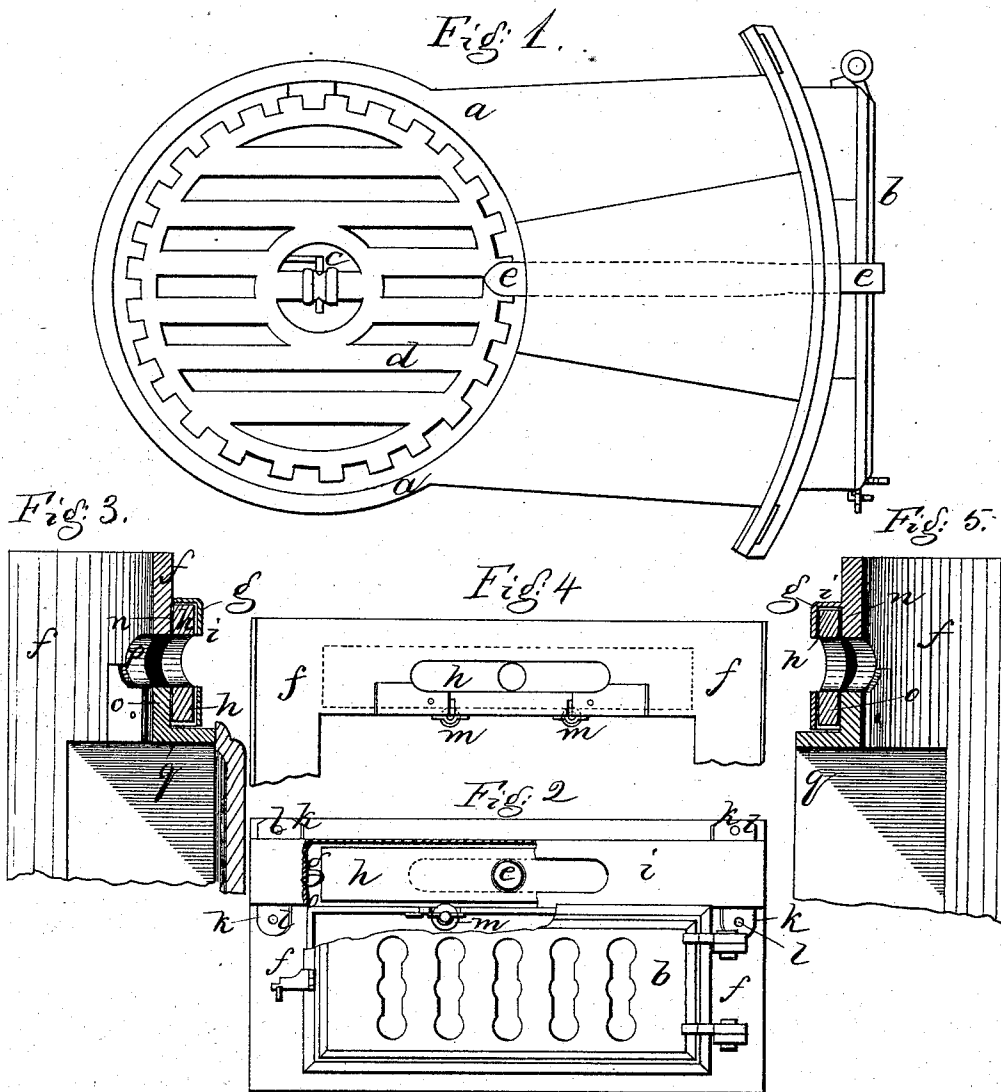


G. W. WALKER.
Stoves.

No. 157,950.

Patented Dec. 22, 1874.



Witnesses.
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L. H. Leatimer.

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UNITED STATES PATENT OFFICE.

GEORGE W. WALKER, OF MALDEN, MASSACHUSETTS.

IMPROVEMENT IN STOVES.

Specification forming part of Letters Patent No. 157,950, dated December 22, 1874; application filed March 14, 1874.

To all whom it may concern:

Be it known that I, GEORGE W. WALKER, of Malden, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Stoves; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

This invention consists in arranging the supporting-slide of the grate-journal in an independent flanged cap-plate or pocket, detachably secured to the outside of the stove or furnace, as hereinafter described.

In my invention I support the journal end in a slide running in a pocket at the front part of the stove, this pocket being so made that its front plate is detachable without taking down any other parts of the stove, and the removal of this plate enabling the slide to be applied or removed, as may be desirable.

The invention consists primarily in supporting the grate-journal in the slide that runs in a pocket between the main casting and a cap-plate, preferably made detachable, for application or removal of the slide.

The drawing represents the bottom part of an ordinary furnace embodying my invention.

Figure 1 shows the same in plan. Fig. 2 is a front elevation. Fig. 3 is a section, enlarged, of the slide-plate and adjacent parts. Fig. 4 is a rear view of the plate that carries the slide.

a denotes the casting that forms the ash-pit; *b*, the ash-pit door; *c*, the center support for the circular grate *d*, the grate rotating and tipping upon this support. *e* denotes the grate journal, shaft, or gudgeon, which, extending from the front side of the grate, passes through the front plate *f* of the stove or furnace, for attachment of a hand-bar, by which the grate is shaken or tipped. In front of this plate there is formed a pocket, *g*, in which is placed and reciprocates a slide, *h*, the shaft *e* being journaled in this slide. The pocket is formed between the main plate *f* and a flanged cap-plate, *i*, and this cap-plate I prefer to fasten

to the front of the plate *f* by ears *k* and screws *l*, or by other suitable means, the slide being made accessible and attachable and detachable by removing the cap. The slide thus inclosed I mount upon friction-rolls *m m*, journaled in suitable bearings, said rolls insuring free movement of the slide without liability to clog or bind. The slide is shown as placed between the front wall or plate *i* and guide-surfaces *n o*, above and below the inner slot *p*, in which the journal reciprocates. The cap-plate *i* may be cast with or as a part of the plate *f*, as shown in Fig. 5, in which case the guide *n* will be a lip or flange extending down to the journal, the guide *o* being then preferably formed as a lip or flange extending up from the plate *g*, beneath the slide, this plate being held by suitable buttons or other fastenings, and preferably so that by removing the plate *p*, and bringing the slide to central position, it will fall from the pocket.

I am aware that a journal-supporting slide has moved in ways cast in and back of the door of the ash-pit, and to remove the grate it was necessary to first remove the door-frame and door from the furnace—a long tedious job. By my invention I obviate this, as the journal-supporting slide moves in a way formed in an independent flanged cap-plate, which may be easily removed by withdrawing two screws and allowing the grate to be removed or replaced, no other portion of the furnace being removed.

I claim—

1. The combination, with the outer side of the stove, of the independent flanged cap-plate *i* and the detachable journal-supporting slide *h*, as and for the purpose described.

2. The combination, with the outer surface of the stove and the independent-flanged cap-plate, of the detachable journal-supporting slide *h* and the rollers *m m*, substantially as shown and described.

GEO. W. WALKER.

Witnesses:

FRANCIS GOULD,
M. W. FROTHINGHAM.