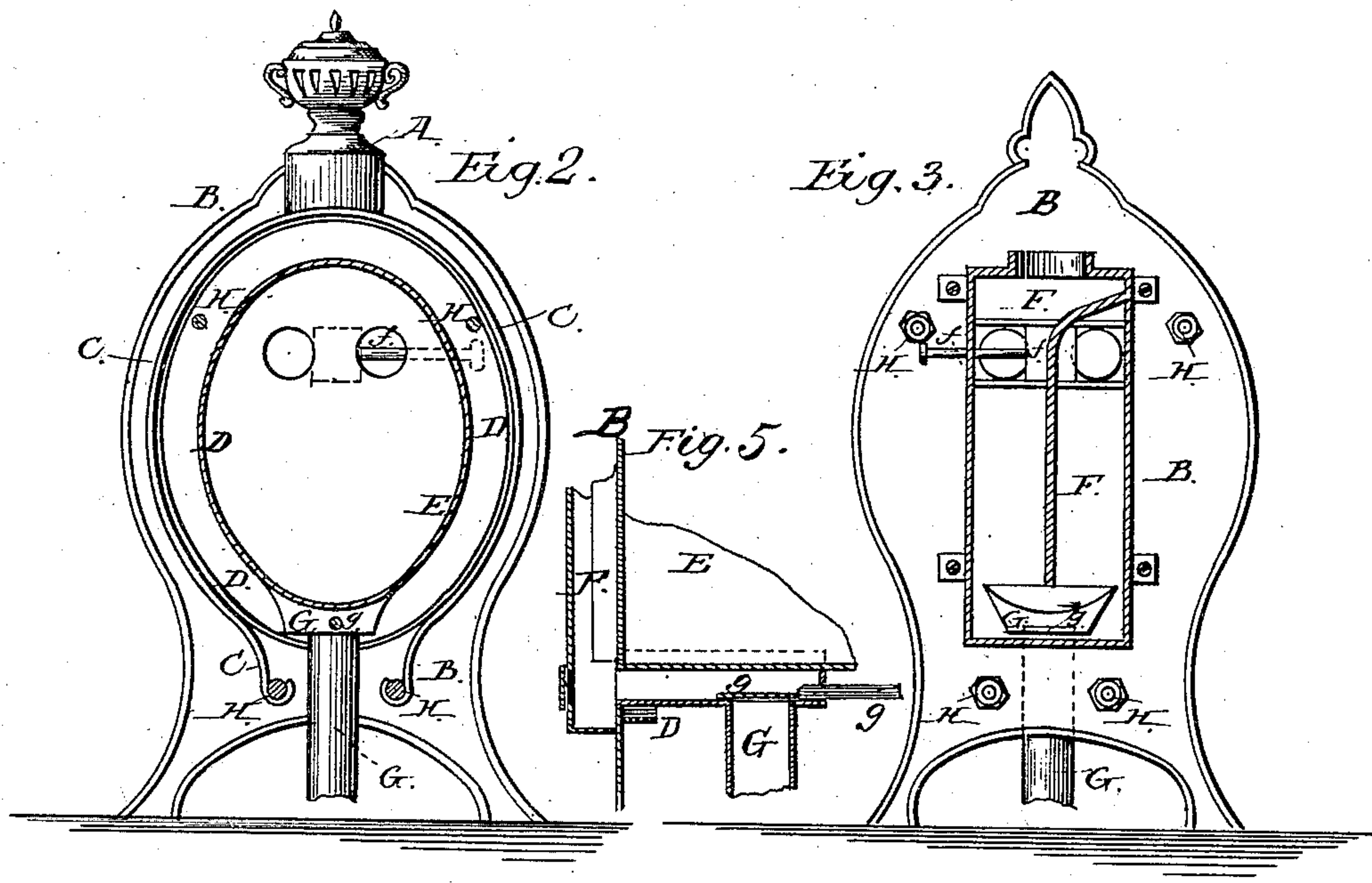
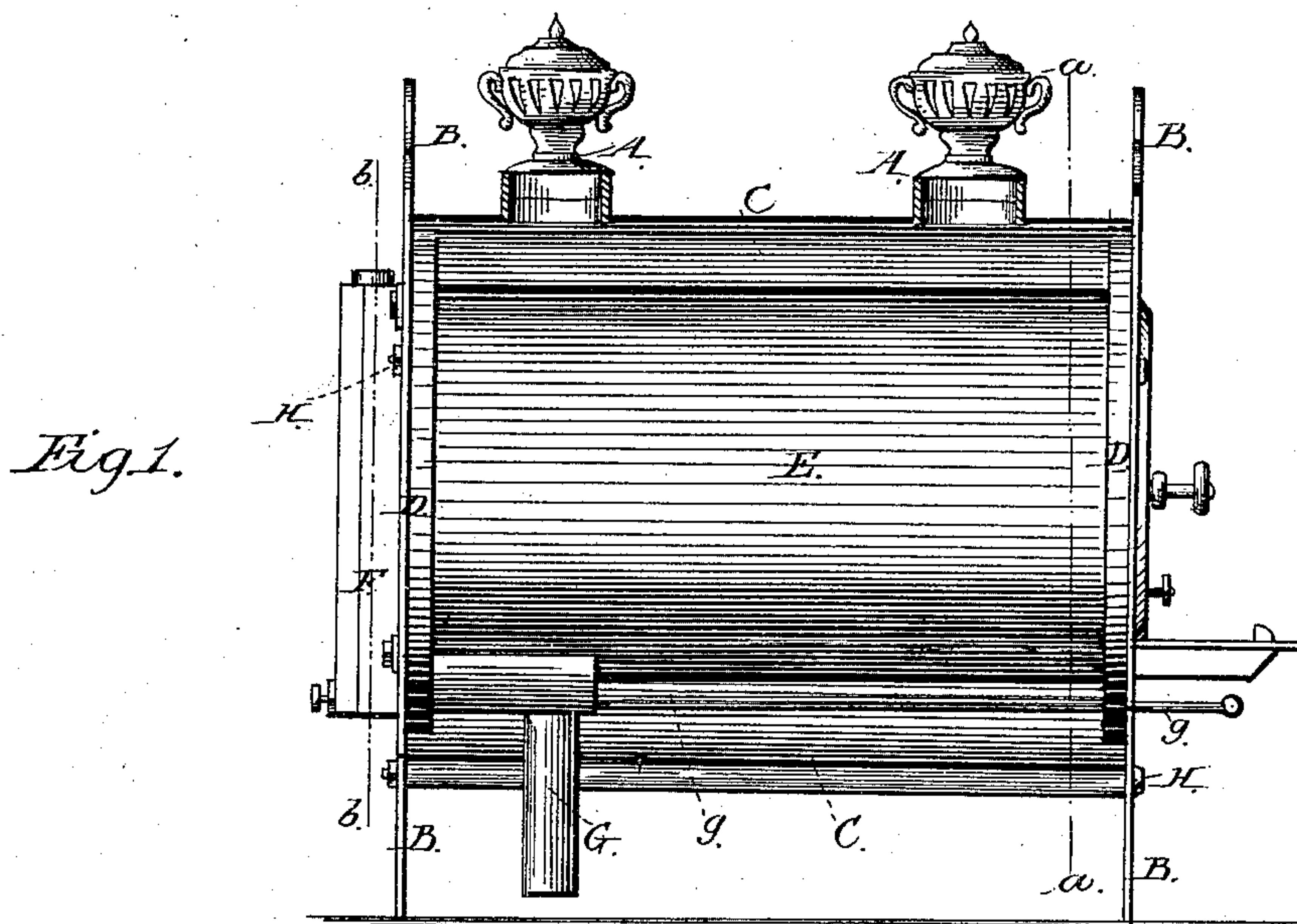


C. H. McCAW & T. BROWN.  
Heating-Stoves.

No. 221,334.

Patented Nov. 4, 1879.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

CHARLES H. MCCAWE AND THOMAS BROWN, OF PORT PERRY, ONTARIO,  
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## IMPROVEMENT IN HEATING-STOVES.

Specification forming part of Letters Patent No. **221,334**, dated November 4, 1879; application filed  
June 5, 1879.

*To all whom it may concern:*

Be it known that we, CHARLES HENRY MCCAWE and THOMAS BROWN, both of the village of Port Perry, in the county of Ontario, in the Province of Ontario, in the Dominion of Canada, have jointly invented a new and useful Improvement in Stoves, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation of a stove embodying our invention with one side of outer casing removed. Fig. 2 is a vertical section on the broken line *a a* in Fig. 1, looking toward the back, with side of casing replaced. Fig. 3 is a vertical section on the broken line *b b* in Fig. 1, looking toward the front, showing the construction of the smoke-box. Fig. 4 is an enlarged plan of the ventilator removed from the stove, and showing the slide-rod broken off; and Fig. 5 is a vertical section of the lower rear part of the stove, showing the combination and arrangement of the ventilator and smoke-box.

The object of our invention is the construction of a stove for parlor use which will occupy small space, be an ornament in the room, have great heating powers by circulation more than radiation, be easily regulated, be a good means of ventilation, will not warp wood-work or burn ladies' dresses if they brush against it, will be extremely durable, and yet, possessing all these advantages, will be cheap and simple of construction.

In the drawings, *A A* are the hot-air outlets, provided with one or two perforated urns to allow the escape of hot air, the urns to be provided with evaporating-pans in the top. *B B* are the cast-iron ends of the stove. *C* is the outer casing of stove, made of Russia iron, quite open at the bottom, and having the hot-air outlets *A A* on the top. This casing fits over flanges *D D* on the ends of the stove. Similar flanges also keep the fire-box *E* in position. The said fire-box may be made of

either plain or corrugated cast-iron, in one or more pieces, as may be most convenient.

*F* is the smoke-box, bolted on end of the stove, over two orifices in the said end, in such a position that one comes on each side of the perpendicular division in the smoke-box, so that by means of the damper *f* either a direct or downward draft can be made.

The damper *f* is shown in the drawings in position between the two orifices from the fire-box.

*G* is the ventilator, which is fixed to the bottom of the fire-box and communicates with the smoke-box, and is provided with the slide-valve *g*.

*H H* are the stove-rods, the two lower ones being contained in the rolls which terminate the sides of the outer casing, *C*.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a stove or heater, of the cast-iron end supports, *B B*, having concentric flanges *D D*, fire-box *E*, fitted at each end upon the innermost of said flanges *D*, outer sheet-metal casing, *C*, fitted at each end upon the outermost of said flanges, open at the bottom, and provided on top with hot-air outlets *A A* and connecting-rods *H H H H*, substantially as and for the purpose herein shown and set forth.

2. The combination, with the stove or heater consisting of the cast-iron ends *B B*, closed fire-box *E*, and open-bottomed sheet-metal casing *C*, having hot-air outlets *A A*, of the centrally-divided vertical smoke-box *F*, provided with the damper *f*, and ventilator *G*, having slide-valve *g*, substantially as and for the purpose set forth.

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Witnesses:

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