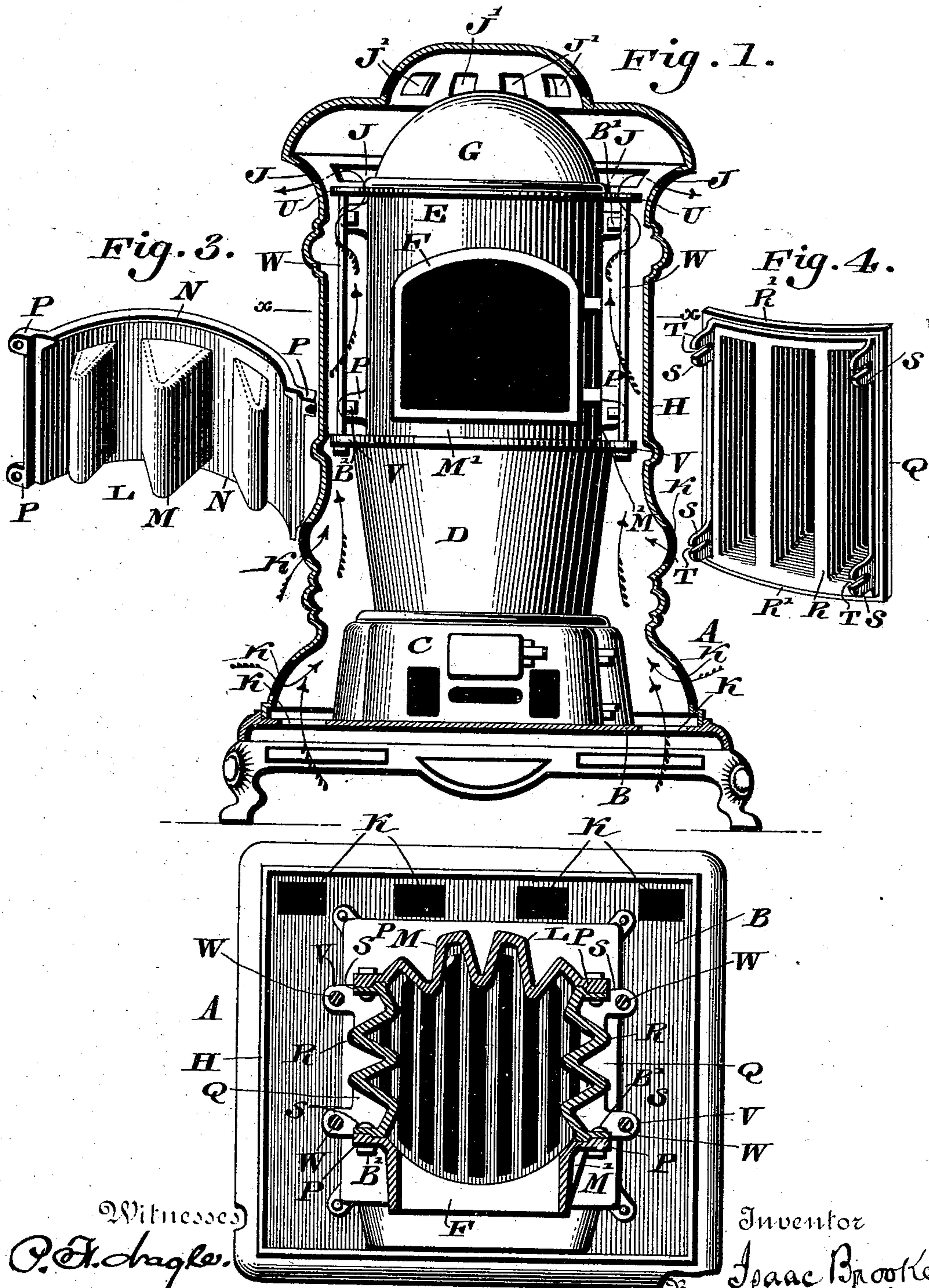


(No Model.)

I. BROOKE.
HEATING STOVE.

No. 551,716.

Patented Dec. 17, 1895.



Witnessed
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Fig. 2.

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UNITED STATES PATENT OFFICE.

ISAAC BROOKE, OF POTTSTOWN, ASSIGNOR TO FLOYD, WELLS & CO., OF ROYERSFORD, PENNSYLVANIA.

HEATING-STOVE.

SPECIFICATION forming part of Letters Patent No. 551,716, dated December 17, 1895.

Application filed May 21, 1895. Serial No. 550,034. (No model.)

To all whom it may concern:

Be it known that I, ISAAC BROOKE, a citizen of the United States, residing at Pottstown, in the county of Montgomery, State of Pennsylvania, have invented a new and useful Improvement in Heating-Stoves, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a novel construction of heating-stove provided with a casing having therein ports for the ingress of cold air and the egress of heated air therefrom, said air being thus more effectively heated and discharged from the stove than heretofore.

It also consists of a novel manner of constructing and assembling certain sections of the stove.

It further consists of novel details of construction, all as will be hereinafter set forth.

Figure 1 represents a front elevation of a heating-stove embodying my invention, the outer casing thereof being shown in section on the broken line *xx*, Fig. 1. Fig. 2 represents a section on line *xx*, Fig. 1. Fig. 3 represents a perspective view of a back section of the combustion-chamber. Fig. 4 represents a perspective view of one of the side sections of the combustion-chamber.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a heating-stove, the same having the base B, which is suitably supported, the ash-pit C, fire-pot D, combustion-chamber E, having an opening or door F therein for the insertion of fuel, and a dome G, the above parts being surrounded by the casing H, the upper portions of which latter at the sides and back are provided with ports or outlets J for the egress of the heated air, the air entering through the base B and the lower portions of the casing by means of the ports K and being heated by its contact with the heated portions of the stove, as is evident.

L designates the rear section of the fire-pot chamber, the same being provided with the corrugations forming pockets therein opening to the surrounding air-space M and having the body portions N curved in the present instance and provided with ears or eyes P

therein, the construction of said rear section being best seen in Fig. 3.

Q designates the side sections of said combustion-chamber, the same having the corrugated portions R forming pockets therein opening to the surrounding air-space and the upper and lower body portions R', said side sections having attached thereto the ears S, which are provided with the slots T therein.

U designates ears which are attached to the dome G, the fire-pot chamber D having similar ears V projecting therefrom, the latter being in line with the ears U and having passing therethrough the rods W, by means of which the parts are held in assembled position.

The operation is as follows: When it is desired to assemble the parts, the sections Q and L are placed upon the fire-pot chamber D, as is also the front section containing the opening F, and the bolts B' connecting the same are readily slipped into the ears P and S, as will be evident, and said bolts being tightened, the front, rear and sides of the combustion-chamber will be rigidly locked in position, the dome and fire-pot sections being held rigid in respect to the combustion-chamber by means of the bolts W, as will be evident. The cold air entering through the ports K passes between the casing H and the stove proper, as will be understood by the arrows in Fig. 1, said air being discharged through the ports J and J' into the apartment in a highly-heated condition and being effectively heated and rapidly circulated, as will be apparent.

Especial attention is called to the feature of providing the side and rear sections Q and L of the combustion-chamber with corrugations, since this is generally one of the hottest points of the stove, an increased heating-surface being thereby attained, since a maximum surface of the combustion-chamber will thus be exposed to the air as it rises, thereby effectively and thoroughly heating the same.

I am aware that it is not broadly new to provide a heating-chamber with corrugations, but by providing the sections hereinbefore referred to with corrugations at the specific point described and inclosing the same with a suitable casing better results are found to

be attained than heretofore in stoves of the usual construction.

It will of course be apparent that the side and rear sections, as well as the others, can be
5 assembled by other means than those shown, and that other changes will be made that will come within the scope of my invention.

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

1. A heating stove having its combustion chamber formed of front, back and side sections, each of said sections having apertured ears at its ends for fastening bolts, and said
15 side and back sections having pockets there-

in, said parts being combined substantially as described.

2. A heating stove having a base with openings therein, a casing on said base surrounding the ash pit, fire pot, combustion chamber 20 and dome of said stove, and having openings in its upper part above said fire chamber, said fire chamber having pockets in its walls opening to the space between it and said casing, said parts being combined substantially as 25 described.

ISAAC BROOKE.

Witnesses:

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