O. SMITH.

DRINKING FOUNTAIN.

APPLICATION FILED OCT. 12, 1910.

986,775.

Patented Mar. 14, 1911.

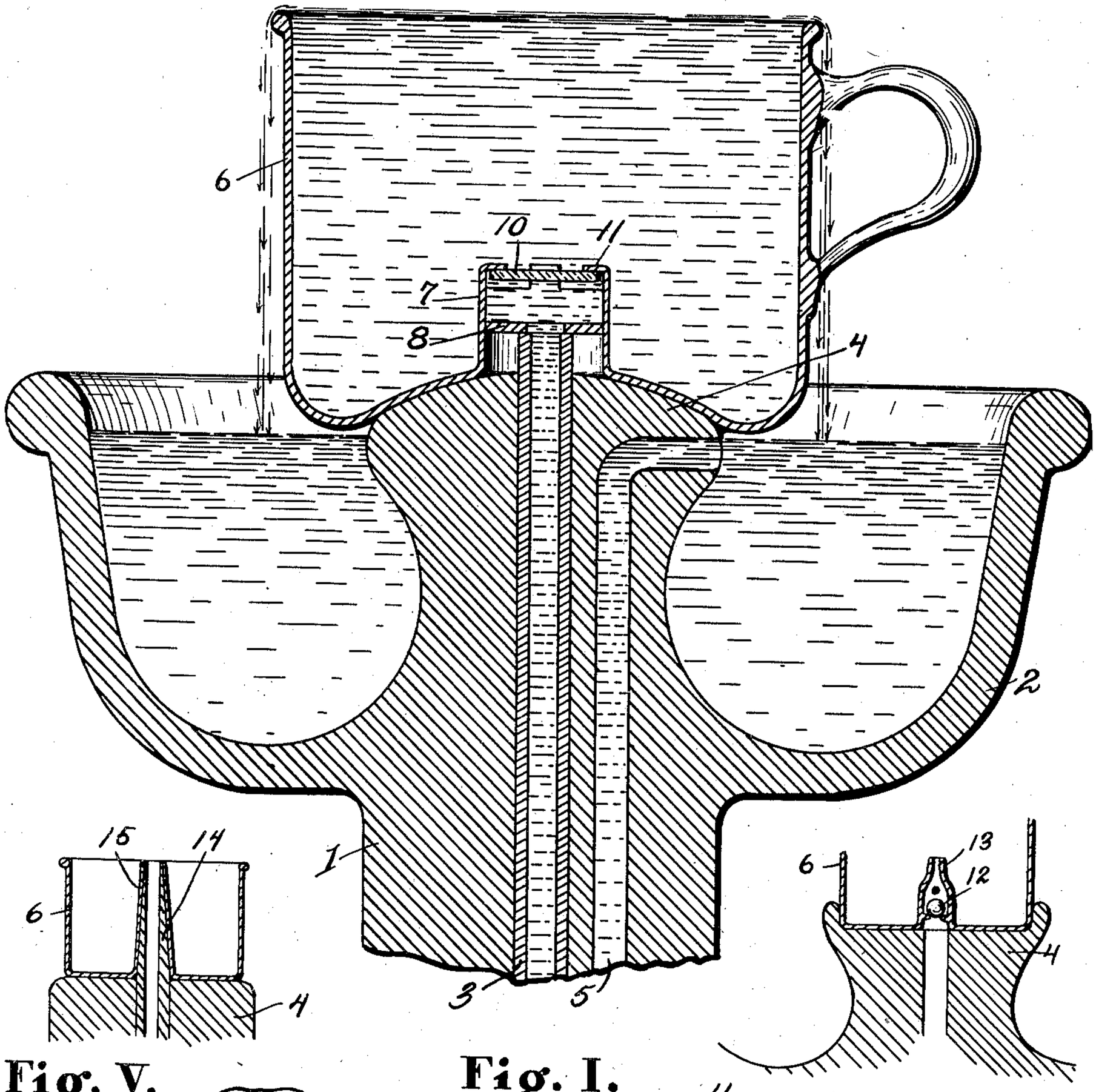

Fig. I.

Fig. V.

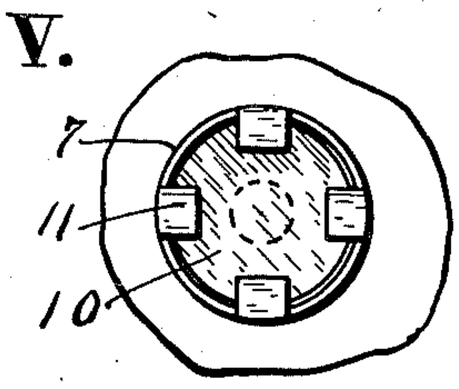

Fig. II.

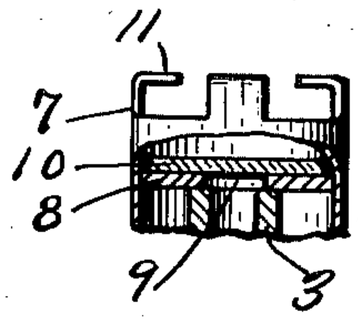

Fig. IV.

Fig. III.

Witnesses

L. G. Greenfield

M. L. Glasgow.

Inventor

Ama Smith

By Chappell & Earl

Attorneys

UNITED STATES PATENT OFFICE.

OMA SMITH, OF THREE RIVERS, MICHIGAN.

DRINKING-FOUNTAIN.

986,775. Specification of Letters Patent. Patented Mar. 14, 1911.

Application filed October 12, 1910. Serial No. 586,712.

To all whom it may concern:

Be it known that I, OMA SMITH, a citizen of the United States, residing at Three Rivers, Michigan, have invented certain new and useful Improvements in Drinking-Fountains, of which the following is a specification.

This invention relates to improvements in drinking fountains.

Sanitary drinking fountains, as ordinarily constructed, are not adapted for the use of very young children, and, further, water cannot be obtained therefrom in cups for the use of persons who are unable to assume the position necessary to drink from the fountain.

It is the main object of this invention to provide sanitary drinking fountains having a sanitary cup which may be used as an ordinary cup.

Further objects, and objects relating to structural details will definitely appear from the detailed description to follow.

I accomplish the object of my invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A structure which is a preferred embodiment of my invention is clearly illustrated in the accompanying drawing, forming a part of this specification, in which:

Figure 1 is a detail vertical section of a fountain embodying the features of my invention, the valve being shown open, or in the position it assumes when the cup is in position on the fountain and the fountain in operation. Fig. 2 is a detail plan view showing details of the inlet valve of the structure shown in Fig. 1. Fig. 3 is a detail side elevation of the inlet valve, of the structure shown in Fig. 1 with the valve in its closed position. Fig. 4 is a detail vertical section of a modified construction, the modifications being mainly in the style or form of the fountain proper. Fig. 5 is a similar view of another modification.

In the drawings, similar reference characters refer to similar parts throughout the several views and the sectional views are taken looking in the direction of the little arrows at the ends of the section lines.

Referring to the drawing, 1 represents the fountain, and 2 the catch basin. The supply pipe 3 is arranged centrally through the standard and projects above the fountain head 4. A discharge pipe 5 is provided for the basin. The supply pipe 3 preferably projects above the fountain head, as illustrated. This head is in the structure of Fig. 1, convexed to center and support the cup 6, the bottom of the cup being convexed to fit the head. The cup is provided with an inlet valve, preferably consisting of a tubular casing 7 centrally located, adapted to receive the upper end of the inlet pipe. This casing is provided with a diaphragm-like valve seat 8, having a central inlet port 9 therein. The valve 10 is preferably a disk formed of glass, as this does not corrode and forms a good joint with the flat valve seat. The casing is provided with inturned valve-retaining fingers 11 at its upper end.

When the cup is removed, the fountain may be used as an ordinary jet or flowing fountain. When the cup is in position, the water from the supply pipe is discharged through the cup and flowing over its edges, keeps it properly flushed and cleansed. When the cup is lifted from the supply pipe, the valve automatically closes and the cup may be used as an ordinary drinking cup.

In the modified construction shown in Fig. 4, the fountain head is slightly modified, this figure showing the adaptation of my invention to different forms of fountains. The valve 12 in this structure is a ball valve.

In the modification of Fig. 4, the valve casing 13 is extended up to provide a discharge nozzle for the supply pipe and delivers the water so that the cup need not be removed when the fountain is used as an ordinary fountain.

In the modification shown in Fig. 5, the supply pipe is provided with a delivery tip 14 and the cup with a central conical portion 15 adapted to receive the tip so that the water is delivered in a jet when the cup is in position. This central portion 15 also obviates the necessity of an inlet valve, as will be obvious.

Other modifications will be obvious to those skilled in the art to which this invention relates.

My improved fountain possesses all the advantages of the common jet or flowing fountain, with the additional advantage that a sanitary cup is provided for the use of children and others who cannot assume the position necessary to drink from the flowing fountain.

Having thus described my invention, what

I claim as new and desire to secure by Letters Patent is:

1. The combination with a fountain having a convex head and a supply pipe projecting from said head, of a cup having a convex bottom provided with a central tubular upwardly-projecting valve casing adapted to receive said supply pipe, said casing being provided with a diaphragm-like valve seat having a central port therein arranged to rest on the upper end of said supply pipe and provided with inturned valve retaining fingers on its upper edge; and a disk valve arranged in said casing.

2. The combination with a fountain having a convex head and a supply pipe projecting from said head, of a cup having a convex bottom provided with a central upwardly-projecting valve casing adapted to receive said supply pipe, and a check valve arranged in said casing.

3. The combination with a supply pipe, of a cup having a tubular upwardly-projecting valve casing on its bottom adapted to receive said pipe, said casing being provided with a diaphragm-like valve seat having a central inlet port therein adapted to rest on the upper end of said supply pipe and with inturned valve retaining fingers on its upper edge; and a disk valve arranged in said casing.

4. The combination with the supply pipe, of a cup having a valve casing in its bottom adapted to receive said supply pipe, and a check valve in said casing.

5. The combination with a supply pipe, of a cup having an inlet valve in its bottom, and means for supporting said cup to receive the water from said supply pipe through said inlet valve.

6. The combination with a supply pipe, of a cup having an inlet valve in its bottom, said cup being adapted to be arranged over said supply pipe, and when in position to serve as a discharge for the pipe.

7. The combination with the fountain supply pipe, of a portable cup having an inlet in its bottom, said cup being removably arranged on said pipe and adapted when arranged on said pipe to serve as a fountain cup and when removed to serve as an ordinary drinking cup.

8. A fountain comprising a portable discharge cup, said discharge cup being readily removable and being adapted when removed to be used as an ordinary drinking cup.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses.

OMA SMITH. [L. S.]

Witnesses:
FRANC L. BURROW,
H. I. WRIGHT.