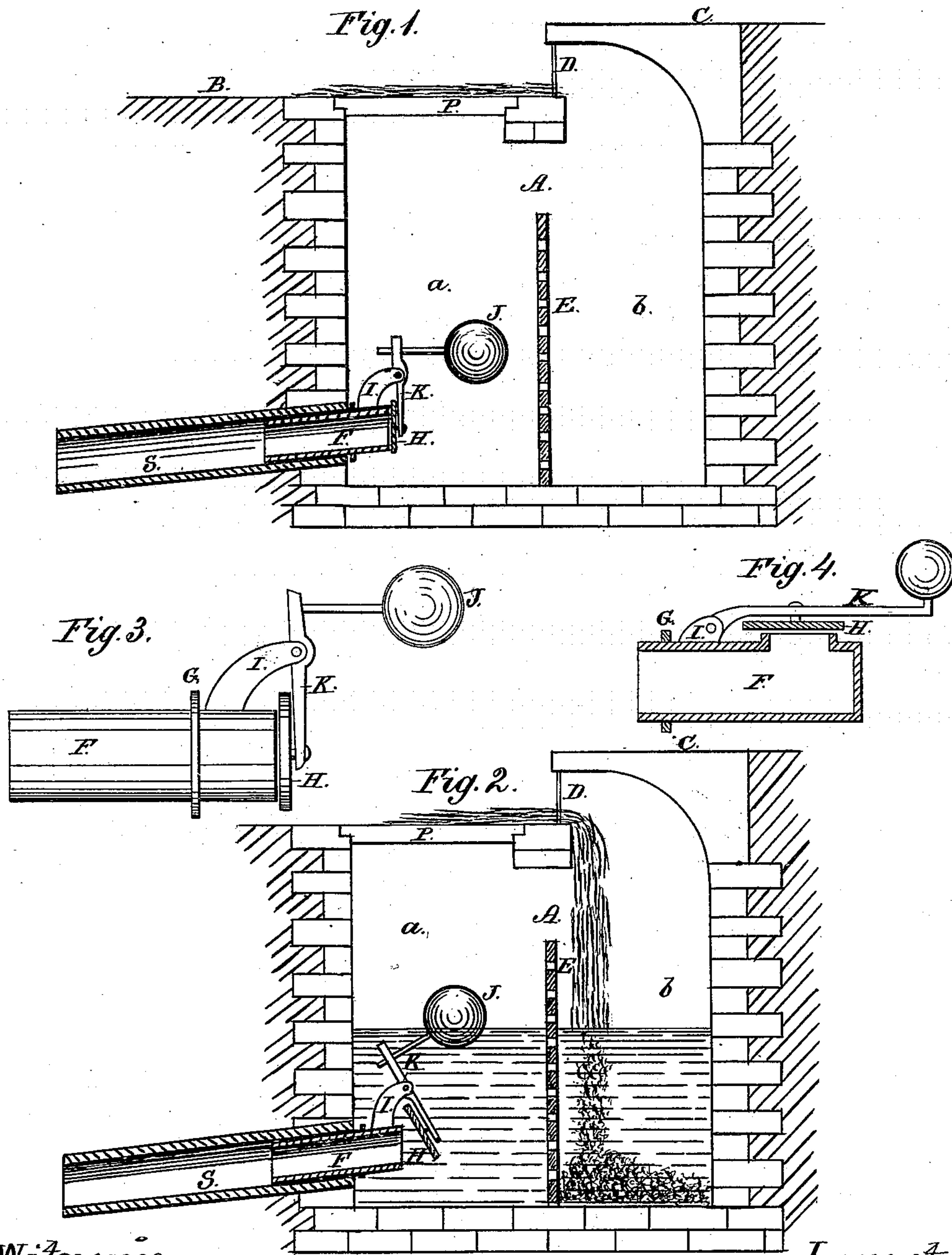


J. P. SCHMITZ.
AUTOMATIC SEWER-TRAP.

No. 187,181.

Patented Feb. 6, 1877.



Witnesses:
Joseph Bayless.
Jacob Mueller.

Inventor:
John Peter Schmitz

UNITED STATES PATENT OFFICE.

JOHN P. SCHMITZ, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN AUTOMATIC SEWER-TRAPS.

Specification forming part of Letters Patent No. **187,181**, dated February 6, 1877; application filed November 13, 1876.

To all whom it may concern:

Be it known that I, JOHN PETER SCHMITZ, of the city and county of San Francisco and State of California, have invented a new and Improved Automatic Sewer-Trap; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention is an improvement in valve attachments for sewers, and relates to a tube designed to be constructed of such size as to adapt it for insertion in the mouth of a sewer or sewer-pipe; said tube having also a circumferential flange to prevent it entering the sewer-pipe too far, and being provided with a valve and float attachment, for regulating the escape of liquid from the cess-pool into the sewer. The tube and its attachments are thus connected, and may be easily applied to, and detached from, the sewer-pipe, as necessity requires.

Figure 1 is a vertical section of a cess-pool, showing my improved trap connected with the sewer, the valve being closed. Fig. 2 is a similar view, showing the float raised and the valve opened by accumulation of water in the cess-pool. Fig. 3 is a detailed view of the flanged tube and its valve attachment. Fig. 4 shows a modified arrangement of the valve.

A indicates the cess-pool; B, the line of the street-pavement; C, the sidewalk; D, the grating placed in the mouth of the cess-pool, and P the cover of the latter. The cess-pool is divided into two compartments, *a* and *b*, by a perforated partition E, which is made to slide vertically in grooves on the sides of the cess-pool, so as to admit of being taken out for the purpose of cleansing the cess-pool.

The sewer-pipe S is connected with compartment *a*, and the trap is applied to its mouth, as shown.

The trap consists of a short tube, F, having an exterior circumferential flange, G, for the purpose of preventing the tube entering the sewer-pipe too far.

H is a valve attached to lever K, to the upper arm of which is attached a hollow sphere

or float, J. That part of the face of the valve H that comes in contact with the open end of the tube F has an elastic packing attached to it, for the purpose of making a tight joint, and preventing any foul air escaping from the sewer into the cess-pool when the valve is closed. The lever K is pivoted to an arm or lug, I, formed in one piece with the tube.

In the modification shown in Fig. 4, the opening of the tube F is in the upper side, and the valve and lever K are placed horizontally instead of vertical. It is obvious the said tube might have an opening in the under side instead, and the valve and lever be applied thereto, without involving a material change in the invention.

The operation of my trap will be as follows: The drainage-water from the street will flow into compartment *b* of the cess-pool, and the dirt, rubbish, or other hard substances which may be carried along with the water into the cess-pool, will remain at the bottom of said compartment, as shown in Fig. 2, while the water and the dissolved matter will pass through the holes in the perforated partition E into the compartment *a*. When the water has risen in the cess-pool to such a height as to reach and buoy the float J, Fig. 2, the lever K will be turned on its fulcrum and the valve opened to allow the water to escape into the sewer-pipe S. When the water has escaped the weight of the float will again close the valve.

I do not claim, broadly, the application or use of a weighted valve for regulating the escape of liquid from a cess-pool into the sewer connected therewith; but

I claim—

The tube F, having flange or rib G, and the valve and float attached thereto, in combination with the sewer-pipe and cess-pool, as shown and described.

JOHN PETER SCHMITZ.

Witnesses:

JACOB MUELLER,
SOLON C. KEMON.