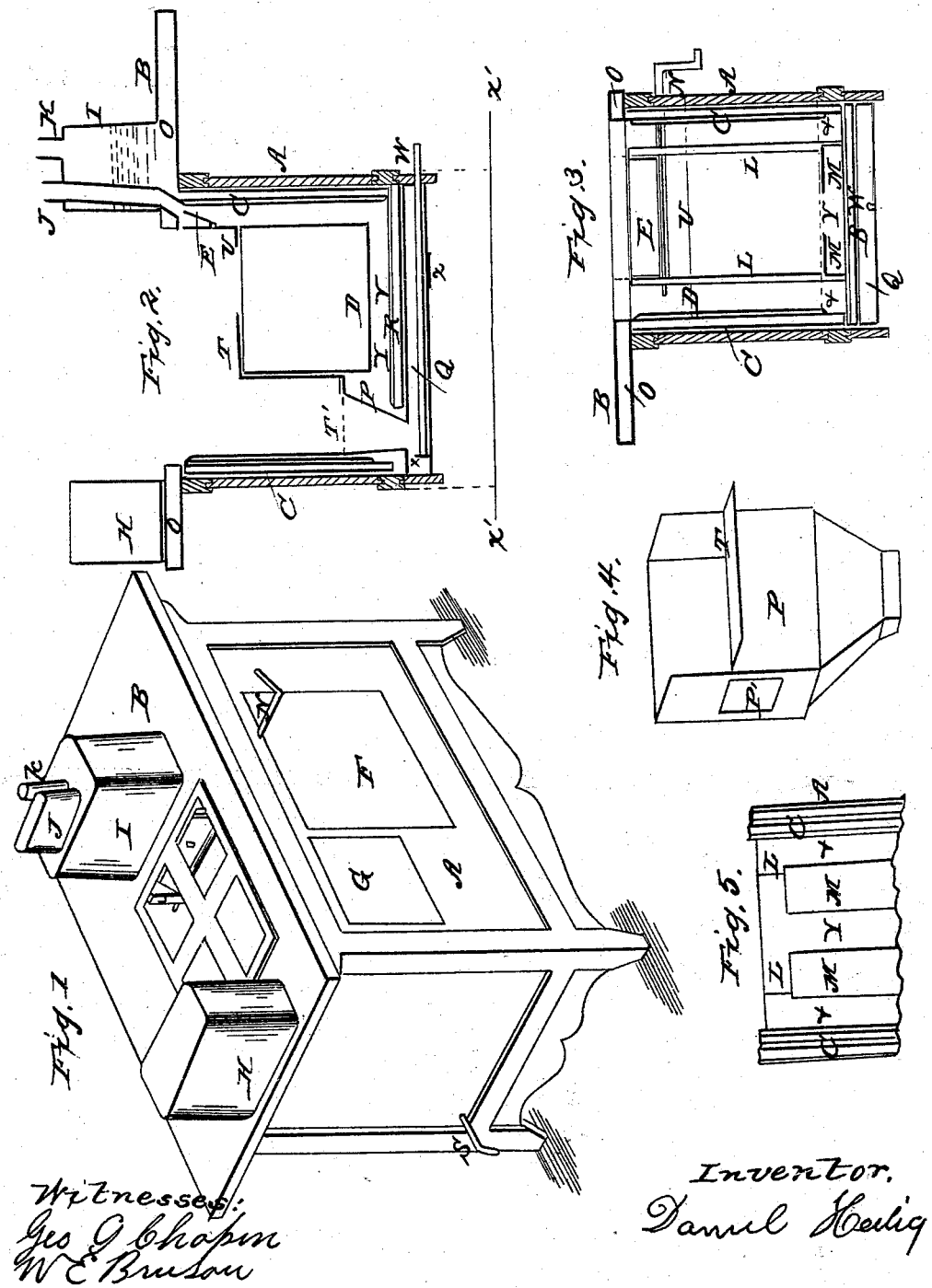
D. HEILIG.

Cooking Stove.

No. 54,721. Patented May 15, 1866.



Witnesses:
Geo. G. Chapin
W. E. Brusan

Inventor.
Daniel Heilig

UNITED STATES PATENT OFFICE.

DANIEL HEILIG, OF CHICAGO, ILLINOIS.

COOKING-STOVE.

Specification forming part of Letters Patent No. **54,721**, dated May 15, 1866.

To all whom it may concern:

Be it known that I, DANIEL HEILIG, of Chicago, in the county of Cook and State of Illinois, have invented an Improved Stove; and I do hereby declare that the following is full, clear, and exact description of the same, reference being had to the accompanying drawings and letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is a perspective representation of my improved stove. Fig. 2 is a longitudinal sectional elevation of my improved stove. Fig. 3 is a transverse sectional elevation of the same. Fig. 4 is a perspective representation of the adjustable fire-box forming a part of the stove. Fig. 5 is a horizontal view of a broken section of the stove, taken directly under the oven.

The nature of my invention consists in providing an air-chamber between the ash-box and the oven, and in constructing an adjustable or movable oven and fire-box. The movable oven is essential in this kind of stove (which is covered with wood) from the fact that there is no means of conveniently removing the soot and ashes from the draft-flues under the oven except by drawing the oven out of the stove through the oven-door, which will uncover the flues. It is further necessary that the oven should not be permanently attached to the stove, because this would render the stove useless when the oven became burned out; but by constructing the oven so that the same can be drawn out of the door a new one can be put in its stead, which will make this part of the stove as good as new.

It is also essential that the fire-box be so arranged that it may be removed and a new one put in its place when it has become imperfect by use.

A very important object is secured by putting an additional plate over the lower water-chamber, which prevents the water from being raised to a boiling heat by allowing the atmosphere to occupy the space between the plate and chamber.

To enable others to make and use my invention, I will describe the method of constructing and using the same.

First, I make the outside or covering of my stove of wood, as shown at A, with posts, rails, and panels, in the usual manner. I then make the usual water-chambers C, extending the same from the lining V to the top of the stove B, which contains a water-chamber, as will be seen at *o*, Figs. 2 and 3. The plates of the top chamber, B, are made of brass or some metal that will bear a high polish, to prevent the radiation of heat.

H shows the common water-heater attached to the top of the stove B, and I the water-tank, in which is kept a supply of water for feeding the entire water-chambers. J represents the stove-pipe passing through the tank I, and K the pipe through which the tank is supplied.

At B′ is shown the seat which supports the furniture used with the stove, and can be made in any form required. V shows the lining over the air-chamber R, and is attached to the inside of the stove in such a manner as to form an air-chamber between the fire and the chambers R. Q shows the ash-box, made in the usual manner.

D is the adjustable or movable oven, made of common sheet-iron, resting upon the draft-flues M, Fig. 3. This oven can be taken out of the stove by means of the oven-door F when it be required to clean or replace the same with a new one. The door F is made with the same chambers as the sides of the stove, but no water is used in the outside chamber, as in other parts of the stove. The door is hung with the same hinge and fastened with the same catch used in other stoves.

P represents the fire-box, made with the flange or plate T projecting over and resting on the top of the oven, D, to protect the same from too great heat rising from the fire in the box. T′ shows the grate used in the common stove. P′ shows an opening corresponding with the door G, used in supplying the box with fuel. The door G can be made similar to the oven-door F, or entirely of metal if preferred.

M shows the horizontal and L the vertical draft-flues used in connection with the damper E in controlling the heat when baking or cooking. N shows the crank of the damper, and S the pipe and stop-cock used in discharging the water contained in the chambers.

V represents the plate which is attached to the inside of the stove a short distance from the lower water-chamber, R, for the purpose of allowing the atmosphere to pass between the plate and chamber, so that the same may not be heated too much during the process of baking.

Operation: It will be understood from the

general character of the stove that it is to be used more especially when it is required to obviate the heating of the room during the operating of the stove. The process of baking, cooking, and heating water is the same as that of other stoves, only that care must be taken in not building or making too hot a fire, as the heat is controlled on the inside, by which means not more than one-third of the fuel is required to produce the necessary heat of that used in the common stove.

What I claim is—

The arrangement and combination of the oven D with the fire-box P, when constructed as described and used for the purpose set forth.

DANIEL HEILIG.

Witnesses:
GEO. L. CHAPIN,
W. C. BENSON.