No. 662,711. Patented Nov. 27, 1900.

W. H. DEWAR.

CATCH BASIN AND FRESH AIR INLET.

(Application filed July 14, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

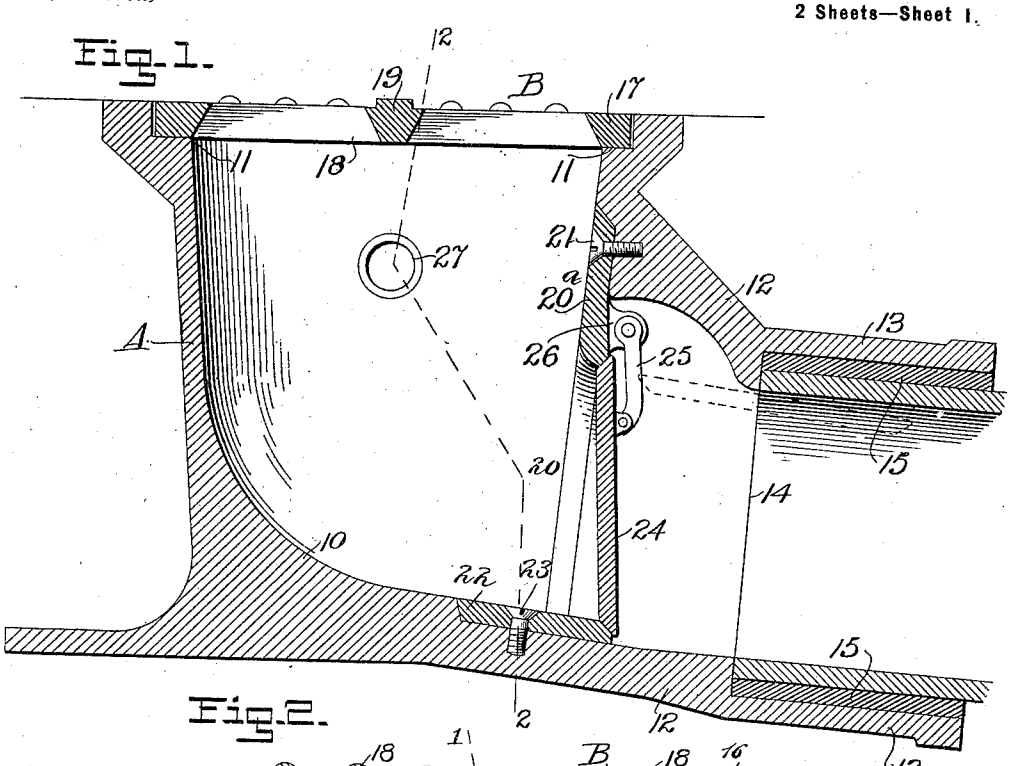
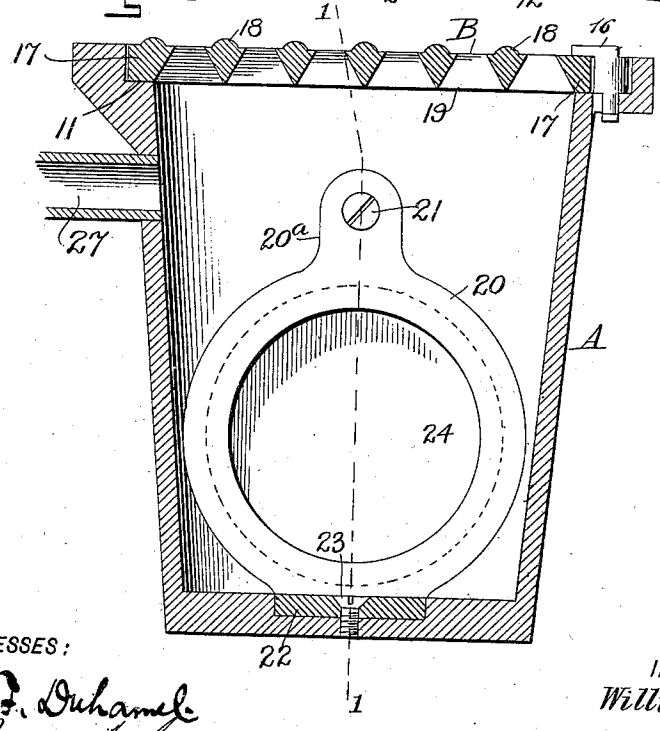


Fig. 2.



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Fig. 3.

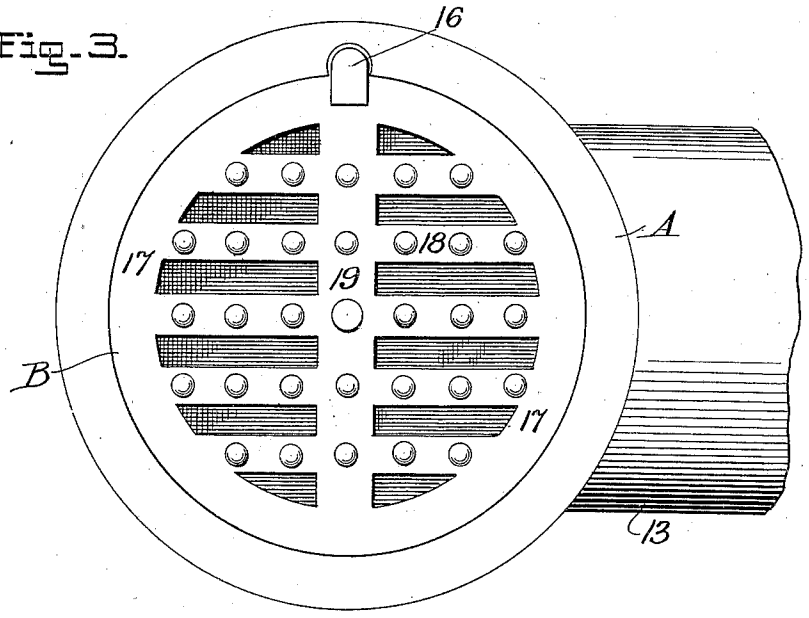
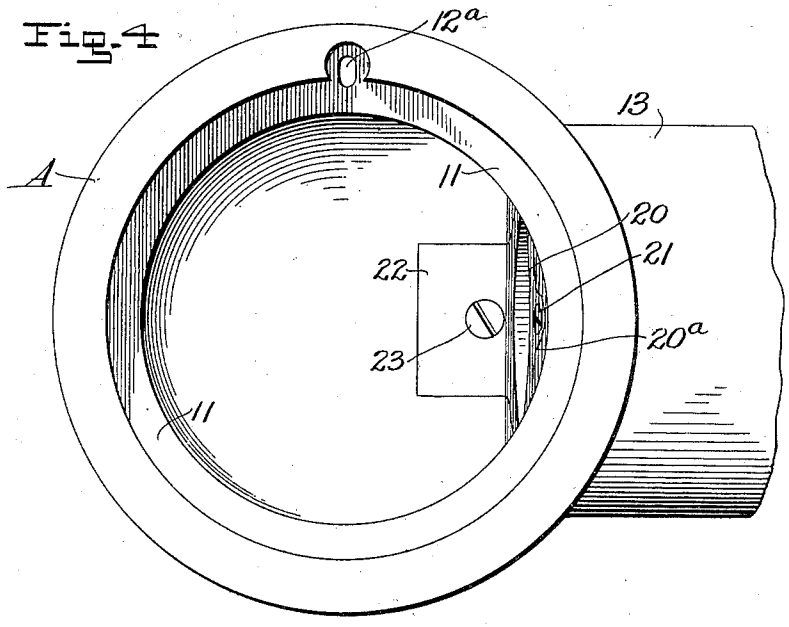


Fig. 4



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UNITED STATES PATENT OFFICE.

WILLIAM H. DEWAR, OF NEW YORK, N. Y.

CATCH-BASIN OR FRESH-AIR INLET.

SPECIFICATION forming part of Letters Patent No. 662,711, dated November 27, 1900.

Application filed July 14, 1900. Serial No. 23,624. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. DEWAR, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Catch-Basin or Fresh-Air Inlet, of which the following is a full, clear, and exact description.

One purpose of the invention is to provide a catch-basin or fresh-air inlet having a self-cleaning top or grating and a back-pressure valve, which valve may be removed in a convenient manner at any time.

Another purpose of the invention is to so construct the basin or inlet that material will not remain therein and so that the basin or inlet may be flooded and cleaned at any time through a connection with a convenient water-supply.

A further object of the invention is to so construct the device that a connection can be made with a pipe of any kind.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal section through a catch-basin constructed in accordance with my invention, the section being on the line 1 1 of Fig. 2. Fig. 2 is a transverse section through the catch-basin on the line 2 2 of Fig. 1. Fig. 3 is a plan view of the body portion of the catch-basin, and Fig. 4 is a plan view of the catch-basin with the top removed.

The basin A shown in the drawings has a bottom 10, which is inclined toward its outlet, and sharp corners are avoided, since wherever such corners would occur the bottom is concaved or inclined to meet the sides. At the mouth of the basin A an interior annular shoulder 11 is formed, which is adapted as a support for a cover or a grating B, and at the outlet of the basin A a neck 12 is formed, which neck is connected with or is an integral portion of a hub 13, and this hub can receive a straight section of pipe 14, and such pipe may be secured in position by calking 15 or a packing of any suitable description, as shown in Fig. 1. The cover B is in the form of a grating and consists of a marginal frame 17, which rests upon the shoulder 11, and transverse and longitudinal bars 18 and 19, which bars are triangular in cross-section, their wider portions being at the top, as shown in Fig. 2, so that the space between these bars is narrowest at the top and widest at the bottom, thus providing for a quick clearance of any material that may pass to the spaces between the bars. The inner edge of the frame 17 is beveled downward and outward, as shown in Fig. 2, for the same purpose.

I desire it to be undersood that while I have illustrated the catch-basin as being of circular form it may be made rectangular, if so desired, or may be given other contour without departing from the spirit of the invention. It will be furthermore understood that the inclination at the bottom of the catch-basin is continued at the neck 12, and when the pipe 14 is placed in position the inner surface of this pipe is correspondingly inclined, as shown in Fig. 1, the inner surface of the bottom and sides of the pipe being flush with corresponding portions of the neck 12 of the basin.

Where the neck 12 joins the basin A, a ring 20 is secured, which ring is shown provided with an upper extension 20^a, countersunk in the inner face of the neck 12 at the top, and the said ring is further provided with a foot 22, countersunk in the bottom of the basin, and the extension 20^a of the ring is attached to the neck by a screw 21 or a like medium. A screw 23 is likewise employed to attach the foot 22 to the bottom of the basin, so that when the cover or grating B is removed the ring 20 may be quickly and conveniently detached, leaving a clear opening between the body of the catch-basin and the pipe 14. A valve 24 is adapted to normally close the opening in the ring 20, as shown in Fig. 1, and said valve is a back-pressure valve opening outward and is so ground that it is gas-tight seated. When this valve is opened to its full extent, it is adapted to occupy substantially the horizontal position shown in dotted lines in Fig. 1, and in order that it may assume such a position a link 25 is attached centrally to the outer face of the valve near its upper edge, and to a projection 26, formed upon the

outer face of the ring 20, within the neck 12. When the ring 20 is removed, it follows that the valve is removed with it.

I desire it to be understood that the upper portion of the pipe 14, which connects with the hub 13, may be flat, and likewise the upper portion of said hub; but I do not confine myself to such formation of these parts.

The cover B for the basin may be connected therewith in any suitable manner. In the drawings the cover is shown as provided with a lug 16, which is adapted to enter a recess in the upper portion of the catch-basin, which recess occurs around a slot 12^a, (shown in Fig. 4,) through which a portion of the lug extends, as shown in Fig. 2; but any approved means may be employed for connecting the cover B to the body of the catch-basin in a removable manner.

Frequently more or less particles of matter may remain in the catch-basin, and in order that the interior of the basin may be thoroughly cleansed a pipe 27 is made to enter the chamber of the basin A at a point near the top, as shown in Figs. 1 and 2, and this pipe is connected with the water-service pipe of the house or with other source of water-supply, and in the length of said pipe 27 a stop-cock (not shown) is provided. The inner end of the flushing-pipe 27 or that end which enters the catch-basin may be threaded, so as to receive the coupling of a hose.

I desire it to be understood that while I have described this invention in detail as applicable to a catch-basin it is equally adapted as a fresh-air inlet and may be employed as such.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a catch-basin or a fresh-air inlet, the combination, with a body having a removable top, the said body having its bottom inclined and concaved where it connects with the sides, a neck formed at the outlet of the body, the neck being provided with a hub, a ring attached to the inner surface of the said neck and to the bottom of the body of the basin or the fresh-air inlet, a valve adapted to normally close the opening in said ring, said valve being a back-pressure valve, and a link connection between the said valve and the said ring, for the purpose set forth.

2. In a catch-basin or a fresh-water inlet, the combination, with a body having an inclined bottom and a concaved surface where the bottom connects with the sides of the basin or the inlet, a removable cover for the basin or the inlet, consisting of an outer frame and longitudinal and transverse bars carried by said frame, the bars being triangular in cross-section and widest at the top, and the inner side face of said frame being inclined downward and outward, a neck at the outlet of the basin or inlet, and a hub forming a continuation of the neck, of a flushing-pipe which enters the basin or the air-inlet, at a point below the top and above the bottom thereof, a ring detachably attached to the neck and the bottom of the basin or inlet, a back-pressure valve normally closing the opening in the said ring, and a link connection between the said valve and the ring, for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM H. DEWAR.

Witnesses:
J. FRED. ACKER,
THOMAS J. FITCH.