

(No Model.)

H. C. STIFEL.
WATER CLOSET.

No. 516,130.

Patented Mar. 6, 1894.

Fig. I.

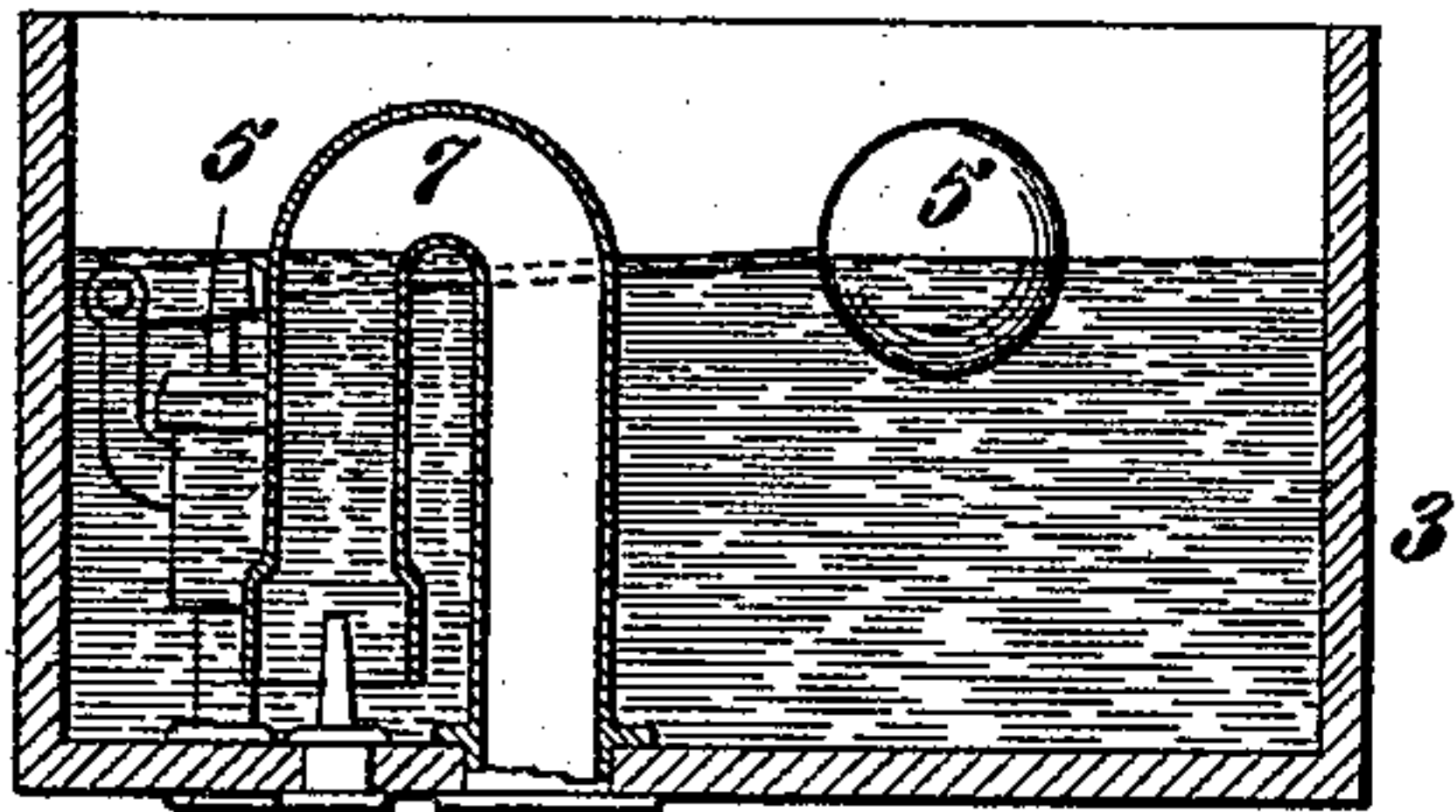


Fig. II.

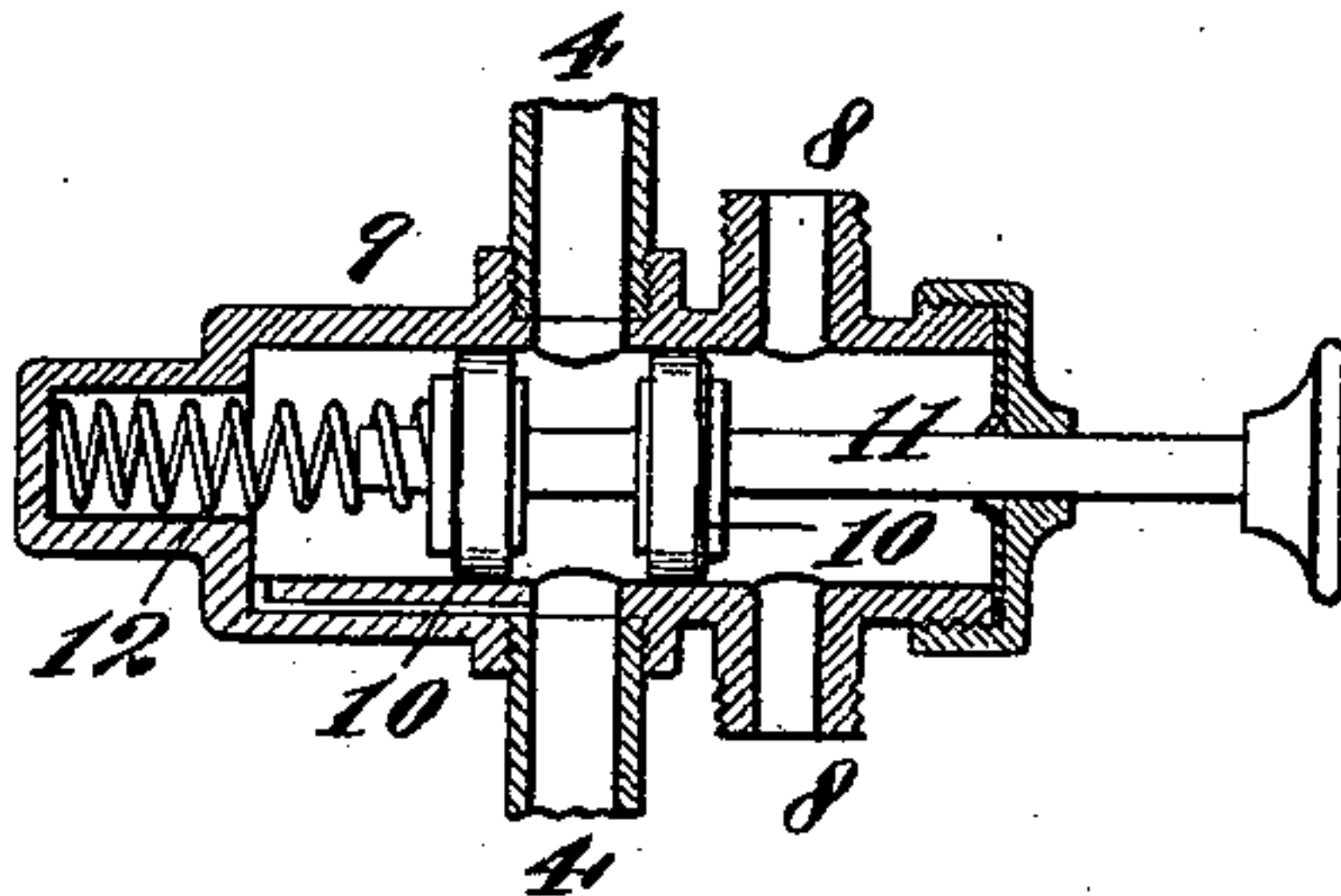


Fig. III.

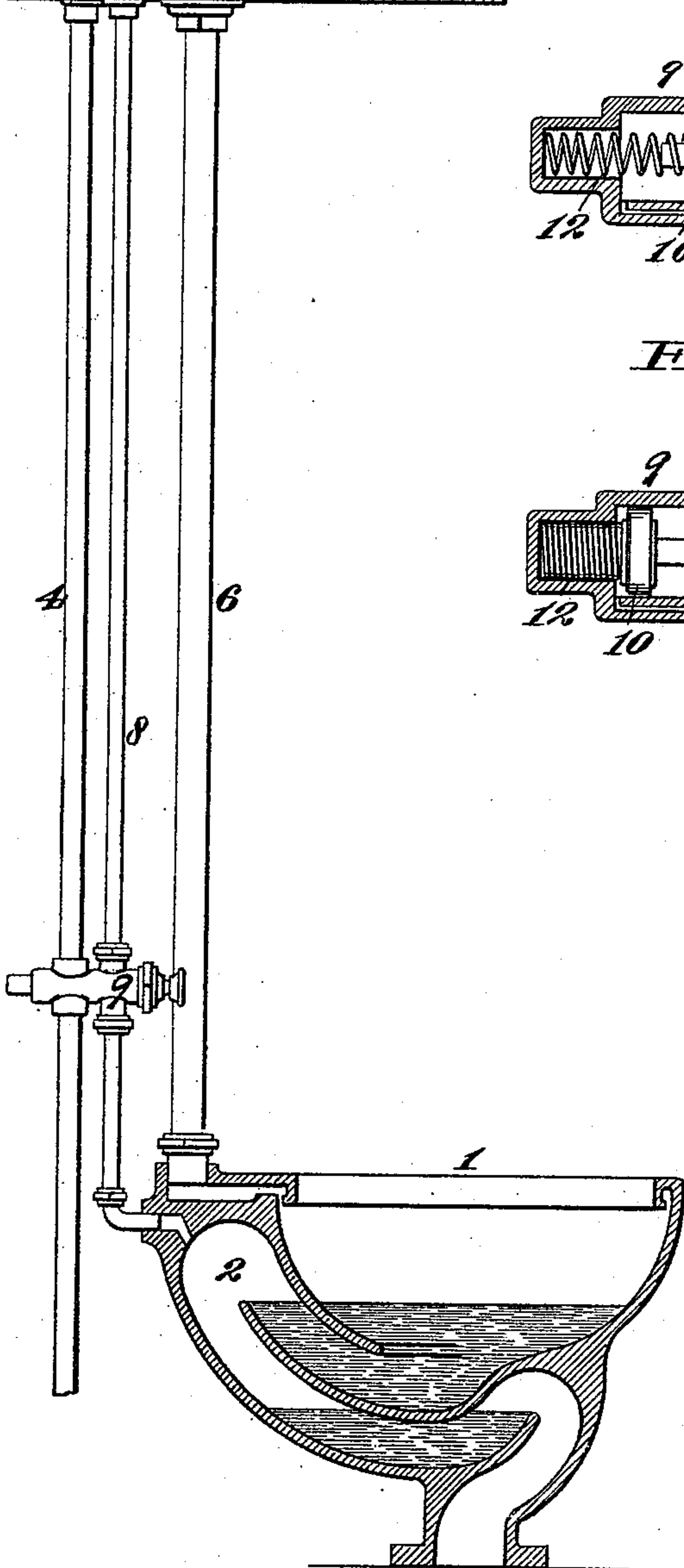
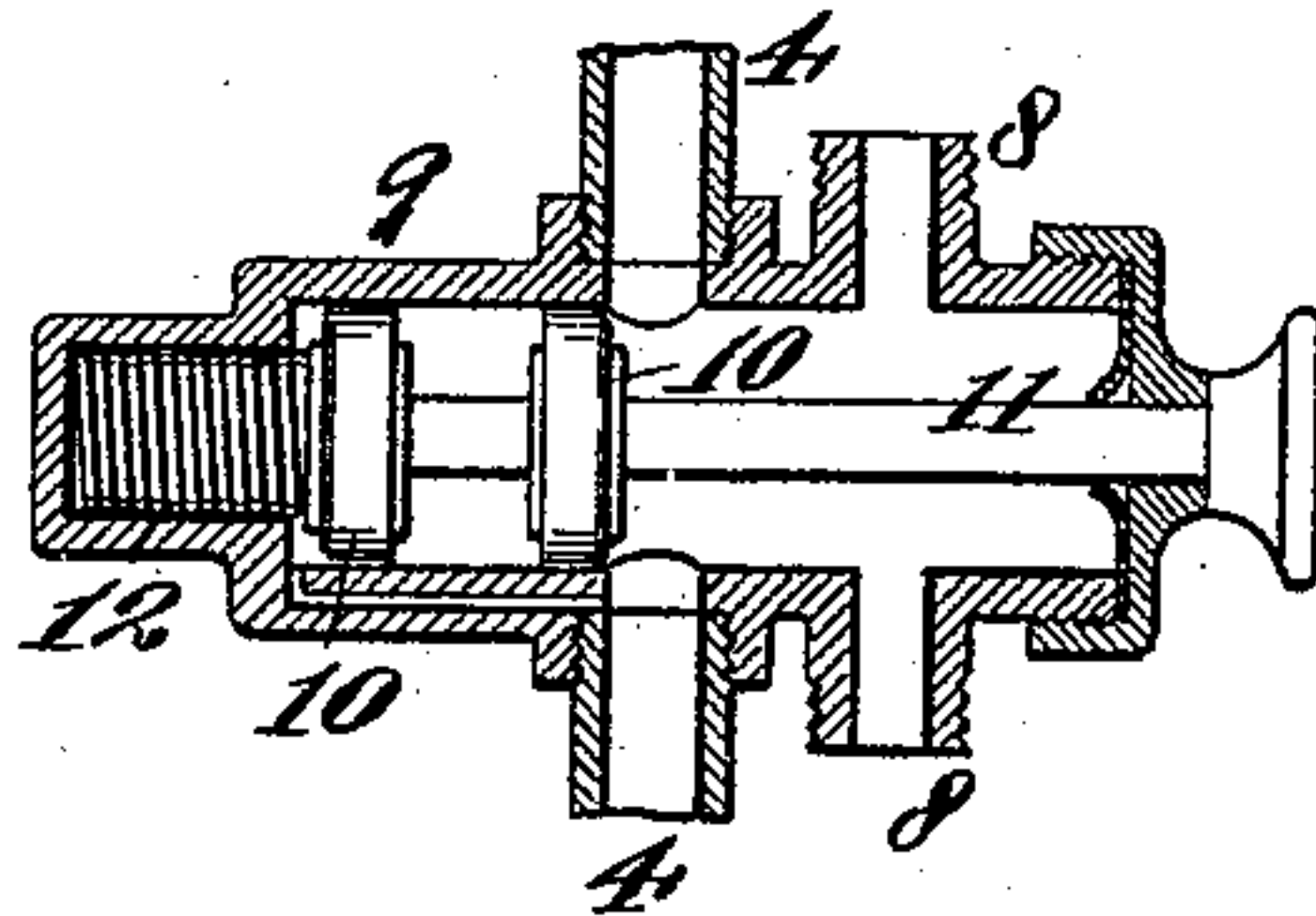
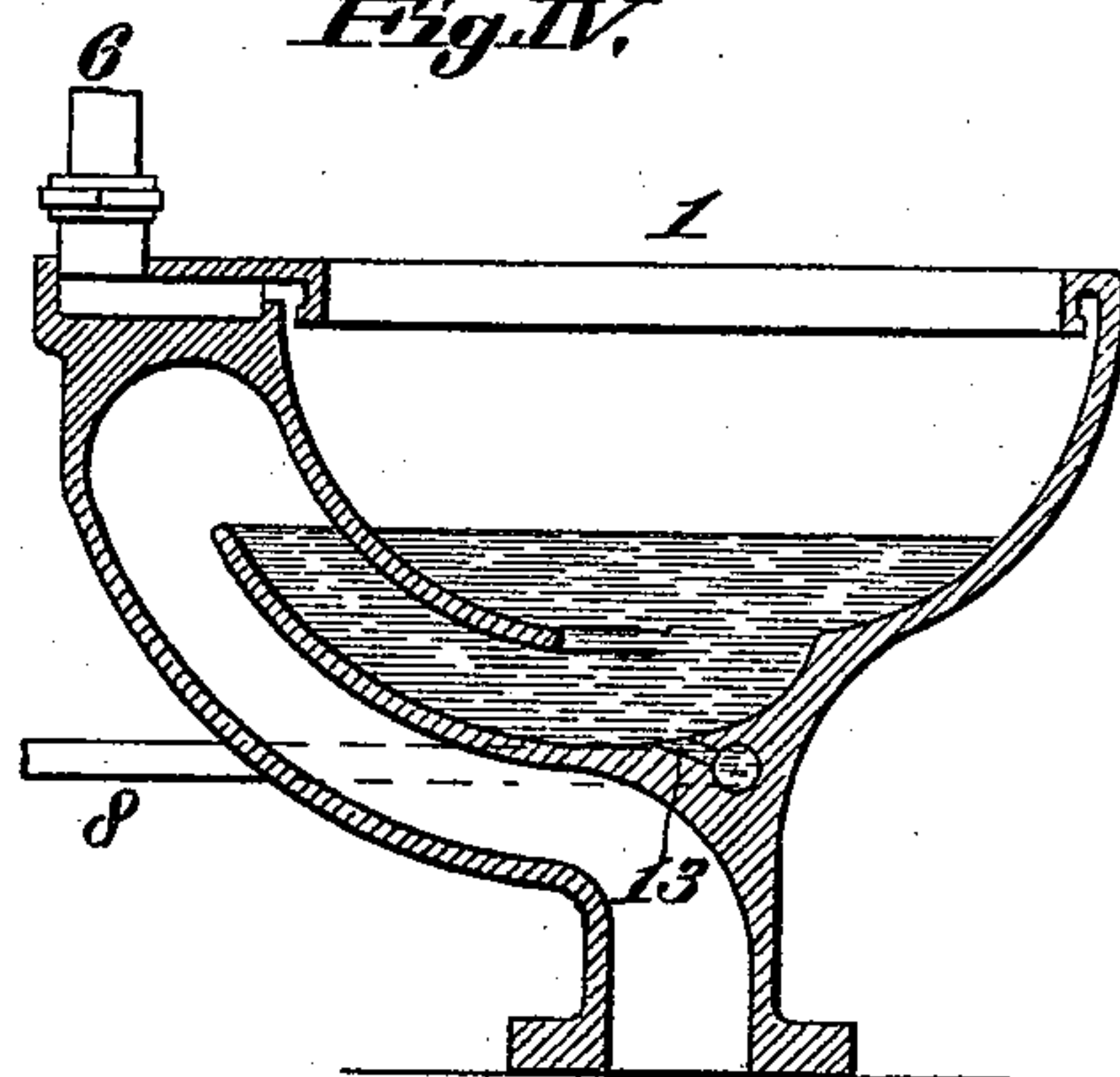


Fig. IV.



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By *Knight Bros* attys

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. 516,130, dated March 6, 1894.

Application filed March 17, 1893. Serial No. 466,483. (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 invention relates to that form of water closets wherein a means is employed for starting a flow in the bowl at the time a flow is started from the tank to the bowl.

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

Figure I is a vertical section, part in elevation, illustrative of my invention. Figs. II and III are enlarged vertical sections of the valve for starting the flow; Fig. II showing the valve in its normal position, and Fig. III showing it in the position it occupies when the piston is forced in to start the flow. Fig. IV represents a modification.

Referring to the drawings, 1 represents the bowl having the usual trap 2.

3 is the tank, 4 the supply pipe, 5 the usual supply valve and float for admitting water from the pipe 4 to the tank 3, and 6 the pipe through which the water passes from the tank to the bowl, and which is provided with the usual goose neck siphon 7.

8 is a pipe communicating with the trap 2, and extending up into the short leg of the siphon 7. This pipe 8 is intersected by a valve 9, which connects the pipe 8 with the pipe 4. The valve has a double piston 10 on a stem 11, which extends out through the housing of the valve. The piston of the valve is held in its normal position by a spring 12, see Fig. II, and when in this position a free passage of water is permitted in the pipe 4, and the water is at this time cut off from the pipe 8. When the piston is forced inwardly a communication is opened between the pipe 4 and the pipe 8, see Fig. III.

The operation is as follows:—When the bowl is to be flushed inward, pressure is exerted on the end of the stem 11 forcing the piston 10 from the position shown in Fig. II to the position shown in Fig. III. A jet of water is then discharged from the lower end of the pipe 8 into the chamber 2 between the

traps of the bowl to start the siphon in the bowl. At the same time a jet of water is discharged from the upper end of the pipe 8 into the short leg of the siphon 7, starting the water to flow from the tank to the bowl. When the valve 9 has been operated, as stated, the pressure is removed from the stem 11, and the piston is forced back to its normal position by the spring 12. The water continues to flow from the tank to the bowl, and through the traps of the bowl until the surface of the water in the tank reaches the open end of the short leg of the siphon, when the entering air will break the siphon in the pipe 6, and at the same time, by passing through the pipe 8, will break the siphon in the chamber 2 between the traps of the bowl, and the water contained in the pipe 6, at the time the siphons are broken, will form the after flow to seal the upper trap of the bowl.

The device is a very simple and durable one, and is not likely to get out of order.

In the modification, Fig. IV, a single trap bowl is shown, and the pipe 8 connected to the bowl and communicating with the trap through a passage 13 and serves to start the flow in the trap, as in the other case.

I claim as my invention—

1. In a water closet, the combination of a bowl, a water tank, a discharge pipe connecting the tank to the bowl, and which is provided with a siphon, an inlet pipe supplying water to the tank, a jet pipe communicating with said siphon and with said bowl, and a valve controlling communication between said inlet pipe and said jet pipe, substantially as and for the purpose set forth.

2. In a water closet, the combination of a bowl having a trap 2, a tank, a discharge pipe connecting the tank to the bowl, and provided with a siphon, an inlet pipe supplying water to the tank, a jet pipe communicating with the short leg of said siphon, and with the chamber between the traps of the bowl, and a valve 9 controlling communication between said supply and jet pipes, substantially as and for the purpose set forth.

HERMAN C. STIFEL.

In presence of—

E. S. KNIGHT,
BENJN. A. KNIGHT.