J. CARTON.

Heating Stove.

No. 33,474. Patented Oct. 15, 1861.

FIG. 1

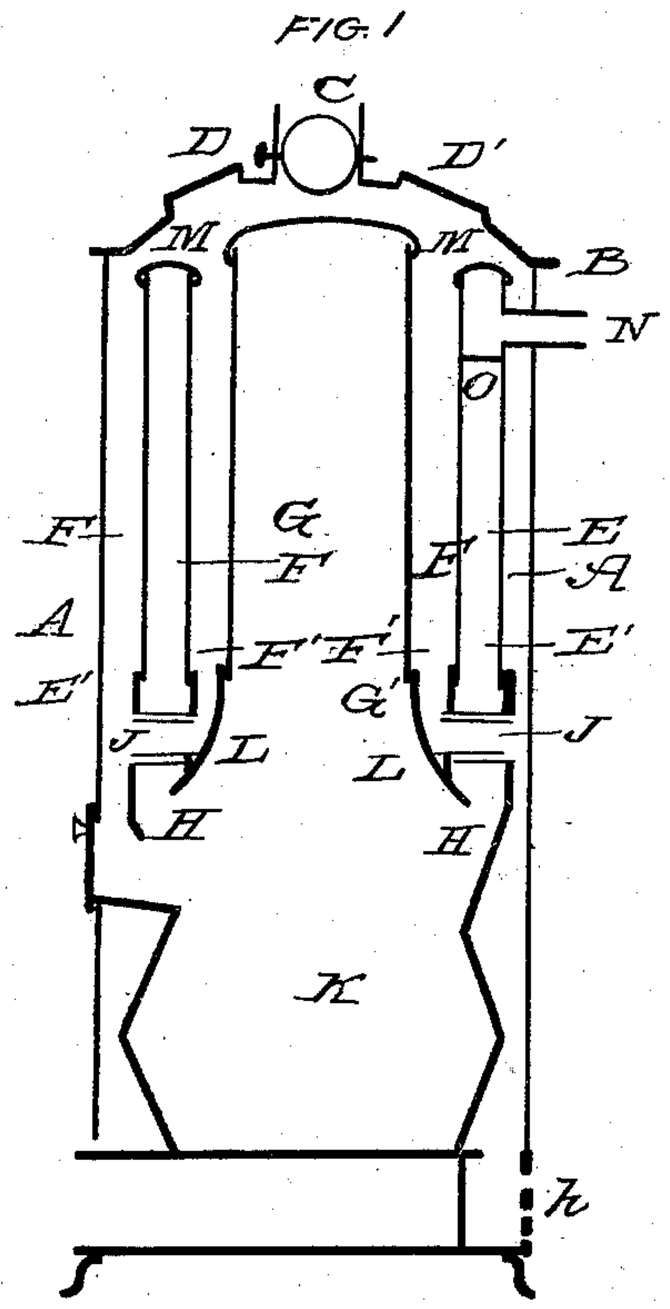


FIG. 2.

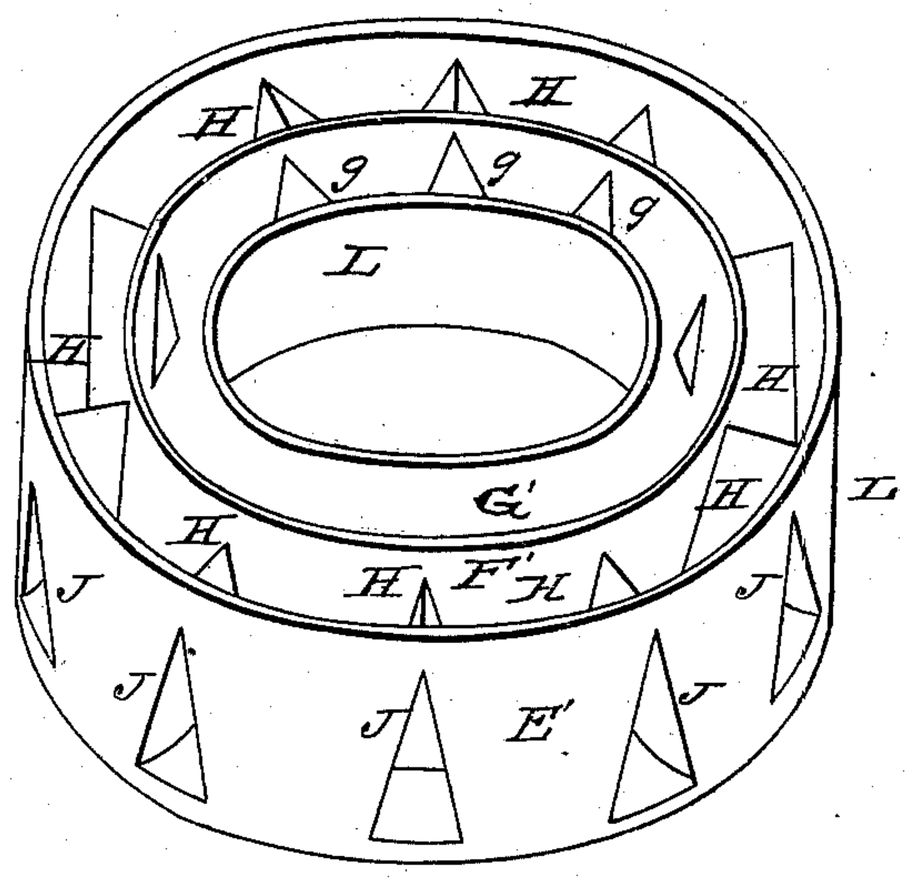
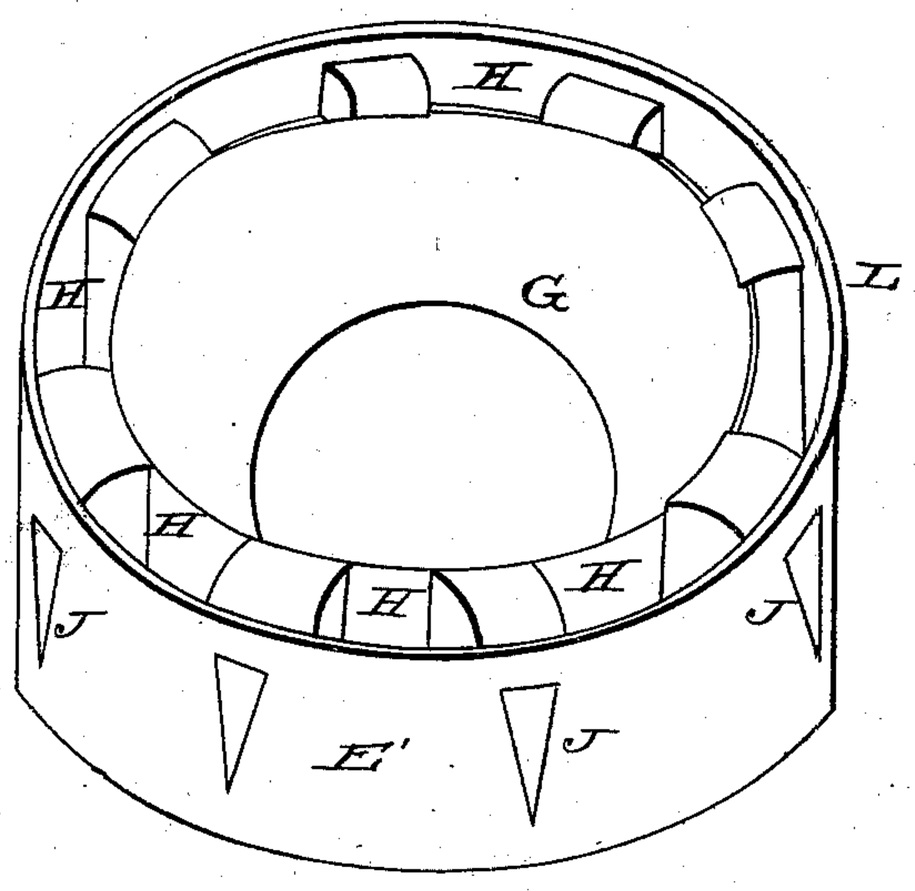


FIG. 3.



WITNESSES

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JOHN CARTON, OF UTICA, NEW YORK.

IMPROVEMENT IN PARLOR-HEATERS.

Specification forming part of Letters Patent No. **33,474**, dated October 15, 1861.

To all whom it may concern:

Be it known that I, JOHN CARTON, of Utica, New York, have invented a new and Improved Parlor-Heater, of which the following is a specification.

The nature of my invention consists in so forming the cap or top of the fire-pot that a number of concentric metallic cylinders may be placed thereon, and be so connected with the fire and with the outer air and with one another that the smoke and heat and inflamed gases may ascend in some of said cylinders and cold air in others, and such smoke be made to pass up the chimney, while the cold air, heated in its passage between such cylinders, may pass into the room where the heater is or be conveyed to upper or adjoining rooms by means of hot-air pipes and registers.

The following is an exact description of my invention, reference being had to the accompanying drawings.

Figure 1 is a sectional view of the heater. Fig. 2 is a perspective view of the upper side of the cap or top of the fire-pot, and Fig. 3 is a perspective view of the under side of the same.

A is the outer casing of the heater.

B is the top of the heater.

C is the hot-air pipe and damper.

D D′ is the register for passing hot air into the room.

E is the first inner cylinder.

F is the second inner cylinder.

G is the center cylinder or cone.

H H, &c., are openings through the cap from the fire to the space between the cylinders E and F.

J J, &c., are covered openings or passages through E′ and F′ of the cap for the passage of cold air from the base-openings *h h* into the space between G and F.

K is the fire-pot.

L is the cap or cover of the fire-pot, and E′ and F′ are two rings thereon for attaching the cylinders E and F, and the cone G is attached to the neck G′.

M is the cap or covering of the space between the two cylinders E and F.

N is the smoke-pipe.

O is a plate extending a part of the way around between the cylinders E and F, to cause the heat to be more equably distributed.

The base of the heater may be in any desirable form. I make it with an open casing for the passage of cold air through the openings *h h′* into the space between A and E. The fire-pot may be of any desirable structure. The cap or top of the fire-pot L curves inward and upward, as seen in the drawings, until it covers about one-half the diameter of the fire-pot, the upper end of which cover is extended into a neck G′, on which the inner cylinder or cone G, which is closed at the upper end, is placed. The ring E′ fits by a joint on the upper edge of the feed-section of the fire-pot, and the cap L is attached by its lower edge to the inside of E′, where it rests upon the fire-pot, and F′ is a similar but shorter ring attached to the upper surface of L, midway between E′ and the neck G′ of L, as seen in the drawings. Passing through L upward are the openings H H, &c., and passing through the rings E′ and F′ are the triangular horizontal openings or passages J J, &c. The spaces between E′ and F′ corresponding with such openings are covered, forming passages, so that the air which enters from the outside must pass into the space between F and G. The cylinders E and F are placed on the rings E′ and F′, respectively, and the space between them is covered by the cap M. The smoke-pipe N passes through the outer casing and the cylinder E and connects with the space between E and F. All parts of the cap L, with the openings and passages, are cast together.

When a fire is made, the gases rise and inflame in the cone G, while the heat and smoke pass up through the openings H H into the space between E and F, by means of which G, E, and F become heated. At the same time cold air passes through the openings *h h*, &c., in the base, and up between the outer cylinder or casing A and E, while a part passes through the openings J J, &c., into the space between G and F. The radiation from G, E, and F heats such cold air, as well as A, and when the air is so heated it passes up through the register D D′ into the room, or into other rooms by means of the hot-air pipe C. The smoke and hot air from the fire are retarded in their passage to the smoke-pipe

and more heat economized by means of the plate O, as seen in Fig. 1.

This form of heater, from the great radiating-surface presented and the free ingress of air between the cylinders, combines great heating powers in a cheap and simple form.

I claim—

The cap L, with the neck G′ and the rings E′ and F′ and the openings H H and the passages J J, constructed and operating substantially as described.

JOHN CARTON.

Witnesses:
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B. F. FRENCH.