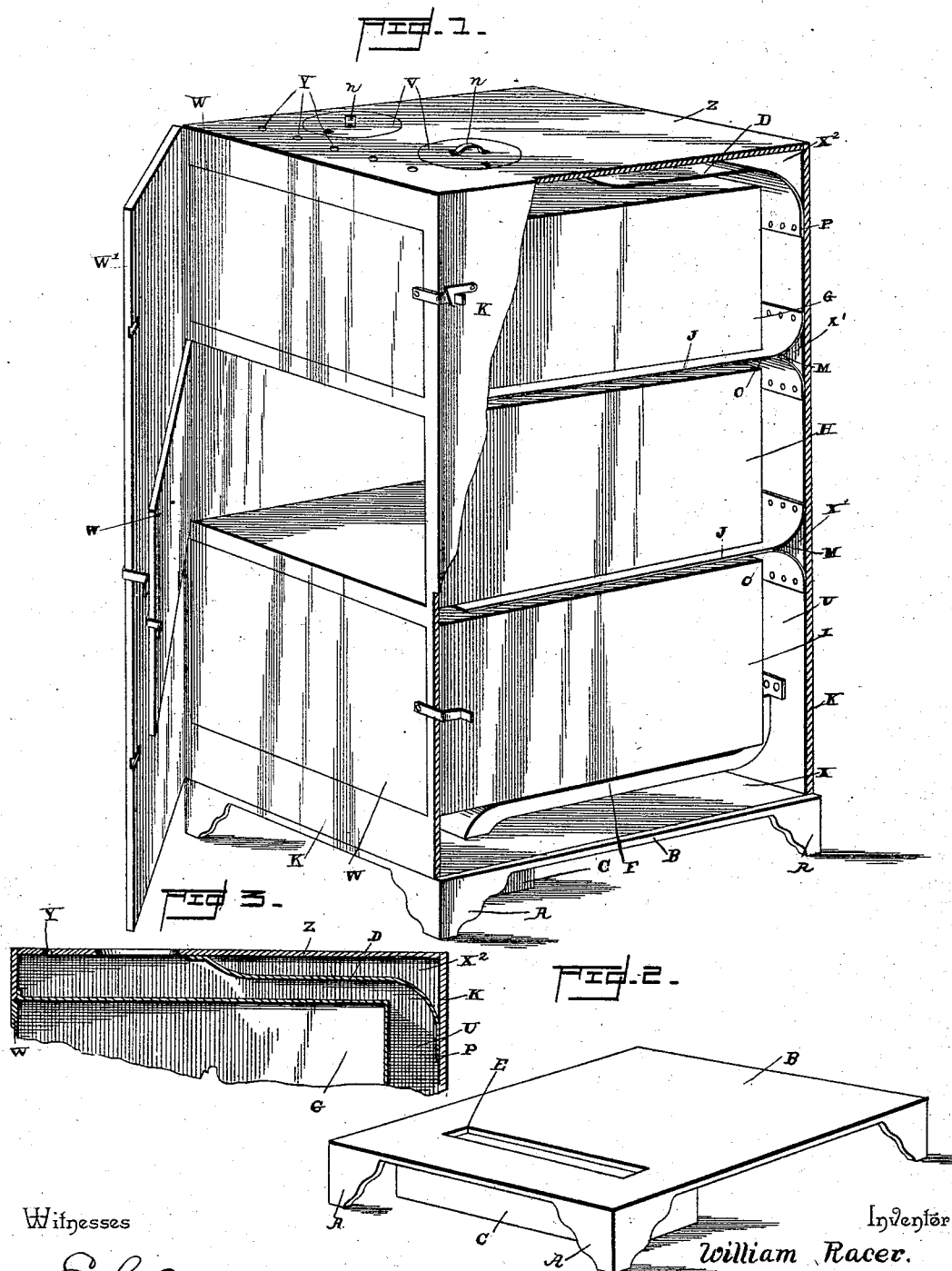


(No Model.)

W. RACER.  
OIL STOVE.

No. 455,356.

Patented July 7, 1891.



Witnesses

*E. S. Dwall* By his Attorneys,  
*A. J. Hollamer*

Inventor

*William Racer.*

*C. A. Snow & Co.*

# UNITED STATES PATENT OFFICE.

WILLIAM RACER, OF SPRINGFIELD, MISSOURI.

## OIL-STOVE.

SPECIFICATION forming part of Letters Patent No. 455,356, dated July 7, 1891.

Application filed January 6, 1891. Serial No. 376,866. (No model.)

### *To all whom it may concern:*

Be it known that I, WILLIAM RACER, a citizen of the United States, residing at Springfield, in the county of Greene and State of Missouri, have invented a new and useful Oil-Stove, of which the following is a specification.

This invention relates to stoves, and more especially to that class thereof known as "lamp-stoves;" and the object of the invention is to simplify and yet improve the construction of such stoves.

To this end the invention consists of a device of the specific form hereinafter more fully described and claimed, and as illustrated in the sheet of drawings, wherein—

Figure 1 is a perspective view of this improved stove with one side removed and with the doors open. Fig. 2 is a perspective detail of the base. Fig. 3 is a detail in section showing the upper deflector.

Referring to the said drawings, the letter B designates a base having legs A, and C is an oil-lamp arranged below the base and directing its products of combustion through an opening E in the base. Upon this base is mounted a rectangular casing K, which rises for a suitable height above the same and is provided with a closed top Z, having a number of exit-openings Y near its front, and preferably provided, also, with pot-openings closed by lids V, having handles *n*, although the details of construction of this casing do not affect the operation of the device.

Within the casing is arranged a number of ovens G H I, one above the other, each of which is closed at its front end by a door W, and a large door W' preferably closes over them all. Rising from the base B is a curved passage-way F, which directs the products of combustion from the opening E rearwardly along the bottom of the lowermost oven I and upwardly in an upright flue U behind the ovens. Between the base B and the bottom of the lowermost oven I and around the passage-way F is a cold-air chamber X, as best seen in Fig. 1. Between each pair of ovens is a horizontal partition J, extending from a point near the front of the casing rearwardly about midway between the ovens, branching at O at a point about in line with the rear walls of the ovens, and curving thence up-

wardly and downwardly, as at M, the rear ends of said curved portions being connected by rivets or otherwise to the rear wall of the casing and leaving a cold-air space X' in the triangle thus formed. Above the uppermost oven is located the upper deflector D, which is connected at its front end to the top Z of the casing at a point a little in rear of the pot-openings, curves downwardly, and extends rearwardly above the upper oven G and at its rear end bends sharply downward, as at P, and connects with the rear wall of the casing, the same as at M in the partitions J just described. With the above construction of parts, the lamp being lighted, the products of combustion pass upwardly through the passage-way F into the upright flue U in rear of the oven I, thence forwardly at M beneath the partition J, and in contact with the upper side of the oven I to the front thereof, thence returning over the partition J and in contact with the bottom of the oven H, curving at M, and again upwardly in the flue U, and so on between each pair of ovens to the top of the casing. Here the products of combustion leave the upright flue U, curve forwardly at P, pass beneath the deflector D and in contact with the upper side of the uppermost oven G, pass beneath the pot-openings, and finally out at the exit-openings Y. In this manner the heat is applied to the top and bottom and to the rear side of each oven and to the bottoms of whatever pots and kettles may be in the openings, and finally escapes through the exits Y. The cold-air chambers X, X', and X'' are of especial advantage.

What is claimed as new is—

1. In a lamp-stove, the combination, with the base having an opening, the casing resting thereon and having a closed top provided with exit-openings near its front end and doors in the front of the casing, of ovens in the casing vertically separated and having closed rear ends forming a vertical flue, and horizontal partitions between the ovens extending from points near the front wall of the casing to points in line with the rear walls of the ovens, thence diverging and curving upwardly and downwardly and connected to the rear wall of the casing, substantially as described.

2. In a lamp-stove, the combination, with the base having an opening, a lamp below the

same, the casing resting on the base and having a closed top provided with exit-openings, doors in the front of the casing, and ovens therein opposite the doors, said ovens having  
5 closed rear ends forming a vertical flue in rear thereof, of a curved passage-way between the base and the lower oven rising from said opening and communicating with said flue, and a  
10 horizontal partition between each two ovens extending forwardly from the rear wall of the casing to a point near the front wall thereof, substantially as described.

3. In a lamp-stove, the combination, with the base having an opening, a lamp below the  
15 same, a casing resting on the base and having a number of ovens vertically separated, doors in the front ends thereof, and a vertical flue between their rear ends and the rear wall

of the casing, of horizontal partitions between the ovens extending forwardly from the rear  
20 wall of the casing to points near the front wall thereof, an upper end to the casing having exit-openings near its front edge, and an upper deflector connected at its rear end to the  
25 rear wall of the casing, curving thence over and extending above the upper oven and connected at its front end to the top of the casing at a point in rear of said exit-openings, substantially as hereinbefore described.

In testimony that I claim the foregoing as  
30 my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM RACER.

Witnesses:

JAMES T. MCNELLE,  
M. E. LOVAN.