

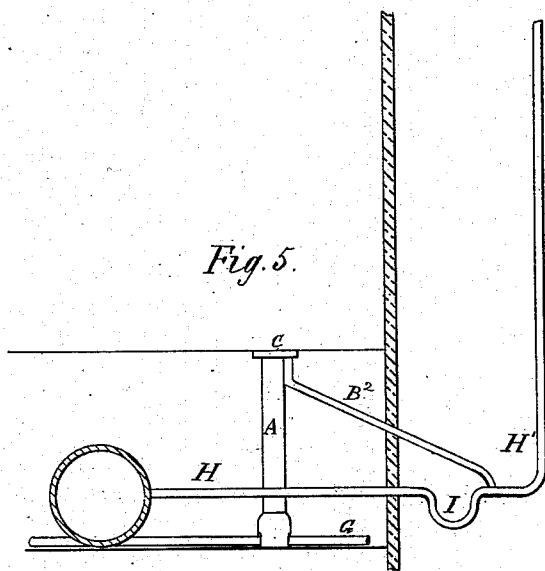
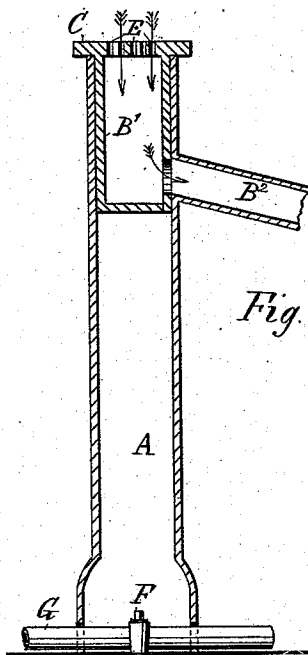
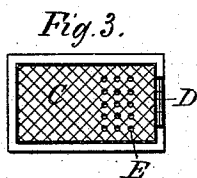
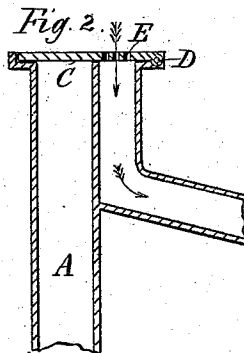
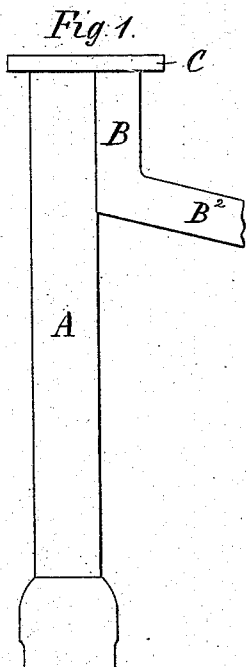
(No Model.)

L. O. HOWELL, Jr.

COMBINED STOP BOX AND FRESH AIR CONDUIT.

No. 293,027.

Patented Feb. 5, 1884.



Witnesses—

Wm. S. Lowe
John Buckler

Inventor—
Louis O. Howell Jr.
By A. M. Pierce,
Atty.

UNITED STATES PATENT OFFICE.

LEWIS O. HOWELL, JR., OF PHILADELPHIA, PENNSYLVANIA.

COMBINED STOP-BOX AND FRESH-AIR CONDUIT.

SPECIFICATION forming part of Letters Patent No. 293,027, dated February 5, 1884.

Application filed July 16, 1883. (No model.)

To all whom it may concern:

Be it known that I, LEWIS O. HOWELL, JR., of Philadelphia, Pennsylvania, have invented certain new and useful Improvements in a Combined Stop-Box and Fresh-Air Conduit, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates especially to stop-boxes for use with pipes supplying water from mains to buildings, &c., in combination with fresh-air conduits to drain-pipes, and has for its object the production of a device which is simple and cheap to construct and effective in operation; and my invention consists, essentially, in a stop-box provided with a fresh-air conduit or pipe adapted and arranged to supply fresh air to the main drain of a building; and my invention also involves certain novel and useful combinations or arrangements of parts and peculiarities of construction and operation, all of which will be hereinafter first fully described, and then pointed out in the claims.

In the drawings, Figure 1 is a view in elevation of my improved device. Fig. 2 is a vertical sectional view thereof, and Fig. 3 is a plan view of the top. Fig. 4 is a modification showing the air-conduit as being removably located in the stop-box. Fig. 5 illustrates my device as applied to a building.

Like letters of reference, wherever they occur, indicate corresponding parts in all the figures.

Heretofore it has been customary to supply fresh air to the main drain of buildings from a pipe having communication with the fresh exterior air, employing a separate device for the purpose, entailing expense for construction and adding to the obstructions in the sidewalk. By the use of my improvement these difficulties are overcome, the stop-box which is always employed having the air-conduit combined directly with it.

A is the stop-box, made of metal or any other suitable material. At one side of said box, formed therewith or attached thereto, is the fresh-air conduit B B². A cover, C, fits

over the box and conduit, said cover being hinged at D, or, if desired, secured in place by bolts or screws. That part of the cover fitting over the box is imperforate, while over the air-conduit it is perforated, as at E. Any water entering the perforations during rains, or when ice or snow melts thereabove, will find its way into the drain-pipe.

In Fig. 4 the stop-box is supplied with a pipe, B², at the side for connecting with the conduit to the drain. A removable air-box, B', having its cover perforated, as above set forth, fits into the box in such a manner as to form the fresh-air-supply conduit, and also conduct any water to the drain which may enter the perforations.

When it is desired to reach the tap F in the water-pipe G, the box B' may be lifted out, leaving box A unobstructed. The box A may be round or square in form, as preferred, and made of various lengths, to suit requirements.

By reference to Fig. 5 the operation of my device will be readily understood, the pipe from the air-box being connected with the main drain H just beyond the trap I, effectively supplying the fresh air necessary for keeping the pipe H' free from foul air and gases.

Having now fully described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. A stop-box provided with a fresh-air conduit or pipe adapted and arranged to supply air to the main drain of a building, substantially as shown and described.

2. In a device of the character herein specified, stop-box A, provided with fresh-air conduit B and a cover, C, perforated at E, substantially as and for the uses and purposes shown and described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of two witnesses.

LEWIS O. HOWELL, JR.

Witnesses:

FRANK CRAVEN,
CHARLES R. HARRIS.