

April 19, 1949.

C. A. BALDWIN
HOT AIR STOVE, INCLUDING A THERMOSTATICALLY
OPERATED DAMPER

2,467,577

Filed Sept. 13, 1945

2 Sheets-Sheet 1

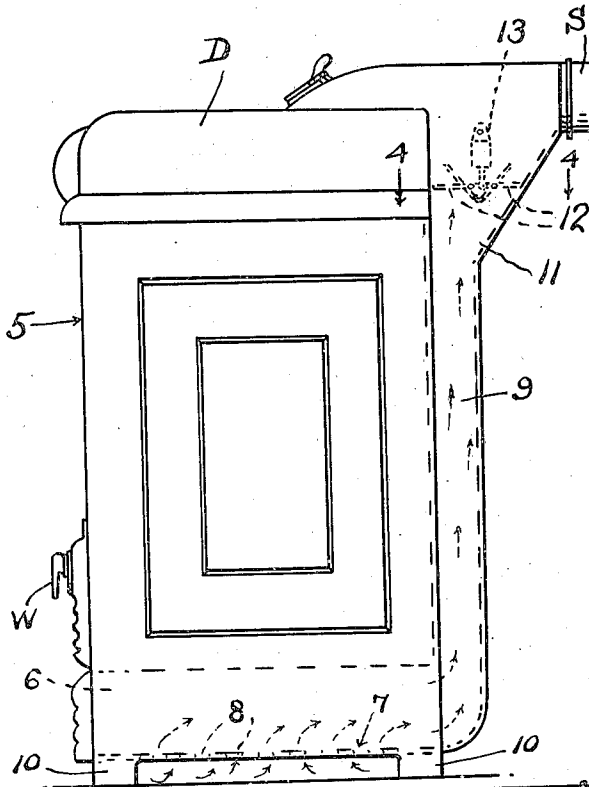


Fig. 1.

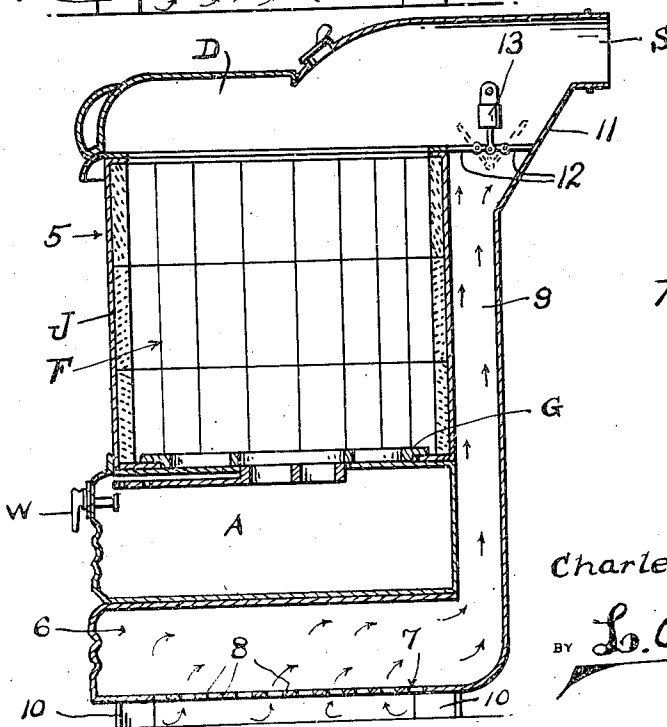


Fig. 3.

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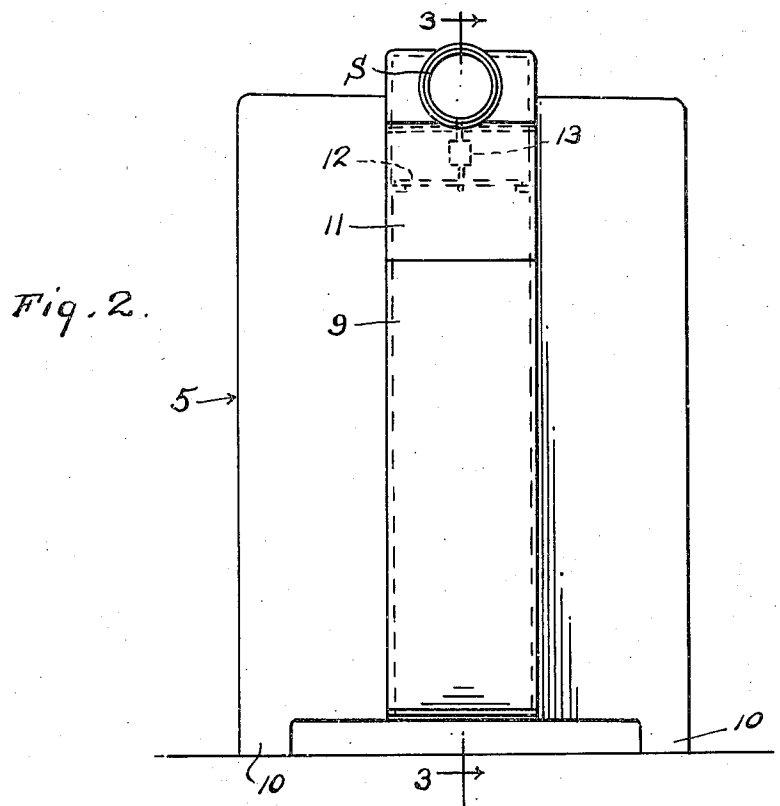
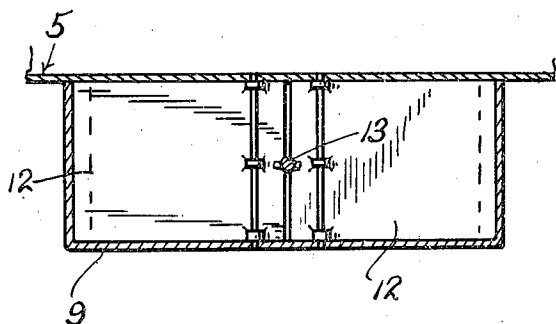


Fig. 4.



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HOT-AIR STOVE, INCLUDING A THERMO-
STATICALLY OPERATED DAMPER

Charles A. Baldwin, Streator, Ill.

Application September 13, 1945, Serial No. 615,944

1 Claim. (Cl. 126—67)

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This invention relates to stoves and more particularly that type set up in rooms.

The primary object of this invention resides in the provision of a stove adapted to draw cold air from the floor of a room so the heat therefrom will displace the same with no resistance.

Another object of this invention resides in the provision of a stove adapted to draw the cold air from the floor of a room so the heat therefrom will displace the same with no resistance and at the same time cause the outgoing cold air to naturalize the draft of the stove prior to passing through the heat drum therearound.

A further object of this invention resides in the particular construction of the stove.

A still further object of this invention resides in the particular arrangement of the dampers and controlling means therefor.

One of the salient features of this invention resides in the provision of a stove adapted to maintain even temperature through the entire area of a room.

With these and other objects in view, this invention resides in certain novel features of construction and arrangement of elements to be hereinafter more particularly set forth in the specification, illustrated in the accompanying drawings and pointed out in the appended claims and, while this disclosure depicts my present conception of the invention, the right is reserved to resort to such departures therefrom as come within the spirit of the invention.

In the accompanying drawings forming a part of this application;

Fig. 1 is a side view of the stove.

Fig. 2 is a rear view thereof.

Fig. 3 is a vertical sectional view taken approximately on line 3—3 of Fig. 2.

Fig. 4 is an enlarged sectional view of the damper taken approximately on line 4—4 of Fig. 1.

In the present illustration of this invention the numeral 5 designates, in general, a stove of the type utilized in heating individual rooms, halls and the like and aside from consisting of the conventional grate G, fire chamber F, ash pit A, smoke dome D, smoke stack S, heat jacket J and other well known elements usually employed in constructing heat stoves, an air duct 6 having its bottom wall 7 provided with inlet air ports 8 is formed below the ash pit and communicating with an outlet air stack 9 formed on the back of the stove with its upper or outlet end connected to and communicating with the smoke stack of the stove.

In order to dispose the bottom perforated wall 7 of the air duct 6 in such spaced relation from the floor of a room as to cause proper flow of cold air

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on the floor of the room toward and through the ports 8, legs 10 of predetermined lengths support the stove from its corners or other elected points thereof.

5 The upper portion of the air stack 9 is increased in area as indicated by the numeral 11 to accommodate pivotal dampers 12 which are operated by a suitable thermostat 13 adapted to control flow of cold air toward and through the smoke stack, it being apparent that suction through the air duct will be created by draft through the smoke stack in accordance with the degree of opening of the dampers whose thermostat is controlled by heat passing through the smoke dome to the smoke stack.

10 With this invention fully set forth, it is manifest that a heat stove is provided whereby cold air on the floor of a room will readily be drawn off and displaced by warm air from the stove without resistance and, through the particular assemblage of the dampers and controlling means therefor, room temperature is not only maintained at an even or predetermined degree but operation of the stove and consumption of fuel therein is controlled.

15 Having thus described my invention, what I claim and desire to protect by Letters Patent is:

20 In a heat stove comprising, a cold air duct beneath the stove and having a perforated bottom, legs on the stove supporting the perforated bottom in spaced disposition from the floor of a room, a substantially funnel shape air outlet stack communicating at its enlarged end with the cold air duct and smoke stack of the stove, oppositely swingable dampers pivoted and adjacent their inner ends over the enlarged outlet end and on opposite sides of a line passing laterally through the air outlet stack, and a thermostat secured within the smoke stack above and between said dampers of the stove with its lower end hingedly engaging the inner ends of the dampers.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
285,485	Howe	Sept. 25, 1883
440,229	Keith	Nov. 11, 1890
747,440	Kitchen	Dec. 22, 1903
844,292	Thurston	Feb. 12, 1907
1,221,008	Thompson	Mar. 29, 1917
1,711,365	Summers	Apr. 30, 1929