

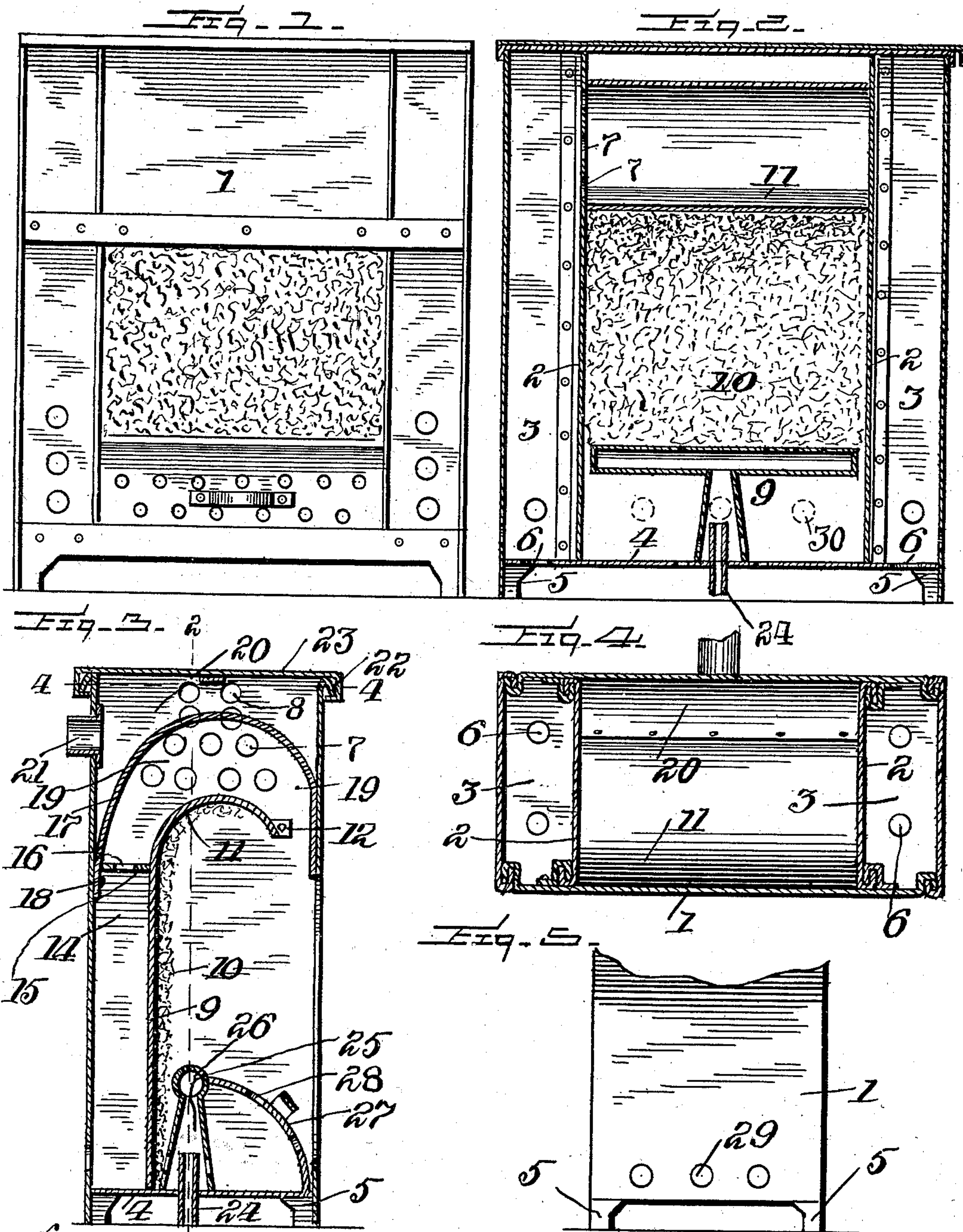
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Patented July 29, 1902.

W. DRENGWITZ.
HEATING STOVE.

(Application filed Feb. 20, 1902.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM DRENGWITZ, OF PITTSBURG, PENNSYLVANIA.

HEATING-STOVE.

SPECIFICATION forming part of Letters Patent No. 705,828, dated July 29, 1902.

Application filed February 20, 1902. Serial No. 94,959. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM DRENGWITZ, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Heating-Stoves, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in gas-stoves, and relates more particularly to heating-stoves.

The present invention has for its object to provide air-chambers on the sides and rear of 15 the stoves and to form suitable openings therein for the purpose of creating a draft that will greatly increase the units of heat and also draw all moisture and dampness from the room.

20 My invention further aims to provide a gas-stove of the above-described character that will be extremely simple in construction, strong, durable, comparatively inexpensive to manufacture, and highly efficient in its 25 use.

With the above and other objects in view the invention consists in the novel combination and arrangement of parts to be hereinafter more fully described, and specifically 30 pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate like 35 parts throughout the several views, in which—

Figure 1 is a front view of my improved gas-stove. Fig. 2 is a vertical sectional view taken on the line 2 2 of Fig. 3. Fig. 3 is a transverse vertical sectional view thereof. 40 Fig. 4 is a longitudinal sectional view taken on the line 4 4 of Fig. 3. Fig. 5 is a side elevation of the stove, partly broken away.

In the drawings the reference-numeral 1 indicates the casing of the stove. In said 45 casing are secured partitions 2, forming chambers 3 3, and the bottom of the casing is represented by the reference-numeral 4 and has suitable supports 5. In said bottom are formed openings 6 6, communicating with the 50 air-chambers 3. At the upper end of the partitions 2 are formed a series of openings 7 8.

Between the partitions 2 is secured a back wall 9, said back wall carrying a suitable covering of asbestos or other fireproof material 10. This back wall 9 is curved, as shown at 11, and 55 suitably secured at 12 to the partitions 2. An air-chamber 14 is formed in the rear of the back wall 9 and the casing, and a partition 15, having a series of openings 16 formed therein, extends horizontally, connecting the 60 rear face of the back wall to the hood 17, which is rigidly secured at 18 to the casing and extends upwardly from the rear portion of the casing to the front thereof, as shown in Fig. 3, forming a mixing-chamber 19 be- 65 tween the curved upper end of the back wall and the hood. An air-chamber 20 is also formed in the rear of the hood and extends to the inner walls of the casing, communicating with the flue 21. The upper end of the 70 casing is crimped, as shown at 22, to receive the sliding cover or top 23. The gas-supply pipe 24 extends through the bottom 4 and leads into the ordinary gas-mixer 25, communicating with the gas-burner 26, and the 75 fender 27 is placed in front of the burner and rests upon the upper face of the base of the casing, this fender having also formed therein a number of openings 28. The side walls of the casing have also formed therein a num- 80 ber of openings 29, and like openings 30 are formed in the rear wall of the casing.

The operation of my improved gas-stove is as follows: The air being admitted from the bottom and sides of the chamber 3 will cir- 85 culate and mix with the hot air in the mixing-chamber 19 and from the air circulating through the air-chamber 14 in the rear of the stove. In this chamber 19 the heat will be baffled and may be conveyed through the 90 opening 7 again into the side air-chambers 3, thence through the openings 8 into the air-chamber 20, leading to the flue. It will be seen that by reason of the many openings leading from the open air into the said rear 95 chambers and also by reason of the openings formed in the lower base of the casing all the dampness and excessive moisture in the room will be drawn through the stove and that by reason of the gas mixing with the heated air 100 in the mixing-chamber the heat will be baffled, preventing the direct draft, thereby ob-

taining a greater number of units of heat than could be obtained in stoves wherein a direct draft is created.

The many advantages obtained by the use of my improved device will be readily apparent from the foregoing description, taken in connection with the accompanying drawings.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention.

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

1. In a gas-stove, the combination of a casing, partitions arranged therein adjacent to the side walls thereof forming chambers between said partitions and the side walls of the casing, said chambers in communication with the open air, a fireback having a curved upper end, a rear chamber between the fireback and the rear wall of the casing, said chamber in communication with the open air, a hood mounted in the casing above the curved upper end of the fireback forming a chamber in communication with the rear chamber and the side chambers, and a cover on the casing forming a chamber above the hood which is in communication with the exit-flue, substantially as described.

2. In a gas-stove, the combination of a casing partitions arranged therein and forming

chambers between the same and the side walls of the casing, a fireback having a curved upper end, a chamber between the fireback and the rear wall of the casing and in communication with the open air, a curved hood mounted over the curved upper end of the fireback forming a hot-air chamber which is in communication with the side and rear chambers, and a cover for said casing forming a chamber above the hood which is in communication with the side and rear chambers, substantially as described.

3. In a gas-stove, the combination of a casing, partitions therein adjacent to the side walls of the casing forming side chambers in communication with the open air, a fireback having a forwardly-curved upper end, a rear chamber between the fireback and the rear wall of the casing in communication with the open air, a hood forming a hot-air chamber between the same and the upper end of the fireback and in communication with the rear chamber, and a chamber above said hot-air chamber in communication with the exit-flue and side chambers, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

WILLIAM DRENGWITZ.

Witnesses:

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