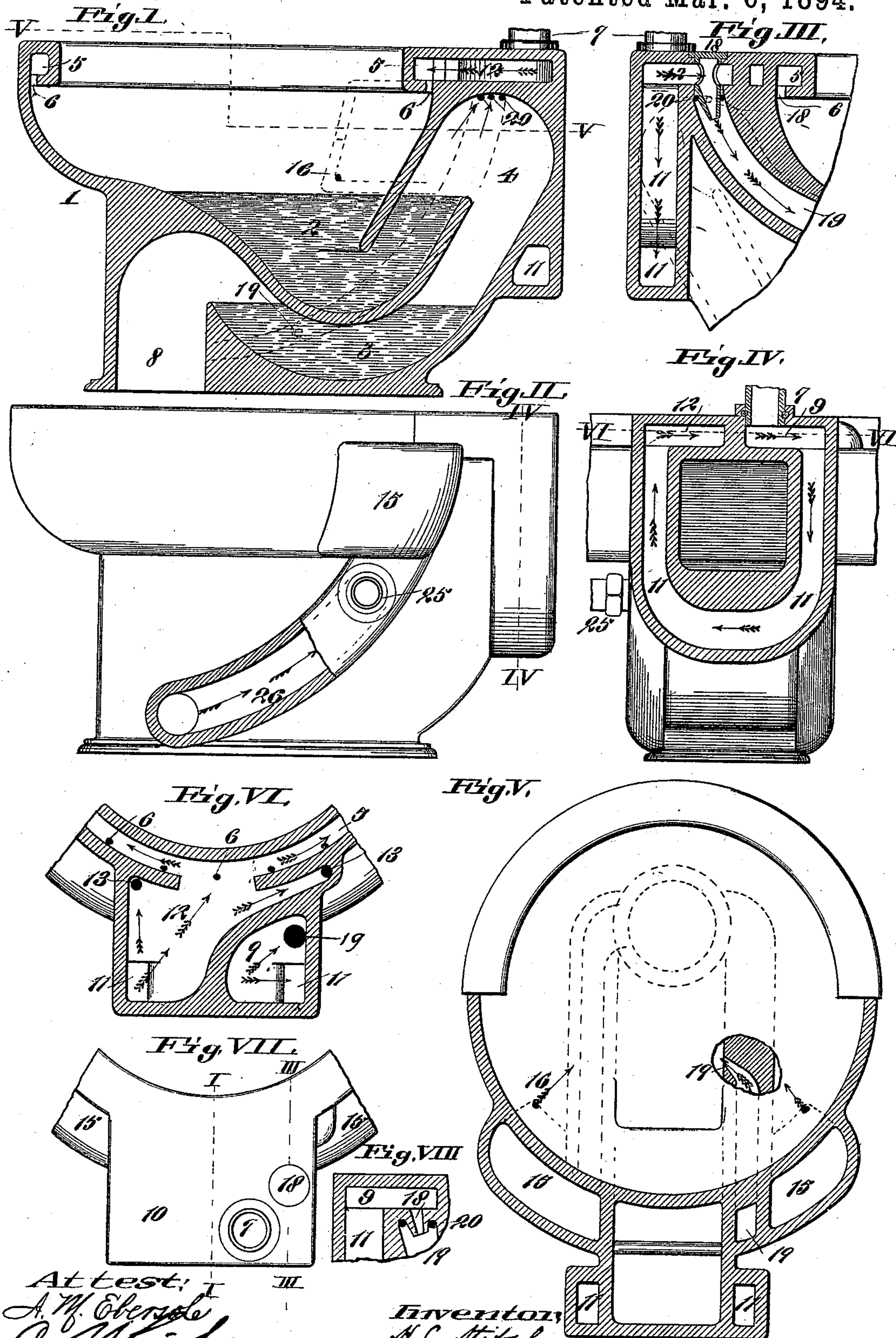


(No Model.)

H. C. STIFEL.
WATER CLOSET.

No. 516,132.

Patented Mar. 6, 1894.



Attest: I
A. M. Oberholzer
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Inventor:
H. C. Stifel
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UNITED STATES PATENT OFFICE.

HERMAN C. STIFEL, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE STIFEL-O'NEIL HOME COMFORT CO., OF SAME PLACE.

WATER-CLOSET.

SPECIFICATION forming part of Letters Patent No. 516,132, dated March 6, 1894.

Application filed May 29, 1893. Serial No. 475,864. (No model.)

To all whom it may concern:

Be it known that I, HERMAN C. STIFEL, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Water-Closets, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My present invention relates to the construction of the bowl of a water closet, a leading feature of which is to so construct the bowl that, with the use of a single pipe connecting the tank to the bowl, the foul air contained in the chamber between the two traps of the bowl is prevented from escaping into the room, either through the flush rim of the bowl, or by way of the tank.

A further object of my invention is to provide for an ample afterflow.

My invention consists in features of novelty hereinafter fully described and pointed out in the claims.

Figure I is a vertical section through a bowl, embodying my improvements; the section is taken on line I—I, Fig. VII. Fig. II is a side elevation of the bowl, part in section. Fig. III is a detail, vertical section, taken on line III—III, Fig. VII. Fig. IV is a vertical section, taken on line IV—IV, Fig. II. Fig. V is part in top view, and part in horizontal section, taken on line V—V, Fig. I. Fig. VI is a horizontal section, taken on line VI—VI, Fig. IV, with the jet removed. Fig. VII is a detail, top view. Fig. VIII is a detail view, illustrating a modification of the jet or nozzle of the bowl.

Referring to the drawings, 1 represents the bowl.

2 is the upper trap, and 3 the lower trap of the bowl.

4 is the chamber between the two traps.

5 is the flush rim of the bowl, provided, as usual, with openings or perforations 6, through which the water passes into the bowl.

7 is the supply pipe leading from the tank, not shown, and 8 is the discharge port or passage of the bowl. The pipe 7 communicates with a chamber 9, formed in an extension 10 of the bowl, (see Figs. VI and VII). From the chamber 9 the main body of the

water passes through a port 11 (see Figs. IV and VI), and is discharged into a chamber 12 in the extension 10, from where the main portion of it passes into the flush rim 5, and escapes through the opening 6 into the upper part of the bowl. The portion of the water which does not pass from the chamber 12 into the flush rim 5, passes through ports or passages 13, into the chambers or reservoirs 15, located on either side of the extension 10, and from these chambers or reservoirs the water passes through perforations 16 into the bowl, after the flush, for the purpose of forming a copious afterflow. It is evident that but one of these chambers or reservoirs 15, with a single port or passage 13 might be used. The portion of the water which does not pass from the chamber 9 through the port 11, escapes through a nozzle or jet 18, (see Figs. III and VI), communicating with a passage or port 19, leading into or beyond the lower trap 3 of the bowl, as shown in Figs. I and III. This port or passage 19 communicates by means of perforations 20, (see Figs. I and II,) with the chamber 4 of the bowl, and as the water passes through the nozzle, it tends to create a vacuum in the chamber 4, and draws the foul air from the chamber into the port or passage 19, from where it is discharged into or beyond the trap 3. By the use of this nozzle or jet 18, the foul air contained in the chamber 4 at the commencement of a flush is carried directly from the chamber, and discharged into or beyond the trap 3, and thus is not allowed to escape into the room, either through the bowl or by way of the pipe 7, and the water tank, while at the same time but a single pipe is used between the bowl and the water tank.

I prefer to make the nozzle or jet of a separate piece of material from the bowl, and I prefer to make it of metal, in order that it may be removed, when desired, and in order that it will not be subject to any contraction or distortion of the bowl, but it is evident that my invention might be carried out, to a certain extent, by forming the jet or nozzle integral with the bowl, as shown in Fig. VIII.

25 represents a pipe communicating with the discharge 8 of the bowl, through means

of a port or passage 26, (see Figs. II and IV.)
No novelty is claimed for this.

I claim as my invention—

1. A bowl for water closets, having a port
5 or passage 19 communicating with the cham-
ber 4 of the bowl, a chamber 9 with which the
supply pipe communicates, a chamber 12, a
passage 11 forming a communication between
the chambers 9 and 12, and a flush rim com-
10 municating with the chamber 12, in combina-
tion with a nozzle or jet 18 located between
the chamber 9 and the passage 19; substan-
tially as and for the purpose set forth.

2. A bowl for water closets, having a port
15 or passage 19, and a removable nozzle located
in said passage through which water passes
from the supply pipe of the closet, said pas-
sage communicating with the chamber 4 of

the bowl above the discharge end of said noz-
zle; substantially as and for the purpose set 20
forth.

3. A bowl for water closets having a cham-
ber 4, a passage 19 communicating with the
chamber 4 and having a nozzle 18, a cham-
ber 9 with which the supply pipe communi- 25
cates, a chamber 12, a passage 11 forming a
communication between the chambers 9 and
12, a flush rim communicating with the cham-
ber 12, and a chamber 15 communicating with
the chamber 12 and with the upper part of the 30
bowl, substantially as and for the purpose set
forth.

HERMAN C. STIFEL.

In presence of—

A. M. EBERSOLE,
GEORGE E. EBERSOLE.