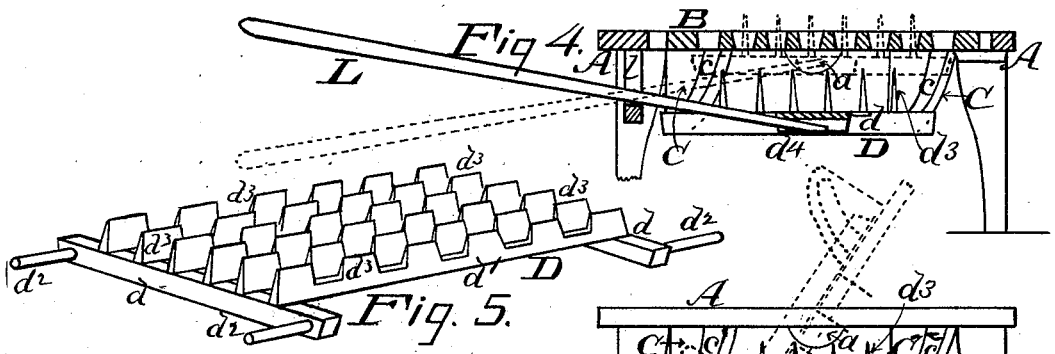
(No Model.) 2 Sheets—Sheet 1.

C. J. WADSWORTH.

PARLOR GRATE.

No. 422,472. Patented Mar. 4, 1890



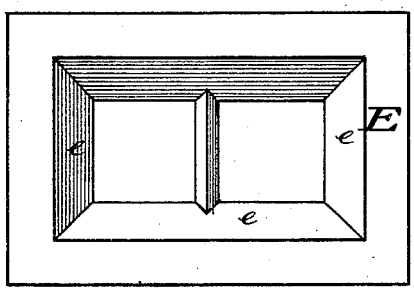
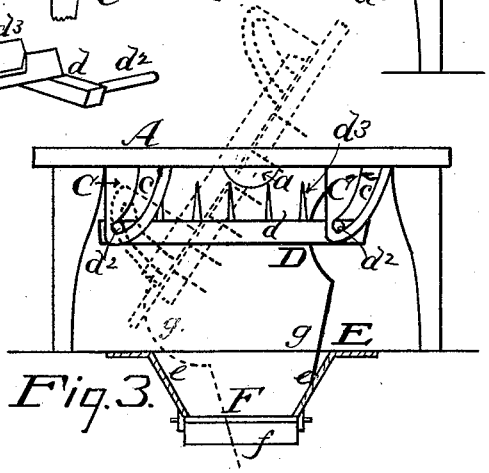
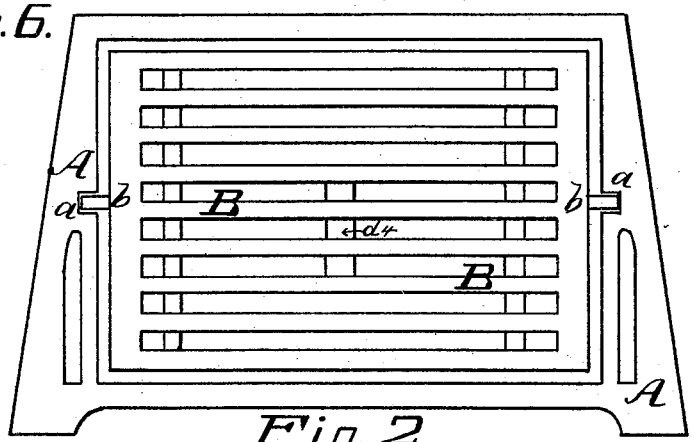
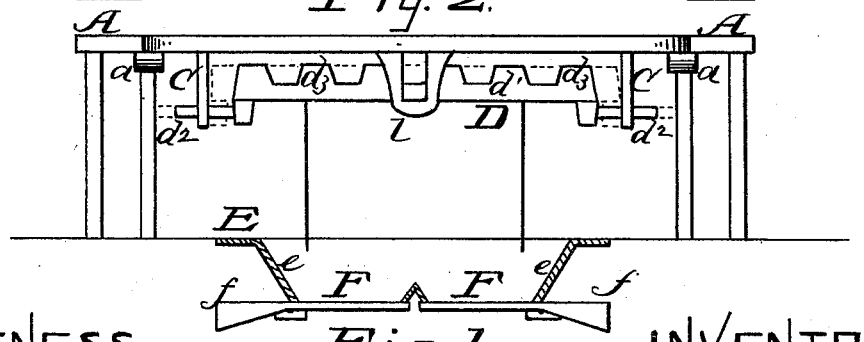


Fig. 6.







WITNESS.

E. A. Tibbitts

Nell McMann.

INVENTOR.

Chester J. Wadsworth.

By Attorney Geo. W. Tibbitts

(No Model.) 2 Sheets—Sheet 2.

C. J. WADSWORTH.

PARLOR GRATE.

No. 422,472. Patented Mar. 4, 1890.

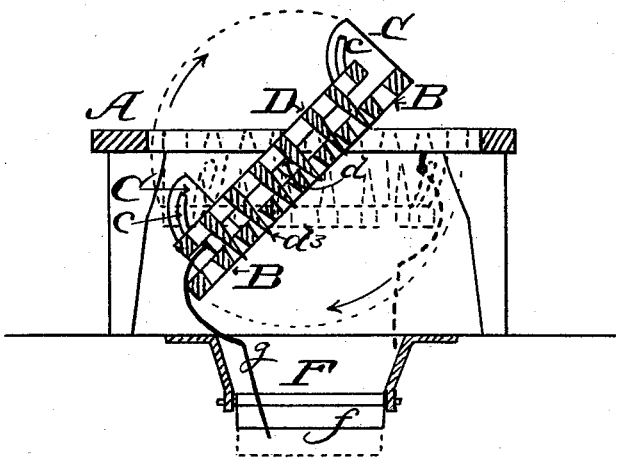


Fig. 7.

Witness,
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Abner Sheetz

Inventor,
Chester J. Wadsworth.
By Geo. H. Tibbitts Atty.

UNITED STATES PATENT OFFICE.

CHESTER J. WADSWORTH, OF CLEVELAND, OHIO.

PARLOR-GRATE.

SPECIFICATION forming part of Letters Patent No. 422,472, dated March 4, 1890.

Application filed July 24, 1889. Serial No. 318,587. (No model.)

To all whom it may concern:

Be it known that I, CHESTER J. WADSWORTH, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Parlor-Grates, of which the following is a specification.

This invention relates to parlor fire-grates; and it consists in the peculiar construction and combination, with dumping grate-bars, of a shaking and clearing mechanism, and of a self-discharging ash-pit, as hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a front elevation, and Fig. 2 is a top or plan view, of my new grate. Fig. 3 is an end elevation showing by dotted lines the grate-bars overturned for dumping, and the ash-pit beneath. Fig. 4 is a cross-section showing by dotted lines the method of shaking and clearing the grate-bars. Fig. 5 is a detached perspective view of the clearing device, and Fig. 6 is a top or plan view of the ash-trap. Fig. 7 is a cross-section through the grate and ash-pit, showing the grate overturned for dumping, with a push-rod carried down and pushing down a door in the ash-pit.

A represents a frame for supporting the grate-bars B. Said frame may be supported on legs or any other suitable means in a fireplace. The grate-bars B are provided with trunions *b b*, which turn in sockets *a a* of frame A.

To the under side of the grate-bars B, at or near the four corners, are attached hangers C C, having diagonally-curved slots *c c*. In these hangers is supported the clearing-frame D, which consists of two end bars *d d*, and several longitudinal bars *d' d'*, connected at their ends to the said end or cross bars. At the four corners of this frame are attached pins or trunnions d^2 d^2, which rest in the said curved slots *c c*. The upper edges of the bars *d'* are made with upwardly-projecting leaves d^3 at suitable distances apart. To the under side of said bars *d'* is attached a slotted bar d^4, into which a shaking-lever L is introduced for lifting and shaking the said clearing device, there being a loop *l* attached to the middle front of the frame A, through which the said lever L is inserted and fulcrumed for the purpose of operating the same.

Beneath the grate is placed an ash-trap having a dumping-bottom for discharging the ashes into a flue, and consists of a plate E having a shallow pit with flaring sides *e e* and open bottom closed by automatically-operating doors F F. The doors are hinged at the ends of the open bottom of the pit, and are provided with counterbalance-weights *f f*, which keep them closed. *g g* are two push-rods pivotally suspended from the rear bar of grate B. (Seen in Figs. 1 and 3.) Their purpose is to push open the doors F in the pit when the grate is overturned for dumping, as seen in Figs. 3 and 7, the dotted lines showing overturned position of the grate and the said rods as they would be projected downward against said doors F.

When it is desired to shake or clear the grate, the lever L is inserted through the loop *l* on the front of frame A and its end inserted in the slot or groove d^4 on the under side of rake D. Then by moving the lever L in the loop *l* as a fulcrum the rake D may be agitated for raking and dislodging ashes from between the grate-bars B. The rake is thus given vertical and lateral movements, limited by the play of the pins d^2 in the curved slots *c* in the hangers C. When, however, it is desired to dump the grate, the lever L is not used as above stated, but may be used as an ordinary poker would be—that is, by turning the grate-bars, and the rake with them, over on the trunnions *b*, as seen in dotted lines in Fig. 3. The rake-bars *d' d'* drop between the grate-bars B in this overturned position, the pins d^2 sliding in the said curved slots *c* in the hangers C. When the grate-bars are turned back again, the rake drops back into its former position. When the grate-bars are thus turned over, the rods *g g*, hung to the bars, push the trap-doors F in the bottom of the pit open and discharge the ashes and cinders into the flue below.

Having described my invention, I claim—

1. In combination, the dumping-grate B, trunnioned to turn in the frame A and having the slotted hangers C C attached, the clearing grate-bars *d d'* D, and supporting-pins d^2, playing in the curved slots *c c* of hangers C C, all constructed to operate as and for the purpose substantially as described.

2. In combination, the dumping-grate B,

trunnioned to turn in the frame A and having the slotted hangers C C attached, the clearing grate-bars D d d', supporting-pins d^2, playing in the curved slots c c of the hangers C C, and the lever L, inserted through loop l on frame A, all constructed and arranged to operate substantially as and for the purpose specified.

3. The ash-pit E e and bottom trip-doors F F, provided with counterbalance-weights f f and trunnioned to the bottom of the pit, in combination with the push-rods g g on the grate D, as and for the purpose specified.

CHESTER J. WADSWORTH.

Witnesses:
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