May 17, 1927. 1,629,162

R. P. HOLMAN

TRASH BURNER

Filed Aug. 16. 1926

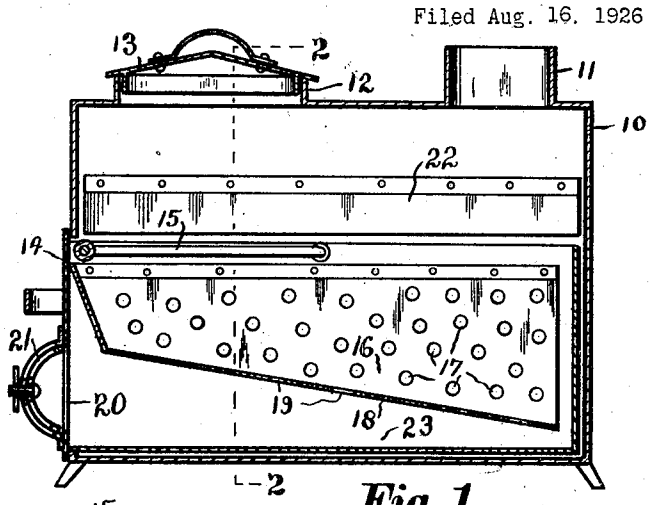


Fig. 1.

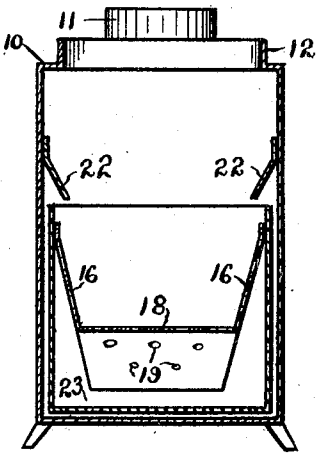


Fig. 2.

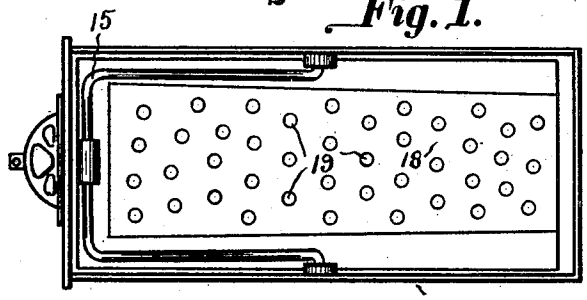


Fig. 3.

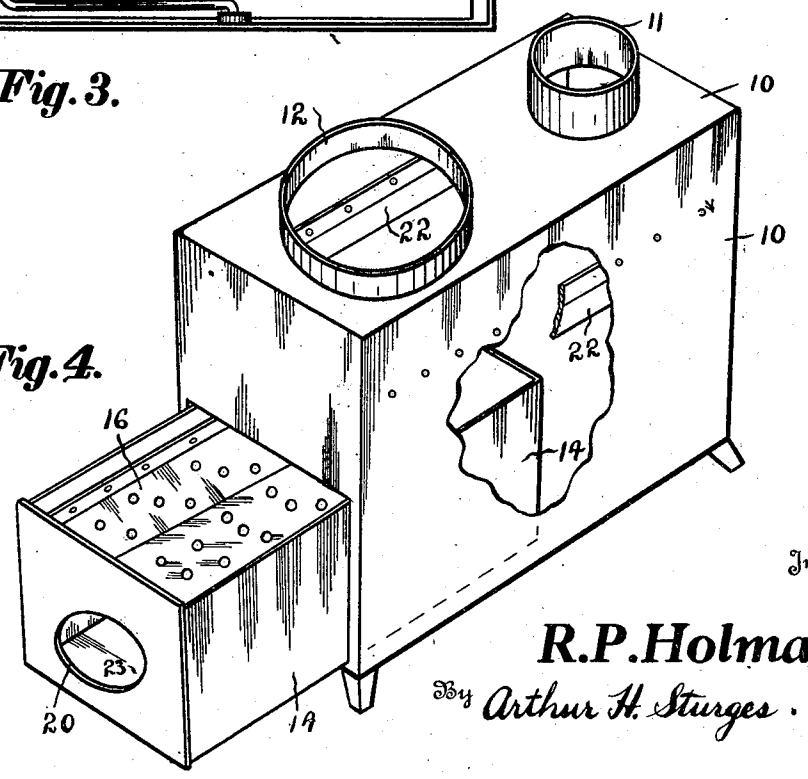


Fig. 4.

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# UNITED STATES PATENT OFFICE.

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## TRASH BURNER.

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This invention relates to trash burners, which are particularly adapted for use in dwellings or other buildings for burning household or other refuse, such as waste paper and the like accumulations.

One of the objects is to provide a novel arrangement for an ash tray to facilitate proper combustion and clean complete burning of trash. The invention also includes other objects and advantages as appear from the following detailed description and appended claims reference being had to the accompanying drawing, wherein like symbols refer to like or corresponding parts throughout the several views.

In the drawing, Figure 1 is a view of the burner in longitudinal section. Figure 2 is sectional view of the same on line 2—2 of Figure 1 the cover being omitted. Figure 3 is a plan view of a drawer. Figure 4 is a perspective broken away view of the device, the cover and the door for the drawer being omitted.

Referring now particularly to the drawing I provide a casing 10 which is preferably imperforate except the apertures in the top to provide near its rear end a collar 11 upon which a smoke pipe (not shown) may be mounted and a collar 12 near its front for a cover 13, an aperture also being provided in the front wall of the casing at its bottom for receiving a drawer 14.

While the casing and drawer are of rectangular form in plan and elevation, this form being preferred on account of convenience and economy in manufacture, they may of course have other forms.

The drawer 14 is of such proportions that it may have free sliding movements on the bottom of the casing for removal or to be placed therein, and is adapted to approximately fill the lower part of the casing. Numeral 15 indicates a bail for the drawer for use when it becomes necessary to empty ashes therefrom.

In order to facilitate combustion I provide a compartment in the drawer having sides 16 extending downwardly convergent from its upper open top and provided with perforations or draft-apertures 17, the bottom 18 of said compartment being also provided with perforations or apertures 19. The rear part of the compartment preferably has a greater depth than its front part, said bottom being inclined upwardly and forwardly to its front end.

The front end of the drawer is provided with an air intake opening 20, best shown in Figure 4, and by means of a draft damper 21 suitably mounted on the drawer the intake of air to the drawer and to its compartment may be under control.

As thus described, operation will be understood. After the cover is removed to permit refuse to be deposited for incineration, said refuse will be contained in the compartment, deflecting plates 22 being mounted on the inner sides of the casing to prevent any refuse from reaching the ash-pit 23, below said compartment, and on account of the construction as described it will be seen that incineration will be aided, not only by the perforated walls 16 and 18 of the compartment, but by the shape of the chamber or ash-pit 23 which, as best shown in Figure 2, is of flaring form both upwardly and rearwardly from the front wall of the drawer.

It will be appreciated that refuse to be burned is often wet or moist, and since complete combustion is desired, an incinerator should be of such construction that a free movement of air be provided, and that the refuse be completely separated from the ashes and supported so that, for the most part, it will be exposed to the air, and in the present instance air may move freely to the sides as well as the bottom of the compartment.

I claim as my invention,—

1. A refuse-burner comprising a casing having its top provided with an intake passage for refuse and a smoke exit passage, and provided at its front with an opening, a drawer having an air draft aperture and provided with a compartment for receiving refuse, and having perforated walls to permit a communication of air with the aperture of said drawer and with the smoke exitway, and a draft damper for the air draft aperture of said drawer.

2. A refuse burner comprising an upright casing having a smoke exit passage and an intake passage for refuse in its top and an opening in an upright wall thereof, a drawer, having a compartment therein and provided with an air draft passage and slidingly disposed in the casing for closing the opening of said upright wall, said compartment hav-

ing its bottom inclined upwardly toward said air draft passage and having perforations formed therein to permit air to move through said compartment from the air intake passage to said smoke exit passage.

3. A refuse burner comprising an upright casing having a smoke exit passage and a refuse intake passage in its upper part, one of its upright walls being provided with an opening, a drawer having a compartment therein and an air draft passage in its front wall and adapted to have sliding movements in the casing for closing said opening, said compartment having a perforated bottom inclined upwardly toward said air draft passage and having perforated side walls inclined upwardly and outwardly from said bottom to two walls of the drawer.

4. In a refuse burner, a casing for receiving refuse and provided with a smoke passage therein, a drawer mounted in the casing and having a front wall for closing the front of the casing, a draft damper mounted in the front wall of the drawer for admitting air thereto, and means in the drawer for directing some of the air to the refuse and some of the air directly to the smoke passage.

In testimony whereof, I have affixed my signature.

ROGER P. HOLMAN.