

(Model.)

J. STRASZER.  
GRATE FOR STOVES.

No. 245,578.

Patented Aug. 9, 1881.

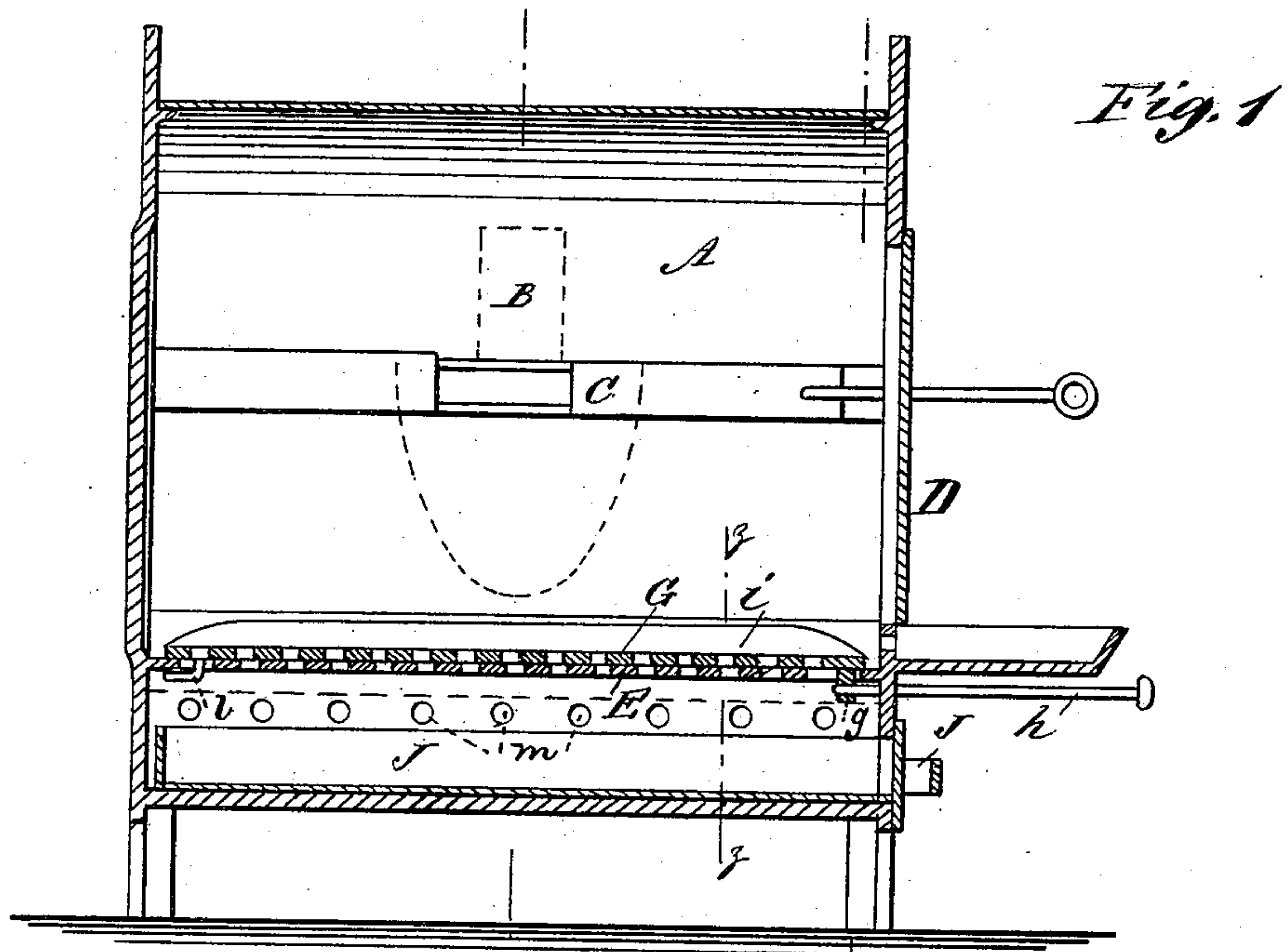


Fig. 1

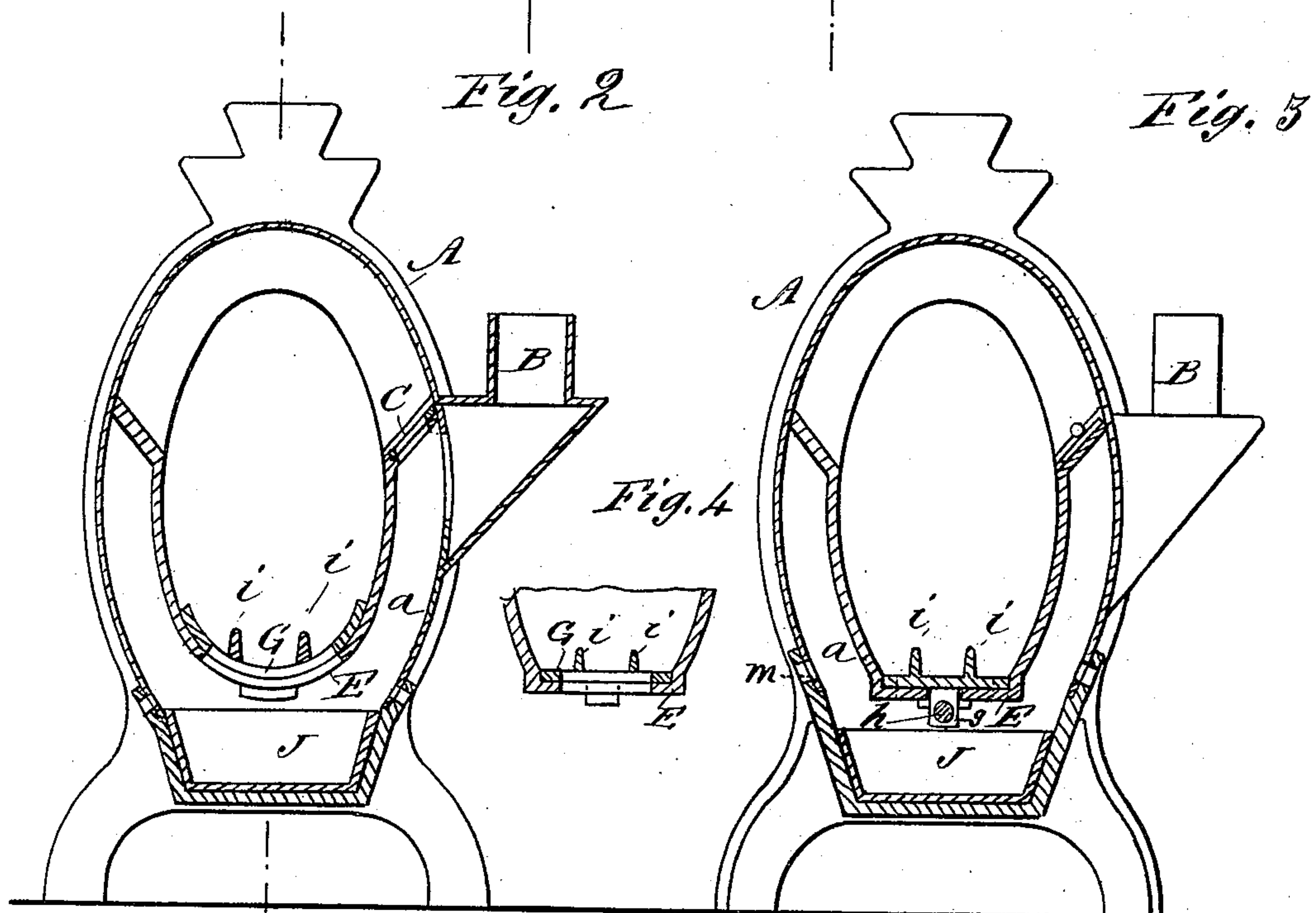


Fig. 2

Fig. 3

Fig. 4

WITNESSES:

C. Verneux  
C. Sedgwick

INVENTOR:

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# UNITED STATES PATENT OFFICE.

JOHN STRASZER, OF MANCHESTER, MISSOURI, ASSIGNOR TO HIMSELF AND  
GEORGE STRASZER, OF SAME PLACE.

## GRATE FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 245,578, dated August 9, 1881.

Application filed April 1, 1881. (Model.)

*To all whom it may concern:*

Be it known that I, JOHN STRASZER, of Manchester, in the county of St. Louis and State of Missouri, have invented a new and useful  
5 Improvement in Grates for Double-Walled Stoves, of which the following is a specification.

This invention relates more particularly to wood-burning stoves of the form known in some  
10 localities as the "Tod" stove.

The invention consists in combining a lugged and ribbed reciprocating grate with a stationary grate, as hereinafter described.

In the accompanying drawings, Figure 1 is  
15 a longitudinal vertical section, and Figs. 2, 3, and 4 are transverse vertical sections, of a stove embodying my improvements.

Similar letters of reference indicate corresponding parts.

20 A represents a wood-burning stove of the form known as the "Tod" stove, the lower portion being provided with double side walls, forming an air-chamber, *a*, and the upper portion communicating with the smoke-pipe B,  
25 and having a damper, C. Such stoves have heretofore had the bottom of the fire-chamber closed. In my invention the stove A has the bottom of the fire-chamber composed of a stationary grate, E, above which is a similar grate,  
30 G, resting on said grate E, and provided with a rod, *h*, extending out through the end wall of the stove, under the feed-door D, so that the upper grate may be reciprocated on the top of the lower one. By this means the ashes may  
35 be raked down from the bottom of the fire-box without the necessity for opening the door D or using a shovel, and they may also be raked down while the fire is burning.

The rod *h* is screwed into a lug, *g*, projecting  
40 downward from the grate G, and working in a slot in the lower grate. At the opposite end of the grate G is a lug, *l*, which extends under one of the bars of the lower grate, and thus

the upper grate is held in place on the lower one. By unscrewing the rod *h* the upper grate  
45 may be removed.

The bars of both grates run transversely of the length of the stove, and are so arranged with relation to each other that the bars of the upper grate may be over those of the lower one,  
50 so as to form practically one grate. Or, the upper bars may be over the spaces between the lower bars, so as to form practically a closed bottom.

The draft is supplied through the front door, 55 D, as usual, or the draft may be admitted through the front of the ash-pan by a slide, according to whether the double grate is to be open or closed.

In cross-section, the grates may be either 60 curved, as shown in Fig. 2, or flat, as shown in Figs. 3 and 4. The upper grate is here shown as provided with two ribs or bars, *i*, running longitudinally of the stove and transversely  
65 of the grate-bars, so as to strengthen said grate and lessen the friction of the burning fuel on the grate-bars when the grate is being reciprocated to rake down the ashes.

In the bottom of the chamber *a*, and below the grates, is the ash-pit, in which is a pan, J, 70 which receives the ashes as they are raked down. This pan is arranged to slide in and out like a drawer, and it may be removed in order to empty the ashes or closed up tight so as to prevent the escape of dust.

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

In grates for double-walled stoves, the combination, with a stationary grate, E, of the reciprocating grate G, having lugs *g* *l* and ribs *i*,  
80 as shown and described.

JOHN STRASZER.

Witnesses:

JAMES H. HALL, Jr.,  
WM. D. CLAYTON.