

(No Model.)

4 Sheets—Sheet 1.

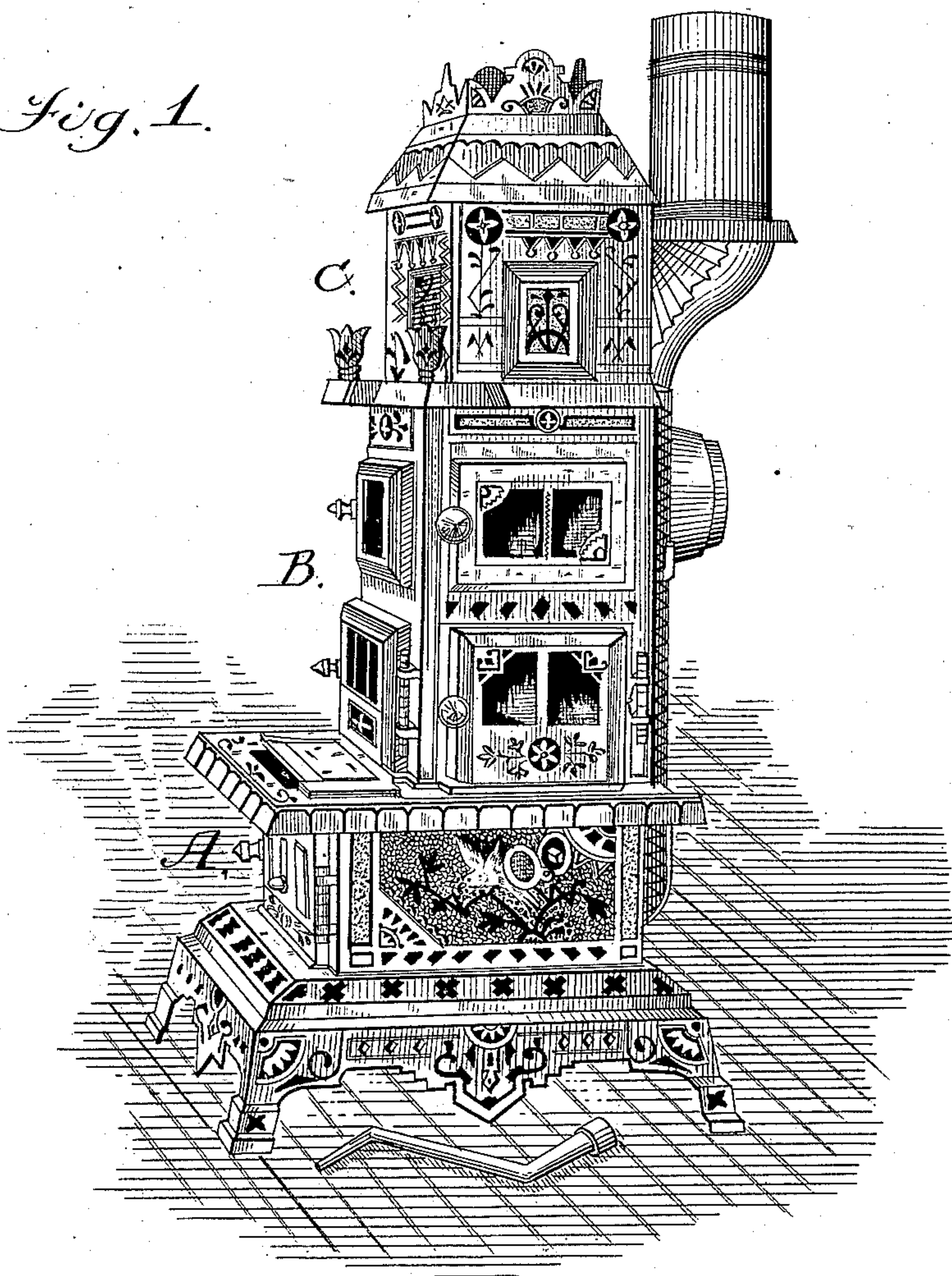
J. A. ORR & H. SEIVARD.

PARLOR HEATING STOVE.

No. 311,139.

Patented Jan. 20, 1885.

*Fig. 1.*



*Witnesses;*

*Walter Fowler*

*Wm. C. Fowler*

*Inventors:*

*J. Allison Orr,*  
*Henry Seivard.*

*by*  
*Thomas P. Kinsey*  
*Atty*

(No Model.)

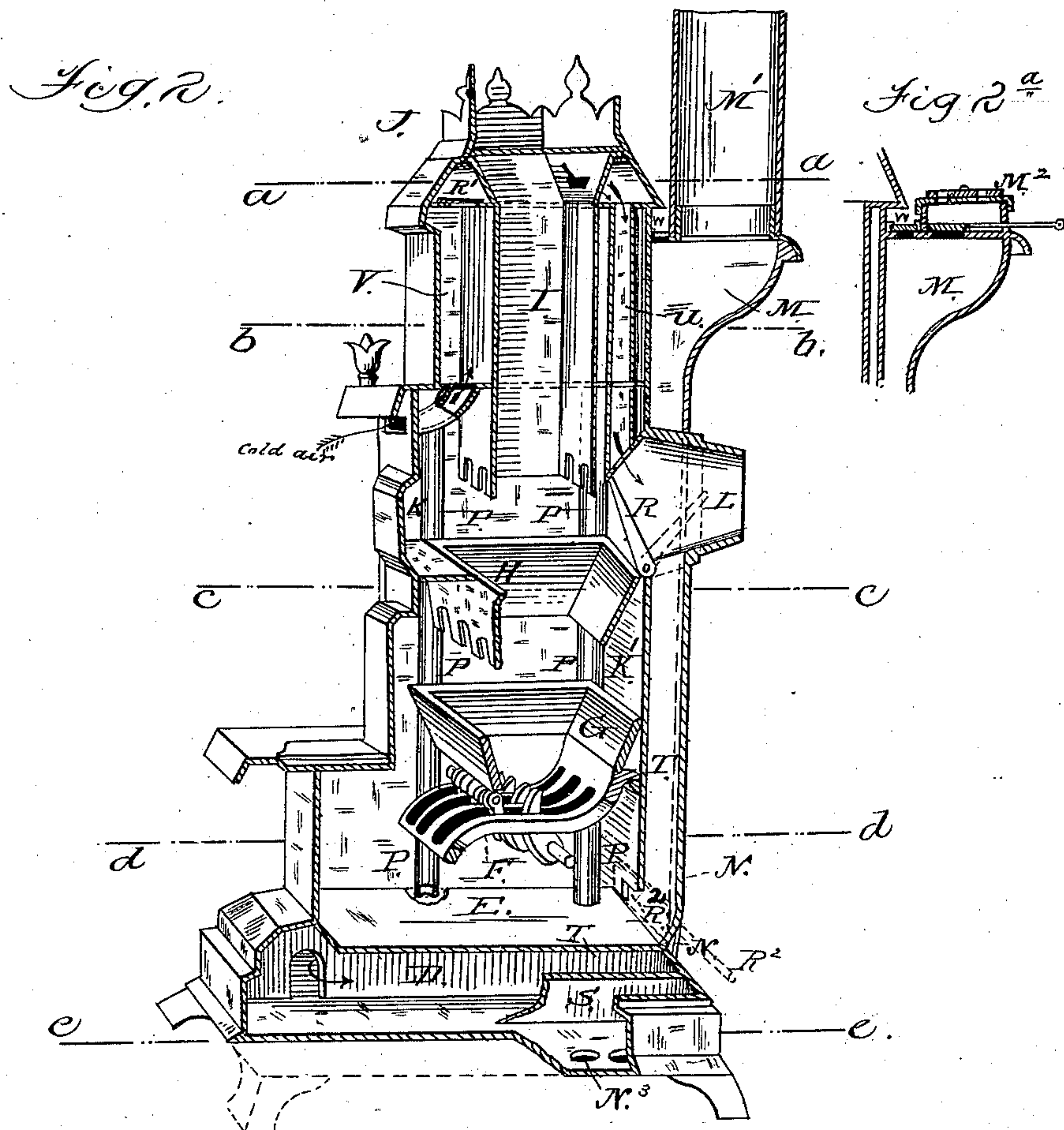
4 Sheets—Sheet 2.

J. A. ORR & H. SEIVARD.

PARLOR HEATING STOVE.

No. 311,139.

Patented Jan. 20, 1885.



Witnesses;  
J. Walter Fowler  
H. B. Applewhite,

Inventors;  
J. Allison Orr;  
Henry Seivard.  
by Thomas P. Kinsey  
atty



(No Model.)

4 Sheets—Sheet 3.

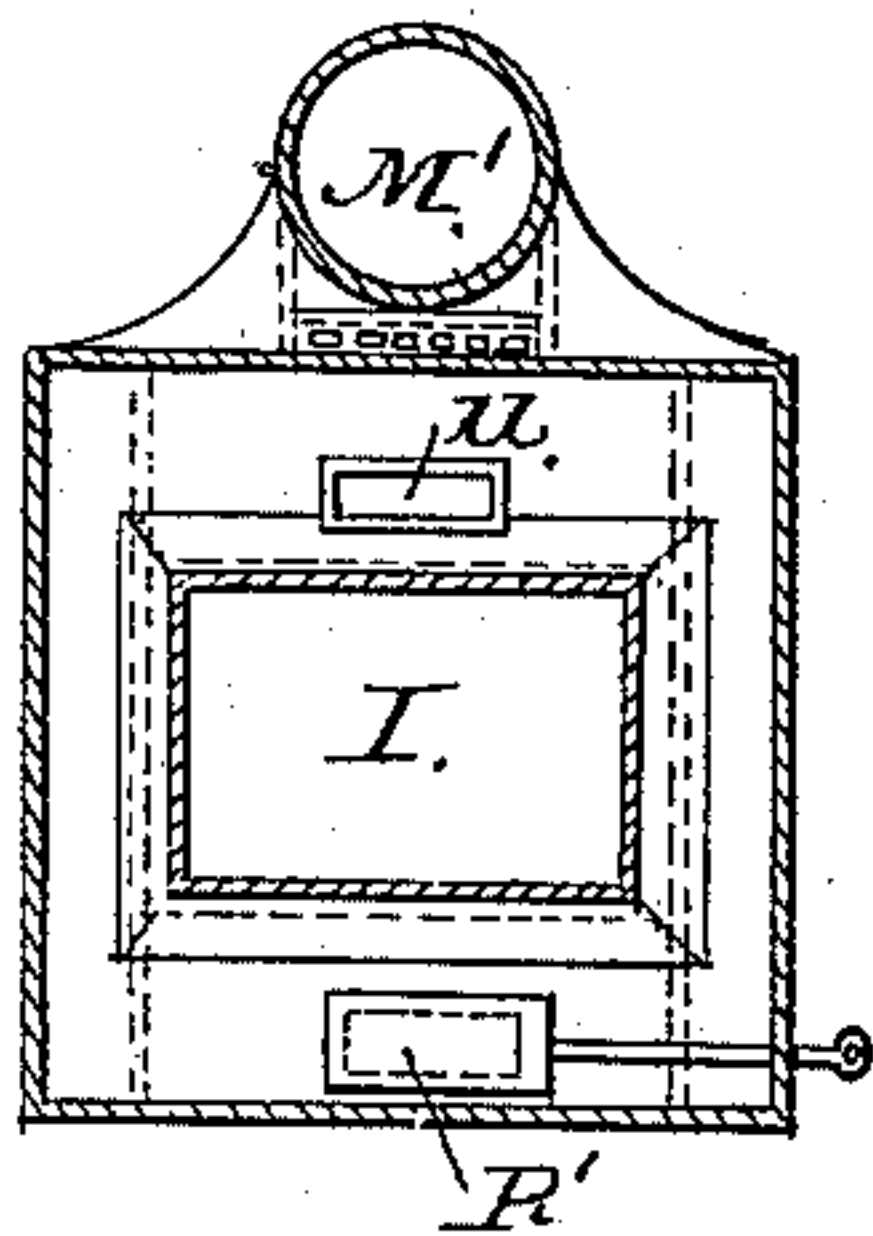
J. A. ORR & H. SEIVARD.

PARLOR HEATING STOVE.

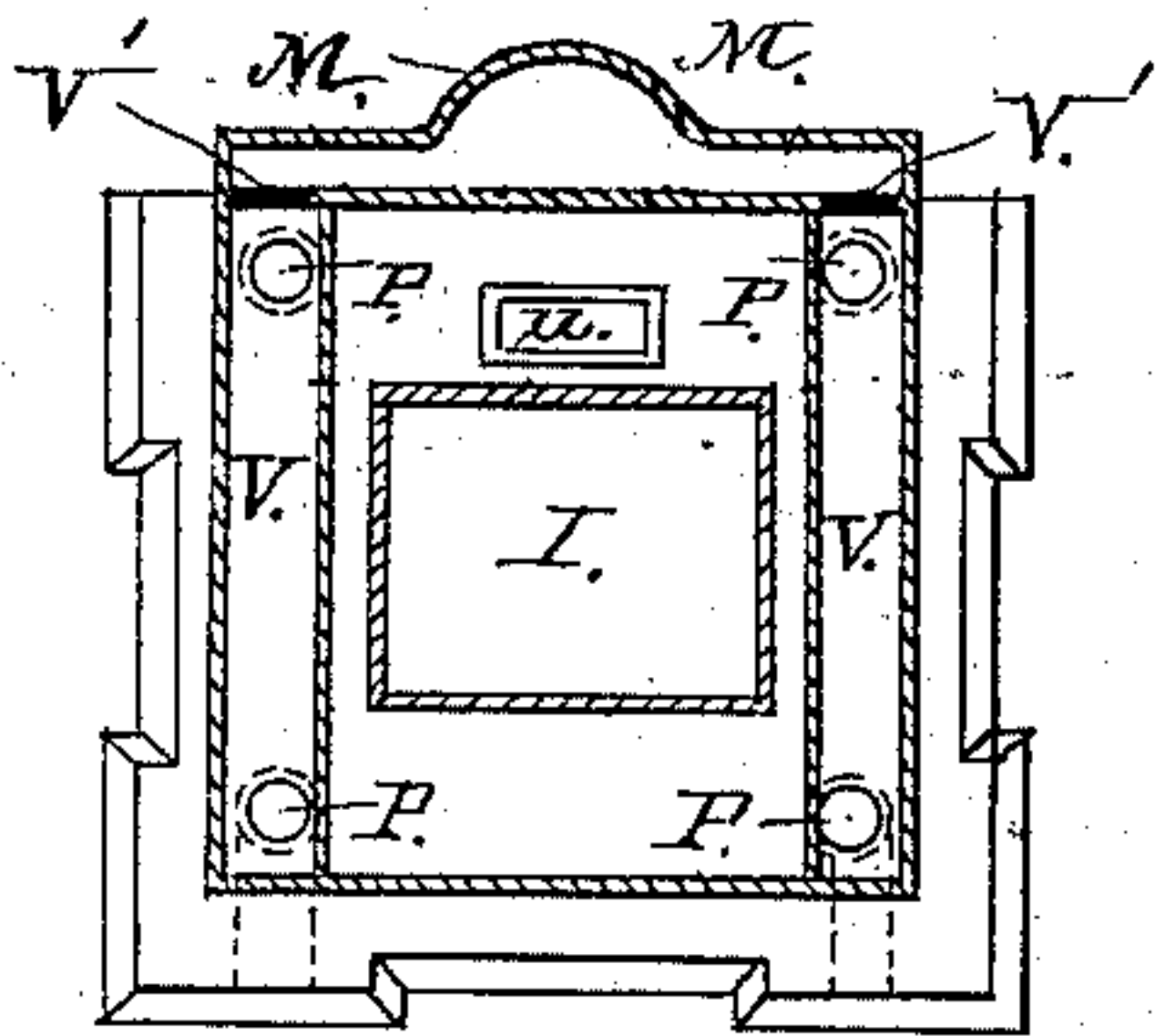
No. 311,139.

Patented Jan. 20, 1885.

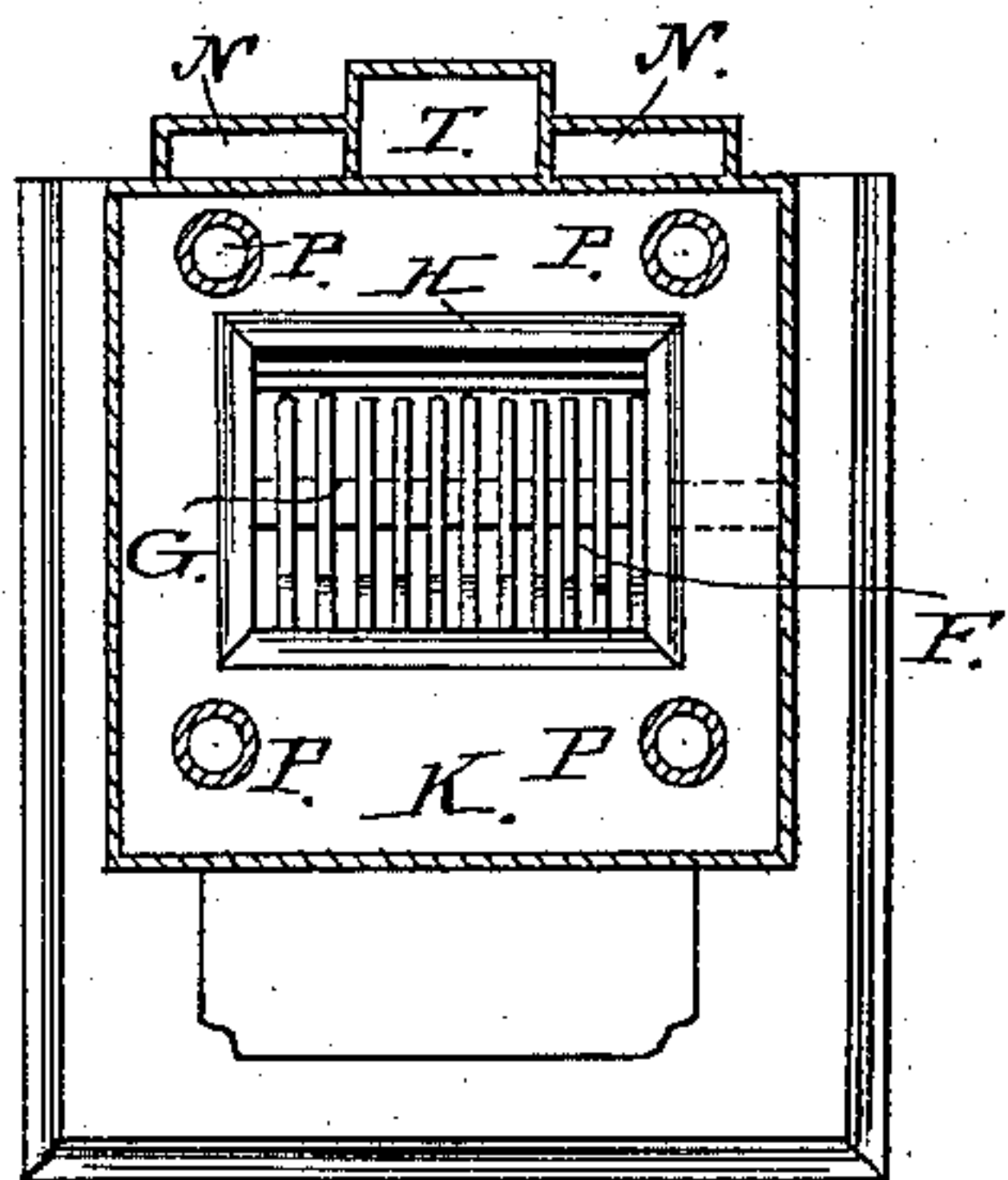
*Fig. 3.*



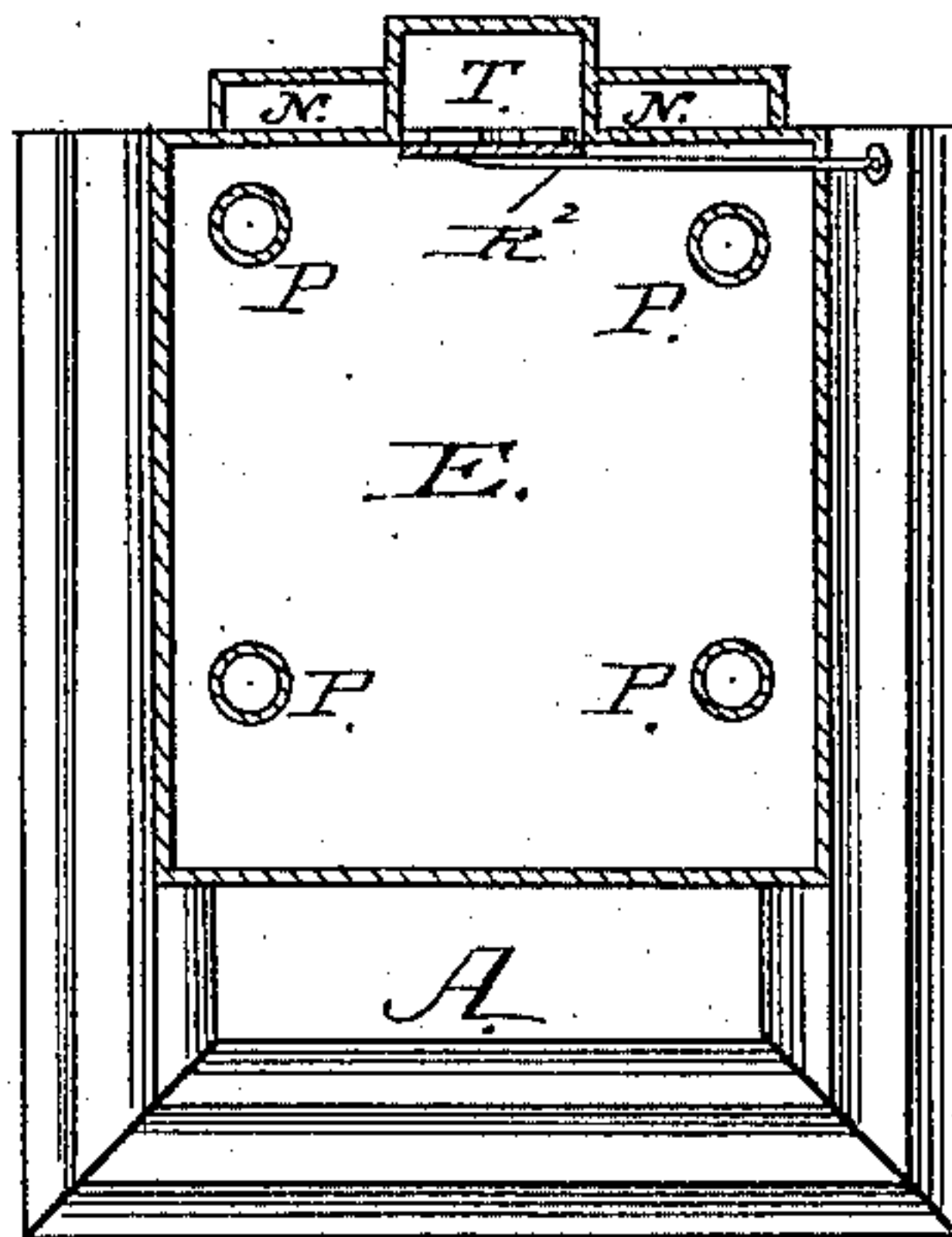
*Fig. 4.*



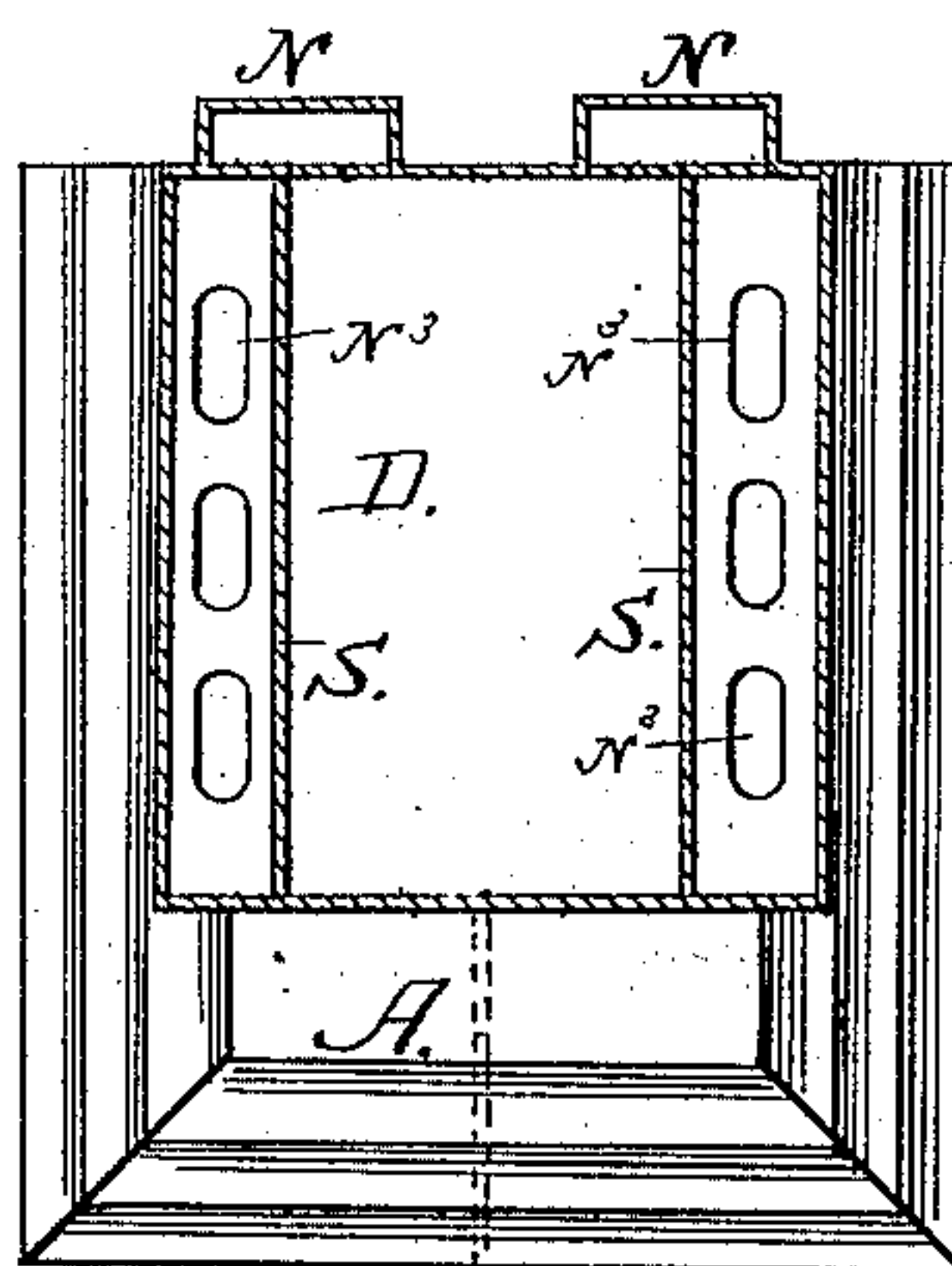
*Fig. 5.*



*Fig. 6.*



*Fig. 7.*



Witnesses;  
Shallies Fowler  
Wm C. Fowler

Inventors;  
J. Allison Orr,  
Henry Seivard,  
by Thomas P. Kinsey  
Att'y

(No Model.)

4 Sheets—Sheet 4.

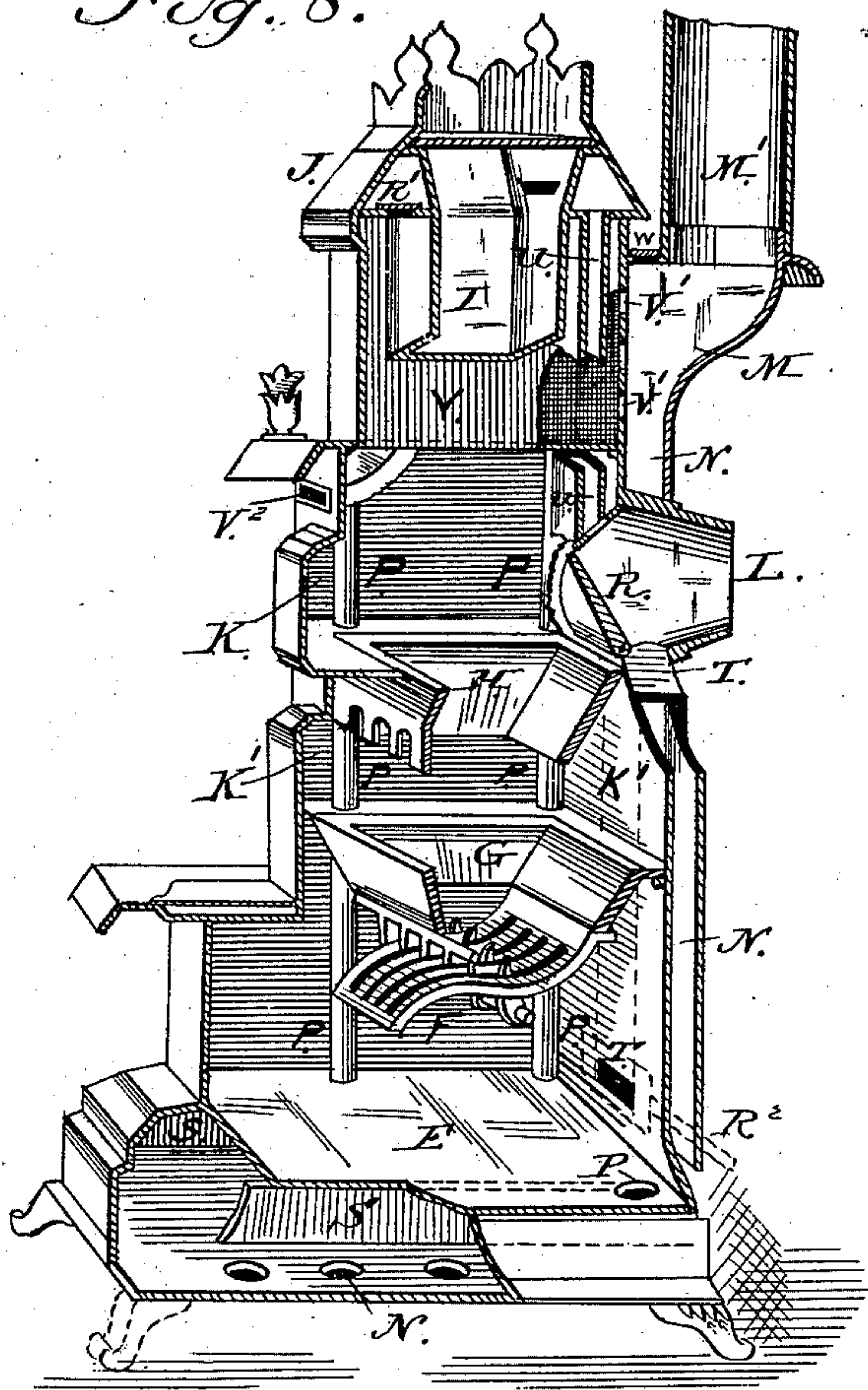
J. A. ORR & H. SEIVARD.

PARLOR HEATING STOVE.

No. 311,139.

Patented Jan. 20, 1885.

*Fig. 8.*



*Attest;*

*S. Walter Fowler,  
H. B. Applenwhite,*

*Inventors*

*J. Allison Orr;  
Henry Seivard;  
by  
Thomas P. Kinsey  
Atty.*



# UNITED STATES PATENT OFFICE.

J. ALLISON ORR AND HENRY SEIVARD, OF READING, PENNSYLVANIA, ASSIGNORS TO THEMSELVES, SAMUEL H. KUTZ, JOHN HAHN, FRANK P. GEISLER, ANDORA McKNIGHT, M. BRAYTON McKNIGHT, AND ZADOK W. BOWEN, DOING BUSINESS AT SAME PLACE.

## PARLOR HEATING-STOVE.

SPECIFICATION forming part of Letters Patent No. 311,139, dated January 20, 1885.

Application filed April 13, 1883. (No model.)

*To all whom it may concern:*

Be it known that we, J. ALLISON ORR and HENRY SEIVARD, citizens of the United States, and residents of the city of Reading, county of Berks, State of Pennsylvania, have invented a new and useful Improvement in Parlor Heating-Stoves, of which the following is a specification.

Our invention pertains more particularly to what are termed "double heaters," where a portion of the heat generated is delivered by register into an upper room; but this may be dispensed with and the entire heat of the stove radiated within the room in which it is placed. The object of the invention is to increase the heat-radiating capacity of the stove by additional cold-air jackets and pipes placed exterior and interior of the stove-case. The general outline of the stove is as shown in the perspective view, and a horizontal cross-section would be square or rectangular.

In the accompanying drawings, forming a part of this specification, and in which similar letters indicate similar parts, Figure 1, Sheet 1, is a perspective elevation of the stove. Fig. 2, Sheet 2, is a vertical sectional view of the same. Fig. 2<sup>a</sup>, Sheet 2, is a partial section, showing a register in lieu of the hot-air pipe for an upper room. Fig. 3, Sheet 3, is a horizontal section at *aa* of Fig. 2, showing the magazine, draft-damper, and revertible flue and hot-air pipe. Fig. 4, Sheet 3, is a horizontal section at *bb* of Fig. 2, showing magazine, cold-air ducts, hot-air drum, revertible flue, and cold-air jackets. Fig. 5, Sheet 3, is a horizontal section at *cc* of Fig. 2, showing the upper fire-pot, the combustion-chamber for same, air-jackets and air-tubes, and the grate of the lower fire-pot and dust-flue. Fig. 6, Sheet 3, is a horizontal section at *dd* of Fig. 2, showing the ash-pit and the external air-jackets and the internal cold-air pipes and dust-flue. Fig. 7, Sheet 3, shows a horizontal section at *ee* of Fig. 2, giving the arrangement of the base for cold-air chambers, and showing the air-jackets. Fig. 8, Sheet 4, is a sectional elevation, designed to show more clearly the working of the stove as a cold-base and air-jacketed heater, in all of which noting only the parts that pertain to the cold-base and cold-air jacketed stove.

A represents the base or ash-pit section; B, the fire-pot or illuminated section; C, the hot drum or magazine section; D, the hollow base; E, ash-pit; F, grate; G, lower fire-pot; H, upper fire-pot; I, magazine; J, dome with a movable top; K, upper combustion-chamber; K', lower combustion-chamber; L, escape-pipe or uptake for heated products of combustion; M, hot-air reservoir; M', hot-air duct leading to upper room; M<sup>2</sup>, a register placed over the seat for pipe M' when the room above is not to be heated by the stove; N N, cold-air jackets; N<sup>3</sup>, cold-air inlets to the cold-air base; P P P, cold-air pipes interior to the stove; R, main damper; R', dome-plate damper; R<sup>2</sup>, damper to the dust-flue; S S, partitions dividing the hollow base into cold-air chambers; T, the dust-flue carried up between the cold-air jackets N N from the ash-pit into the uptake. U is a revertible flue from the dome to the uptake. V' are apertures from the hot-air drums into the hot-air reservoirs; V V, hot-air drums; V<sup>2</sup>, cold-air educts from the front of the stove into the hot-air drums; W, register in top plate of hot-air reservoir.

The stove may be operated both as a direct or inverted draft heater, also as a single or double heater. We will first operate it as a direct-draft stove. The magazine is suspended by a flange from the dome-plate, and drops, clear of the case inside of the stove, to within about three inches of the upper fire-pot, H, and is provided with fingers at its front and rear lower ends. The upper fire-pot, H, is suspended from the case, and projects downward to within about three inches of the lower fire-pot, and is also provided with fingers on its lower front edge. The lower fire-pot, G, rests, as is usual, upon the grate-frame suspended in the ash-pit, and is provided with a La Rue or equivalent cleaning-grate. Combustion-chambers K K' are formed at both fire-pots, and the products of combustion from the lower fire-pot, G, and chamber K' are drawn up through the incandescent fuel of the upper fire-pot, H, and, together with the products of combustion therefrom in the chamber K, circulate around the magazine I and against the sides of the hot-air drums V V, next to the magazine, and, according to the manner in which the damper R in the uptake L and R'



in the dome-plate operated, will pass directly into the uptake-flue L, or, passing into the dome, will revert down the flue U on the opposite side, and thence into the uptake. The  
 5 pipes P may also be used in combination with the exterior cold-air jackets, thus increasing the circulation of air through the stove and increasing the radiating effect of the same.

The cold and heated air circulates as follows:  
 10 Where the air-jacket is used, the heating of the back of the stove, rarefying the air within the jacket, causes the same to rise, which induces the colder currents of air near the floor to rise within the flues N N, and from there  
 15 pass into the hot-air reservoir M, and from thence up the pipe M' into the room above. The cold air also entering at the front of the stove is caused in the same way to rise into the hot-air drums on the right and left of the  
 20 magazine, and after being heated is passed through apertures V' V' in the back of the case into the hot-air reservoir M. A register placed between the stove and the hot-air pipe M' permits a portion of the heat generated to pass  
 25 into the lower room, and, if the hot air is not required for an upper room a register will take the place of the pipe M', and the circulation of air through the room may be regulated thereby. When the pipes P are put into  
 30 service, the air within the same is rapidly heated, and a corresponding force given to the entering and discharged air therefrom. This is occasioned by their passing through both of the combustion-chambers. These pipes  
 35 may be of wrought or cast iron. The magazine being suspended by its flanges alone with a clear space of one or more inches between it and the sides of the hot-air drums V V, its expansion and contraction throw no strains  
 40 upon the stove, and do not rack the joint as when secured to the casing of the stove. The front and sides of the stove are provided with a double row of illuminating-windows, which correspond with the spaces between the mag-  
 45 azine and upper fire-pot, and between the up-

per and lower fire-pots, giving at all times a bright and cheerful appearance to the stove.

We are well aware that we are not the first to place air-jackets exterior to a heating-stove, or to place cold-air pipes within a stove; but  
 50 we believe ourselves to be the first to place air-jackets exterior to a stove in combination with heating-drums placed in the combustion-chamber of the stove, and having a hot-air reservoir common to both. We also believe  
 55 ourselves to be the first to make use of cold-air pipes interior to the stove and passing through two combustion-chambers therein. We also believe ourselves to be the first to use  
 60 superimposed fire-pots in a stove of a square or rectangular cross-section.

We lay no claim to the use of double fire-pots *per se* in stoves of square cross-section, they having been used in combination with  
 65 stoves of a cylindrical cross-section for many years.

Having described our improvement and shown its construction and operation, we desire to secure by Letters Patent the following  
 70 claims:

1. The combination of the combustion-chamber K, and the heating-drum V within the same, with a magazine freely suspended in  
 75 said combustion-chamber, the heated products of combustion circulating around the magazine and impinging upon the interior surface of the drum, said drum provided with inlets V<sup>2</sup> and outlets V', as shown, and for the purpose set forth.

2. The combination of the following elements: the heating-drum V, having the inlet-  
 80 ducts V<sup>2</sup> and exit-openings V', the hot-air reservoir M, having register W and hot-air pipe M', and the air-jacket N, substantially as described.

J. ALLISON ORR.  
 HENRY SEIVARD.

Witnesses:

F. PIERCE HUMMEL,  
 J. W. Y. LYON.