No. 661,486. Patented Nov. 13, 1900.

R. A. BRATTON.

HEATING STOVE.

Application filed Aug. 9, 1900.

(No Model.)

FIG. 2.

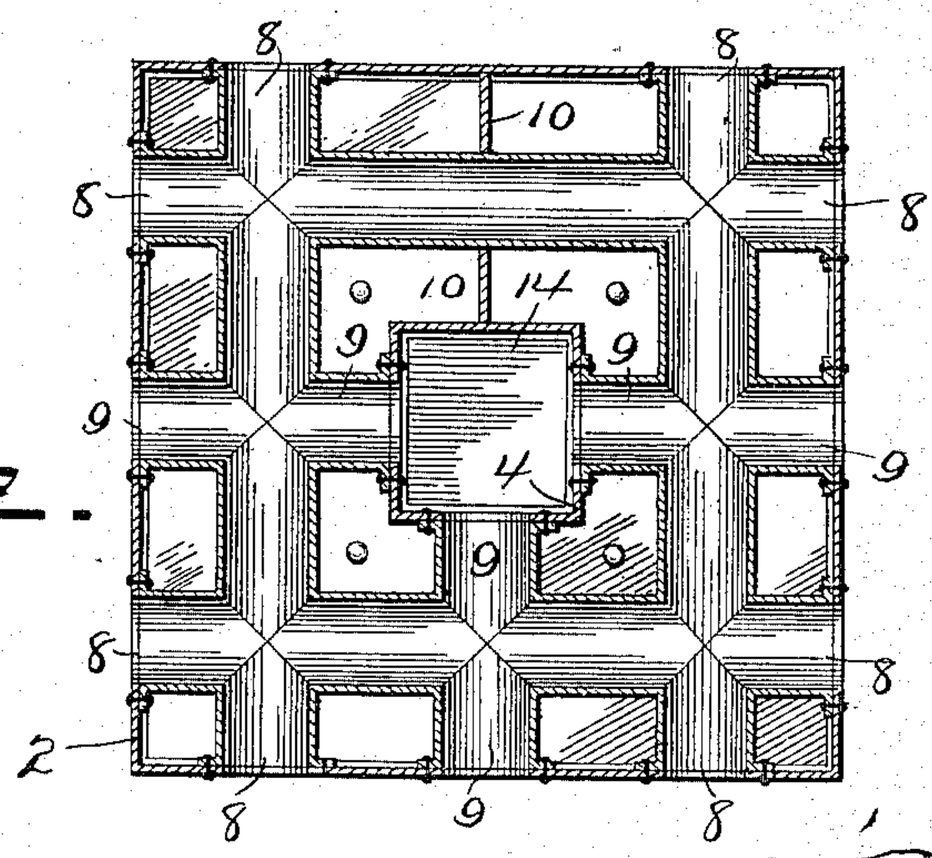


FIG. 3.

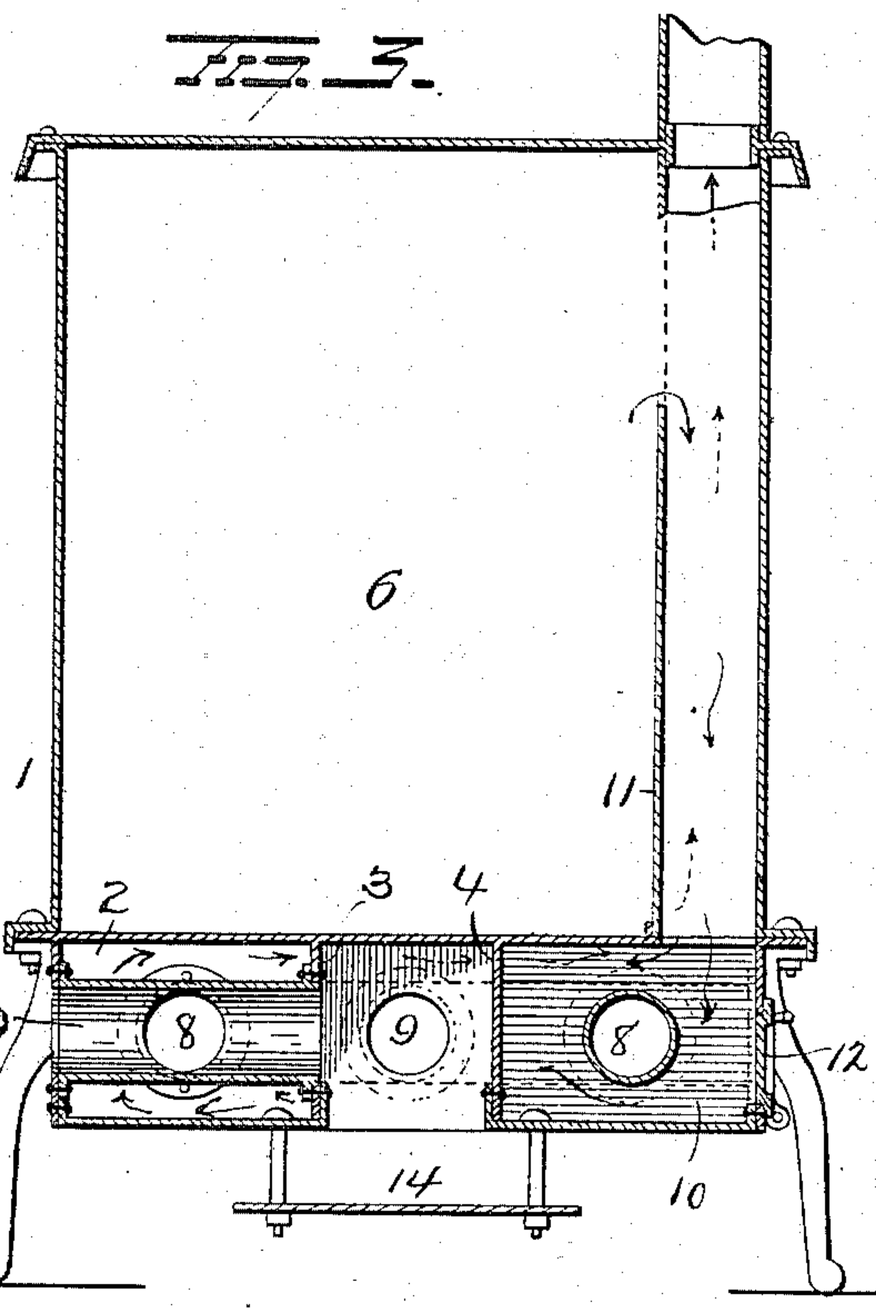
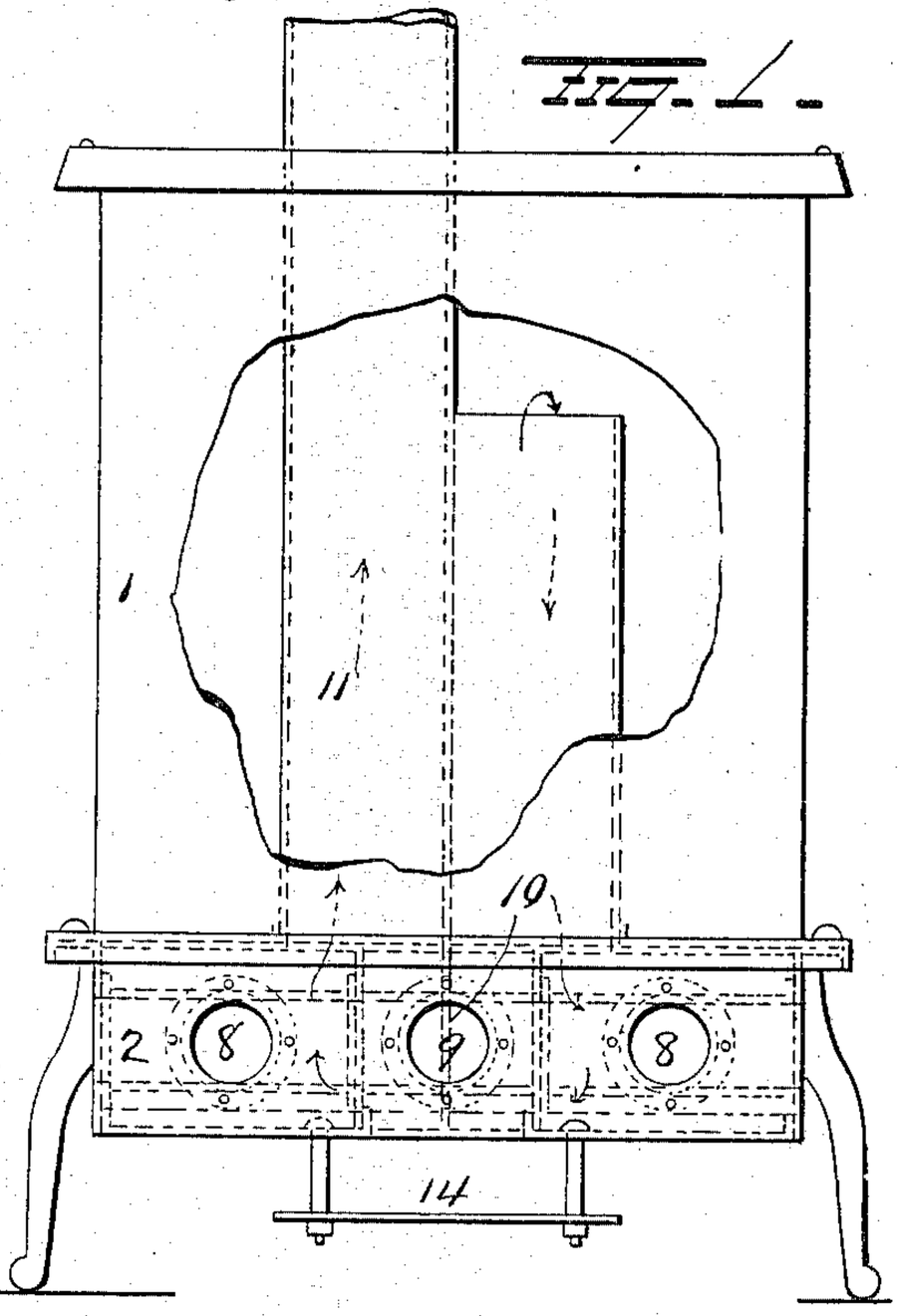


FIG. 1.



WITNESSES
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ROBERT AQUILA BRATTON, OF GALENA, ILLINOIS.

HEATING-STOVE.

SPECIFICATION forming part of Letters Patent No. 661,486, dated November 13, 1900.

Application filed August 9, 1900. Serial No. 26,394. (No model.)

To all whom it may concern:

Be it known that I, ROBERT AQUILA BRATTON, a resident of Galena, in the county of Jo Daviess and State of Illinois, have invented certain new and useful Improvements in Heating-Stoves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in heating-stoves, the object of the invention being to provide a stove with an improved base-radiator which will utilize the smoke and products of combustion to heat the same and discharge the heated air onto the floor.

With this object in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view illustrating my improvements. Fig. 2 is a view in horizontal section of the same, and Fig. 3 is a view in vertical section.

1 represents a stove provided with my improved base 2, which latter comprises a rectangular casing having an angular central opening in the bottom communicating with an outlet-chamber 4 for heated air, which chamber is formed in the casing by an angular partition 3. The top 5 of the base, which also forms the bottom of the fire-box and combustion-chamber 6, is preferably provided throughout its edge with flanges 7, secured to flanges 7^a at the bottom of the body of the stove. A series of flues 8 extend entirely through the casing both longitudinally and transversely and communicate at their juncture with each other, and short flues 9 connect main flues 8 with chamber 4 and with the outside air, as clearly shown in Fig. 2.

A vertical partition 10 is provided between the rear wall of the casing 1 and the rear wall of chamber 4, and the smoke-flue of the stove communicates with one side of the partition 10, so as to discharge the smoke and products of combustion into the casing, and the smoke and products of combustion will circulate around the interior of the casing and around flues 8 and 9 to heat the air passing therethrough and will then pass out into an exhaust-flue 11, communicating with the interior of the casing on the other side of the partition 10.

The rear wall of the casing is provided with a suitable opening normally closed by door 12 to permit the ready removal of soot and dirt which may collect in the casing, and suitable legs may be provided to hold the stove above the floor. A deflector 14 is provided below the chamber 4 and serves to cause the air to enter the central chamber around said deflector, and thus come into contact with the bottom of the stove and be partly warmed before it enters said chamber.

If desired, my improved stove-base may be made circular or other shape.

It will be seen that by employing my improvements a great radiating surface is provided by the flues and casing and that the cold air entering through the chamber 4 will flow into and through the main flues 8 and auxiliary flues 9 and be discharged into the room near the floor, thus more effectually utilizing the heat of a given quantity of combustible material than has heretofore been accomplished.

My improvements are adapted for use in connection with oil or gas heaters as well as coal and wood, and hence I do not wish to be limited to any particular fuel.

Various slight changes might be resorted to in the general form and arrangement of the several parts described without departing from my invention, and hence I would have it understood that I do not wish to limit myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A base for a stove comprising a casing having a central chamber therein open at its bottom, a series of flues extending through said casing and communicating with the central chamber said flues being open at their outer ends for the discharge of hot air and means for directing smoke and products of combustion about the flues.

2. A base for a stove comprising a casing having a central chamber therein open at its

bottom, a series of flues extending longitudinally and transversely through the casing, short flues connecting the first-mentioned flues with the central chamber and outside air and a partition in said casing to compel the circulation of smoke and products of combustion around all of said flues.

3. A base for a stove comprising a casing having a central chamber therein open at its bottom, a series of flues extending longitudinally and transversely through the casing, short flues connecting the first-mentioned flues with the central chamber and outside air, a partition in said casing to compel the circulation of smoke and products of combustion around all of said flues and a door in the wall of said casing to facilitate cleaning the same.

4. A base for a stove comprising a casing having a central chamber open at its bottom, a deflector disposed below said open bottom of the central chamber, and a series of flues communicating with said central chamber and open at their outer ends to discharge heated air.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ROBERT AQUILA BRATTON.

Witnesses:
D. B. BLEWETT,
H. S. CROOKS.