

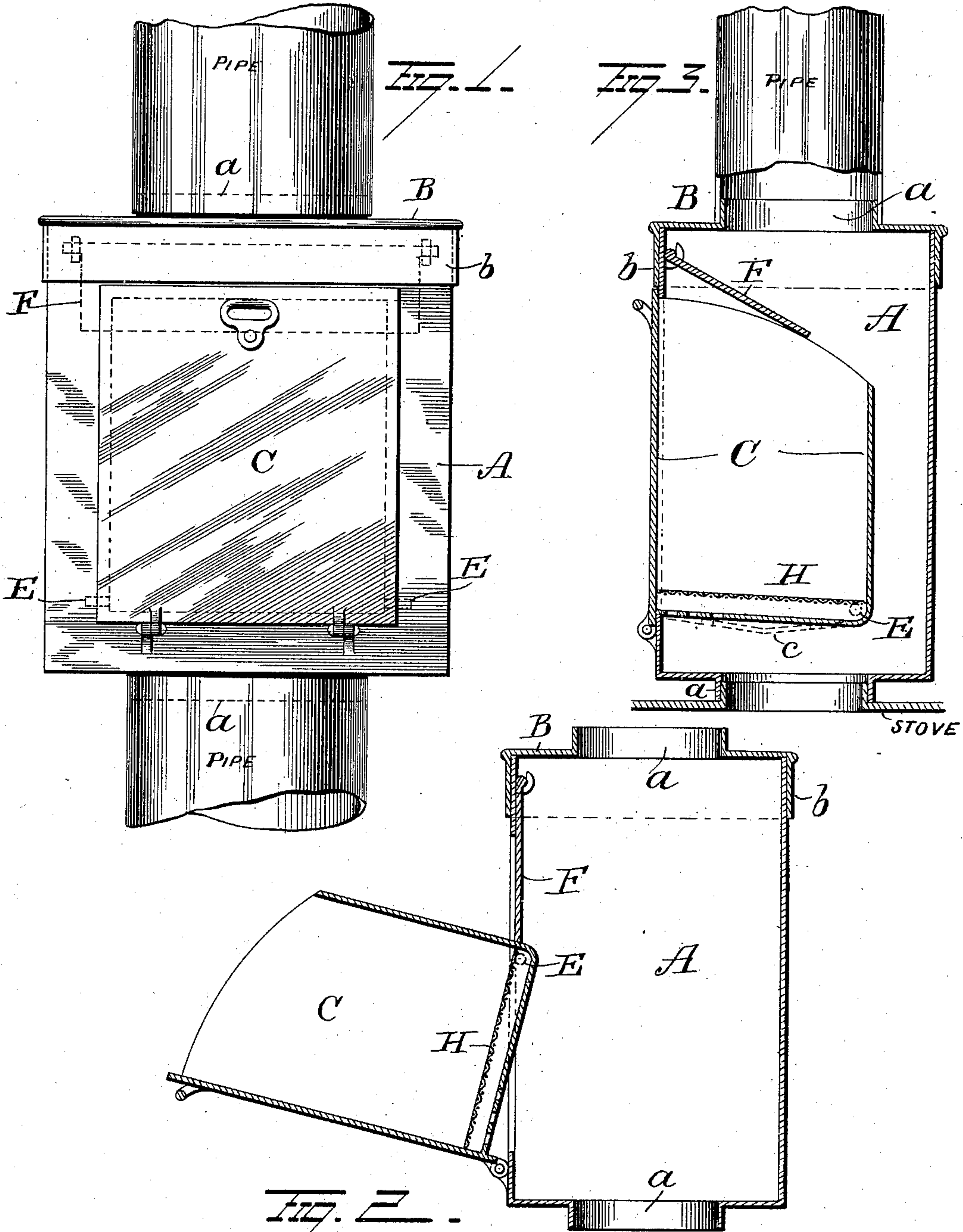
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Patented Aug. 21, 1900.

C. R. HARRIS.
DOMESTIC GARBAGE BURNER.

(Application filed Oct. 29, 1897. Renewed Jan. 23, 1900.)

(No Model.)



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CHARLES R. HARRIS, OF WILLIAMSPORT, PENNSYLVANIA.

DOMESTIC GARBAGE-BURNER.

SPECIFICATION forming part of Letters Patent No. 656,404, dated August 21, 1900.

Application filed October 29, 1897. Renewed January 23, 1900. Serial No. 2,513. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. HARRIS, of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain
5 new and useful Improvements in Domestic Garbage-Burners; and I do hereby 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 ap-
10 pertains to make and use the same.

My invention relates to an improvement in domestic garbage-burners, the object being to provide a cheap and simple device constructed to be interposed between and con-
15 nected to sections of the smoke-pipe of an ordinary cook-stove, range, or other heater and provided with a hopper adapted to hold the solid garbage or kitchen refuse in a position where it will be subjected to the heat of
20 the escaping products of combustion until carbonized or incinerated.

With this end in view my invention consists in the parts and combinations of parts, as will be more fully explained, and pointed
25 out in the claims.

In the accompanying drawings, Figure 1 is a view showing my device connected to sections of a stovepipe. Fig. 2 is a view in section showing the hopper in its open position,
30 and Fig. 3 is a view in vertical section showing it closed.

A represents a casing or frame of any desired shape, but preferably rectangular, and of any suitable material, its top and bottom
35 faces being provided with the projecting collars *a*, adapted to enter the ends of pipe-sections to which the garbage-burner is attached. If desired, the device may rest directly on the stove, and in such event the lower collar would
40 encircle or be encircled by the pipe-flange on the stove or range.

The top plate B of the device may be rigidly secured to the casing A; but, if desired, I may provide it with a flange *b*, adapted to
45 take over the top of the casing similar to the lid of an ordinary box. With such construction the top of the casing is rendered removable, thus permitting of convenient and ready access to the interior of the device for the
50 purpose of inspection and for removing any soot that may accumulate therein.

The front of the casing A is provided with an opening, preferably rectangular in shape, in which is mounted the hopper C, the outer side of the latter overlapping the walls of the
55 hopper-opening. This hopper may be in the form of a sliding drawer; but I prefer to construct it in the form of a bin and pivotally secure it at its lower front edge to the front of the casing A, so that when turned out-
60 wardly its open top is exposed, thus permitting of the free removal of the charred contents. This hopper is considerably smaller than the casing, so as to permit free and direct draft from the range or stove up around
65 the hopper, and the bottom of the latter is preferably slightly inclined downwardly toward the rear, or it may be made V shape, as shown in dotted lines *c* in Fig. 3, so as to cause any liquid that may exude from the
70 garbage to collect at the lowest point, and is preferably provided with perforations for the free upward passage of the heat and gases through and in direct and intimate contact with the garbage, thus resulting in a rapid
75 and more perfect carbonization of the garbage in the hopper. The hopper is provided at the side edges of its bottom with the lateral projections E, which latter are adapted to en-
80 gage the inner face of the casing A and limit the movement of the hopper, the parts being so located that when the hopper is in its open position, as shown in Fig. 2, its front face rests approximately in a horizontal position,
85 thus providing for the ready introduction of the garbage and its quick removal after it has been subjected to the action of the heat.

To prevent smoke or gases from escaping when the hopper is in its open position and also to prevent any interruption of the draft
90 through the stove, I provide the casing A with an apron F, which latter is hinged to the casing just above the hopper and normally rests with its free end on the upper edge of the hopper, and as the upper edge of the hopper
95 passes from under the apron the latter swings forward and closes that portion of the opening not filled by the hopper when the latter is in its open position, although when the hopper is returned to its upright position its top is
100 never entirely covered or closed by the apron. This absolutely prevents the escape of smoke

or gases from the smoke pipe or flue and also maintains a closed flue which is essential to a perfect draft through the stove and pipe.

In order to prevent the garbage from stopping up the perforations in the bottom of the hopper, and thus preventing the free upward passage of the hot air and gases through the mass of garbage, I have provided the hopper with a grate H, located slightly above the bottom of the hopper, which latter not only holds the mass above the bottom of the hopper and allows all the fluids to drain from the garbage and fall to the bottom, but it also operates to keep the perforations open, thus permitting the hot air to enter under the grate and penetrate the entire mass of garbage.

To operate the device, the garbage is first drained to remove all the free water or other fluid mixed therewith, and the solids are then deposited in the hopper and the latter closed. The hopper in its closed position is in the direct path of all the escaping heated gases and products of combustion, and the garbage is soon carbonized by the intense heat to which it is subjected. After the material has been carbonized it can be removed and deposited with the wood or coal, to be afterward burned as fuel, or it can be deposited directly in the stove. All odors arising from the burning garbage are carried off through the smoke-flue. Hence the entire operation is odorless.

It is evident that many slight changes might be resorted to in the relative arrangement of parts herein shown and described without departing from the spirit and scope of my invention. Hence I would have it understood that I do not wish to confine myself to the exact construction herein shown and described.

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

1. In a domestic garbage-burner the combination with a casing having flue-openings therein, of a movable hopper located within the casing and an apron for closing the hopper-opening when the latter is open but which never closes the hopper.

2. In a domestic garbage-burner the combination with a casing constituting a part of a stovepipe, said casing having an opening in one side, of a hopper adapted to be inserted and removed through said opening and fully close the opening when in its normal position and partly close it when drawn out, and a hanging apron extending normally part way only across the open upper end of the hopper and which apron closes the portion of the opening not closed by the hopper when the latter is draw out.

3. In a domestic garbage-burner, the combination with a casing having flue-openings therein, of a tilting hopper pivoted to the casing and a swinging apron for closing the hopper-opening when the latter is open said apron normally resting upon the upper edge of the hopper and being of less width than the width of the hopper whereby to admit the free circulation of combustion products through the hopper.

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

CHARLES R. HARRIS.

Witnesses:

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S. G. NOTTINGHAM.