

(No Model.)

S. C. PURDY.

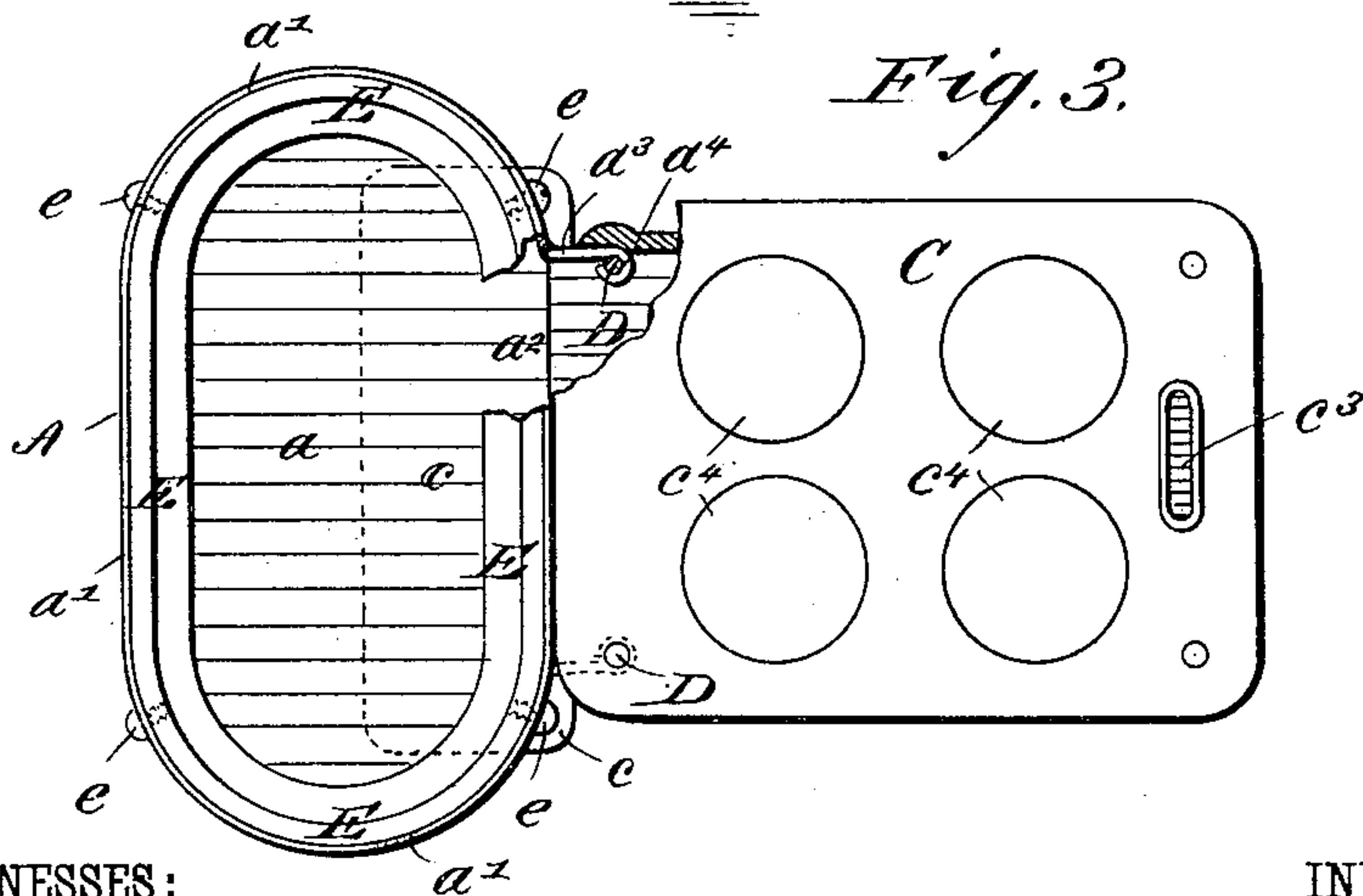
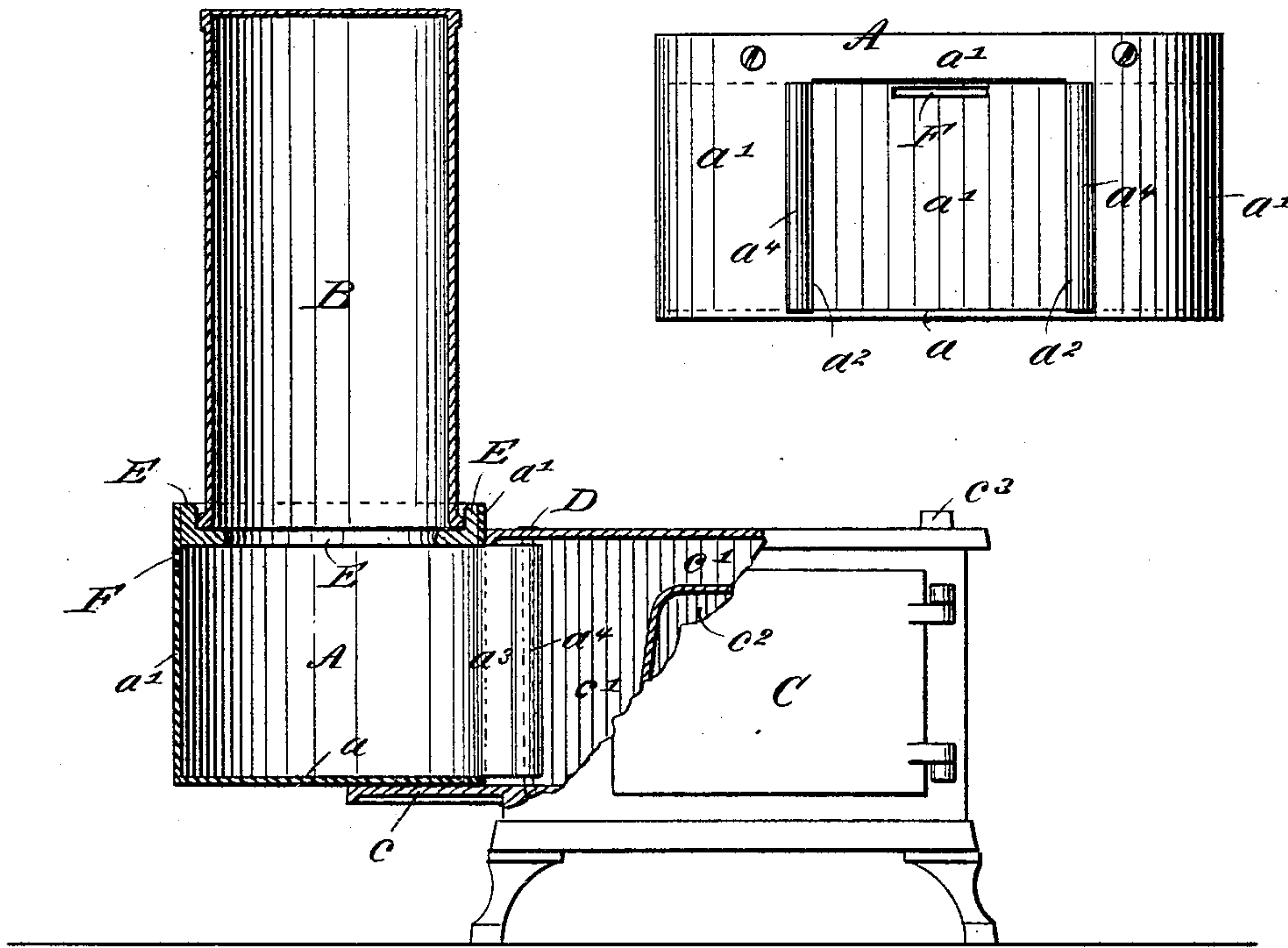
STRAW BURNING ATTACHMENT FOR STOVES.

No. 344,327.

Patented June 22, 1886.

Fig. 1.

Fig. 2.



WITNESSES:

Donn Twitchell  
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# UNITED STATES PATENT OFFICE.

SILAS C. PURDY, OF ATKINSON, NEBRASKA.

## STRAW-BURNING ATTACHMENT FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 344,327, dated June 22, 1886.

Application filed December 11, 1885. Serial No. 185,329. (No model.)

*To all whom it may concern:*

Be it known that I, SILAS C. PURDY, of Atkinson, in the county of Holt and State of Nebraska, have invented a new and Improved  
5 Straw-Burning Attachment for Stoves, of which the following is a full, clear, and exact description.

My invention relates to an attachment to stoves whereby straw, hay, or other fibrous  
10 fuel may be economically burned by utilizing the draft-passages of the stove and without decreasing the heating or cooking capacity of the stove.

The invention consists in certain novel features of construction of the straw-burning attachment and in its combination with the stove,  
15 all as hereinafter fully set forth.

Reference is to be had to the accompanying drawings, forming a part of this specification, in  
20 which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a transverse vertical sectional elevation of my improved straw-burner as applied to a stove, the latter being partly  
25 broken away and in section. Fig. 2 is a rear elevation of the base or fire pot of the attachment; and Fig. 3 is a plan view of the stove and base of the straw-burner, partly broken away and in section.

30 The straw-burning attachment consists of a base or fire box A, adapted to the front of an ordinary cook-stove, and a straw or fuel reservoir, B', adapted to be set, when filled and turned bottom upward, onto the top of the  
35 base A, as clearly shown in Fig. 1. The base A is made preferably of sheet-metal with a closed bottom,  $a$ , and sides and ends formed of a bent plate,  $a'$ , which is cut away at the rear side to form an opening,  $a^2$ , at each side  
40 of which there is an out-turned vertical flange,  $a^3$ , at the extremity of which a hollow bead or eye,  $a^4$ , is formed. The opening  $a^2$  corresponds in size with the opening at the front of the stove C when the entire front of the  
45 stove is removed, and whereby the side flanges,  $a^3$   $a^3$ , of the base fit against the opposite side plates of the stove, and so that the same stove bolts or pins D D which had served to hold the ordinary stove-front in place may be passed  
50 down through the beads or eyes  $a^4$   $a^4$  to hold

the base A to the body of the stove, while its bottom rests on the front plate,  $c$ , of the stove.

At or near the top of the base A is fastened by screws or bolts  $e$  the cast-iron angular flange E, which forms the seat or support  
55 on which the open end of the fuel-reservoir B rests, and in the front of the base A, just beneath this flange E, is formed an opening, as at F, to give draft for proper combustion of the hay or straw. When the stove-front and  
60 the ordinary wood or coal burning grate of the stove are removed, the draft-passage  $c'$  of the stove over its oven  $c^2$  will be unobstructed from the base A to the exit  $c^3$ , to which the stove pipe or flue is fitted.  
65

It is evident that when the fuel-reservoir B is filled with hay or straw or like fibrous fuel and is set inserted on the base A, as in Fig. 1, and when the fuel ignites, the draft through the opening F in the base will allow free com-  
70 bustion of the fuel, and the products of combustion will pass through the base A and into and along the stove draft-passage  $c'$  and at the front and over the top of the stove-oven  $c^2$ , and beneath all the holes  $c^4$  of the stove-top; 75 hence the entire heating or cooking capacity of the stove may be made available when the straw-burner is attached to the stove, and which is not possible when a fuel-reservoir is placed over the front holes of the stove-top, 80 as these holes then cannot be used for cooking purposes. Furthermore, with the fuel-reservoir-supporting base A attached to the front of the stove there is much less liability of choking up the draft-passages of the stove 85 than there is when the fuel-reservoir is supported directly on the stove-top, as it only is necessary, after three or four reservoirs full of fuel have been burned, to stir up the ashes in the base A, and they will fly backward and 90 out of the stove-pipe fixed at the exit  $c^3$ .

The attachment or base A may readily be applied to or removed from the stove and may be made very cheaply, and is durable in use.

Having thus fully described my invention, I 95 claim as new and desire to secure by Letters Patent—

1. In straw-burning attachments to stoves, the base or fire box A, made with an open top, an upper support for the fuel-reservoir, 100



a draft-aperture, as at F, a rear side opening,  $a^2$ , and flanges  $a^3$ , provided with hollow beads or eyes  $a^4$ , substantially as described, for the purposes set forth.

- 5 2. The combination, with a stove, of a base or support, A, having an open top, an upper flange, as at E, a draft-aperture, F, and a rear side opening,  $a^2$ , flanges  $a^3$ , provided with eyes

$a^4$ , the stove-bolts D, passing through said eyes, and a fuel-reservoir, B, adapted to rest 10 on the flange E of the base A, substantially as and for the purposes herein set forth.

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Witnesses:

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