J. DUNN & T. H. BIRDSALL.

Sewer Trap.

No. 202,250. Patented April 9, 1878.

Fig 1.

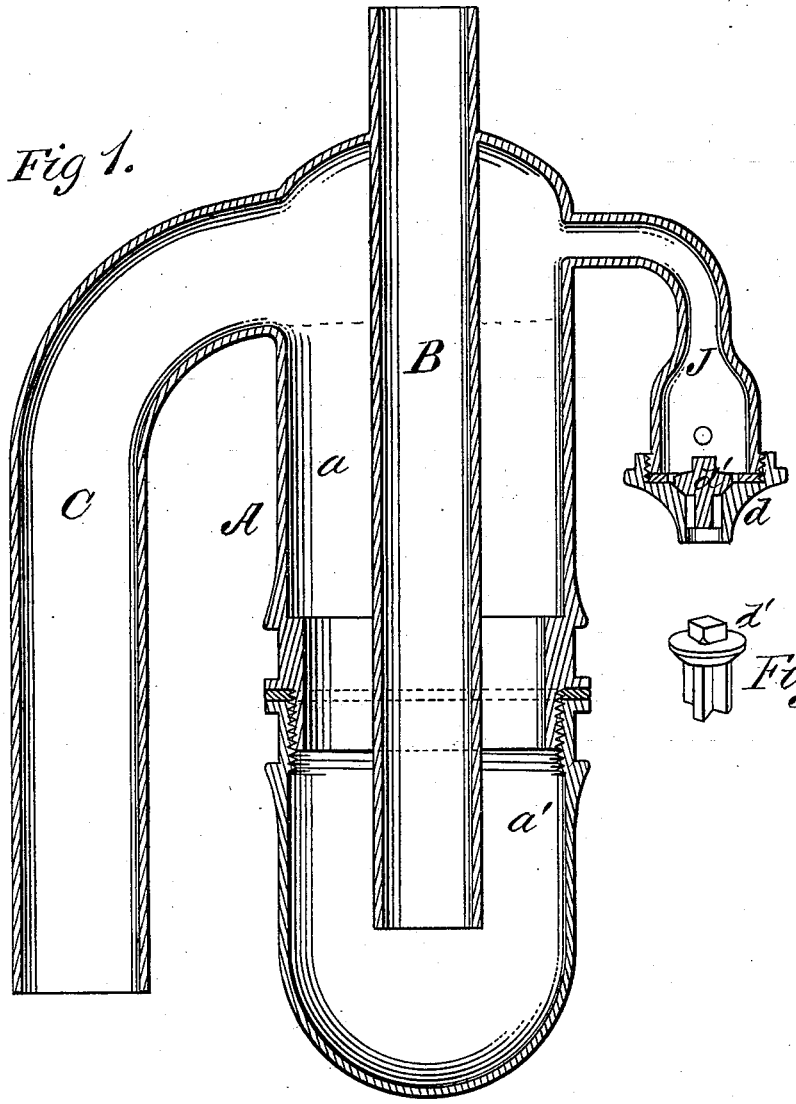

Fig 2

WITNESSES

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JOHN DUNN AND THOMAS H. BIRDSALL, OF NEW YORK, N. Y.

IMPROVEMENT IN SEWER-TRAPS.

Specification forming part of Letters Patent No. **202,250**, dated April 9, 1878; application filed March 16, 1878.

To all whom it may concern:

Be it known that we, JOHN DUNN and THOMAS H. BIRDSALL, of New York, in the county of New York and State of New York, have invented a new and valuable Improvement in Sewer-Traps; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal vertical section of my improved trap, and Fig. 2 is a perspective view of the valve.

This invention has relation to improvements in sewer-traps.

The nature of the invention consists in certain novel constructions of the parts of the trap, whereby the siphon-like action of the discharge-pipe is prevented, as will be hereinafter more fully set forth.

In the annexed drawings, the letter A designates an oblong metallic vessel, composed of two sections, *a a'*, screwed or otherwise removably secured together. B represents a pipe, extending through the top of the section *a* and reaching some distance below its joint with section *a'*, which pipe is coupled in any suitable way to the pipe leading to the basin; and C is the discharge-pipe, opening into section *a* of the trap near its top and leading directly to the sewer.

As the water comes down pipe B and flows out of its lower end into vessel A, it rises in the latter until it reaches the level of the lower edge of the discharge-pipe C. It then runs into it and gets into the sewer, producing a siphon-like action where the flow is rapid and in large quantity, which, by emptying the vessel A, uncovers the lower end of the pipe B and allows sewer-gas to penetrate into the house. To prevent this I use a small pipe, J, opening into the vessel A above the lower edge of the discharge-pipe C, and bending downward as shown in Fig. 1. This pipe has at its lower end a valve-seat, *d*, in which is a puppet-valve, *d'*, opening upward. This valve readily prevents the escape of bad odors, but yields upward when siphoning occurs, and, by the admission of air into the vessel, prevents such action.

Should the vessel need cleaning out, the lower section may be readily detached from the upper, leaving it and its pipe-connections in position. In practice I prefer to cast the sections *a a'* and screw them together, a suitable packing being interposed to prevent leakage; and the pipe B is a component part of the vessel-section *a*, being cast therewith.

What we claim as new, and desire to secure by Letters Patent, is—

In combination with the vessel A, the induct-pipe B and the educt-pipe C, constructed and arranged as described, the pipe J opening into the vessel A above the educt C, and provided with a valve-seats, *d*, and valve *d'*, opening upward, substantially as specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

JOHN DUNN.
THOMAS H. BIRDSALL.

Witnesses:
WILLIAM R. HOUGHTON,
VALENTINE WAAS.