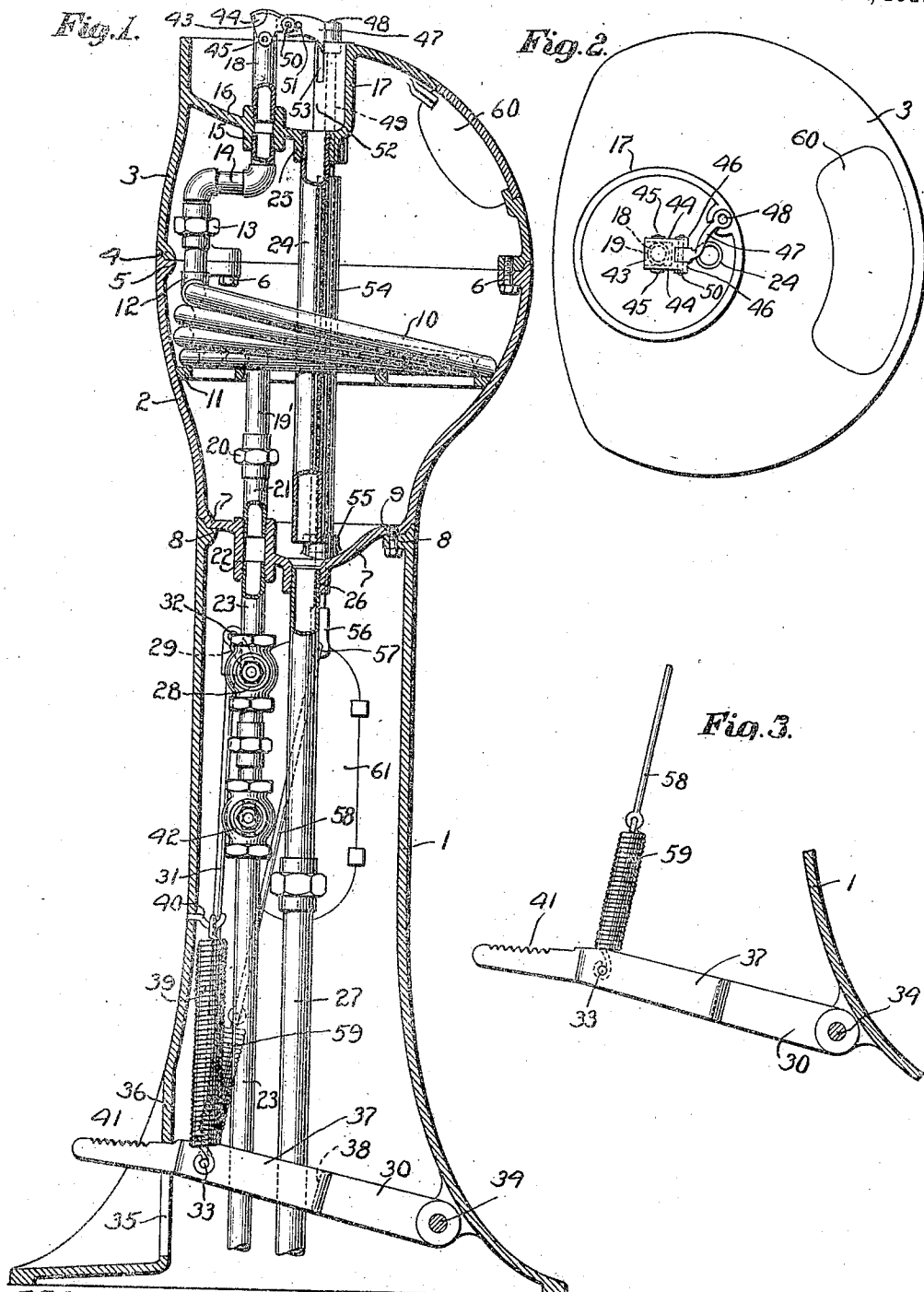


H. H. NEWCOMB.
 DRINKING FOUNTAIN.
 APPLICATION FILED OCT. 30, 1909.

1,006,870.

Patented Oct. 24, 1911.



Witnesses:

Carrie Lucina Barker,
 Lloyd Lubitz.

Inventor:

Harry Howard Newcomb,
 by Edward H. Palmer
 Atty.

UNITED STATES PATENT OFFICE.

HARRY HOWARD NEWCOMB, OF NEWTON, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO CORA AGNES BENNESON, OF CAMBRIDGE, MASSACHUSETTS.

DRINKING-FOUNTAIN.

1,006,870.

Specification of Letters Patent.

Patented Oct. 24, 1911.

Application filed October 30, 1909. Serial No. 525,526.

To all whom it may concern:

Be it known that I, HARRY HOWARD NEWCOMB, a citizen of the United States, residing at Newton, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Drinking-Fountains, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to drinking fountains, and more particularly to drinking fountains of the class described in my pending application Serial No. 487,212, filed April 1, 1909. As explained in the earlier application referred to, in all drinking fountains of the class described as heretofore used the water is allowed to flow freely and continuously, which is productive of great waste, and furthermore the nozzle from which the water issues is at all times fully exposed and accessible and therefore liable to become infectious.

One of the objects of the present invention is to overcome these and other objections.

The present invention as to some of its features is a development of that described in the pending application above referred to, and one of its objects is also to improve the general construction and to provide a fountain of the general character stated which shall be simple in construction and efficient in operation.

The various characteristics contributing to these ends will best be understood from the following specification and drawings of one embodiment of the invention, which in its true scope is definitely set forth in the claims.

In the drawings:—Figure 1 is a vertical sectional elevation taken slightly to one side of the center through the fountain from front to rear, showing the relative position of the parts when the fountain is not in use, certain parts being broken away; Fig. 2 is a plan view of the head; and Fig. 3 is a detail of the operating treadle and the spring connection of the latter to the cover operating rod.

In the preferred embodiment of the invention herein shown, the hollow column 1 supports the hollow head formed for convenience in two parts 2 and 3, provided respectively with inturned flanges 4 and 5 clamped firmly together by screw bolts 6 passing

through holes provided at suitable intervals in said flanges. Only two of said screw bolts 6 are shown, see Fig. 1. The lower part 2 of the head has a bottom wall 7, preferably cast integral therewith and resting at its edges upon the upper edge of the column 1 and upon an inturned flange 8 extending around the inside of said edge and slightly below the latter, the head portion 2 and column being firmly joined to one another by screw bolts 9 passing through holes provided at suitable intervals in the flange 8 and screwed into the bottom 7 of the head part 2, only one of said bolts being shown in Fig. 1. The contact surfaces of the flanges 4 and 5 and of the bottom wall 7 and the flange 8 are on a broken line having a portion extending obliquely inwardly and downwardly to provide a firm seat and close joint. The head is preferably of the general globular shape shown in Figs. 1 and 2, somewhat flattened at the front to permit closer approach to the fountain, when drinking. The head contains a flattened coil 10 resting upon a perforated plate 11 attached at its edges in any suitable manner to the inner wall of the part 2 of the head and adapted to sustain a sufficient quantity of ice for cooling purposes. The upper horizontally extending end of the coil is tapped into the lower horizontal arm of a tubular elbow piece 12, the vertical arm of which is connected by a screw-threaded tubular socket 13 with the vertical arm of a second tubular elbow piece 14, having its vertical arm tapped into a nipple 15 cast integral with the bottom wall 16 of a basin 17 provided at the top and at the front side of the part 3 of the head and preferably cast integral with the latter. Into the upper end of the nipple 15 is tapped a short tube 18 provided at its upper end with a suitable discharge nozzle 19. The upper edge of the basin 17 is preferably circular, as shown in Fig. 2, and the nozzle 19 is preferably located centrally thereof and somewhat above said edge for convenient access. The lower horizontal end of the coil 10 is tapped into a tubular elbow piece 19', the vertical downturned branch of which is connected by a screw-threaded socket 20 with the upper end of a tube 21 having its lower end tapped into the upper end of a nipple 22, preferably cast integral with the bottom wall 7 of the part 2 of the head. Into the lower end of the

nipple 22 is tapped the upper end of a supply pipe 23, which may be connected with any suitable water supply.

The upper end of a discharge pipe 24 is tapped into a nipple 25 preferably cast integral with the bottom of the basin 16, the pipe 24 extending down to bring its lower end within a short distance of the deepest portion of the bottom wall 7 of the part 2 of the head. This wall 7 is provided with an opening, preferably in line with the lower end of the pipe 24, in the form of a nipple 26, into which is tapped the upper end of a discharge pipe 27 which thus serves to drain both the basin 17 and the ice chamber.

A valve 28 of any usual and suitable construction is provided in the supply pipe 23, the operating arm 29 of said valve, being, in accordance with the present invention, connected directly to a treadle 30 by a link or rod 31 having its upper end pivoted at 32 to said valve operating arm 29 and its lower end pivoted at 33 to said treadle near the forward end thereof. The treadle 30 is pivoted at its rear end to the inner wall of the column 1 at 34, and its forward end extends through a vertical longitudinal slot 35 provided in the lower flattened portion 36 of the front wall of the column 1. The middle portion 37 of the treadle is yoke-shaped or longitudinally slotted at 38, in dotted lines, Fig. 1, to provide a passage for the pipes 23 and 27. A coiled spring 39 connected at its lower end to the treadle 30, as at 33, and at its upper end to a link 40 attached to the inner front wall of the column 1, normally maintains the treadle in raised position, with the valve operating arm 29 in the position shown in Fig. 1 and the valve closed, but downward pressure on the tread 41 of the treadle will, through the rod 31, swing the arm 29 downwardly to open the valve 28 and cause a flow of water from the nozzle 19. In order that the water may not be projected to too great a height above the opening in the nozzle 19, but only sufficiently high to enable a person to drink conveniently without touching said nozzle, a second valve 42 of any usual and suitable construction is provided in the supply pipe 23, which may be set by a key or other suitable tool to regulate the flow of water projected from the opening of the nozzle 19 when the valve 28 is opened, as above described.

The improved cover or protector for the discharge opening of the nozzle 19 and its improved operating means are as follows. In the preferred form shown and described herein, said cover or protector consists of a curved plate 43 adapted to completely cover the discharge opening of the pipe 18 and having ears 44 extending downwardly at opposite sides of said pipe and pivoted

thereto at 45. The ears 44 are provided with rearward extensions 46, 46 embracing the forward slotted end of an arm 47, somewhat offset, as shown in Fig. 2, and rigidly attached at its other end in any suitable manner to the reduced upper portion 48 of a vertical rod 49. A pin 50 having its ends mounted on the rearward extensions 46, 46 of the ears 44, 44 passes through the slot 51 in the forward end of the arm 47. The rod 49 is adapted to slide vertically in a vertical bearing 52 provided in the lateral wall of the basin 17, said bearing 52 being slotted vertically at 53, Fig. 1, to permit vertical movement of the arm 47. The rod 49 extends downwardly through a tube 54 having its lower end tapped into a nipple 55 provided in the bottom wall 7 of the part 2 of the head, said nipple and the bearing 52 thus guiding said rod 49 in its vertical movement. The top of the tube 54 extends above the level of the ice in the ice chamber. At its lower end below the bottom wall 7 of the part 2 of the head, the lower end of the rod 49 is provided with an enlarged end piece 56 pivoted at 57 to the upper end of a rod 58, extending diagonally downward toward the front of the fountain and having its lower end attached in any suitable manner to the upper end of a helical spring 59, the lower end of which is hooked to the pivot pin 33 on the treadle 30. A hinged door 60 is provided in the rear upper part 3 of the head and another hinged door 61 in the side wall of the column 1 to give access to the interior and to the parts contained in the head and in the column and to permit the introduction of ice into the former. Both doors are preferably provided with locks (not shown).

With the treadle 30 held in its raised position by the spring 39, as shown in Fig. 1, the rods 31, 58 and 49 will also be raised, the valve 28 being thus closed, as above described, and the plate 43 of the cover covering the discharge opening of the pipe 18, thus rendering said opening inaccessible and protecting the same from contamination. If the treadle be now depressed, the rod 31 on the one hand and the rods 58 and 49 on the other hand will be drawn downwardly, the last two through the spring 59, which is of sufficient strength not to yield, except in case of some obstruction being offered to the downward movement of said rods 58 and 49. By the first part of the downward movement of the treadle 30, therefore, the arm 47, being depressed with the rod 49 to which it is attached, will, through the pin and slot connection with the rearward extension of the cover for discharge opening of the tube 18, swing said cover downwardly about its pivot 45, thus uncovering said discharge opening. At about this time the arm 47 encounters the lower end wall of the slot

53, thus arresting further downward movement of said arm, cover, and of the rods 49 and 58, or any other means may be provided for this purpose, such as an adjustable collar (not shown) attached to the rod 49 at the required distance above the upper end of the tube 54. During this first part of the downward movement of the treadle 30, the valve operating arm 29 is swung downwardly, but the adjustment of the valve is such that the downward movement imparted to said arm 29 before the cover is withdrawn from the discharge opening of the pipe 18 is not sufficient to open the valves 28. By the continued depression of the treadle 30, however, the spring 59 yielding for that purpose, the valve 28 will be opened, thus causing the water to bubble up out of the discharge opening of the pipe 18 to a height previously determined by adjustment of the valve 42. The flow of water will continue as long as the treadle is maintained depressed, and a person standing in front of the fountain and operating the treadle can drink freely from the jet of water projected above the discharge opening of the pipe 18; without the lips, hands or any other part coming into contact with any part of the tube 18 or any other part of the fountain. On removing the foot from the treadle, the spring 39 will cause the latter to rise. By the upward movement of the treadle, owing to the contraction of the spring 59, which takes place during the first part of said upward movement, the rod 31 will be raised sufficiently to close the valve 28 and stop the flow of water before the plate 43 of the cover swings into position over the discharge opening of the tube 18. It will be obvious that various changes may be made in the details of the means herein shown for carrying the invention into practical effect, and it is to be understood that applicant does not regard himself as restricted or limited to these details, his invention in its true scope being definitely set forth in the claims.

What is claimed is:

1. In a drinking fountain of the class described, water supplying means comprising a pipe and a nozzle having a discharge opening for the water, means movable relatively to said nozzle to cover the discharge opening, water supply controlling means, and means first to cause relative swinging movement of said covering means and nozzle to uncover said discharge opening and then to actuate said water supply controlling means to produce a flow of water from said discharge opening.

2. In a drinking fountain of the class described, water supplying means, comprising a pipe and a nozzle having a discharge opening for the water, means movable relatively to said discharge opening to cover

the latter, water supply controlling means, and means first to actuate the latter to stop the flow of water from said discharge opening and then to impart relative swinging movement to said nozzle and covering means to cover said discharge opening.

3. In a drinking fountain of the class described, water supplying means comprising a pipe having a discharge opening for the water, a cover for said discharge opening movable to and from covering position, supply controlling means and means for first actuating said supply controlling means to stop the flow of water and then yieldingly moving said cover into covering position.

4. In a drinking fountain of the class described, water supplying means comprising a discharge opening for the water, supply controlling means, movable cover means for said discharge opening, and manually operable means for first withdrawing said cover means from said discharge opening and then actuating said supply controlling means to cause a flow of water from said discharge opening.

5. In a drinking fountain of the class described, water supplying means comprising a discharge opening for the water, supply controlling means, movable cover means for said discharge opening, and manually operable means for first actuating said supply controlling means to cut off the supply of water and then moving said cover means to cover said discharge opening.

6. In a drinking fountain of the class described, water supplying means comprising a discharge opening for the water, supply controlling means, movable cover means for said discharge opening, means for normally maintaining the supply controlling means in position to cut off the supply of water, means for normally maintaining said cover means in position to cover said discharge opening, and means for first withdrawing said cover means from said discharge opening and then actuating said supply controlling means to cause a flow of water from said discharge opening.

7. In a drinking fountain of the class described, water supplying means communicating with a source of water supply and provided with a discharge opening, a cover movable into and out of a position directly over said discharge opening, supply controlling means, operating means for said cover, operating means for said supply controlling means, and a common actuator for both said operating means.

8. In a drinking fountain of the class described, water supplying means comprising a pipe and a discharge opening for the water, a cover for said discharge opening movable to and from covering position, supply controlling means, and means for first actuating said supply controlling means to

stop the flow of water and then moving said cover into covering position.

9. In a drinking fountain of the class described, water supplying means provided with a discharge opening, supply controlling means, a cover for said discharge opening movable into and out of a position directly over said discharge opening, means for normally maintaining the supply controlling means in position to stop the flow of water and for normally maintaining said cover in position to cover the discharge opening, means for operating said cover to withdraw the same from said discharge opening, means for operating the supply controlling means to cause a flow of water from said discharge opening, and a common actuator for both said operating means.

10. In a drinking fountain of the class described, in combination, a coil communicating at one end with a source of water supply, a discharge nozzle connected to the other end of said coil, a movable cover for said nozzle, actuating means and intermediate connections to move said cover into operative position, actuating means and intermediate connections to move it into inoperative position, and water supply controlling means.

11. In a drinking fountain of the class de-

scribed, water supplying means comprising a nozzle having a discharge opening for the water, supply controlling means, means adjacent the discharge opening for normally protecting said discharge opening from contamination, means for operating said protecting means to render the same temporarily inoperative, means for operating said supply controlling means to cause a flow of water from said nozzle, and a common actuator for both said operating means.

12. In a drinking fountain of the class described, water supplying means comprising a nozzle having a discharge opening, water supply controlling means, means for directly covering said opening to protect the same from contamination, operating means for producing relative movement of said covering means and nozzle to cause said opening to be uncovered, means for operating said water supply controlling means to cause a flow of water from said nozzle, and a common actuator for both said operating means.

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

HARRY HOWARD NEWCOMB.

Witnesses:

ELIZABETH FULLERTON,
JAMES B. PICKETT.