(No Model.)

J. ZAPP.

UNDERGROUND REFUSE CAN.

No. 419,905. Patented Jan. 21, 1890.

Fig. 1.

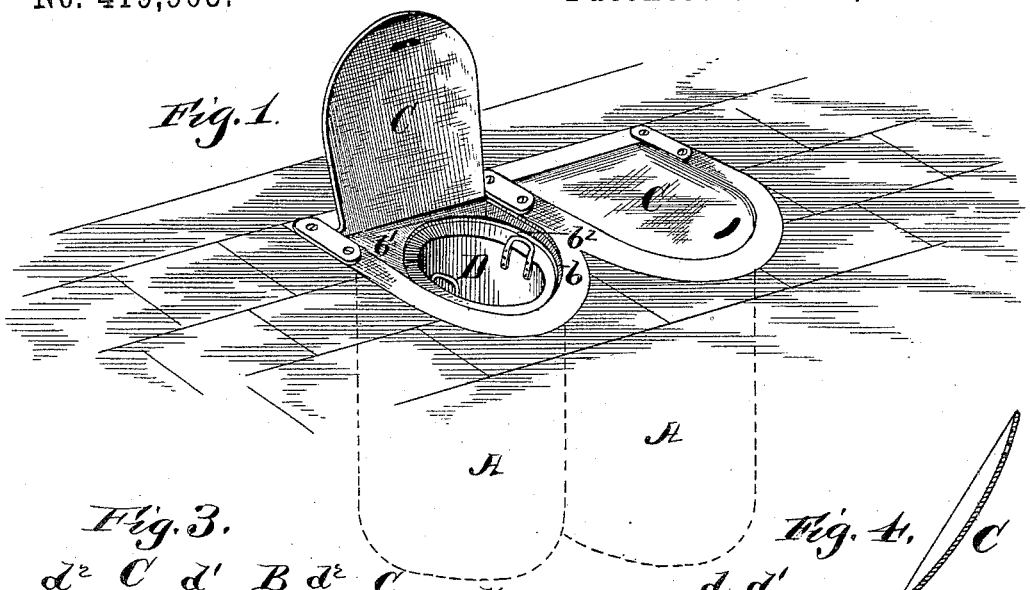


Fig. 3.

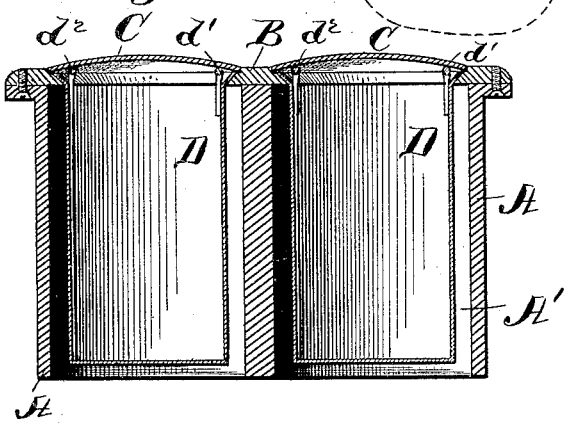


Fig. 4.

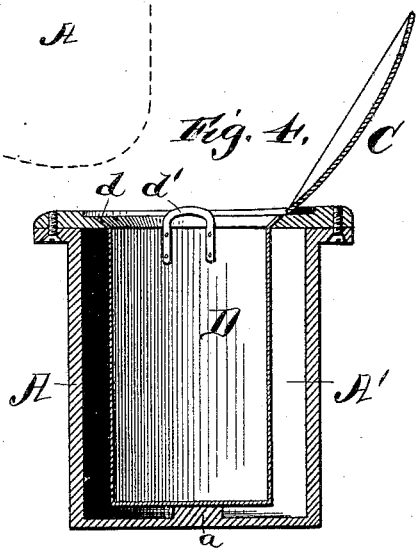
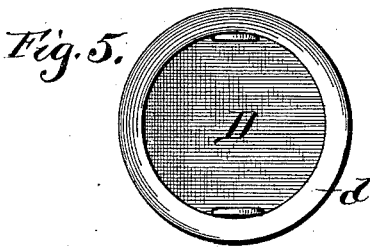


Fig. 5.



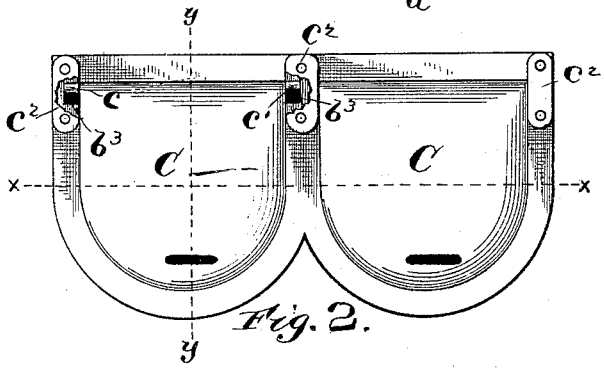


Fig. 2.

Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN ZAPP, OF NEW YORK, N. Y.

UNDERGROUND REFUSE-CAN.

SPECIFICATION forming part of Letters Patent No. 419,905, dated January 21, 1890.

Application filed September 20, 1889. Serial No. 324,552. (No model.)

To all whom it may concern:

Be it known that I, JOHN ZAPP, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Underground Refuse-Cans; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 the letters of reference marked thereon, which form a part of this specification.

My invention relates to certain improvements in garbage or ash receptacles.

The objects of my invention are to provide improved, simple, and cheap means to be located out of the way and below the surface of the ground or level with the sidewalk to receive garbage, ashes, or other refuse, and to close the same from the outer atmosphere, and thereby prevent unhealthy and unpleasant gases and odors from emanating therefrom while waiting for removal, and to so construct said means that the garbage, &c., can be easily swept or deposited in or removed from the same. These objects are accomplished by, and my invention consists in, certain novel features of construction and in combinations of parts more fully described hereinafter, and more particularly pointed out in the claims.

Referring to the accompanying drawings, Figure 1 shows a portion of the sidewalk provided with the present invention in perspective. Fig. 2 is a top plan with portions broken away. Fig. 3 is a cross-section on line x x, Fig. 2. Fig. 4 is a section on line y y with the cover of the receptacle or casing thrown open. Fig. 5 is a detail top plan of the removable receiving can or vessel.

In the drawings, the reference-letter A indicates a hollow casing, preferably cylindrical in shape and open at the top and provided with an annular flange around the top. This casing is buried, preferably, in the sidewalk, as shown, near the curb, so as to be conveniently reached from the street and from the houses, and so that the top flange will lie but a short distance below the surface. This hollow casing is provided with a top B, secured by rivets, bolts, or other means to the bottom casing, so that said top will lie about flush with the pavement and will offer no dangerous obstruction to pedestrians. This top is provided with a central mouth or opening into the casing, which opening is beveled outwardly and upwardly, as shown, forming a bevel or tapered seat b^2. Around this opening into the casing the top is provided with a countersunk recess forming a seat b, in which the cover C fits, and the bottom of this seat slopes or is inclined toward the center opening, as shown particularly at b'. The swinging cover C snugly fits in the seat b, tightly covering and sealing the opening through the top, and is provided at one end with the opposite lugs c c', which fit in recesses b^3 b^3 in the top and are loosely held therein by the metal strips or plates c^2. These recesses b^3 are slightly wider than the pivot-lugs, so that they can slide from one side to the other when the cover is opened or closed, whereby the cover, when swung open, will lock itself in that position. This cover can be provided with suitable means for raising the same, and is shaped so that the water will flow off the same.

The removable garbage can or vessel D is open at the top and normally depends from the opening in the top B down into the chamber or receptacle A', formed by the casing A. The open top of the can is provided with an annular upward and outwardly flaring or beveled or supporting flange d of a size to snugly fit the bevel-edge of the top opening, and thereby support the can depending into the casing. The loop-handles d' d^2 are secured to the inner sides of the can at the opening top thereof and extend up so that they can be easily grasped and be lifted from the receptacle.

The lower ends of the casing A can be open, as shown in Fig. 3, so that all moisture and wet can escape and will not collect in the chamber A'; or the casing can have a bottom provided with an upward extension a, (see Fig. 4,) upon which the closed bottom of the can rests, thereby relieving the flange or lips b from the strain. The bottom can be provided for the escape of water; but where the casing is located over a vault or cellar it is best to have it tight. The casing and can

can be placed singly—one in front of each house—or they can be arranged in pairs, as shown, or in any other suitable manner, as may be found most convenient and desirable.

By employing this device the unpleasant and unhealthy method generally followed in removing garbage, ashes, and refuse from houses is obviated, for where the usual method of throwing the refuse into barrels which are placed on the sidewalk or in an alley to wait for the garbage or ash man is followed the refuse is left exposed to the open air, and a disagreeable odor and disease are the result; but where this device is employed the cover is opened and the refuse thrown or swept into the can, and the cover is dropped, and everything is tightly closed beneath the ground and no odor escapes, and the garbage-man has merely to lift out and empty the can and replace it. By reason of the peculiar shape of the seat in which the cover fits and the flaring supporting-flange of the can and beveled openings therefor dirt, &c., cannot accumulate in such seat and prevent the cover from being tightly closed, and the weight of the can holds the lip b tightly engaged with the beveled edge b^2, so that the dirt cannot easily slip between the same. It is evident that various changes might be made in the form and arrangement in the parts described without departing from the spirit and scope of my invention, and I do not wish to limit myself to the precise construction herein set forth.

What I claim is—

1. The combination of a hollow underground casing having an outwardly-flaring top opening, a beveled seat, a cover for said opening, and a refuse-can normally inclosed in said casing and having a flaring lip or flange at its upper end fitting said beveled seat, substantially as set forth.

2. The herein-described refuse-can, open at the top, provided with an outwardly-flaring annular flange around its top edge, and having handles at its top secured to the inner sides, substantially as set forth.

3. In a refuse-receptacle, the combination of an underground hollow casing open at the top, a top plate secured to said casing and having an outwardly-flaring opening into the top of same, and a beveled countersunk seat around said opening, the bottom b' of which slopes or is inclined toward the opening, and a cover hinged to said top and adapted to fit snugly into said seat, with a removable can located in said casing and having an annular beveled top flange to engage with the beveled walls of said opening, substantially as and for the purpose set forth.

4. In a refuse-receptacle, the combination of an underground casing open at the top, a top plate therefor having an opening into the top of the casing, and a seat around said opening, a pair of separate elongated slots b^3 b^3 at sides of said seats, a cover having lugs c c', adapted loosely to fit in said slots, as set forth, and straps c^2 c^2, securing the same therein, and a removable refuse-can, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN ZAPP.

Witnesses:
J. B. McGIN,
W. KUFFNER.