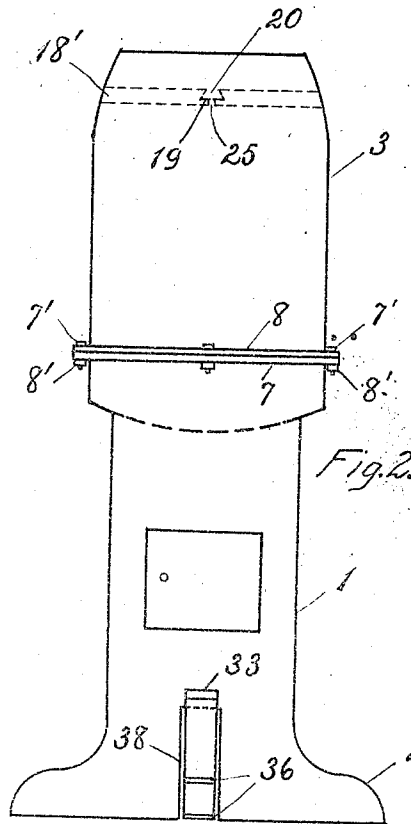
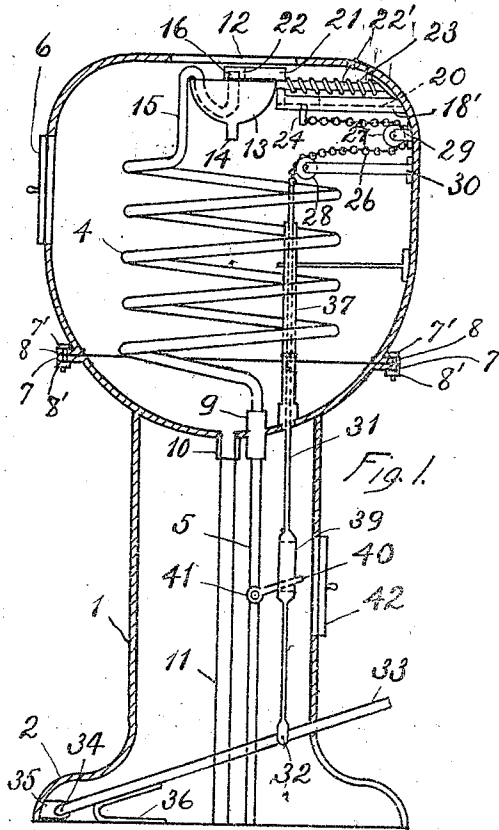


1,006,869.



Carrie S Barker
 Sigrid Libby.

INVENTOR,
Harry Howard Newton.
BY Edward H. Palmer.
ATTORNEY.

UNITED STATES PATENT OFFICE.

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

DRINKING-FOUNTAIN.

1,006,869.

Specification of Letters Patent.

Patented Oct. 24, 1911.

Application filed April 1, 1909. Serial No. 487,212.

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 those in which the water is intended to be drunk directly from the stream as it issues from the nozzle, without the use of any drinking vessel and without the mouth contacting with the nozzle, the object being to thus avoid the communication of disease.

While drinking fountains of the type as heretofore constructed have met the requirements to a certain extent, yet they are open to certain objections, and in some respects fail of the accomplishment of the object for which they are intended. For example, in all such drinking fountains, as heretofore used, the water is allowed to flow freely and continuously, thereby occasioning great waste. Furthermore, the nozzle is at all times fully exposed and therefore liable to become infectious from handling, for example, by persons afflicted with contagious diseases or from the introduction therein of dirt or other unclean matter.

One of the objects of my invention is to provide a drinking fountain of simple construction and operation, in which the above objections are overcome. These and other objects and features of my invention will best be understood from the following description taken in connection with the accompanying drawings of a drinking fountain embodying one form of my invention and selected for the purpose of illustration, the scope of the invention being more particularly pointed out in the appended claims.

Referring to the drawings:—Figure 1 is a front elevation of the drinking fountain, embodying one form of the invention, the frame being shown in section; Fig. 2 is a side elevation of the drinking fountain shown in Fig. 1; and Fig. 3 is a plan view thereof.

The frame comprises a column 1 having a circular base 2 and supporting a head 3 of any suitable shape. In the embodiment

shown of the invention, this head is intended to contain a suitable coil 4 connected at its lower end to a supply pipe 5 leading to any suitable water supply. The head 3 is of sufficient size to provide for the packing of the coil 4 in ice and is provided with a door 6 for that purpose. The head is preferably of a general globular shape, flattened at the front and rear ends, as shown in Fig. 2, to facilitate access to the nozzle when standing at the front of the fountain. Preferably, as shown, the column and lower portions of the head are cast in a single piece, the upper portion being cast in another, Figs. 1 and 2, the two castings being provided with flanges 7 and 8, joined by bolts 7', 8', any suitable packing being interposed to render the joint water-tight. The lower end of the coil 4 is preferably tapped into the upper end of a nipple 9 cast integral with the bottom of the head 3, and having tapped into its lower end the upper end of the supply pipe 5. A similar nipple 10 is provided into which is tapped the upper end of a drainage pipe 11. In the top of the head 3 there is provided an opening 12, preferably circular in shape, immediately beneath which is placed a basin 13, also preferably circular, having a discharge tube 14 which may discharge directly into the ice receiving space, as shown, or may be extended to discharge into the discharge pipe 11. The upper portion of the coil 4 terminates in a tube 15 which is bent over the edge of the basin 13, continued down, as shown, approximately to its center, and then rises vertically, being terminated by a suitable nozzle 16 situated just below the opening 12 in the head 3 and preferably in the center thereof. The basin 13 is supported by two brackets 17, 18, cast integral with the head or suitably attached to the inner wall thereof, Fig. 3.

The present invention contemplates the provision of means for covering the nozzle 16 and means to move said cover to and from operative position. To this end, in the embodiment of the invention shown, a wide bracket 18' is attached to the inner wall of the head 3, having a dove-tailed guide or groove 19, in which slides a dove-tailed slide 20, mounted on the outer end of which is a rectangularly bent carrier 21, having at its free end a cover 22 for the nozzle 16 with downturned lateral flanges.

A rod 22', rigidly attached by one end in any suitable manner to the inner wall of the head 3, has its free end passing through a circular opening in the upright portion of the rectangular carrier 21, so that the latter is in sliding engagement with said rod 22'. A helical spring 23 surrounds said rod 22' between the carrier 21 and the inner wall of the head 3, and tends to move the carrier 21 to the left, Fig. 1, to bring the nozzle cover 22 into operative position. From the under side of the slide 20 there projects downwardly a pin 24, said pin projecting through a longitudinal slot 25, Fig. 2, in the under side of the guide groove 19 in the bracket 18, and having attached thereto one end of a chain 26 which passes over two guide rolls 27, 28 mounted in the forked ends of brackets 29, 30, respectively, rigidly attached in any suitable manner to the inner wall of the head 3. The other end of the chain 26 is herein attached to the upper end of a rod 31, passing through a guide opening therefor in the bottom of the head 3 and having its lower end pivoted at 32 to a treadle 33, pivoted at 34 to an ear 35 rigidly attached in any suitable manner to the base 2 or cast integral therewith. A leaf spring 36 tends to keep the treadle 33 normally raised. That part of the rod 31 extending upwardly into the head 3 is preferably contained in a loosely fitting tube 37, having its lower end attached in suitable water-tight manner to the bottom wall of the head 3, and its upper end extending above the level of the ice contained in the head 3, to prevent leakage. The free end of the treadle plays in a suitable opening 38 provided in the base 2 of the column 1, the end of the treadle not extending beyond the periphery of the base 2 when in its lowered position.

From the construction described it will be clear that on depression of the treadle 33, the rod 31, being drawn down, will cause the chain 26 to draw the slide 20 to the right, in Fig. 1, thus withdrawing the nozzle cover 22 from the nozzle 16 against the tension of the spring 23. On release of the treadle the latter will be raised by the spring 36 and the slide 20 will be pushed to the left, Fig. 1, by the spring 23, thus covering the nozzle 16. If desired, the spring 23 could be chosen sufficiently strong to raise the treadle, as well as to move the slide 20, and the spring 36 dispensed with, but the construction embodying both springs is preferred, as thereby the spring 23 may be chosen of sufficient strength only to maintain the necessary tension on the chain 26 and effect the required movement of the slide 20, without making the movement of the latter too violent. If desired, a collar (not shown) may be adjustably clamped to the rod 22' as by a set screw (not shown) for the abutment for the right end of the

spring 23, thereby providing for adjustment of the tension of the latter, as desired. An adjustable stop (not shown) may also be provided to limit, as desired, the downward movement of the treadle 33.

Means are provided to control the flow of water. Herein said means consist of a valve 41 provided in the supply pipe 5. Said valve may be of any suitable construction, consisting preferably of a spring valve, of usual construction, that is to say one which is normally maintained closed by a spring to cut off the water supply. The valve in itself forms no part of the invention, and will not be more fully described. Means are also provided for opening and closing the valve, said means being preferably herein controlled by the treadle 33, the arrangement being preferably such that when the treadle is depressed, the nozzle cover 22 will first be withdrawn from the nozzle 16 and then the valve opened, while, when the treadle is allowed to rise, the valve 41 will first be closed and then the cover moved back over the nozzle 16. To this end the valve controlling arm 40 engages a longitudinal slot 39 in the rod 31, as shown in Fig. 1. In said figure the arm 40 is shown as engaging the lower end of the slot 39 and at the limit of its upward movement, the valve being closed, the treadle raised and the nozzle 16 being covered by its cover 22. With the parts in that position, if the treadle be depressed, the lost motion formed by the slot 39 will permit the nozzle cover 22 to be drawn sufficiently to the right, Fig. 1, to uncover the nozzle 16, whereupon in the further downward movement of the treadle the upper end of the slot will meet the valve controlling arm 40 and turn the latter downward to open the valve, the cover 22 completing its movement to the right. If the treadle be allowed to rise the spring (not shown) in the spring valve will cause the arm 40 to follow the upper end of the slot 39 in its upward movement until said arm reaches the limit of its upward swing, the valve being thus closed during the first part of the movement of the slide 20 to the left, Fig. 1, and before the nozzle cover 22 reaches the nozzle, whereupon in the continued upward movement of treadle the nozzle cover will complete its movement to cover the nozzle 16.

When conditions permit, the coil 4 may be placed in a space provided therefor underground. The valve 41 and associated parts are readily accessible through a door 42 provided in the side of the column 1. Instead of a spring valve, an ordinary valve may be used, in which case the arm 40 will be connected to the bottom of the head 3 by a helical contraction spring (not shown) to maintain the arm 40 normally in raised valve closing position.

One advantage offered by the present invention consists in the fact that the water supply is at all times under control, the flow of water being cut off at all times except when a person is actually using the fountain. This represents a great saving in water, a great recommendation in any case, but more particularly where there is a limited supply. Another advantage resides in the fact that, except when actually in use, the nozzle of this fountain is securely covered, thereby protecting it from dust or being tampered with in any way, shape or manner. The possibility of the nozzle's becoming infectious from street dust, handling by those afflicted with contagious diseases, or from the introduction therinto of unclean matter by children or others, more particularly when set up in public places, is therefore precluded. One of the great objections to public drinking fountains, the transmission of disease, is therefore avoided by the drinking fountain constructed in accordance with this invention, said fountain being hygienic in a high degree.

While details of mechanical devices have been shown which have been found well adapted to carry the invention into effect, it is to be understood that said invention is not restricted or circumscribed thereby, the essentials of the invention being defined in the claims by intentionally broad language comprehensive of various forms or embodiments of the invention.

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

1. In a drinking fountain of the class described, water supplying means comprising a discharge opening, a cover for said discharge opening connected to a slide, a treadle, and connections intermediate said treadle and slide whereby operation of said treadle will actuate the slide to withdraw said cover from operative position.

2. In a drinking fountain of the class described, water supplying means comprising a pipe, a nozzle, a movable cover for said nozzle, a slide, treadle controlled means for moving said slide to place the cover in position to cover the nozzle, and treadle actuated means reversely to move said slide to withdraw said cover from said position.

3. In a drinking fountain of the class described, water supplying means comprising a pipe and a discharge opening, a valve in

said pipe, a movable cover for said discharge opening, and manually controlled connections between said valve and cover, comprising a lost motion, for operating said valve and moving said cover.

4. In a drinking fountain of the class described, water supplying means comprising a pipe and a discharge opening, a basin surrounding said discharge opening, a casing surrounding said pipe and said basin, an opening in said casing located above said basin and nearer that side of said casing at which a person stands when drinking, a movable cover for said discharge opening, supply controlling means, and means operable by the person drinking for moving said cover to and from covering position and actuating said supply controlling means.

5. In a drinking fountain of the class described, water supplying means including a discharge opening, a cover for said discharge opening, means for moving said cover into covering position, water supply controlling means, and means for actuating said supply controlling means to stop the flow of water and for controlling the movement of said cover by said cover moving means.

6. In a drinking fountain of the class described, water supplying means including a discharge opening, a cover for said discharge opening, yielding means for moving said cover into covering position, water supply controlling means, and means for actuating said supply controlling means to stop the flow of water and for controlling the movement of said cover by said cover moving means.

7. In a drinking fountain of the class described, water supplying means including a nozzle having a discharge opening, means for covering said opening, means for relatively moving said covering means and nozzle to cover said opening, water supply controlling means, and means for actuating said controlling means to stop the flow of water and for controlling the relative movement of said nozzle and covering means by said moving means.

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

HARRY HOWARD NEWCOMB.

Witnesses:

CHARLES E. DAVIS,
WARREN J. BALDWIN.