

W. BUTCHER.

Heating Stove.

No. 4,295.

Patented Nov. 29, 1845.

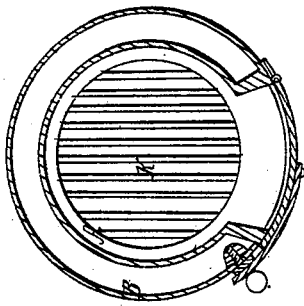
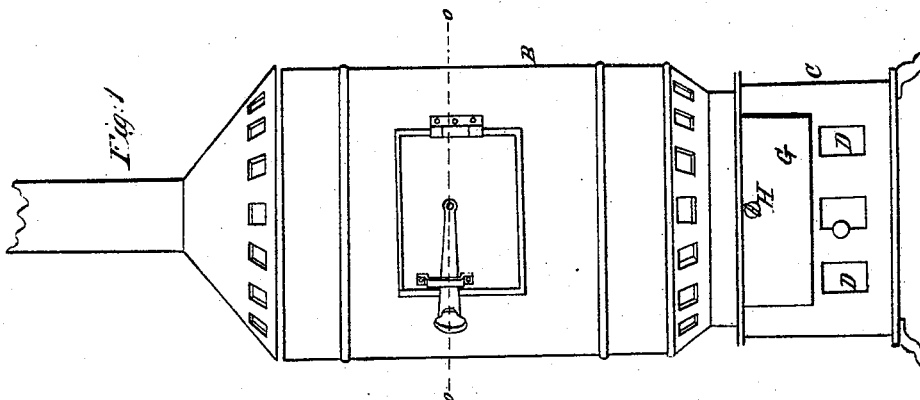
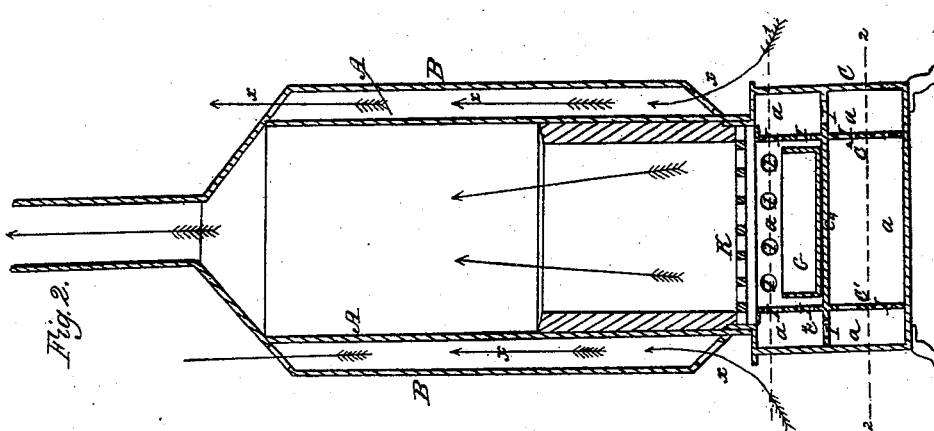
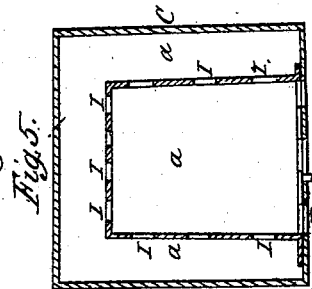
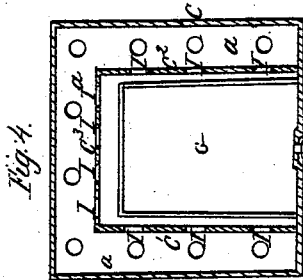


Fig. 3.



# UNITED STATES PATENT OFFICE.

WILLIAM BUTCHER, OF PHILADELPHIA, PENNSYLVANIA.

## ASH-PIT OF STOVES.

Specification of Letters Patent No. 4,295, dated November 29, 1845.

*To all whom it may concern:*

Be it known that I, WILLIAM BUTCHER, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Stoves for Heating Apartments, called "Butcher's Improved Safety-Stove," which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a front elevation of the stove. Fig. 2 is a vertical section through the center of ditto. Fig. 3 is a horizontal section at the line *o o* of Fig. 1. Fig. 4 is a horizontal section of the base of the stove at the line 1 1 of Fig. 2. Fig. 5 is a horizontal section of the base at the line 2 2 of Fig. 2.

Similar letters in the several figures refer to corresponding parts.

This stove in its general features resembles other stoves in use—that is to say it is of an upright circular form, and is placed on a square base or box containing the ash box &c.

My improvement consists in surrounding the fire chamber A of the stove with an additional cylinder B, between which and the inner cylinder or fire chamber, a column of air is allowed to pass, for preventing the outer surface of the stove from becoming heated to too great a degree—and in making the route, for the draft to pass, from the exterior to the fire, through a series of apartments formed in the base of the stove, so arranged in relation to each other as to render it impossible for the fire to escape from the stove through the draft openings, and at the same time not interfering with the draft.

The outer cylinder B, is designed to be made of tin, japanned on its outer surface, and is situated three inches from the inner cylinder A or fire chamber when a nine inch box is used in order to allow a space between the two for a column of air to pass as indicated by the arrows *x w*. Such being the case the outer cylinder will not become sufficiently hot, to do any injury to children or other objects that may accidentally come

in contact with it, thus rendering the stove particularly adapted to nursery use.

The base C, of the stove is divided into several apartments *a*, communicating with each other, by means of two vertical perforated plates *c'* *c''* secured parallel to the sides of the box or base and extending from the front toward the back of said box, connected together at their back extremities by another upright perforated plate *c'''* and a horizontal perforated plate *c''''* the size of the interior of the box, secured midway between the top and bottom of said box. Thus converting the box into several apartments *a* and causing the draft to pass to the fire, from the lower center apartment, through the side and back apartments into the upper center apartment, to the fire, and at the same time making it impossible for the fire to escape through the draft openings D, when the stove is jarred by the lurching of a vessel or other cause, without first passing through each of the several apartments, thus removing all danger of accident from fire escaping from the stove, and rendering it perfectly safe for ships cars and all places where a stove is required.

G is the ash box.

H is the screw for securing the ash box; I, the draft openings to allow the air that enters through the openings D to pass through the apartments *a* to the fire chamber A.

K is the grate.

What I claim as my invention and which I desire to secure by Letters Patent is—

Preventing the fire and ashes escaping from the stove through the draft openings D by dividing the base or lower box of the stove into a number of apartments *a* communicating with each other, formed by a horizontal perforated plate *c''''*, and vertical perforated plates *c'* *c''* *c'''* in the manner and for the purpose set forth.

WM. BUTCHER.

Witnesses:

EDWARD MAHER,  
JOHN THOMPSON.