

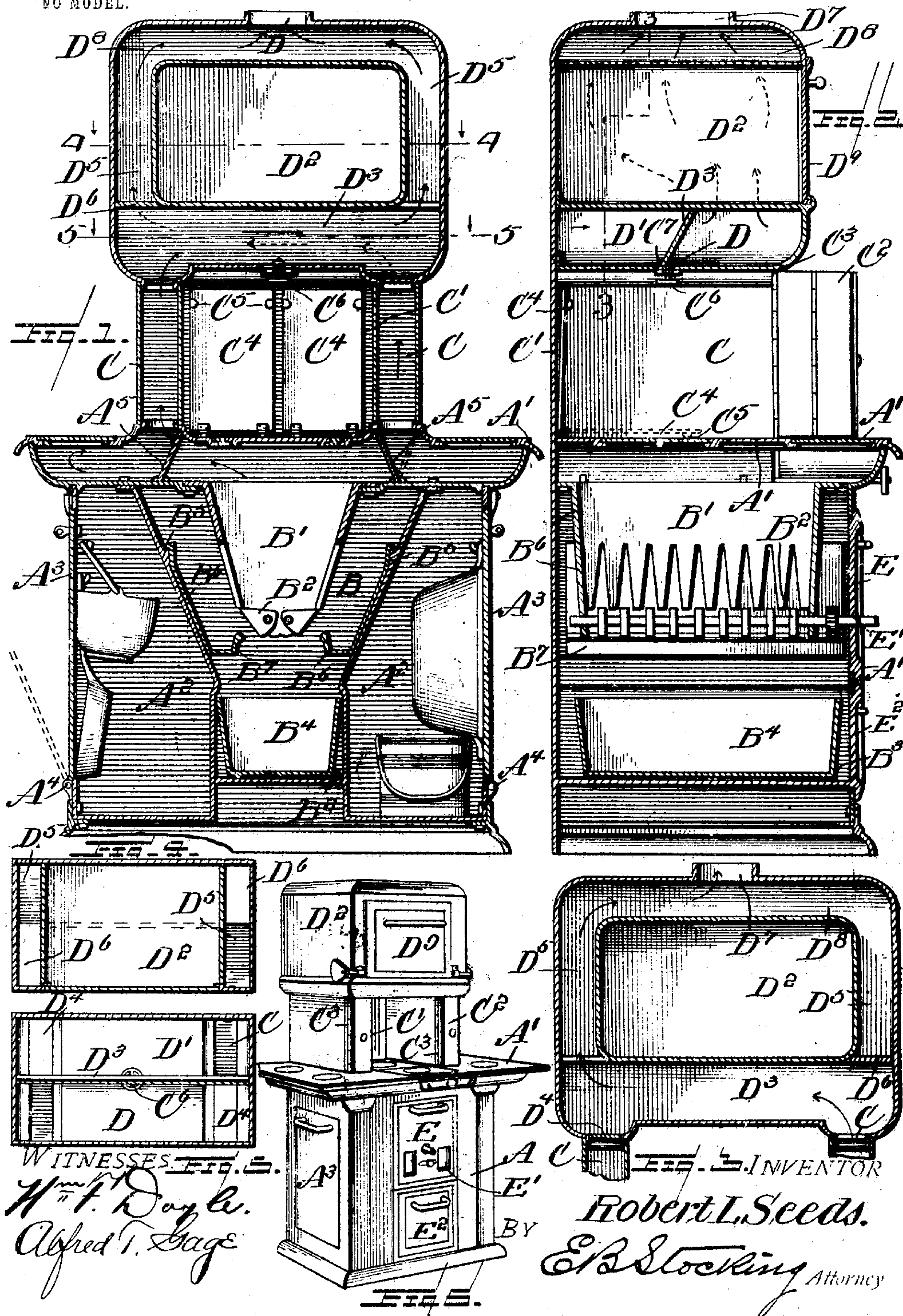
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R. L. SEEDS.
RANGE.

APPLICATION FILED FEB. 18, 1903.

NO MODEL.



UNITED STATES PATENT OFFICE.

ROBERT LEE SEEDS, OF COLUMBUS, OHIO.

RANGE.

SPECIFICATION forming part of Letters Patent No. 737,785, dated September 1, 1903.

Application filed February 18, 1903. Serial No. 143,927. (No model.)

To all whom it may concern:

Be it known that I, ROBERT LEE SEEDS, a citizen of the United States, residing at Columbus, in the county of Franklin, State of Ohio, have invented certain new and useful Improvements in Ranges, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in ranges, and particularly to a construction of parts wherein the oven is disposed above the fire-pot and heated by the products of combustion.

The invention has for an object to provide an improved construction and arrangement of this oven whereby the products of combustion passing through the flues pass beneath the oven from one side thereof to the other in opposite directions to secure the most efficient heating action.

A further object is to provide a roasting-chamber beneath the oven and adapted to be opened for use in ordinary cooking upon the top of the stove or closed for the purpose of roasting by means of a door provided at the front of the stove.

Another object of the invention is to provide at opposite sides of an elongated fire-grate broiling-chambers arranged to support suitable receptacles carrying material to be broiled or toasted; and a further object is to provide in the base of the range utensil-closets within which cooking utensils may be stored, and thus rendered convenient for use at all times.

Other and further objects and advantages of the invention will be hereinafter set forth, and the novel features thereof defined by the appended claims.

In the drawings, Figure 1 is a vertical longitudinal section through the range; Fig. 2, a central vertical cross-section; Fig. 3, a detail vertical section on the line 3 3 of Fig. 2; Fig. 4, a similar horizontal section on the line 4 4 of Fig. 1; Fig. 5, a horizontal section on the line 5 5 of Fig. 1, and Fig. 6 a detail perspective of the complete range.

Like letters of reference refer to like parts in the several figures of the drawings.

The letter A designates the base of the range, the top A' of which is provided with the usual openings and stove-lids thereon,

while at opposite sides of the base utensil-chambers A² are provided, having outwardly-swinging doors A³, pivoted at their lower ends A⁴ to permit access to the closets. Intermediate of these closets a broiling-chamber B is provided, having centrally disposed therein a fire-pot B', with any desired form of shaking-grate B² at its lower portion. Beneath the grate B² an ash-pot B³ is provided, adapted to receive a suitable pan or receptacle B⁴. Upon each side of the broiling-chamber a supporting lug or projection B⁵ is provided, upon which a broiling-pan B⁶, of any desired construction, may be supported. The pan B⁶ is herein shown as provided with an inclined side wall and an outer flanged edge B⁷, adapted to retain any liquids resulting from the broiling operation. These pans are also adapted for the purpose of toasting, as will be apparent. At opposite sides of the fire-pot and beneath the top suitable swinging dampers A⁵ are provided for the purpose of permitting a direct or indirect draft upward through the flues C. These flues are disposed at opposite sides of the range and, in connection with the rear wall C', form a roasting-chamber, which when open, as shown in Figs. 2 and 6, permits the free use of the top of the stove directly above the fire-pot, but when used for roasting may be closed by means of the doors C², which are formed of sections hinged together, as shown at C³, so as to fold back upon the face of the flues C, as shown in Fig. 6. When the roasting-chamber is to be used, a false bottom C⁴, pivoted against the back wall C', may be lowered into position for use, as shown by dotted lines in Fig. 2, and is provided with a lug or projection C⁵ to support the same at a slight distance above the top A' of the stove. This roasting-chamber may be also provided at its upper portion with a damper C⁶ of any desired construction adapted to open and close suitable openings C⁷, communicating with the flues D and D' beneath the oven D². The front flue D is separated from the rear flue D' by means of a partition D³, which is preferably disposed above the ventilator C⁶, as shown in Fig. 2.

As shown in Fig. 5, the opposite end of the upper portion of each of the side flues C is closed by means of a cap D⁴, thus causing

the products of combustion to pass longitudinally beneath the oven to the opposite end, whence they are permitted to escape by flues D⁵ at the opposite ends of the oven, the lower portions of these flues being closed at opposite ends by means of plates D⁶, extending the width of the flue-spaces D and D', respectively, said plates D⁶ being in alinement above the openings from the lower flues C, so that the products of combustion in passing upward from the fire-pot traverse a path substantially of the shape of the figure 8 and escape to the smoke-pipe by means of the central opening D⁷ in the horizontal flue D⁸ above the oven. This arrangement will be apparent by reference to Figs. 1, 4, and 5.

The oven is provided with the usual door D⁹, while the broiling-chamber B is provided with a swinging door E, having the usual damper E' therein, and the ash-pot is also provided with the door E² for access thereto.

In the operation of the invention it will be seen that the products of combustion passing upward from the fire-pot traverse the opposite flues C, and thus heating the roasting-chamber when it is desired to close the same for use and also increasing the temperature of this portion of the stove when the doors are folded to open the chamber. The products of combustion then pass from each flue C at one side of the oven B longitudinally beneath the oven, thence upward at the opposite side of the oven, as indicated by arrows in Fig. 1, and thus traveling in a path substantially similar to the figure 8. The oven is thus very effectually heated, as the temperature of the products of combustion passing upward is naturally very high, while a roasting-chamber is provided beneath this oven which may be used when desired by simply lowering the false bottom and closing the doors at the front thereof. The broiling-chamber opposite the sides of the fire-pot provides means for broiling or toasting without the necessity of removing any of the stove-lids, and thus deadening the fire, while any of the liquids released from the material broiled are caught in the pans and may be used as usual. The disposition of the utensil-closets at opposite sides of the broiling-chamber also provides means for storing cooking vessels where they will be free from dampness and always in the most convenient position for use upon the stove.

It will be obvious that changes may be made in the details of construction and configuration without departing from the spirit of the invention as defined by the appended claims.

Having described my invention and set forth its merits, what I claim, and desire to secure by Letters Patent, is—

1. In a range, a fire-pot, flues extending upward from opposite sides thereof, a plate extending across a portion of each flue, an oven disposed above said flues having a surrounding flue-space, and a plate extending across

the oven-flues above the open end of the lower flues for directing the products of combustion from the flue at one side of the fire-pot across the bottom of the oven to the flue at the opposite end of the oven.

2. In a range, a fire-pot, flues extending upward from opposite sides thereof, an oven disposed above said flues having a surrounding flue-space, means for deflecting the products of combustion from the flue at one side of the fire-pot to the flue at the opposite end of the oven, and a partition extending longitudinally of the flue-space beneath the oven to provide independent flues communicating with different portions of the fire-pot flues and the flues at the end of the oven.

3. In a range, a fire-pot, flues extending upward from opposite sides thereof, an oven disposed above said flues having a surrounding flue-space, means for directing the products of combustion from the flue at one side of the fire-pot to the flue at the opposite end of the oven, means for closing the space between the flues at opposite sides of the fire-pot to form a roasting-chamber, and a broiling-chamber formed in the base of the range at opposite sides of the fire-pot.

4. In a range, a fire-pot, flues extending upward from opposite sides thereof, an oven disposed above said flues having a surrounding flue-space, means for directing the products of combustion from the flue at one side of the fire-pot to the flue at the opposite end of the oven, means for closing the space between the flues at opposite sides of the fire-pot to form a roasting-chamber, a broiling-chamber formed in the base of the range at opposite sides of the fire-pot, and utensil-closets at opposite sides of said broiling-chamber.

5. In a range, a fire-pot, flues extending upward from opposite sides thereof, an oven disposed above said flues having a surrounding flue-space, a longitudinal partition extending through the flue-space beneath the oven, and caps for the upper portion of the flues from the fire-pot at opposite sides and ends of said partition.

6. In a range, a fire-pot, flues extending upward from opposite sides thereof, an oven disposed above said flues having a surrounding flue-space, a longitudinal partition extending through the flue-space beneath the oven, caps for the upper portion of the flues from the fire-pot at opposite sides and ends of said partition, and closing-plates at the lower portion of the flues at the ends of the oven disposed in alinement with the open upper end of the fire-pot flues.

7. In a range, a fire-pot, a top above said fire-pot provided with lids, flues disposed at opposite sides of said fire-pot, an end wall connecting said flues to form a roasting-chamber, a folding door pivoted to said flues to fold thereon, and a false bottom for said chamber pivotally mounted therein at the end wall.

8. In a range, a fire-pot, a top provided with lids, flues disposed at opposite sides of said

fire-pot, an end wall connecting said flues to form a roasting-chamber, a folding door pivoted to said flues to fold thereon, a false bottom for said chamber movably mounted thereon, a transverse flue above said chamber, and a ventilator in the upper portion of said chamber communicating with said flue.

9. In a range, a base provided with a fire-pot, a broiling-chamber surrounding said fire-pot, utensil-closets at opposite sides of said broiling-chamber, smoke-flues extending

above the top of the range at opposite sides of the fire-pot, a roasting-chamber between said flues, an oven disposed above said chamber, and flues traversing the space above and beneath said oven and at opposite ends thereof. 15

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

ROBERT LEE SEEDS.

Witnesses:

F. D. BENTZ,
WM. A. BEBER.