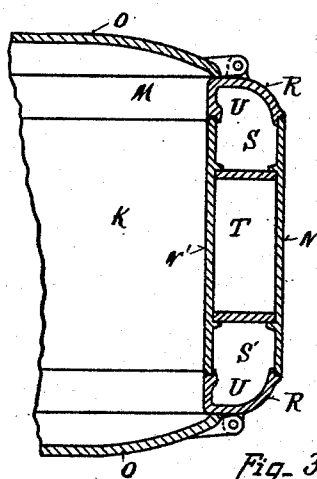
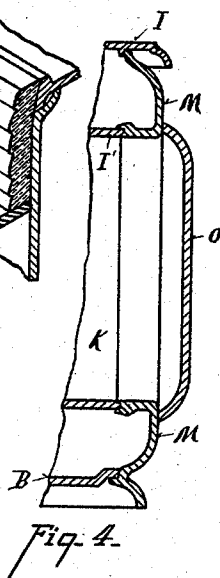
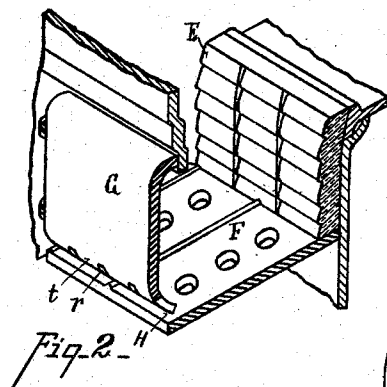
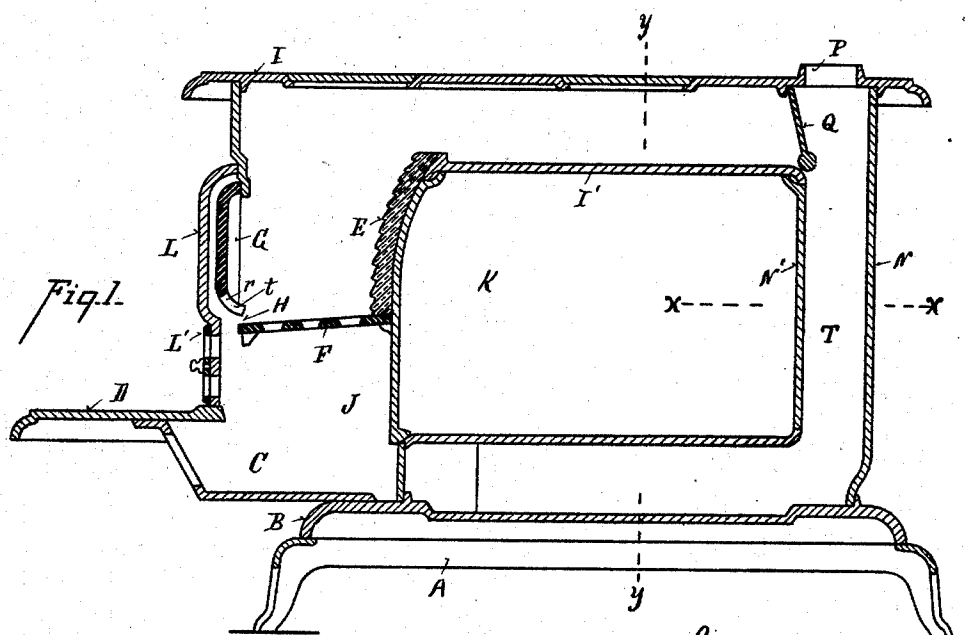


(No Model.)

S. BOAL.
COOKING STOVE.

No. 527,382.

Patented Oct. 9, 1894.



Witnesses
C. W. Miles.
Oliver B. Kaiser.

Inventor
Stanhope Boal
By *Wood & Bond*
Attorneys

UNITED STATES PATENT OFFICE.

STANHOPE BOAL, OF PIQUA, OHIO.

COOKING-STOVE.

SPECIFICATION forming part of Letters Patent No. 527,382, dated October 9, 1894.

Application filed April 25, 1894. Serial No. 508,975. (No model.)

To all whom it may concern:

Be it known that I, STANHOPE BOAL, residing at Piqua, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Cooking-Stoves, of which the following is a specification.

The object of my invention is to provide a wood burning cook stove with a low down hearth and square oven of such form and construction that it can be readily turned into a coal burning stove if desired.

Another object of my invention is to provide a curved or swelling form of door and side plates to which the oven doors are hinged so as to increase the capacity of the flues and also to increase the capacity of the oven and at the same time adding a beautiful appearance to the stove without increasing the cost.

The features of my invention will be fully set forth in the description of the accompanying drawings making a part of this specification, in which—

Figure 1, is a central longitudinal vertical section of my improved cook stove. Fig. 2, is a central perspective view of the fire box. Fig. 3, is a section on line *x, x*, Fig. 1. Fig. 4, is a section on line *y, y*, Fig. 1.

A represents the base frame of the stove.

B represents the lower plate.

C represents the ash pit, detachably supported upon the plate B.

D represents the sliding hearth over the ash pit C.

The fire box is composed of the back E, perforated fire bottom F, front fender door G, ash chute J and air space H. It will be observed that the fire back E, is opposite the upper portion of the oven K, while the lower portion of the oven is opposite the ash chute J. L represents the front door; L', an air register in the bottom portion of the door.

G represents the fender or front of the fire box. It is provided with openings *r* between the teeth *t* along the lower edge. The remaining portion rises solid to the front plate so as to prevent the draft of air from entering the fire box except at the bottom. It will be observed that the space H between the front grate and the bottom plate is opposite the door openings and it is provided for the purpose of supplying air to the bottom of the grate as well as for removing the ashes which

are partly removed through the perforated bottom and through the opening H.

I represents the top plate of the stove. 55

I' represents the top oven plate.

Between the plates I, I', is formed the ordinary flue.

N represents the back plate of the stove; N', the back plate of the oven. Between these plates is formed the down flues S, S', for the products of combustion to pass under the oven, these flues being extended under the oven for this purpose. 60

T represents the up flue which carries off the products of combustion. P represents the up take flue or pipe collar. Q represents the damper for opening and closing the flue T. These flues are constructed in the ordinary manner. 65

M represents the side plates of the stove. They are out-curved from the top and bottom edges respectively to the edge of the openings against which the oven doors abut both at the top and bottom and form an enlargement of the side flues under the oven and of the flue space above the oven. R represents the rear end of these side plates which curve outward from their rear edges to the edge against which the hinged oven doors abut forming pockets or enlargements U of the down flues in the rear of the oven. The side plates are similarly curved in front of the oven so that the oven is practically enlarged by the out-flaring of the side plates and still further enlarged by the swelling or curved form of door, O. By this construction I increase the size of the oven all the way around where the oven doors mount to the sides one inch, more or less, without increasing the cost of making these sides or the cost of making the stoves. 70

This is accomplished preferably by the curved form. One part of the pockets referred to above extends perpendicularly on the side directly opposite the descending or back corner flues S, S', and therefore increases the capacity of these flues. These pockets increasing the capacity of these flues swell up flush with the oven doors and may be covered in one design with the oven doors, thus adding beauty to the appearance of the stove at the places referred to and increasing in appearance the length of the oven door. 85 90 95 100

Another important advantage obtained by

the out-flared or out-curved form of plates is that they are much less liable to crack in cooling than plane faced plates.

By making the ash pit and hearth low down to the fire box opposite the top portion of the oven a deep chute is obtained which allows the ashes to fall through the chute into the ash pit, and admits a free supply of air to the bottom of the perforated fire box without danger of interference by the accumulation of ashes. I also obtain a square oven and low down hearth in combination with a wood burning fire box which can be converted into a coal stove by changing the fire box to a coal basket and making the front plate with a coal feed door.

I claim—

1. The combination with a cook stove hav-

ing the usual draft flues and oven, and provided with two plates forming a flue at the rear of the oven, of a curved side plate M joined to the aforesaid flue plates and forming an extension of the rear flue, substantially as described.

2. The combination with a cook-stove having an oven and draft flues extending about said oven and up at the rear thereof at each side, of curved plates M forming extensions of the said rear flues, substantially as described.

In testimony whereof I have hereunto set my hand.

STANHOPE BOAL.

Witnesses:

W. R. WOOD,
C. W. MILES.