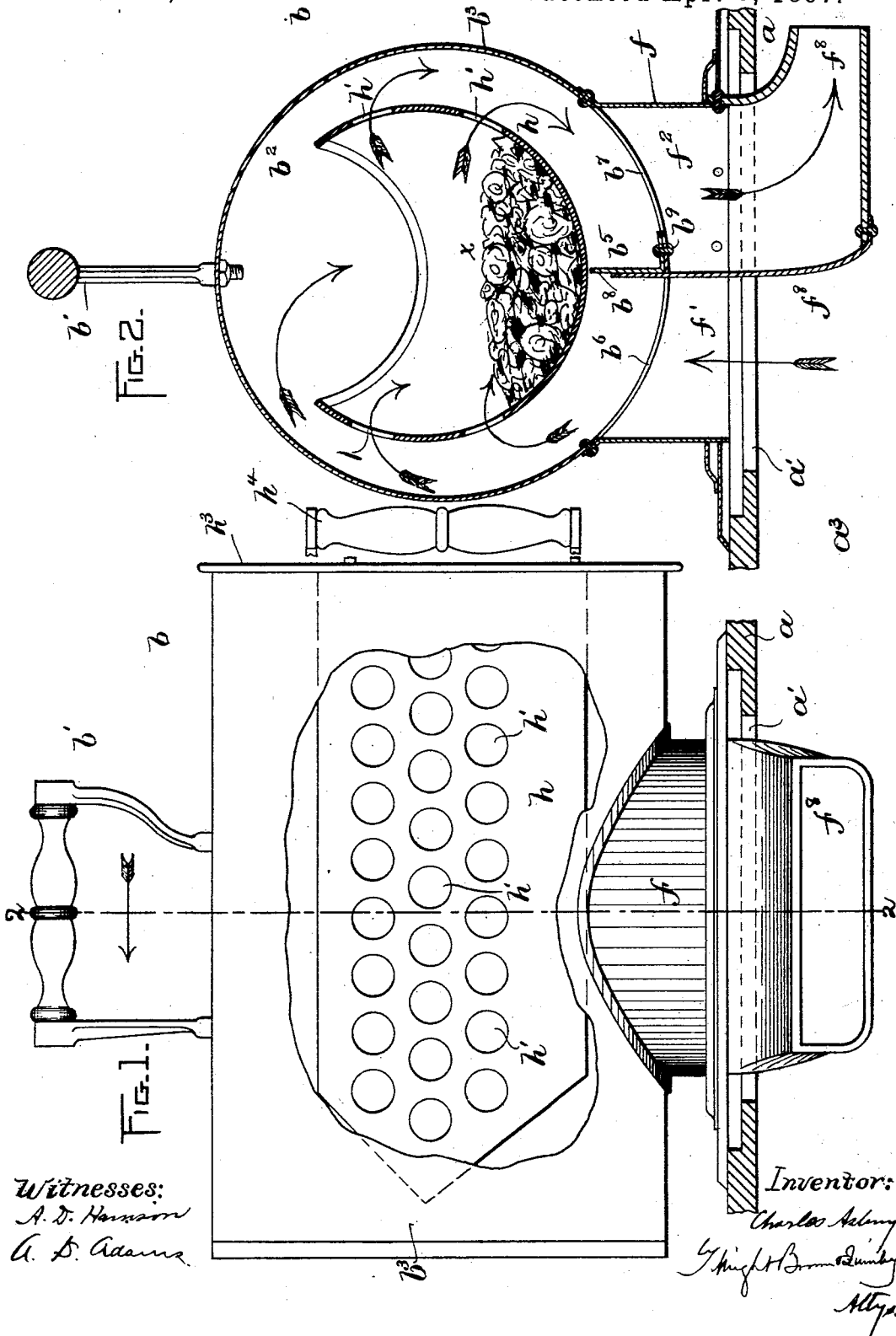


(No Model.)

C. ASBURY.
CARBONIZER.

No. 580,078.

Patented Apr. 6, 1897.



Witnesses:

A. D. Hanson

A. D. Adams

Inventor:

Charles Asbury

By Knight Bros & Quincy

Atty.

UNITED STATES PATENT OFFICE.

CHARLES ASBURY, OF CHELSEA, MASSACHUSETTS, ASSIGNOR TO THE
SANITARY CONSTRUCTION COMPANY, OF NEW YORK, N. Y.

CARBONIZER.

SPECIFICATION forming part of Letters Patent No. 580,078, dated April 6, 1897.

Application filed March 16, 1896. Serial No. 583,324. (No model.)

To all whom it may concern:

Be it known that I, CHARLES ASBURY, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Carbonizers, of which the following is a specification.

This invention has for its object the production of a new and improved carbonizer; and it consists in the novel features of construction and relative arrangement of parts hereinafter fully described in the specification, clearly illustrated in the drawings, and particularly pointed out in the claim.

Reference is to be had to the accompanying one sheet of drawings, forming a part of this application, in which like characters indicate like parts wherever they occur.

In the drawings, Figure 1 represents in side elevation a carbonizer constructed in accordance with my invention. Fig. 2 represents a vertical cross-sectional view thereof on the line 2 2 of Fig. 1.

Referring to the drawings, in the embodiment of my novel carbonizer therein shown and selected by me for the purpose of illustrating my invention, *a* represents a portion of the top of a range or other heat-producing device. *a'* represents an opening therein adapted to be closed when not in use by a cover or lid (not shown) in the usual way. The range *a* and its several parts and adjuncts may be of any preferred construction or style, and it will not be further described here, as it forms no part of my invention.

b represents my improved carbonizer provided with a handle *b'*, by which it may be moved about or carried. As here shown, the carbonizer is separable from the range or stove and can be placed aside when not in use, or can be moved to different parts of the range or flue, or applied to different ranges, it being designed to be a portable utensil separate and distinct from a flue or range in connection with which it is used and adapted to be moved about or placed aside, like a metal or other kitchen utensil.

The several parts of the carbonizer, as here shown, are made of sheet-iron suitably riveted together, but they may be made, if desired, of cast-iron and bolted together.

b² represents a chamber of any desired form,

the material forming the walls *b³* of said chamber being cut away at one end to form an opening, (not shown,) in which the hopper may be inserted, and also cut away at the bottom to form an opening *b⁵*. The latter opening is divided into two passage-ways *b⁶* *b⁷*, by means of the partition *b⁸*, secured by rivets *b⁹* to the bottom of the wall *b³* adjacent the opening *b⁵*. A short pipe *f* is connected at one end to the wall *b³* about the opening *b⁵*, and at its bottom is adapted to fit about the opening *a'* in the range *a*. The opening in the pipe *f* is divided into two passage-ways *f¹* *f²* by means of a partition *f³*, secured in any desired way to the partition *b⁸*. This partition *f³* is designed to extend into or below the top of the range, as shown, into the passage-way *a³* of the range, through which the products of combustion pass from the fire-box to the flue.

The walls of the lower portion of the passage-way *f²* are bent to form a snout *f⁴*, whose mouth is directed to deliver its contents toward the flue (not shown) and away from the fire-box. The partition *f³* acts as a stop to compel the products of combustion coming from the fire-box to travel into the chamber *b²*, as shown by the arrows, and to leave said chamber by the passage-way *f²* and snout *f⁴*. The partition and snout do not completely close the passage-way *a³*, but by their size and construction intercept a sufficient quantity of the products of combustion to perform the desired work.

h represents a hopper, preferably provided with a closed bottom in order to hold any drippings or moisture that may be held by the garbage *x*, placed in said hopper. The sides of the hopper are preferably perforated, as at *h'*, in order to permit the products of combustion the more readily to have access to the contents of the hopper. The hopper at the bottom is designed to rest upon the top of the partition *b⁸* and is provided with a head *h³*, adapted when the hopper is placed in the chamber to close the opening at the end of the chamber. The head *h³* carries a handle *h⁴*, by which the hopper may be manipulated.

The operation of my improved carbonizer is as follows: The parts being constructed

and arranged as described, the garbage is placed in the hopper and the hopper inserted in the chamber, thus completely closing said chamber, except the passage-ways $f' f^2$. The products of combustion coming from the fire-box strike the partition f^3 and are deflected upward, as indicated by the arrows, contacting with the garbage through the openings h' and over the top of the hopper, the combined gases and products of combustion passing completely about the chamber b^2 and leaving the same through the passage-way f^2 and snout f^8 , the latter delivering the gases in the direction of the currents of gases and their products of combustion that are continually passing from the fire-box to the flue, so that a continuous draft is maintained through the chamber of the carbonizer.

The partition-wall b^3 is a convenient means to prevent the products of combustion passing from the passage-way f' directly to the passage-way b^2 without contacting with the garbage, &c.

Having thus explained the nature of my invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which

it may be made or all of the modes of its use, what I claim, and desire to secure by Letters Patent, is—

A carbonizer, comprising a chamber, having an opening adapted for connection with a stove or range, a partition in said opening, a hopper arranged in said chamber adapted to rest upon said partition, said partition being arranged to divide said opening into passage-ways b^6, b^7 , a snout f^8 connected to form a continuation of the passage-way b^7 , one side of said snout forming a continuation of said partition, and acting as a stop, or damper to said range to deflect the products of combustion into said chamber, whereby the products of combustion are admitted to said chamber through an opening, passing to the flue or range by way of the snout.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 14th day of March, A. D. 1896.

CHARLES ASBURY.

Witnesses;

C. F. BROWN,

A. D. HARRISON.