

J. C. DAVIS.
 DRINKING FOUNTAIN.
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1,047,762.

Patented Dec. 17, 1912.

Fig 1

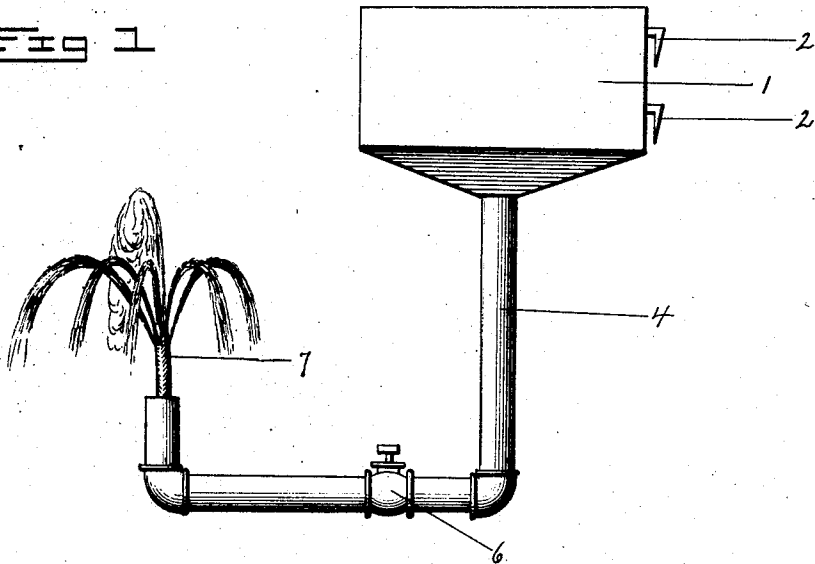


Fig 2

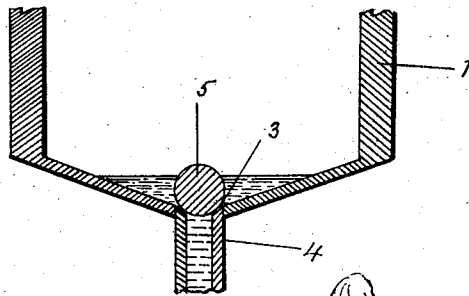


Fig 3

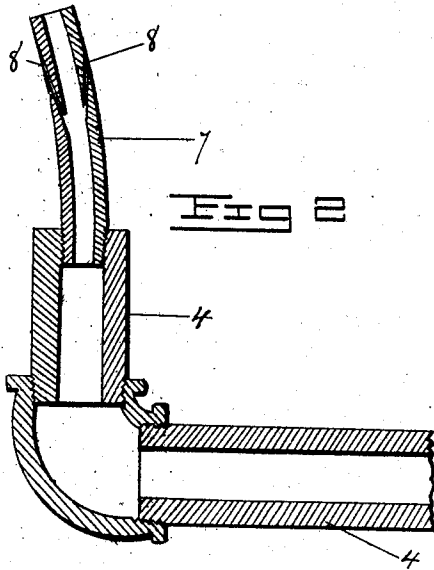
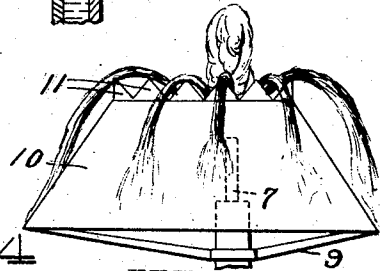


Fig 4



WITNESSES.

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DRINKING-FOUNTAIN.

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To all whom it may concern:

Be it known that I, JOHN C. DAVIS, of Dighton, in the county of Bristol and Commonwealth of Massachusetts, have invented a new and useful Improvement in Drinking-Fountains; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

My improvement relates to the kind of drinking fountain that throws a small stream of water from a nozzle of reduced size in such manner that a person may conveniently catch said stream in his mouth without bringing his lips into contact with the nozzle itself.

An important object of my invention is to provide a drinking fountain of this type having a drinking jet and means for preventing the user touching the drinking outlet with his lips without wetting his face. This object is accomplished in a very simple and efficient manner by providing a second supply of liquid so positioned as to wet a person before his face can contact with the means for supplying the drinking jet. Preferably and as shown I surround the drinking stream with a water curtain or screen comprising a number of small jets of water encircling the drinking stream and separate therefrom that rise above the drinking stream outlet or nozzle but not so high as the drinking stream. A user may apply his mouth to the top of the stream and drink without interference from the water curtain, but should he lower his head and approach too near, or touch the nozzle, the jets of water forming the curtain or screen will be discharged against his face. This curtain of jets is in so far independent of the drinking stream that any interference with or interruption to the flow of the jets of the curtain will not destroy the drinking stream. A flexible nozzle may be employed that can be bent so as to direct the stream issuing therefrom in the direction most convenient for drinking, the water pressure and the position of the fountain being taken into account. In places where there is no water service I provide a storage tank that may be employed with success with my improved device, the tank being so constructed that the pressure of water supplied to the fountain may be as high and as uniform as pos-

sible for the longest period of use, considering the capacity of the tank, and means connected with the tank whereby the water may be automatically shut off therefrom when this period is past.

In the accompanying drawings, Figure 1 is a side elevation of an arrangement embodying my invention. Fig. 2 is an enlarged cross-sectional view of the nozzle and the pipe immediately adjoining it. Fig. 3 is an enlarged cross sectional view of the bottom of the storage tank and the top of the outlet pipe. Fig. 4 is a detail view illustrating a shield within which the nozzle may be disposed.

In the drawing, 4 indicates the water supply pipe to which is attached a means for delivering a drinking stream, this means being shown in the drawing as a nozzle 7 in the form of a tube. The nozzle or tube 7 is preferably somewhat flexible having a small bore therethrough which serves as a continuation of the bore of the pipe 4. The diameter of the bore in tube 7 is regulated in accordance with the water pressure and is made sufficiently small to allow the drinking stream issuing therefrom to rise to a height of from six to eight inches, so as to permit a person to receive the same in his mouth.

According to the example of my invention shown in the drawing, in the walls of the nozzle or tube 7 are several minute holes leading upward and outward from the interior, so arranged about the tube as to throw small diverging streams or jets of water up around the central stream issuing from the main outlet of the nozzle and separated from it. These side holes are so small that the streams or jets issuing therefrom will not rise to the full height of the main stream, but will rise sufficiently high to strike a person's face if he tries to place his lips on or too near the outlet of the nozzle 7 from which the drinking stream issues.

My invention, as hereinbefore described, is one which may be employed without danger of physical injury, the discharge of water to wet the person being ordinarily sufficient. But if desired, although I make no claim thereto, a further but elective guard may be used. For example, brackets 9 may be secured to the pipe 4 and support a shield 10, larger at the base than at the top and having around the top edge a row of py-

ramidal pointed projections 11 to prevent anyone from trying to put his lips over or through the opening in said top. This opening is of such size that it is impossible for one to get his lips therethrough and touch the nozzle, while the spread of the walls of the shield 10 will prevent a person from placing his lips around said shield.

In Fig. 1 of the drawing, merely for illustrative purposes, I have in a general way represented the drinking stream and several small jets of water; and in Fig. 4 of the drawing show a similar representation in an arrangement in which the shield 10 may be utilized.

The pipe 4 may be connected to the service pipe of a water system or, as shown in the drawing, to a portable storage tank 1 provided with clamps or hooks 2 for hanging it on a wall. The bottom of the tank slopes downwardly from all sides to a common point 3 where the upper end of the supply pipe 4 opens into the tank. Within the tank is a float valve 5 in the form of a ball made of wood or other buoyant material that is adapted to close the upper end of the pipe 4 formed with a seat for this purpose. The purpose of this ball is to tightly close the inlet to the pipe 4 as soon as almost all of the water is run out of the tank, immediately shutting off the supply to the fountain; otherwise, the fountain would continue to run as the water sank lower and lower in the pipe 4, the pressure of course, diminishing gradually. The pipe 4 is carried downward a distance necessary to obtain the required pressure of water at its lowest point and then it is carried to the place desired for drinking and curved upward again to receive the nozzle or tube 7.

At any convenient place in the pipe 4 is placed an automatic closing valve 6 of any desired construction.

In operating the invention in connection with the storage tank, the tank is filled with water, the pipe 4, being of such length that it will afford sufficient pressure to force the main or drinking stream from the outlet of the nozzle 7, seven inches or so above the top of the shield 10, and the surrounding small streams or jets of the curtain or screen five or six inches or so above said shield. When a person wishes to drink he opens the valve 6, lowers his lips and drinks from the top of the main stream. When the tank is nearly empty it is automatically closed by means of the ball valve 5 as before explained.

If the device be used in connection with a system of continuous water pressure, as a city water plant, any suitable water pressure regulator may be inserted in the pipe 4 to properly regulate the height of the drinking stream and the projecting jets issuing from the nozzle 7.

What I claim is:

1. A nozzle adapted to furnish a drinking jet or bubble, and means to furnish a second supply of liquid so positioned as to wet a person before his face can contact with the nozzle.

2. A drinking fountain containing means for delivering a drinking stream and containing also a second means adapted to emit water to wet a person before his face can contact with the first-named means.

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Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."