

W. MUELLER.
 DRINKING FOUNTAIN.
 APPLICATION FILED JULY 27, 1911.

1,038,937.

Patented Sept. 17, 1912.

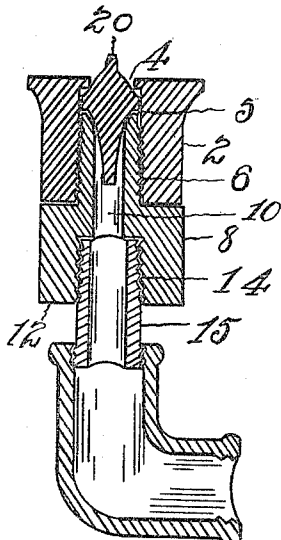


FIG. 2.

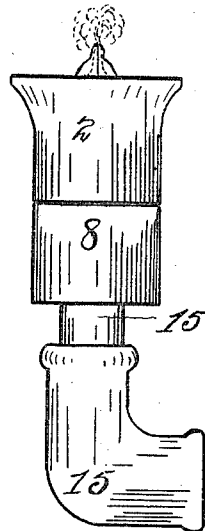


FIG. 1.

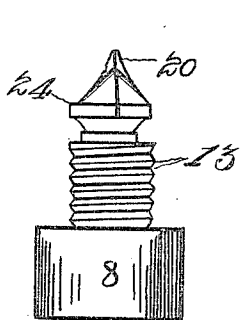


FIG. 3.

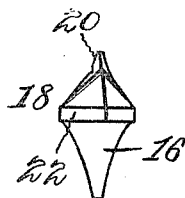


FIG. 4.

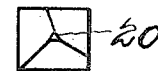


FIG. 5.

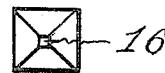


FIG. 6.

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DRINKING-FOUNTAIN.

1,038,937.

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To all whom it may concern:

Be it known that I, WILLIAM MUELLER, a citizen of the United States, and resident of the city and county of Dubuque and State of Iowa, have invented certain new and useful Improvements in Drinking-Fountains, of which the following is a specification.

In the practical use of nozzles or mouth-pieces for drinking fountains, where the nozzle is in the form of a cup or hollow receptacle the water supply has frequently been polluted and rendered unsanitary by tobacco or other filthy substances collecting in the cup, either through mistake or intent; and the object of my invention is to do away with this cup or receptacle and provide a nozzle in which there shall be no space for the collection of foreign matter and that shall furnish the water directly from the supply and thus prevent any possibility of pollution.

A further object is to economize in the use of water whereby it may be adapted to be used on railway trains in connection with the usual tanks and in numerous other places where the supply of water is limited. The manner in which I accomplish this, will be fully described and set out in the following specification when read with reference to the drawings accompanying the same and forming a part hereof.

Figure 1 is a perspective view of the nozzle attached to the water supply. Fig. 2 is a vertical section of Fig. 1. Fig. 3 is a perspective view of the coupling with the water controlling member therein. Fig. 4 is a perspective view of the water controlling member. Fig. 5 is a top view of Fig. 4. Fig. 6 is a bottom view of Fig. 4.

Like characters of reference denote corresponding parts in each of the figures.

Having reference to the drawings, 2 is the body of the nozzle which is hollow and preferably in the form of an inverted truncated cone, as shown in Fig. 1 and provided in the top with a round opening 4 and a larger opening 5 extending through the remainder of the nozzle. Most of this opening is provided with screw threads 6. Beneath the nozzle 2 is located a hollow coupling member 8 which is provided at the upper part with screw threads 13 around the outer end and the lower end 12 is supplied with screw threads 14 around the inside for removably securing it to the water supply pipe 15.

In the top of the coupling member 8 is placed one end 16 of the water controlling member 18, the opposite end 20 of which projects through the round opening 4 in the nozzle. This member 18 is formed with three sides converging to the end 20 where it approaches to a point though slightly flattened and two sides preferably curved in one direction and the third side curved in the opposite direction. The lower part is of pyramidal shape having four sides converging toward the end 16 and between the ends 20 and 16 the central part 22 is preferably square for a short space sufficient to substantially fill the space between the top of the coupling member 8 and the top of the nozzle on the inside, with the corners 24 of the member 18 substantially in contact with the inner side of the nozzle, leaving only sufficient space to dispose of the water that is delivered up through the coupling member along the four lower sides of the member 18 and to direct it up through the opening 4 along the three sides of said member 18. The member 18 is set loosely between the coupling and the nozzle and the point 20 projects through the opening sufficiently to prevent any mischievous person, with his fingers, from stopping the flow of water through the opening 4 or directing it sidewise or causing a sudden and increased flow of water in other nozzles attached to the same water supply.

In operating my device the coupling member 8 is screwed upon the supply pipe 15 by the threads 14 and the end 16 of the water controlling member 18 is inserted in the opening 10 in the coupling. Then the nozzle 2 is screwed down around the coupling by the threads 6 until the end 20 of the member 18 projects some distance through the opening 4 in the nozzle and the end 16 projects down into the opening 10 in the coupling and the corners 24 of the member 18 contact or nearly contact with the inner surface of the nozzle 2. The water is then turned on and strikes the end 16 of the member 18 and passes up along the four sides of the member striking the inner surface of the sides of the nozzle 2, then up between the nozzle and the narrow space of the member 18 between its corners 24, then up along the three sides of the member 18 and out at the top 20 in three jets of water striking each other at an angle and spraying out as shown in Fig. 1.

It will be seen by this mode of construction of the water controlling member 18 and its loose position in setting, whereby it practically fills the space from the top of the coupling member to the opening except just sufficient for permitting the water to pass up and out at the opening, that there will be no space into which any foreign matter can be deposited, since the space in the nozzle is very small and the force of the water around the different sides 18 being under pressure will prevent any foreign matter collecting. Further it will be seen that it will be very difficult for children to stop the water and direct it in a side stream, for the purpose of shooting it at their companions, as the point 20 of the member 18 projects sufficiently out to prevent such action.

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

1. In a device of the character described, a nozzle provided with an opening through the top, a supply pipe, a coupling to couple the nozzle to the supply pipe, and a water controlling member larger at the center and tapering toward each end and having at all times one end projecting into the coupling and the other end through the opening in the nozzle and its sides substantially filling the space in the nozzle above the coupling.

2. In a device of the character described, a hollow nozzle provided with a circular opening in the top, a supply pipe, a coupling to couple the nozzle to the supply pipe, and a water controlling member having one end projecting into the coupling and the other end formed into three converging sides and projecting through the opening in the nozzle and the body of the member nearly filling the inside of the nozzle above the coupling.

3. In a device of the character described,

a hollow nozzle having a circular opening through the top, a supply pipe, a coupler between the supply pipe and nozzle and provided with means for coupling them together, and a water-controlling member having a square body and pyramidal ends, one of said ends inserted in the coupling and the other slightly curved and projecting some distance through the opening in the nozzle.

4. In a device of the character described, a hollow nozzle provided with a circular opening in the top, a supply pipe, a coupling to couple the nozzle to the supply pipe, and a water controlling member formed with a square body with one end converging along four sides toward a point and inserted in one end of the coupling and the other end converging on three sides to nearly a point and projecting through the opening in the nozzle and the corners of the body closely engaging the inside of the nozzle and substantially filling the space in the nozzle above the coupling.

5. In a device of the character described, a water supply, a nozzle having an opening therethrough smaller at the upper end, a coupling surrounding the water supply at the base of the coupling and the upper end of the coupling screwed into the nozzle, and a water controlling member at all times nearly contacting with the inner surface of the nozzle with one end projecting some distance through the opening in the top of the nozzle and the other end projecting into the coupling and held in such position by the nozzle and coupling.

In testimony whereof, I affix my signature in the presence of two witnesses.

WILLIAM MUELLER.

Witnesses:

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