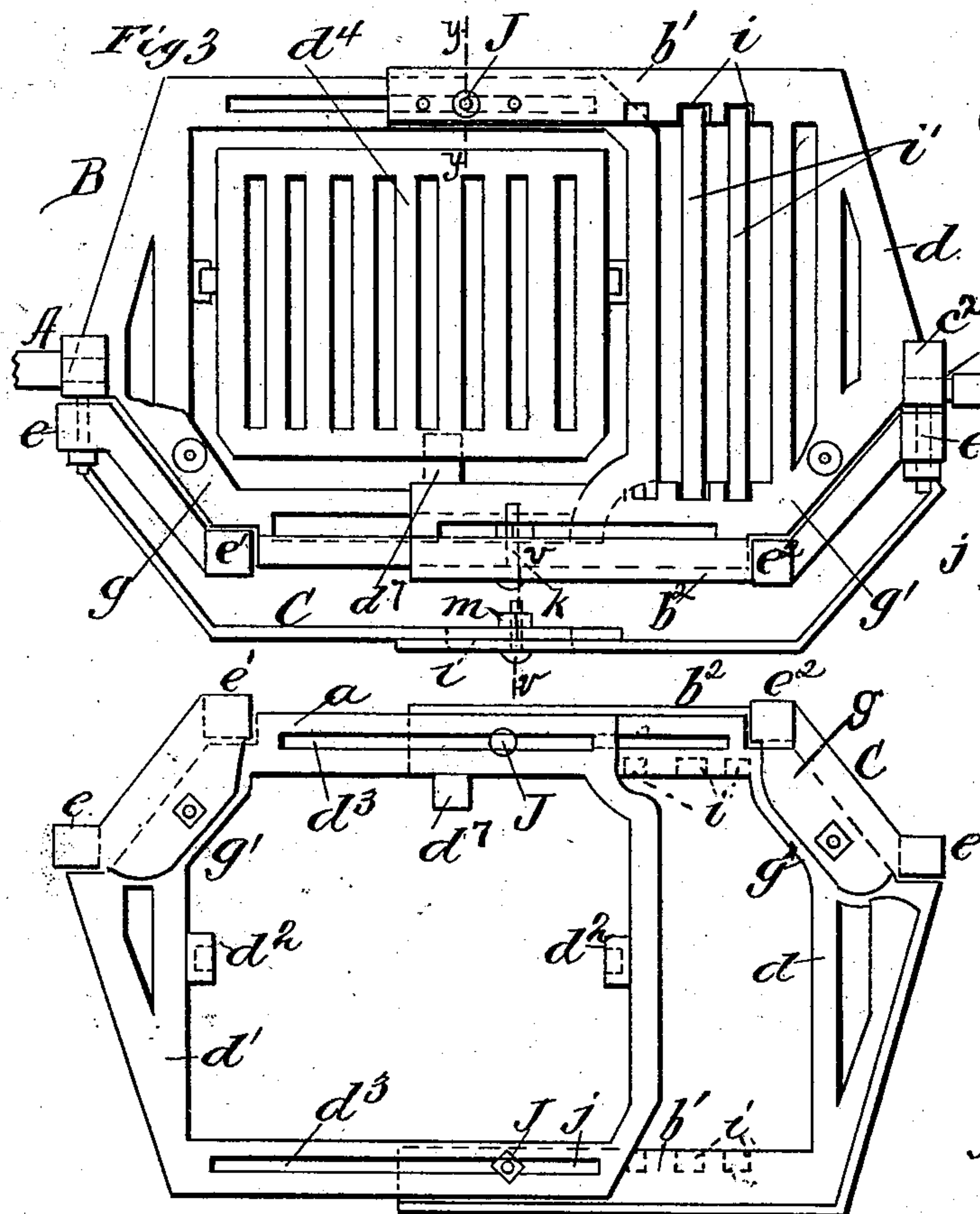
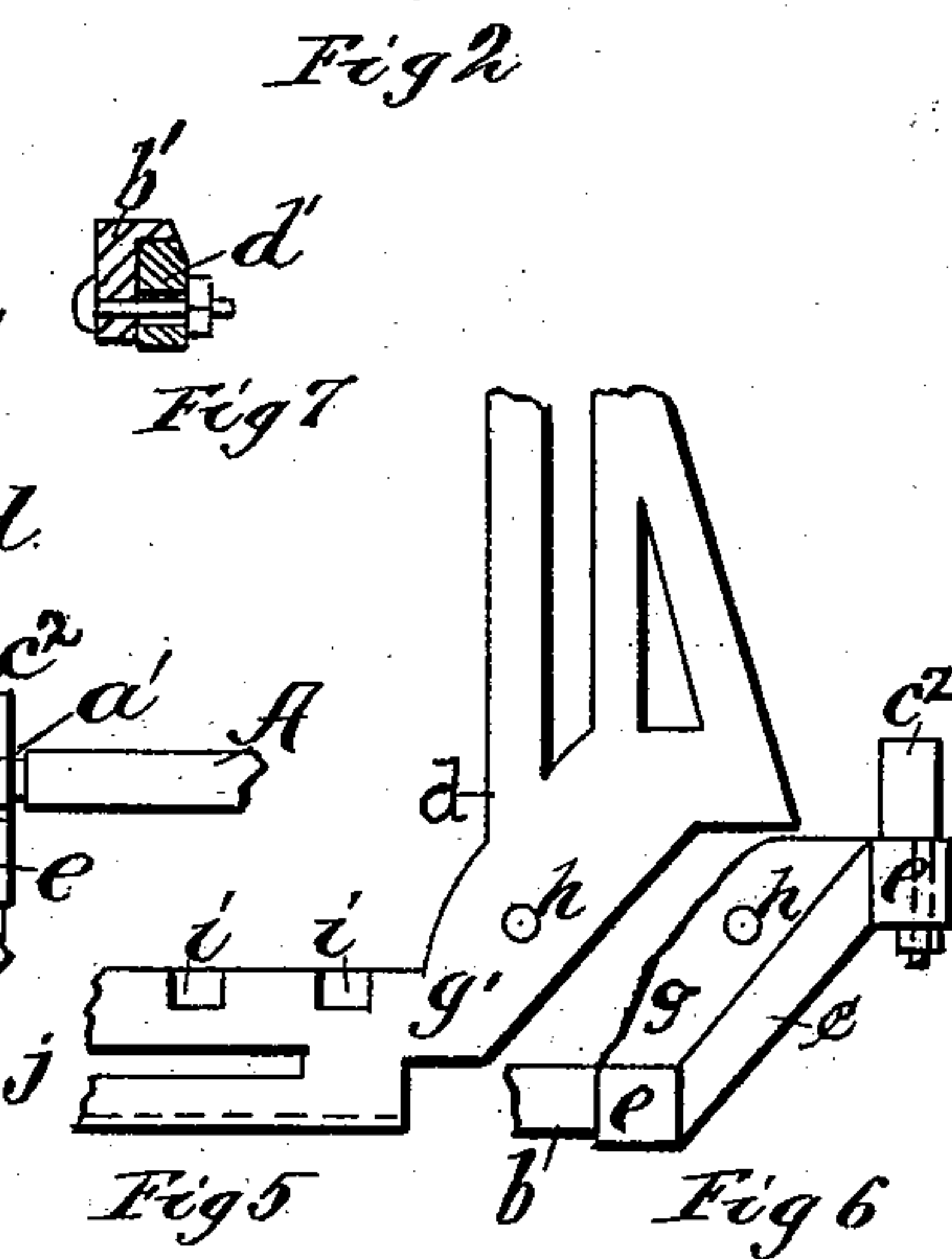


J. McWADE.  
GRATE BASKET.

Patented Oct. 17, 1893.



W. B. Bodley  
Norton Hurlburt.

Fig 4

John McWade  
By Wm Zimmerman  
Atty



# UNITED STATES PATENT OFFICE.

JOHN MCWADE, OF CHICAGO, ILLINOIS.

## GRATE-BASKET.

SPECIFICATION forming part of Letters Patent No. 507,075, dated October 17, 1893.

Application filed June 12, 1889. Serial No. 313,999. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN MCWADE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Grate-Baskets, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part hereof, and in which—

Figure 1 shows my improved grate-basket B, in front elevation together with the crown, or fret, C, under it. Fig. 2 shows the same in side elevation with a fragment of the mantel-frame below the lower lug  $a'$ . Fig. 3 shows the grate basket in plan view as seen from the top, with fragments of the mantel-frame A, on each side. Fig. 4 shows Fig. 3 as seen from its under side, with grate-bars and dumping-grate removed. Fig. 5 shows a fragment of the front corner of the bottom, or horizontal frame  $d$  of Fig. 3, in plan detached from the upright part  $c$ . Fig. 6 shows the part  $c$  of the basket B, in plan, detached from the part  $d$ , and moved away from it far enough so as to separate the parts and at the same time with Fig. 5 show how they are united. Fig. 7 shows the rear overlapping bars of the parts  $d$   $d'$  in cross section, at  $y, y$ , of Fig. 3. Fig. 8 shows the front overlapping bars of the parts  $d$  and  $d'$  in cross section, at  $v, v$ , of Fig. 3. Fig. 9 shows a cross section of the central one of the front and overlapping bars shown in Fig. 1 in cross section at the connecting bolt, on line  $x, x$ . Fig. 10 shows a construction in which the lugs  $a'$ , are adjustable on the mantel-frame.

Like letters refer to like parts.

The object of my invention is to construct a grate-basket for mantels which shall be adjustable longitudinally of itself, or, in the direction of the width of the opening of the fire place so as to be readily adjusted to any mantel-frame A, and also at the same time to make it adjustable vertically so as to fit closely upon any crown or fret C, or so that the grate-basket may set high or low from the hearth, and, among other conveniences, so that the grate may be dumped with facility whenever desired, and to attain said several ends I construct my improved grate-basket in substantially the following manner, namely:

I construct a complete frame  $d'$ , as shown

in Figs. 1, 3 and 4 provided with the longitudinal slots  $d^3$ , and an incomplete frame  $d$ , having only three sides of a frame, the fourth side being omitted in the plans in Figs. 3 and 4, where the longitudinal and slotted sides, or arms  $b^2$  and  $b'$ , of said part, overlap the front and rear sides of the frame  $d'$ . Both of said parts are provided with slots  $d^3$ , which register over each other and through which pass one or more bolts  $j$ , which play loosely in said slots and are provided with nuts by means of which said parts, after being adjusted to the opening of the fire place, are permanently secured together. In said frame are bearings  $d^2$ , in which play the trunnions of a dumping grate-bottom  $d^4$ , which rests its front edge on a lug  $d^7$ , attached to said frame  $d'$ , and to the lower and back edge of said grate-bottom is cast a lug  $d^5$ , to which is attached a rod  $d^6$ , which passes out over or through a slot in the fret C, outside of which it is formed into a handle. Said rod is used for dumping the grate-bottom as shown in Fig. 2. Said part  $d$ , is also provided with notches  $i$ , in which rest removable bars  $i'$ , which are removed or supplied, as may be required, after said frames are adjusted to each other, and serve to fill the open space in the grate-bottom after the grate-bottom is lengthened. The front corners of said frames are constructed as shown in Fig. 5 so as to fit to the upright part  $c$ , shown in Fig. 6 and said part is also shown in Figs. 1, 2, 3, and 4 which consist of the vertical posts  $e$   $e'$ , and the bars  $c'$ , connecting them for one end and of the posts  $e$ ,  $e^2$ , and bars  $c'$ , connecting them for the other end of the grate-basket and also of horizontal flanges  $g$ , upon which rest the flange-like corners  $g'$ , of the parts  $d$ ,  $d'$ . Said parts are provided with bolt-holes  $h$ , through which a bolt and nut are passed and said parts securely bolted together. To one of the foremost or inner ones of said posts, are also attached bars  $b$ , which are channeled, as shown in Fig. 9, and also slotted, as shown in Fig. 1. Said bars form a part of said foremost post, and extend across the front of the grate-basket B, toward the opposite post  $e'$ , such distance as, in practice, will be found necessary or desirable; and to said opposite post are attached slotted solid bars  $a$ , and through said slots pass bolts  $k$ , which clamp said bars



together after they are adjusted and thus, by this construction the grate-basket is as solid as if made in one piece.

To the outer posts  $e$ , are attached adjustable hooks  $c^2$ . Said outer posts are slotted vertically from front to back, as seen in Figs. 1 and 2, and through said slots pass threaded pins, forming a part of said hooks, which are provided with nuts. By means of this construction the said hooks are made adjustable on said posts. By said hooks the grate-basket B, is hung on lugs  $a'$ , which form a part of the mantel-frame A, which is, usually, of metal, and has the lugs  $a'$ , permanently attached to it. Said lugs  $a'$ , may however be made adjustable, as shown in Fig. 10, by forming said lug  $a'$ , of an independent piece secured to the mantel frame by a bolt and nut working in a slot through the mantel frame, but where no mantel-frame is used said lugs are secured in the brick, or stone, work in such position as to answer said desired purpose.

The inner posts  $e'$   $e^2$  and the bars  $a$ ,  $b$  connecting them, are here shown projecting forward beyond the connecting plane of the other posts. This construction is preferable for grates in which coal is burned, but for wood burning grates it would be preferable to make the front of the grate-basket on a line with the plane of the mantel-frame in which all the parts would, of course, remain the same in the general construction.

In order to make the fret  $c$ , adjustable I make it of two overlapping parts which are provided with slots  $l$ , through which passes a bolt and nut  $m$ , by means of which the said parts may be adjusted to the opening in the mantel-frame and to the grate-basket. By means of said construction, of grate-basket and fret, I am enabled to adapt both the grate-basket and fret to the width of any fire-place opening and at the same time regulate the draft to the under side of the grate. When the grate-basket is set down closely upon the fret no air is admitted from below and more or less air is admitted, either by raising the grate basket above the fret or by drawing out the fret. When the fret is thus adjusted to the opening it forms a closed ash-pit which prevents dust from entering the room. By means of this construction I obtain a grate-basket and fret which is adjustable to the width of the fire place opening and also vertically to the hearth and am thus enabled to make grate-baskets, which can be used in almost every mantel-frame, from a single pattern.

What I claim is—

1. In a grate basket, the combination with a longitudinally adjustable bottom, of the posts  $e'$ ,  $e^2$ , provided with overlapping bars  $a$ ,  $b$ , and flanges  $g$ , substantially as specified.
2. In a grate-basket the combination with the lugs  $a'$ , of a grate-basket provided with

vertically adjustable hooks, said hooks adapted to work in vertically slotted posts, substantially as specified.

3. In a grate-basket, the combination with the lugs  $a'$ , of a grate-basket provided with vertically adjustable hooks adapted to hang on said lugs and hold said basket in position, substantially as specified.

4. A grate-basket provided with a bottom formed of two parts adapted for longitudinal adjustment wherein one of said parts is provided with removable grate-bars, substantially as specified.

5. A grate-basket provided with a bottom formed of two parts adapted for longitudinal adjustment wherein one of said parts is provided with a dumping-grate and the other with removable grate-bars, substantially as specified.

6. In combination with a mantel-frame provided with lugs, a grate-basket, capable of longitudinal adjustment between said lugs, provided with vertically adjustable hooks adapted to hang said basket on said lugs, substantially as specified.

7. In a grate-basket, the combination with the lugs  $a'$ , of a grate-basket capable of longitudinal adjustment between said lugs provided with hooks adapted to hang said grate-basket on said lugs and to hold it in position, substantially as specified.

8. In combination with a longitudinally and vertically adjustable grate-basket, a longitudinally adjustable fret.

9. The combination with a grate-basket formed of a longitudinally adjustable bottom and a longitudinally adjustable and overlapping front wall formed of bars whose ends overlap the vertical center of the grate-basket, of a longitudinally adjustable fret, substantially as specified.

10. The combination in a grate-basket capable of vertical adjustment, relative to the hearth, of a fret resting upon the hearth to operate with said grate-basket, substantially as specified.

11. In a grate-basket, the combination with a longitudinally adjustable bottom of a longitudinally adjustable and overlapping front wall formed of bars lying in the same horizontal plane behind each other, posts to hold said bars and means to clamp said bars together, substantially as specified.

12. In a grate-basket, the combination with a longitudinally adjustable bottom of a longitudinally adjustable and overlapping front wall formed of bars whereof one of each pair is channeled and adapted to receive the opposite bar behind it, posts to hold said bars and means for clamping said bars together, substantially as specified.

JOHN McWADE.

Witnesses:

WM. ZIMMERMAN,  
T. VOGEL.