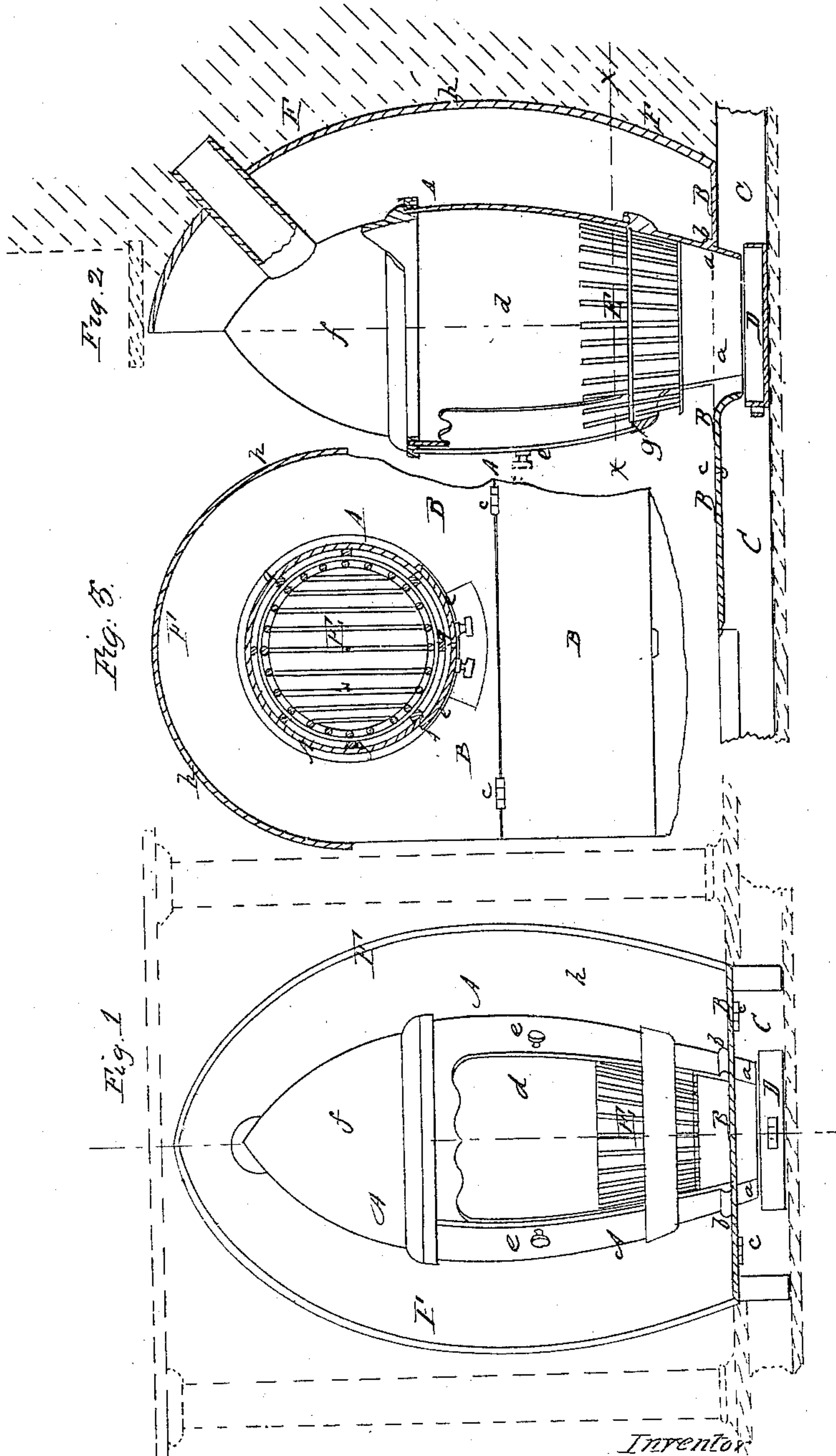


F. WALKER.  
COAL STOVE.

No. 76,565.

Patented Apr. 7, 1868.



Witnesses  
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# United States Patent Office.

FELIX WALKER, OF MEMPHIS, TENNESSEE.

*Letters Patent No. 76,565, dated April 7, 1868.*

## IMPROVEMENT IN COAL-STOVES.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, FELIX WALKER, of Memphis, in the county of Shelby, and State of Tennessee, have invented a new and improved Apparatus for Heating Apartments; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a front elevation, partly in section, of my invention.

Figure 2 is a side elevation, partly in section, of the same.

Figure 3 is a horizontal sectional view of the same, the plane of section being indicated by the line *xx*, fig. 2.

Similar letters of reference indicate corresponding parts.

This invention relates to a new device for heating apartments, and consists, first, in the use of an egg-shaped stove set upon a hearth or iron plate, which is on a level with the floor, the ashes falling through the plate into a pan arranged under the floor, or through a tube under the floor into any suitable receptacle.

The invention consists, second, in the use of a basket-shaped grate, which is fitted into the stove, so as not to reach to the side of the same, leaving an air-space around the whole fire.

The invention consists, third, in forming the inner surface of the fireplace elliptic, so as to conform to the shape of the stove, and in coating the surface of the fireplace with some reflecting-substance, for the purpose of preserving some of the heat which would otherwise escape into the chimney, and also for the purpose of throwing the heat downward, so that the whole heat radiating from the stove and fireplace may be concentrated in one point of the room, instead of being uniformly spread in a room, as usually. Thereby persons will be enabled to place themselves into a more or less warm atmosphere in the same room.

The spot in front of the stove where the heat is concentrated is the hottest, and the atmosphere in the room becomes gradually cooler the farther it is from this spot.

A represents an egg-shaped stove made of cast iron or other suitable material. It is open at the under side, and is fitted with its sides *a a* through a hole in a horizontal hearth-plate, B.

The hearth-plate B is laid so as to be on the same level with the floor, being countersunk in the same, and a chamber, C, is formed under it, as shown in figs. 1 and 2.

The flanges *a* of the stove fit through the hole in the plate B, and a ring, *b*, or its equivalent, projecting from the side of the stove, rests upon the plate B, as shown, whereby the stove is supported.

An ash-pan, D can be set under the open end of the stove into the chamber C, as shown.

The plate B must have a joint at *c*, to allow access to the pan D, or the ashes may be allowed to fall into a tube arranged under the stove, conducting them through the wall or floor of the house to the outside, or to any suitable receptacle.

The central widest portion, *d*, of the stove is provided with sliding or other doors, *e e*, and supports the conical cap *f*, as shown.

The cap is removable to allow the insertion or removal of the grate E.

The grate E is made of wire or other suitable material, like a cylindrical basket, with open sides and bottom, as shown.

From its sides project pins *g g*, which prevent its setting too low in the stove, and which keep the sides of the basket from the sides of the stove, leaving an air-chamber all around the basket.

The pins *g g* may, if desired, be formed on the inside of the stove, to arrest the grate at any desired height, and to keep it off the sides of the stove.

The stove A is fitted in a fireplace, F, which is shaped like a niche to correspond to the shape of the stove, as will be understood from figs. 1, 2, and 3.

The interior surface of the fireplace or niche is coated with some reflecting-substance *h*, or is lined with bright metal, or any other suitable reflecting-material. When it is desired to heat apartments having no fireplace, a portable niche-shaped reflector, F, lined as before described, may be used, the same being placed upon

or behind the hearth-plate B, and being firmly secured to the same, so that the whole apparatus may be connected and set up in any part of the room.

I claim as new, and desire to secure by Letters Patent—

The egg-shaped stove A, having an open bottom, the bed-plate B, and chamber C, in combination with the semi-elliptical reflecting niche F, all arranged as described, for the purpose specified.

FELIX WALKER.

Witnesses:

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