

# JOHNSON & WANSBROUGH.

## Cooking Stove.

No. 29,381.

Patented July 31, 1860.

Fig: 1.

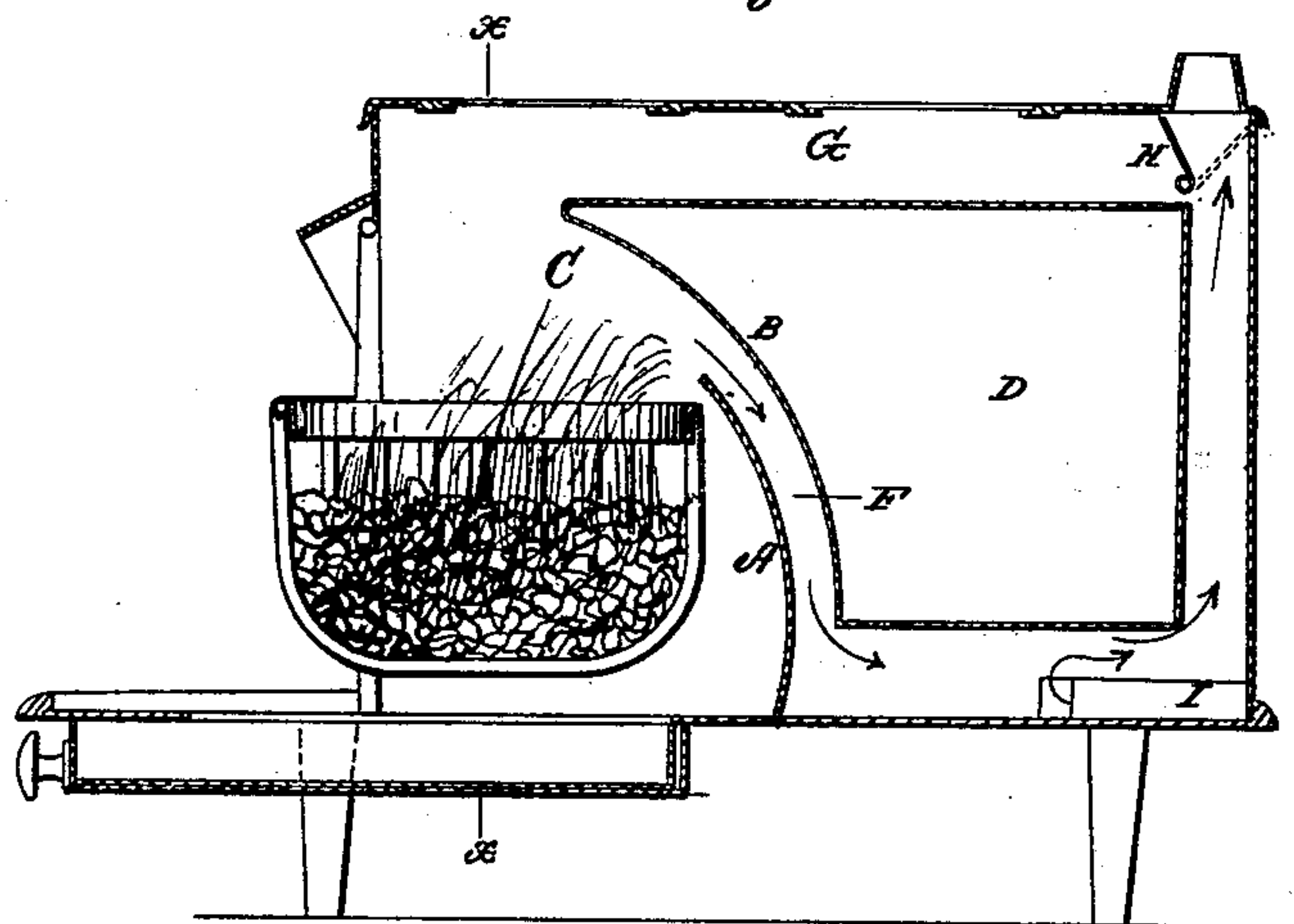
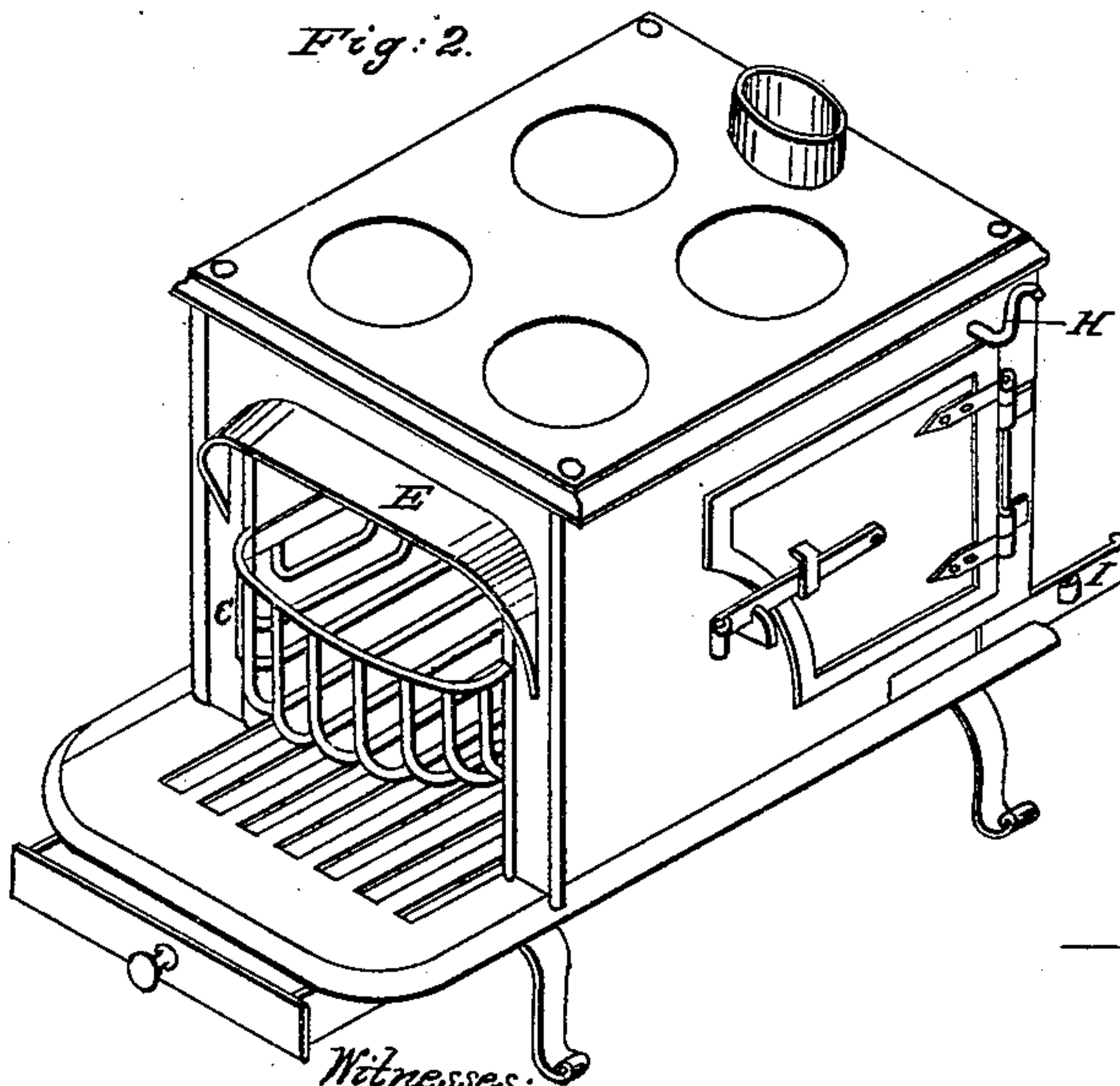
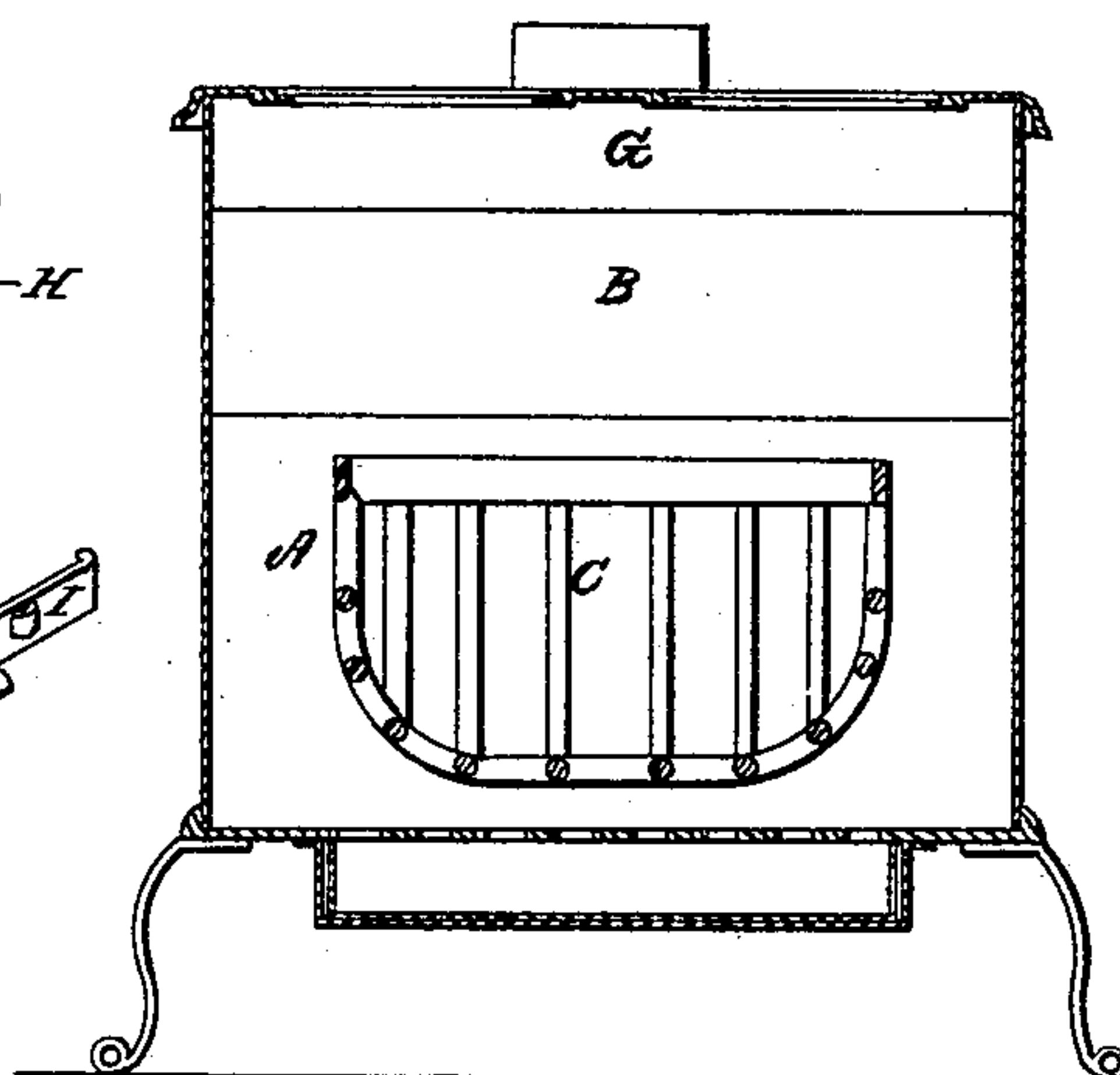


Fig: 2.



Witnesses:  
E. P. King  
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Fig: 3.



Inventors:

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# UNITED STATES PATENT OFFICE.

WM. JOHNSON AND H. WANSBROUGH, OF CINCINNATI, OHIO.

## COOKING-STOVE.

Specification of Letters Patent No. 29,381, dated July 31, 1860.

*To all whom it may concern:*

Be it known that we, WILLIAM JOHNSON and HENRY WANSBROUGH, both of Cincinnati, Hamilton county, Ohio, have invented a certain new and useful Cooking-Stove; and we hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification.

10 The subject of this invention is a plan of cooking stove adapted to the use of coke or of bituminous coal.

In the accompanying drawings Figure 1 is a longitudinal section of a stove embodying our invention. Fig. 2 is a perspective view of the same. Fig. 3 is a transverse section at *x x* Fig. 1.

20 The fire back is formed of two plates namely a plate A which rises from the bottom of the stove and arches forward to the top of the grate C, and the front plate B of the oven D which plate being situated slightly in rear of plate A and parallel therewith arches forward over the fire grate to which it forms a canopy or coping, which both receives heat from the flames and causes a reverberation of the flames and smoke resulting in a combustion of the latter and by narrowing the throat prevents any interruption arising from irregular drafts and eddies.

30 The grate C is composed wholly of open bars and has an approximately hemispherical contour and is so suspended as to be isolated from the sides of the stove, such construction being best adapted to insure complete and active incandescence in every part, and acting to preserve the stove sides from undue heat. The front portion of the grate projects somewhat in front of the stove, a hood E serving to direct the smoke inward.

The oven is entirely surrounded by flues—namely, a lower flue F which commences between the plates A and B passes back beneath and ascends to the stack behind the oven, and an upper flue G which passes directly over the oven to the chimney.

H is a damper which extends entirely across the stove.

I is a door by means of which the flue F may be cleaned and air admitted thereto when needful, to regulate the heat or draft.

For kindling the fire for broiling merely, the damper H is thrown back as shown by dotted lines so as to afford a direct passage from the fire to the chimney of the entire width of the stove; and in this case the lower flue is not used; but when the oven is required the damper is thrown forward as represented in full line which converts the upper flue into a hot air chamber and compels the entire volume of gases to pass under and behind the oven through the flue F. Whichever flue is used the smoke finds a direct, short and easy exit to the chimney, free from those sudden turns which are so objectionable in stoves of this class.

The fire being open in front can be employed for roasting, toasting, &c.

We claim as new and of our invention herein—

The arrangement of the grate C, arching fire and oven plates A, B, flues F, G, and damper H, constructed and combined in the manner and for the purposes set forth.

In testimony of which invention, we hereunto set our hands.

WILLIAM JOHNSON.  
H. WANSBROUGH.

Witnesses:

GEO. H. KNIGHT,  
C. STEEMER, Jr.