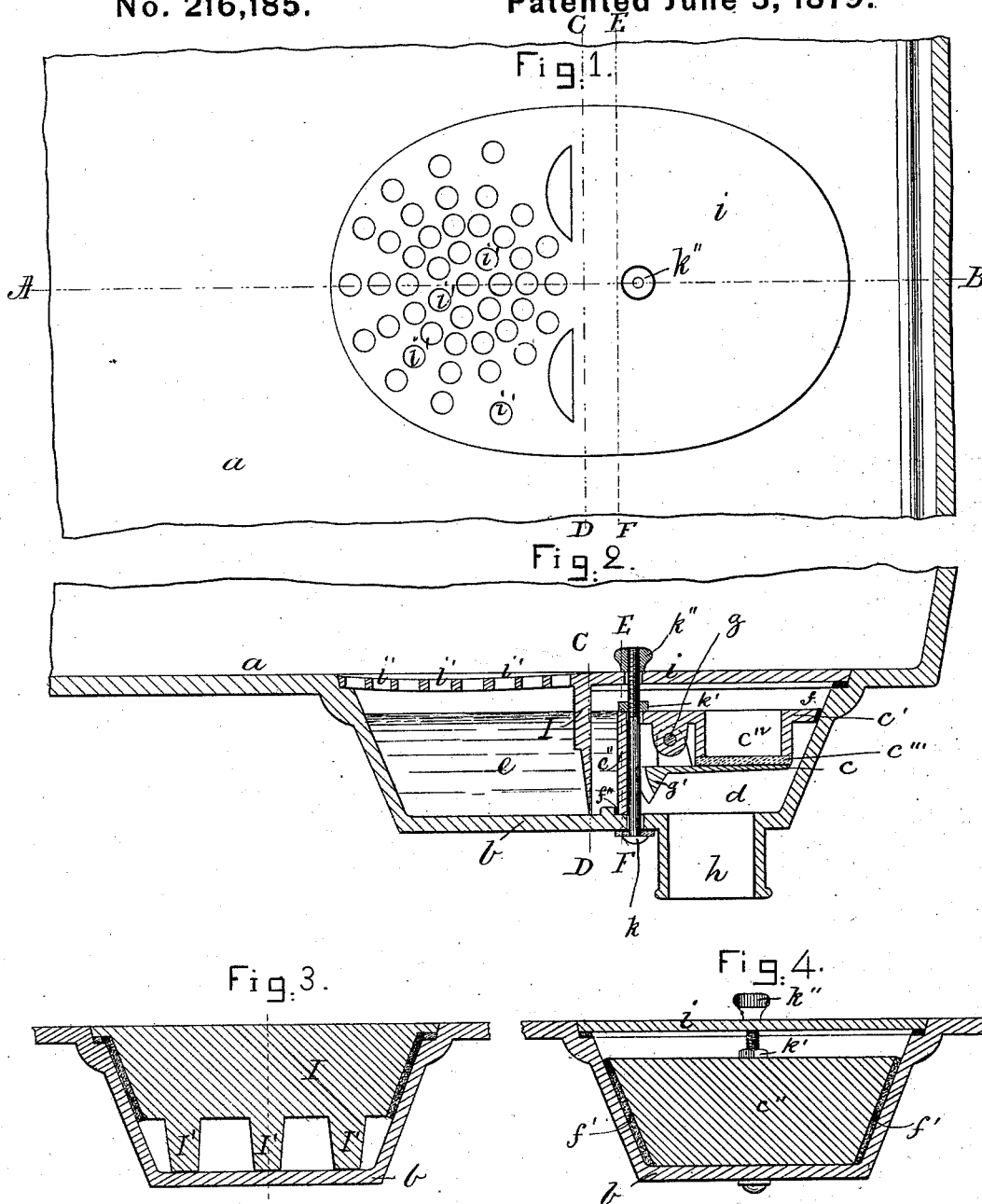


A. S. HODGES.
Sink-Trap and Valve.

No. 216,185.

Patented June 3, 1879.



Witnesses.
C. N. Möller.
H. Allen.

Inventor
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by Allan Audreie
his atty.

UNITED STATES PATENT OFFICE.

ADDISON S. HODGES, OF CHELSEA, MASSACHUSETTS, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM L. DAVIS, OF SAME PLACE.

IMPROVEMENT IN SINK TRAPS AND VALVES.

Specification forming part of Letters Patent No. **216,185**, dated June 3, 1879; application filed April 9, 1879.

To all whom it may concern:

Be it known that I, ADDISON S. HODGES, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Sink Traps and Valves; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in sink valves and traps for the purpose of preventing foul air from rising upward into rooms from sink-drains; and this I accomplish by the arrangement of a combined automatic valve and a water-seal, in a manner as will hereinafter be more fully described.

The invention is carried out as follows: A cup-shaped chamber or receptacle is made in the bottom of the ordinary sink, and from the bottom of said receptacle leads a short pipe, to which the waste-pipe is connected. Said receptacle is, as it were, divided in two parts by means of an angular plate that is packed air-tight all round against the above-named receptacle, and the space so inclosed by said angular plate forms an air-tight valve-box, its horizontal part being provided with an opening that is covered by means of a weighted and self-closing valve. The other part of the aforesaid receptacle forms a water-chamber, and it is covered by means of a plate extending over and covering the whole of the receptacle, and having such part thereof directly above the water-chamber made with perforations, so as to serve as a strainer, and the other part above the valve-box being made solid and packed air-tight against the said receptacle. The said plate or cover is further provided with a downward-projecting wall, the lower part of which is toothed or made in the shape of a strainer, so as to cut up such particles that escape with the sink-water, and thereby prevent any clogging up of the self-closing valve.

In the accompanying drawings, Figure 1 represents a plan view of my invention. Fig. 2 represents a longitudinal section on the line A B, shown in Fig. 1. Fig. 3 represents a cross-section on the line C D, shown in Figs.

1 and 2; and Fig. 4 represents a cross-section on the line E F, also shown in Figs. 1 and 2.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

a represents an ordinary sink. *b* is the receptacle in the bottom thereof, which receptacle is divided by means of the angular plate *c' c''*, into two compartments, viz., the valve box or chamber *d* and water-chamber *e*, as and for the purpose set forth. *f f' f''* are packings between the sides and bottom of the said angular plate *c' c''* and the receptacle *b*, by which the valve-box *d* is rendered airtight. *c* is the self-closing valve, with its packing *c'''*, adapted to close the opening *c^v* in the upper portion of the valve-box plate *c'*. The valve *c* is hinged at *g*, as shown, to an ear on the under side of the angular plate *c'*, and is provided with a weighted extension, *g'*, by means of which the valve is automatically held against its seat as soon as the sink is emptied. *h* is the pipe leading from the bottom of the valve-box *d*, as and for the purpose set forth. *i* is the cover at the top of the receptacle *b*, which cover is provided with perforations *i' i'* above the water-chamber *e*, the other part above the valve-box *d* being solid, as and for the purpose set forth.

I is the downward-projecting wall, extending from the cover *i*, its lower part, being made with the projections or teeth *I' I' I'*, serving as a strainer, for the purpose of cutting up particles previous to their escaping through the valve-opening *c^v*, as described. *k* is a bolt, provided with nuts *k'* and *k''*, by means of which the angular plate *c' c''*, as well as the cover *i*, are secured to the receptacle *b*.

What I wish to secure by Letters Patent, and claim, is—

The herein-described improvement in sinks, consisting of the receptacle *b*, angular plate *c' c''*, with its self-closing valve *c g g'*, the cover *i*, with its vertical wall *I' I' I'*, fastening-screw *k k' k''*, and escape-pipe *h*, as and for the purpose set forth.

In testimony that I claim the foregoing as my own invention I have affixed my signature in presence of two witnesses.

ADDISON S. HODGES.

Witnesses:

ALBAN ANDRÉN,
F. ALLEN.