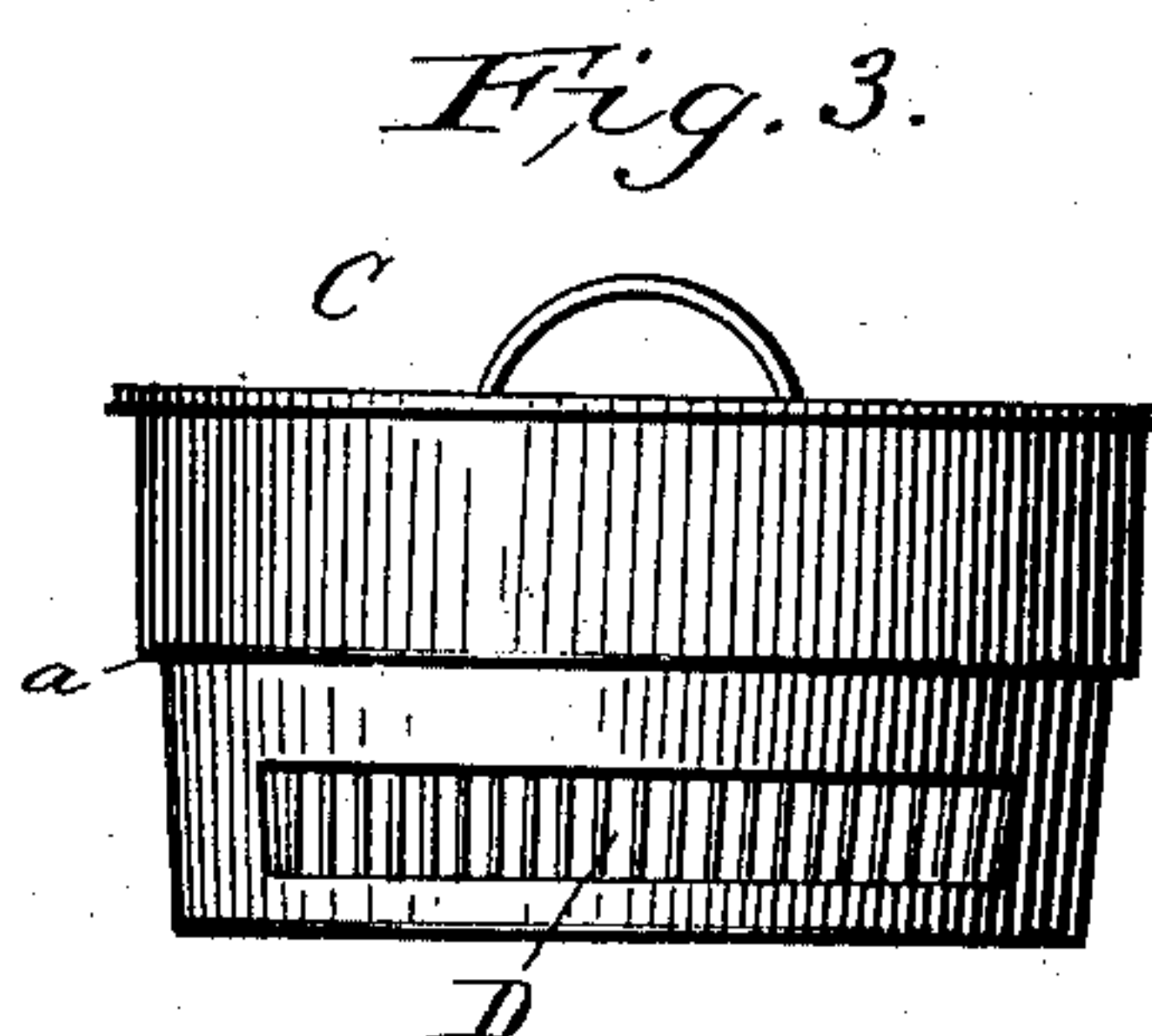
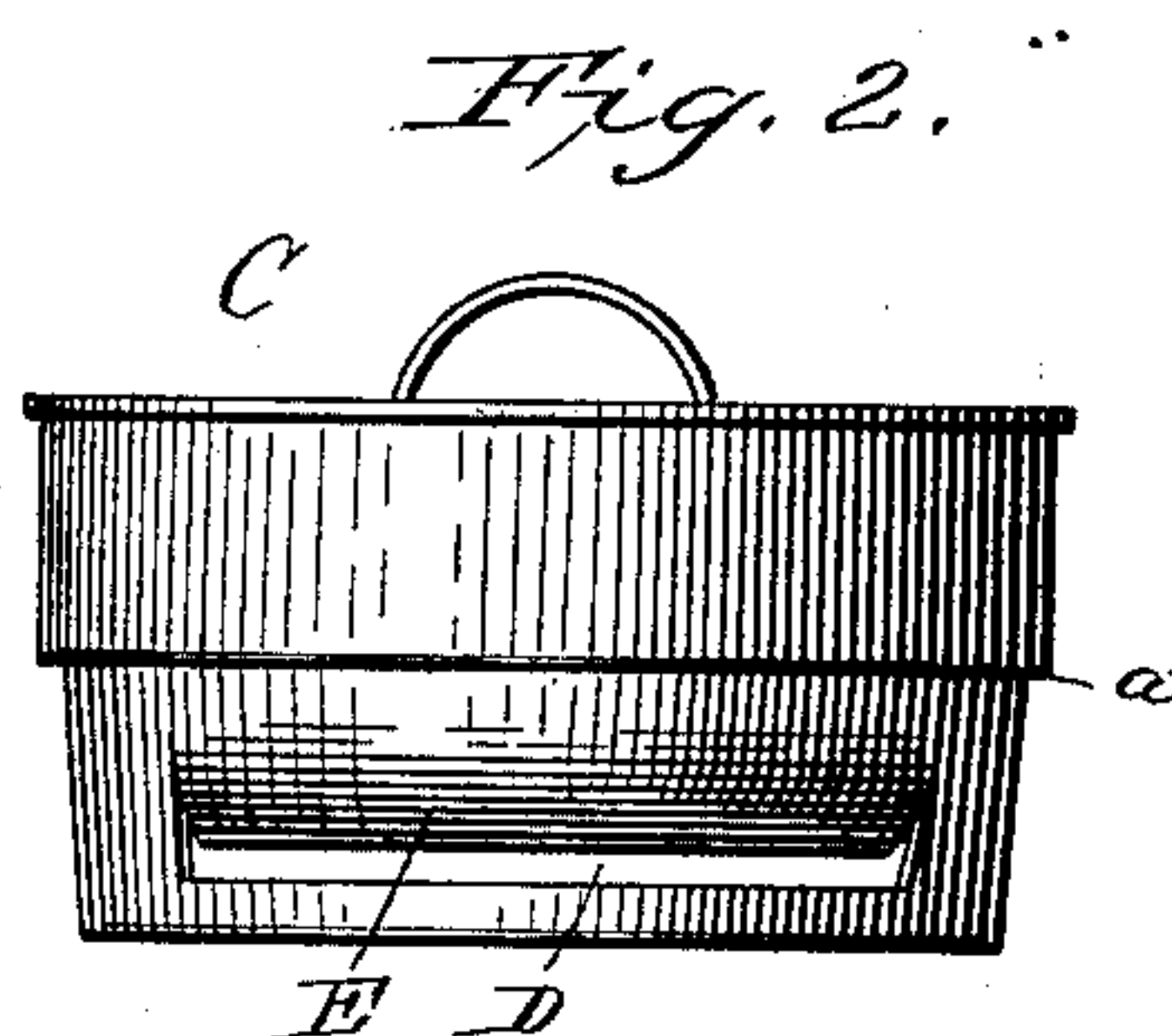
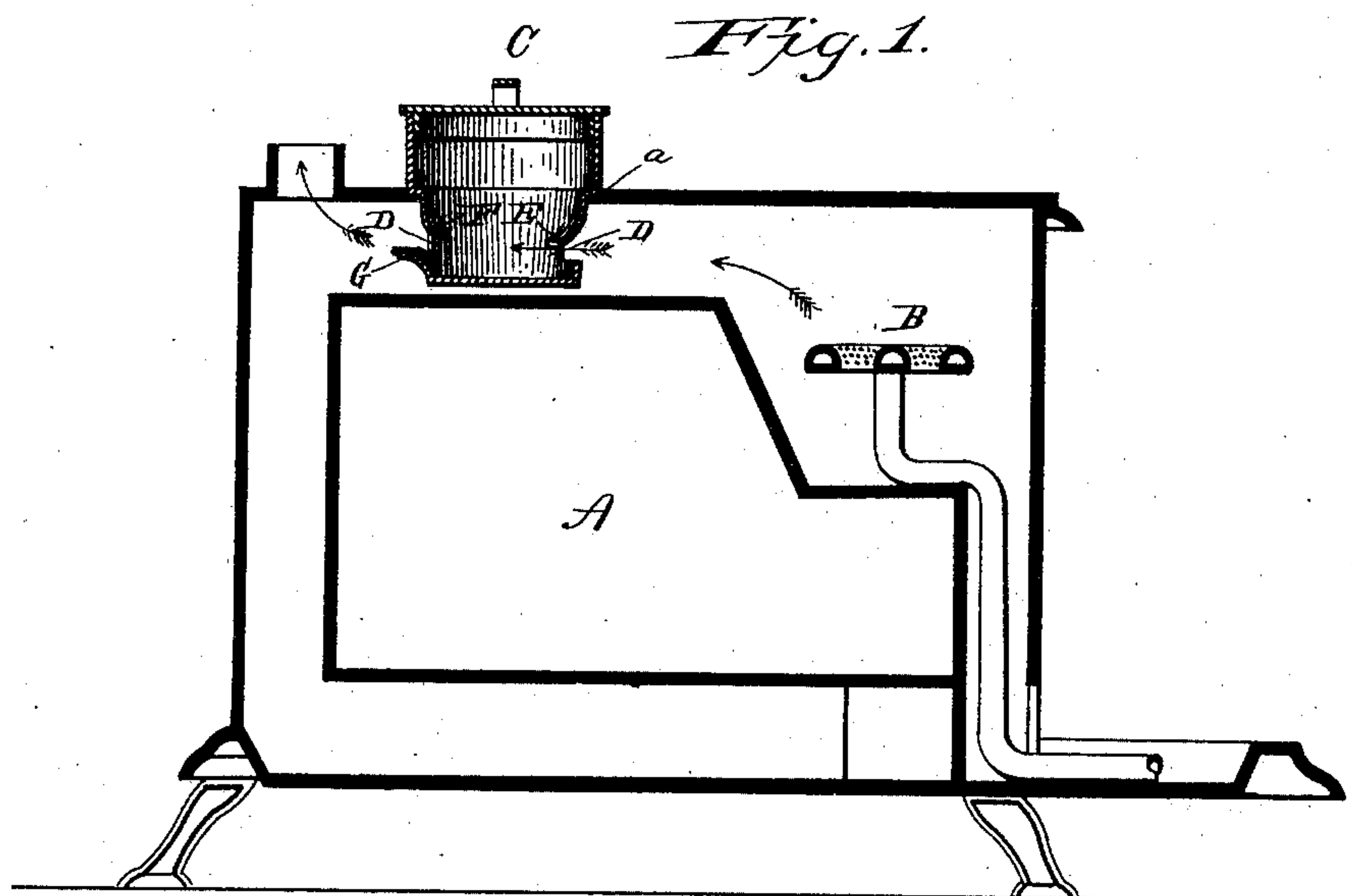


(No Model.)

C. T. BUCHER.
REFUSE BURNER.

No. 375,667.

Patented Dec. 27, 1887.



Witnesses:
John S. Finch Jr.
C. D. Davis.

Inventor:
C. Theodore Bucher
By his Attorney
C. M. Alexander

UNITED STATES PATENT OFFICE.

C. THEODORE BUCHER, OF TIFFIN, OHIO.

REFUSE-BURNER.

SPECIFICATION forming part of Letters Patent No. 375,667, dated December 27, 1887.

Application filed July 7, 1887. Serial No. 243,666. (No model.)

To all whom it may concern:

Be it known that I, C. THEODORE BUCHER, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have
5 invented certain new and useful Improvements in Refuse-Burners, of which the following is a specification, reference being had therein to the accompanying drawings.

It is well known that a serious drawback to
10 the introduction of burners for "natural gas" into cook-stoves as a substitute for solid fuel lies in the fact that it is impossible to burn the kitchen refuse, floor-sweepings, &c., because the burners, which are usually provided with
15 numerous small perforations for the escape and distribution of the gas, would speedily become clogged and inoperative, as is evident.

My invention is designed to overcome this objection to the use of gas as a substitute for
20 solid fuel in cook-stoves; and in attaining this object I employ an independent burner or receptacle adapted to be placed upon the holes of a stove in the same manner as an ordinary cooking utensil, the lower portion of the recep-
25 tacle, or that portion which extends into the stove and holds the refuse, being provided with slots or openings in its opposite sides, the horizontal edges of which are provided with de-
30 flecting lips or flanges to allow the passage of the flame and hot gases through it, in order that the refuse may be consumed without any danger of it reaching and clogging the burn-
35 ers, as will be more fully hereinafter specified, and particularly pointed out in the claims ap-
ended.

In describing the apparatus I have invented for the above purpose reference is made to the accompanying drawings, in which—

Figure 1 represents a vertical sectional view
40 of a cook-stove, showing my apparatus in section and applied thereto; Fig. 2, a side elevation of my invention detached from the stove. Fig. 3 is a view of a modification of my inven-
45 tion, which will be hereinafter described.

Referring to the drawings by letter, A des-
ignates a cook-stove of ordinary construction heated by means of a suitable gas-burner, B,
placed in the fire-box thereof, as usual. Pref-
erably in the rear pot-holes of the stove, near
50 the exit-flue and in the line of draft of the prod-
ucts of combustion, I place my apparatus,

which consists of an elliptical or similarly-
shaped receptacle, C, so formed in order that it
will conform to the opening in the stove made
by removing two covers and a center piece, and
55 also for the purpose of presenting a broad sur-
face to the hot gases and flame of the burning
gas. This receptacle is provided with a re-
movable cover, and has its lower portion, or
half, reduced in diameter, forming an annular
60 shoulder, *a*, which rests on the edge of the stove-
hole when the apparatus is in use, thereby sus-
pending the said lower portion, which holds the
refuse, in the combustion-chamber of the stove.
In the opposite sides of the lower reduced por-
65 tion of the receptacle are formed longitudinal
slots or opening D, for the purpose of permit-
ting the flame and hot gases to pass through
and over the refuse that may be deposited in
the receptacle, and consume and carry off
70 through the exit-flue the products of combus-
tion therefrom. The receptacle being sus-
pended within the combustion-chamber, the
flames and hot gases from the burning gas will
pass freely around and under it, thereby serv-
75 ing to highly heat it without interfering with
the draft of the stove.

Upon the upper longitudinal edge of the slot
D, nearest the flame, I form a depending in-
wardly-curved lip or flange, E, which serves the
80 double purpose of deflecting or directing the
flames into the receptacle and preventing the
refuse from falling out of the same or stopping
up or clogging the opening or slot. The lon-
gitudinal edges of the slot on the opposite side
85 of the receptacle are both provided with lips
or flanges F G, the upper one, F, being curved
or turned inwardly for preventing the refuse
from closing the slot, and the lower one, G,
being outwardly curved or extended to assist
90 in directing the smoke and products of com-
bustion out of the receptacle, and at the same
time deflect the current of hot gases that passes
under the receptacle away from the slot or
opening, so as not to retard the consumption
95 of the contents of the receptacle by preventing
the exit of the smoke and gases therefrom.

In the modification designated by Fig. 3 I
may use, in addition to the lips or flanges, to
prevent the refuse in the receptacle from fall-
100 ing out, a grating of bars for that purpose.

It will be observed that by my invention I

provide an eminently useful apparatus for use in connection with stoves heated by gas or oil, and one which may be cheaply made and will effectually prevent the clogging of the burners
5 by any foreign substances.

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

10 1. A refuse-burner consisting of the closed receptacle provided with corresponding horizontal slots in its opposite sides, the upper edge of one of said slots being provided with the depending inwardly-curved deflecting lip E, and the lower edge of the opposite slot with
15 the outwardly-curved deflecting flange G, as and for the purpose specified.

2. A refuse-burner consisting of the closed receptacle, having means, substantially as described, for suspending it within a stove, and provided on its opposite sides with correspond- 20 ing horizontal slots, the upper edges of the said slots being provided with depending inwardly-curved deflecting lips E and F, and the lower edge of one of said slots being provided with an outwardly-curved deflecting lip, G, as and 25 for the purpose specified.

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

C. THEODORE BUCHER.

Witnesses:

W. S. WAGNER,
GEO. E. SCHROTH.