E. B. Finch.

Grate.

No. 7,598. Patented Aug. 27. 1850.

Fig. 3.

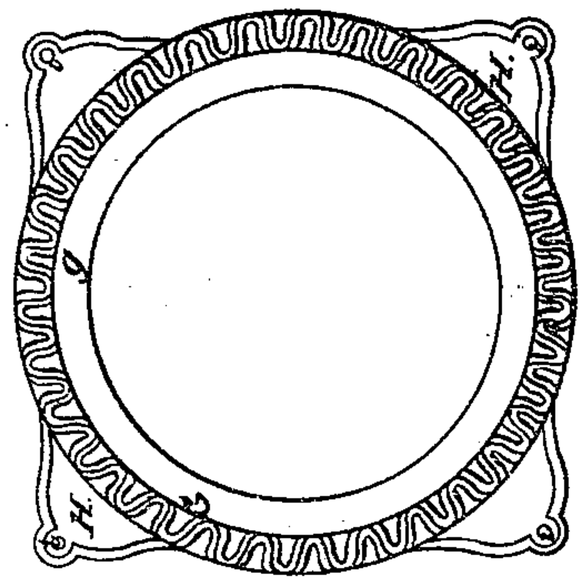


Fig. 4.

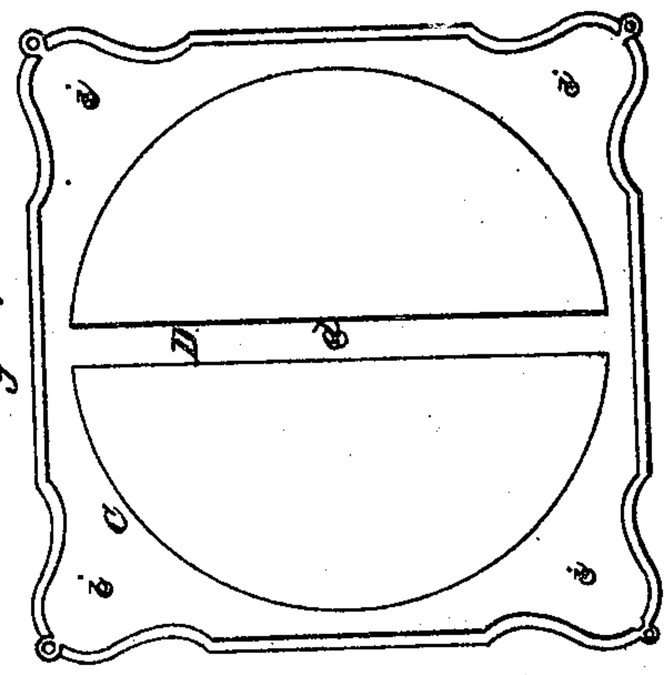


Fig. 1.

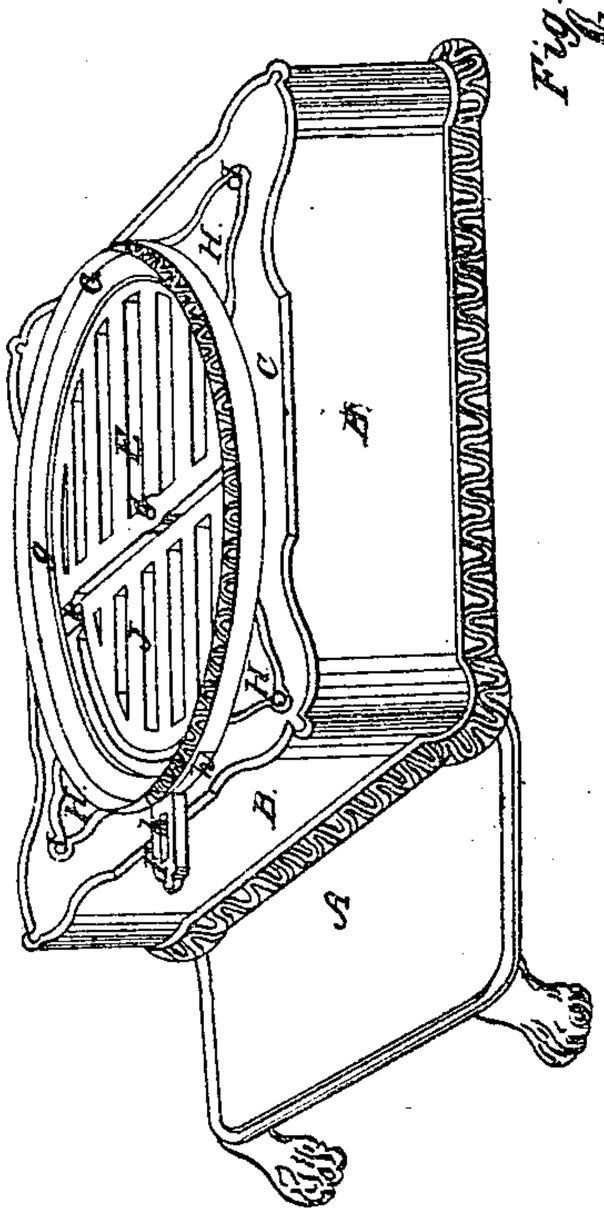
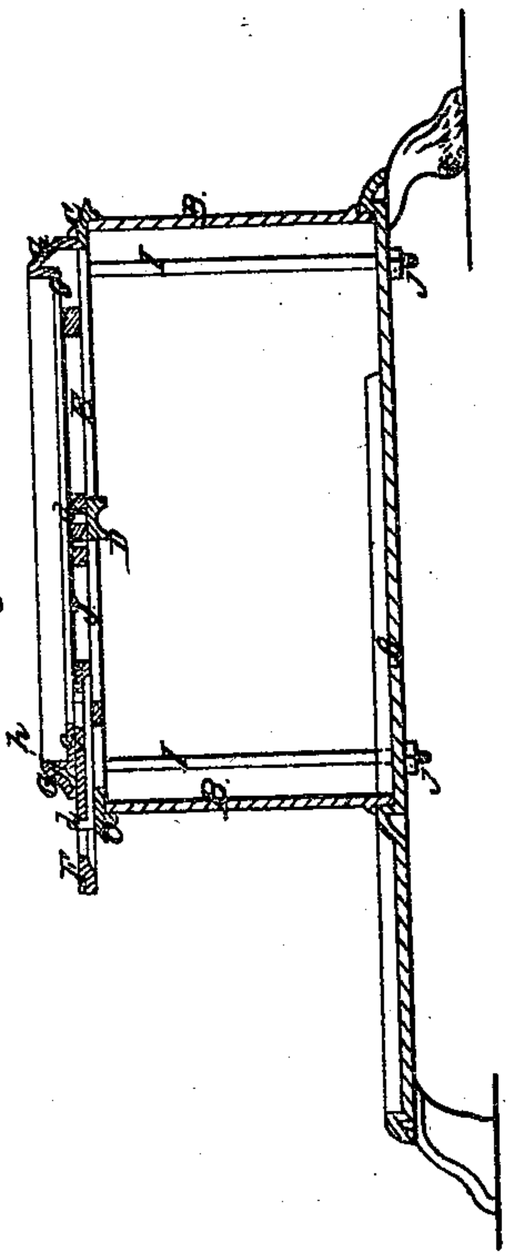


Fig. 5.

Fig. 2.



UNITED STATES PATENT OFFICE.

EDWARD B. FINCH, OF PEEKSKILL, NEW YORK.

STOVE WITH CIRCULAR SHAKING GRATE.

Specification of Letters Patent No. 7,598, dated August 27, 1850.

To all whom it may concern:

Be it known that I, EDWARD B. FINCH, of Peekskill, in the county of Westchester and State of New York, have invented a new and useful Improvement in a Stove with a Circular Rotating or Shaking Grate; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, is a perspective view. Fig. 2, is a vertical section through the center. Fig. 3, is a plan of the seat of the fire-box. Fig. 4, is a plan of the top plate of the ash box. Fig. 5 is a detached view of the sliding segment.

Similar letters of reference relate to corresponding parts in all the figures.

The nature of my invention consists in having the bar which supports the circular rotary or shaking grate, cast with and forming part of the top plate of the ash box and in providing a sliding segment for the purpose of closing the slot or aperture in the seat through which the lever for shaking the grate works.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and use.

A, is the floor plate.

B, B, are the sides of the ash-box.

C, is the top plate having a bar D, cast with and forming part of it. *d*, is a pin or fixed center on the bar D. E, is the circular grate having a hole or socket at its center fitting easily on the pin *d*, on which it is capable of being made to rotate. F, is a lever attached to the circular grate E. G, is the seat of the fire box having an inner flange *g*, which keeps the circular grate E, down in its place. H, H, are ears cast on the seat G. The seat G, rests on the top plate C, and is secured to it by bolts I, I, which pass through holes *i*, *i*, in the ears H, H, and top plate C, and through the floor plate A, and are secured by nuts *j*, *j*, under the floor plate. A slot is cut in the seat G, through which the lever F works. *n* is a sliding segment or part of a ring of metal, sliding in a recess below the seat G, and moving with the lever F, for the purpose of closing the said slot in the seat G, and shutting the draft. The sliding segment *h*, rests on the plate C, and is provided with a notch fitting over the lever F; it is kept in its place on the lever by shoulders *i* on the sides of the lever. J, is a trap in the grate E, which works on centers *k*, and is kept up by a sliding pin *l*, under the lever.

It is usual in stoves constructed on this principle with rotary or shaking grates to have the seat G, of the fire box cast with the top plate C, of the ash box, and the bar D, is usually riveted or bolted to the said top plate and is very liable to become loose by the action of the fire or by the shaking of the grate, but this objection will be obviated by having the bar (D) cast to the top plate (C). The seat (G) and the top plate (C) are cast separately in my stove as it would be impossible to introduce the grate between the bar (D) and the flange (*g*) on the seat (G) if the top plate of the ash box and the seat of the fire box were cast together in the usual manner, neither could the sliding segment (*h*) be inserted.

What I claim as new and desire to secure by Letters Patent is—

Casting the seat (G) of the fire box separate from the top plate (C) of the ash box, having the bar (D) carrying the center or pin (*d*) for supporting the grate, cast with, and forming part of the top plate (C) of the ash box substantially as described and for the purposes set forth.

EDWARD B. FINCH.

Witnesses:

WM. H. BRIGGS,

EDGAR D. BASSETT.