

I. G. HUSTON.
FIRE POT.

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969,373.

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Fig. 1.

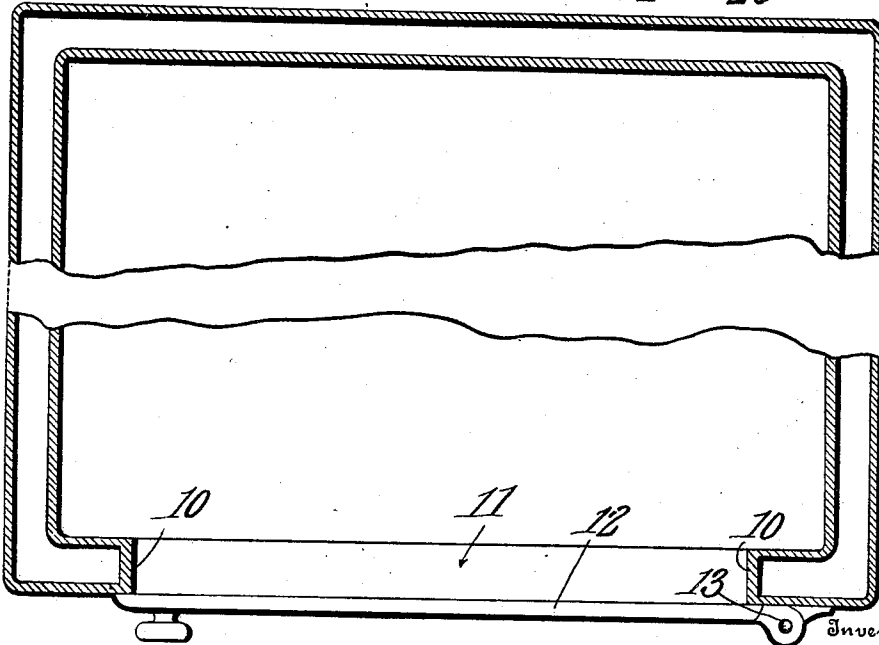
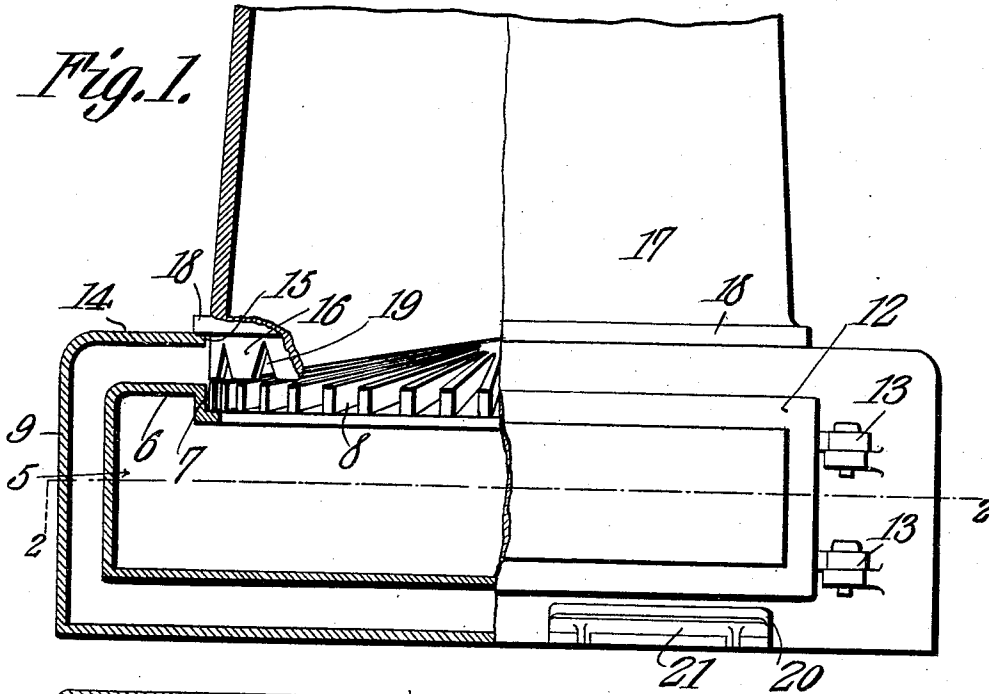


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

ISAAC G. HUSTON, OF CAREY, OHIO.

FIRE-POT.

969,373.

Specification of Letters Patent.

Patented Sept. 6, 1910.

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To all whom it may concern:

Be it known that I, ISAAC G. HUSTON, a citizen of the United States, residing at Carey, in the county of Wyandot and State of Ohio, have invented a new and useful Fire-Pot, of which the following is a specification.

This invention aims to provide a construction of stove having as its object to provide for more perfect and complete combustion of the fuel.

In carrying out the invention, the heat given off from the ashes in the ash-pit of the stove is utilized to initially heat the air which is led into the body or fuel basket of the stove so that the fuel will not be chilled and a more complete and perfect combustion of such fuel will result.

Stoves have heretofore, in a few instances, been constructed with air jackets surrounding their ash-pits and opening into the body of the stove but in such constructions it has been customary to locate the point of communication of the air jacket with the interior of the stove body, considerably above the plane of the grate of the stove and consequently above the fuel in the stove. As a consequence, practically no beneficial results were obtained. The present invention however, contemplates discharging the air from the air jacket into the body of the stove in or substantially in the plane of the grate and at all points around the fuel thereon so that the fuel around the sides or in other words at the edge of the grate will receive as much draft, if not more, than will the fuel at the middle of the grate. Consequently, the combustion of the fuel will be more complete and more nearly perfect and there will be of course less waste of fuel and a maximum production of heat units.

In the accompanying drawings, Figure 1 is a view partly in elevation and partly in section of a stove constructed in accordance with the present invention, and Fig. 2 is a horizontal sectional view therethrough on the line 2—2 of Fig. 1.

In the drawings, the ash-pit of the stove is indicated by the numeral 5 and is provided in its upper wall 6 with an opening 7 in which is received the grate 8 of the stove. The ash-pit 5, as heretofore stated, is practically completely surrounded by an air jacket formed by a casing 9 which constitutes the base of the stove, the walls of this casing being spaced from the walls of

the ash-pit at all points except at the front of the said casing, the ash-pit and casing, at this wall, being connected by means of an integral web or flange 10 which forms a door opening 11 through which access may be had to the interior of the ash-pit 5, this opening being normally closed however, by a door 12 hinged as at 13 at one side of the said opening.

Like the top wall 6 of the ash-pit 5, the top wall 14 of the casing 9 forming the base of the stove, is provided with an opening 15 which is of the same general outline as the opening 7 and in which is inserted the lower end or flange 16 of the stove body 17, the said body being formed exteriorly with a circumscribing shoulder 18 which rests upon the upper side of the top wall 14 of the casing 9 at the edge of the said opening 15 therein whereby to properly support the stove body upon the said top wall of the casing. It will be observed from an inspection of the two figures of the drawings and from the foregoing description, that the walls of the casing 9 and ash-pit 5 are spaced at practically all points, and it will also be observed, from an inspection of Fig. 1 that the air jacket formed between the said walls of the casing and ash-pit opens into or communicates with the interior of the stove body 17 between the edges of the openings 7 and 15 in the top walls 6 and 14 of the ash-pit and casing respectively, and the flange 16 of the stove body is formed, throughout its entire extent, with openings 19 through which the air currents may pass to the fuel upon the grate 8. In the front wall of the casing 9, there are formed draft openings 20 and these openings are closed or exposed at will by the manipulation of doors 21 which are suitably hinged each at one edge of each opening. When the doors 21 are in open position, as shown in Fig. 1 of the drawings, only one of such doors being shown in this figure, it will be understood that the draft will be through these doors, and the air jacket or space between the walls of the base casing 9 and the ash-pit 5, and that the circulation of the currents around the walls of the ash-pit will result in the air being thoroughly heated before being discharged, by way of the openings 19, into the body of the stove. Inasmuch as the flange 16 is provided at all points in its extent with the openings 19 the heated air currents discharged from the air jacket into the body of

the stove through these openings will impinge directly upon the fuel at the edge of the grate 8 so that the fuel at this portion of the grate or fuel basket will receive the proper amount of draft and burning of the fuel in the center only is in this manner obviated.

What is claimed is:—

In a stove, an ash pit formed in its upper wall with an opening, a grate mounted in the opening, a casing affording a base for the stove, and an air jacket for the ash pit, said casing surrounding the ash pit with its walls spaced therefrom at all points except at the front, the front wall of the ash pit and the front wall of the casing being connected by a continuous web affording a door opening through which access may be had to the interior of the ash pit, a door hinged to one side of the opening, the top of the casing being also formed with an opening, a

stove body having its lower end fitted into the opening in the top wall of the casing, the said body being formed in its said portion with a plurality of openings, the said continuous web constituting the sole support for the ash pit and the sole connection between the ash pit and casing; the casing being formed below the plane of the bottom of the ash pit with openings, and doors arranged to close the said openings, the openings serving as a means for admitting air to the space between the casing and the ash pit.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ISAAC G. HUSTON.

Witnesses:

OTTO GOTTFRIED,
S. W. RANGER.