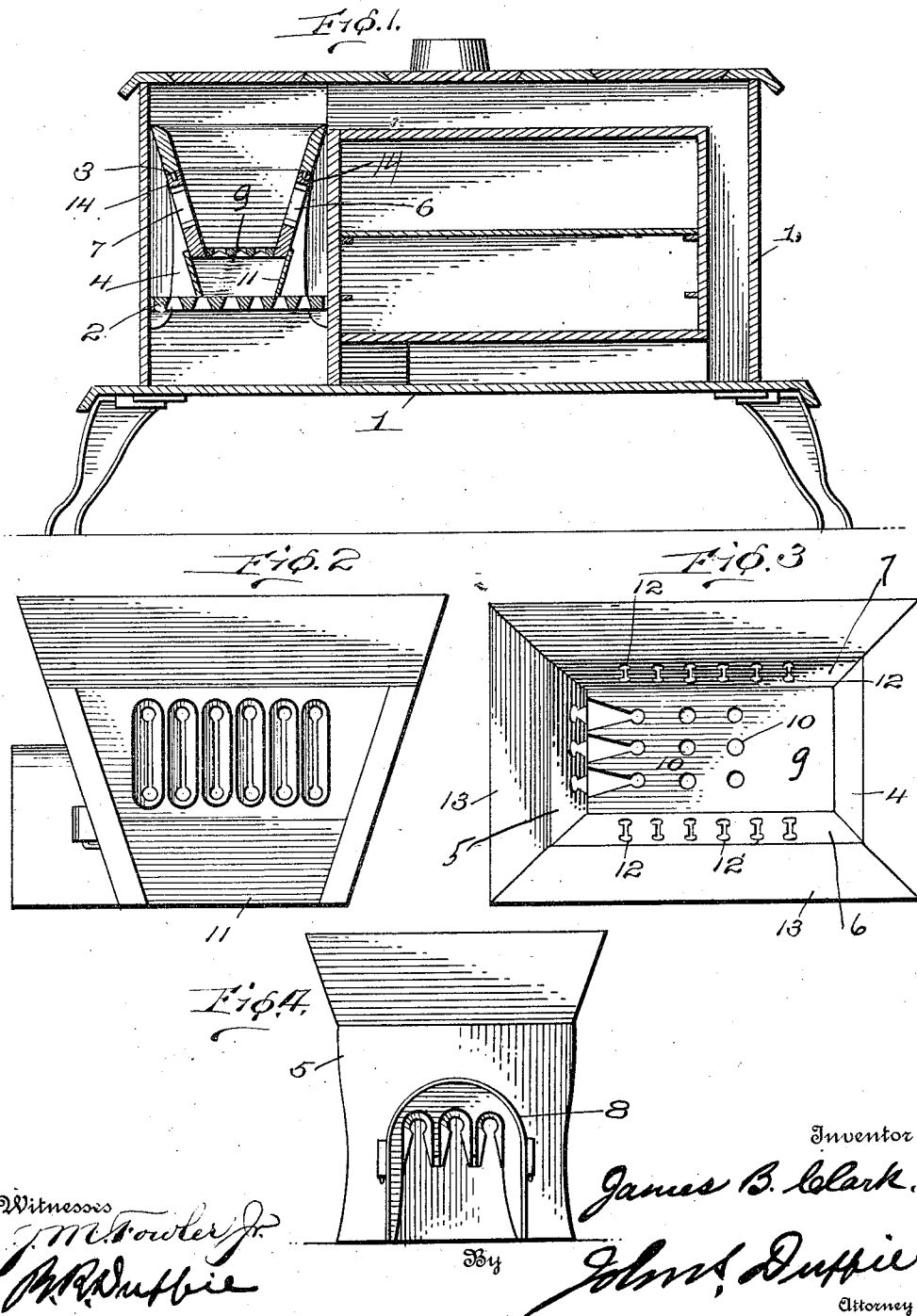


J. B. CLARK.
FIRE GRATE.

APPLICATION FILED JULY 20, 1910.

1,000,716.

Patented Aug. 15, 1911.



UNITED STATES PATENT OFFICE.

JAMES B. CLARK, OF HARRISBURG, ARKANSAS.

FIRE-GRATE.

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Specification of Letters Patent. Patented Aug. 15, 1911.

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To all whom it may concern:

Be it known that I, JAMES B. CLARK, a citizen of the United States, residing at Harrisburg, in the county of Poinsett and State of Arkansas, have invented certain new and useful Improvements in Fire-Grates, of which the following is a specification.

My invention has relation to improvements in fire grates and especially to grates to be used within a sheet iron heater and so arranged that coal, corn cobs, short blocks of wood and trash of all kinds may be burned in such stoves without injury to walls of the fire boxes thereof.

By the use of my grate an underneath draft is obtained, and, at the same time, a draft is obtained from each side of the grate. This grate can be readily removed from the stove when it is desired to burn long wood, when the ordinary flat grate, upon which my improved grate rests, is employed.

With the foregoing and other objects in view my invention consists in the novel features of construction, combination and arrangement of parts as are described in this specification, illustrated in the accompanying drawings forming a part thereof and particularly pointed out in the appended claims.

Referring more particularly to the drawings: Figure 1 is a longitudinal, vertical section of a sheet iron stove in which my improved grate has been employed. Fig. 2 is a side elevation of the grate. Fig. 3 is a top plan view thereof. Fig. 4 is a front elevation of my improved grate.

Referring more particularly to the drawings, my invention is described, in detail, as follows:

The stove 1 which is preferably constructed of sheet iron is provided with the usual flat grate 2 upon which my improved grate 3 rests. Said grate is provided with four walls, namely, a rear wall 4, a front wall 5 and respective side walls 6 and 7. The rear wall extends downward so that its lower edge contacts said flat grate 2, said wall not being provided with any openings for the passage of air. The front wall 5 is provided with a semi-circular opening 8 for the purpose of permitting the draft passing under and through the horizontal grate 9, which horizontal grate is supported by each of the walls above named. The

grate 9 is also provided with a number of openings 10 for the passage of the draft therethrough. So that the main draft which passes up through the horizontal grate 9 will not be affected I provide a tin or metallic side 11 extending downward from each side wall 6 and 7 until each contacts said flat grate 2. Thus it will be seen that the air currents which pass through the flat grate 2 into the space between my improved grate and the side walls of the stove will be drawn through the openings 12 in the respective side walls 6 and 7.

Each of the front, rear and side walls slants inwardly as it extends downward. Said walls are provided at their upper edges with removable sections 13 which are held to their respective walls by means of pins 14 extending from each section into the upper edge of its respective wall. It is necessary to provide these sections so that my grate may be easily removed from the stove when it is desired to use the stove for burning long wood or other form of fuel which could not be adapted to be used in my grate.

Although I have specifically described the construction, combination and arrangement of the several parts of my invention, yet I may exercise the right to make such changes or modifications therein as are not a departure from the spirit of the invention or the scope of the claims hereunto appended.

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

1. A fire grate of the class described adapted to rest on the usual flat grate of a stove or heater comprising front, rear and respective side walls, a horizontal grate supported by said walls, the said side walls having openings therein for the passage of draft therethrough, a metallic side extending from the lower edge of each side wall until it contacts the flat grate of the stove, said rear wall of the first-mentioned grate extending downward until it contacts the said flat grate, the front wall provided with a semi-circular opening therein for the passage of draft, each of the walls extending slantingly inward as it extends downward.

2. A fire grate of the class described adapted to rest on the usual flat grate of a stove or heater comprising front, rear and

respective side walls, a horizontal grate supported by said walls, the said side walls having openings therein for the passage of draft therethrough, a metallic side extending from the lower edge of each side wall until it contacts the flat grate of the stove, the rear wall of the first-mentioned grate extending downward until it contacts the said flat grate, the front wall provided with a semi-circular opening therein for the passage of draft, each of the walls extending slantingly inward as it extends down-

ward, each of the walls provided with a removable upper section secured to its upper edge, each section held to its respective wall by means of pins extending from each section therewith.

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

JAMES B. CLARK.

Witnesses:

R. L. COWAN,
ALICE BYRD.