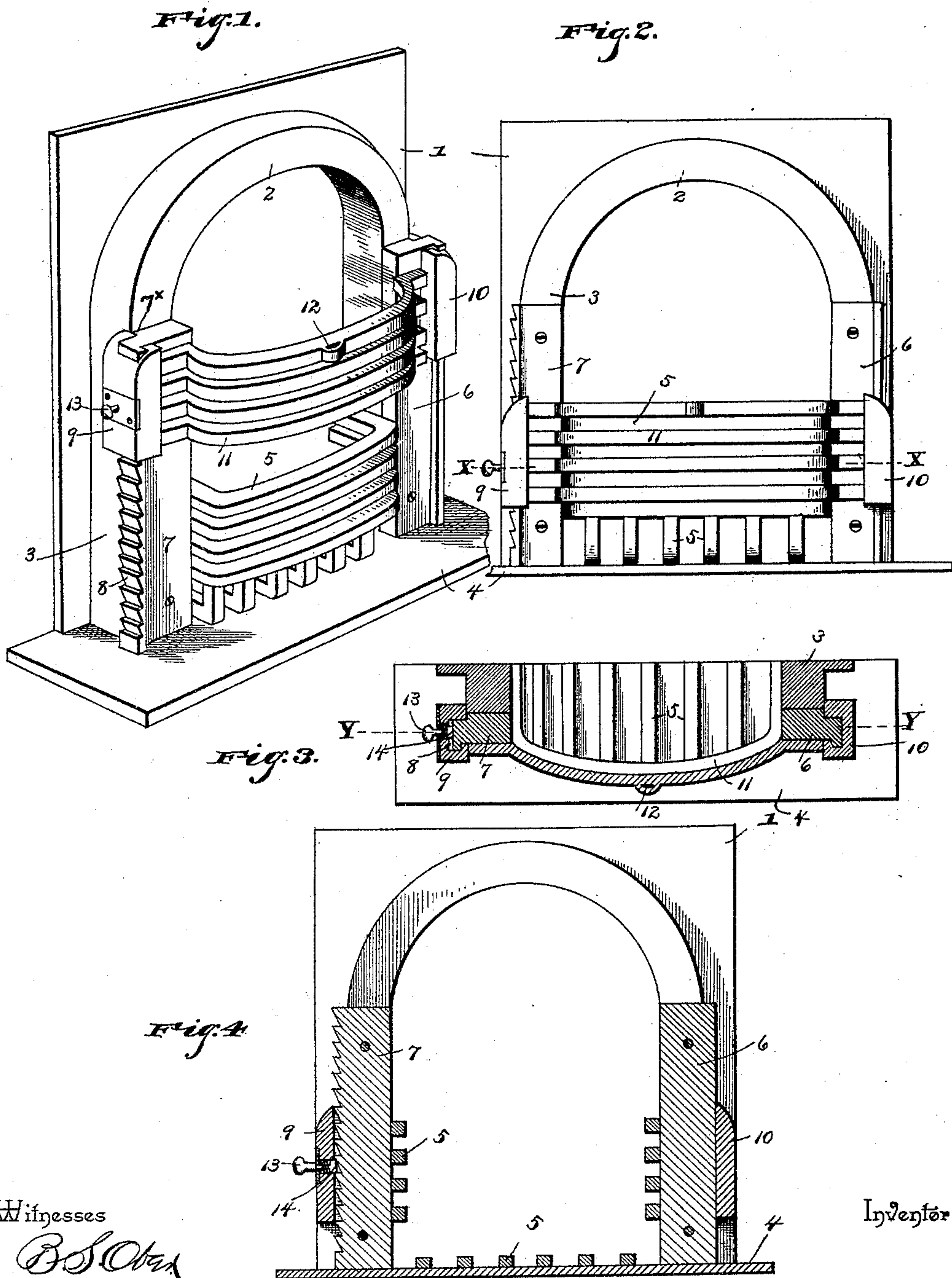


(No Model.)

M. C. HUTTON.  
ADJUSTABLE GRATE ATTACHMENT.

No. 497,921.

Patented May 23, 1893.



Witnesses

B. S. O'Byrne  
Chas. E. Hyer

Inventor

By *his* Attorneys,

M. C. Hutton.

Chas. E. Hyer.



# UNITED STATES PATENT OFFICE.

MILTON CALHOUN HUTTON, OF GEORGETOWN, TEXAS, ASSIGNOR OF ONE-HALF TO WILLIAM E. CHAPMAN, OF SAME PLACE.

## ADJUSTABLE GRATE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 497,921, dated May 23, 1893.

Application filed April 28, 1892. Serial No. 430,982. (No model.)

*To all whom it may concern:*

Be it known that I, MILTON CALHOUN HUTTON, a citizen of the United States, residing at Georgetown, in the county of Williamson and State of Texas, have invented a new and useful Adjustable-Grate Attachment, of which the following is a specification.

This invention relates to grate attachments adapted for use with that class of grates known as open grates, and consist in the construction and arrangement of the parts thereof as will be more fully hereinafter described and claimed.

The object of this invention is to provide an attachment for open grates to prevent the falling of heated coals therefrom; also, to provide for extension of the grate vertically to facilitate making of a larger fire; and further, to provide an attachment which may be used in regulating the draft to the grate proper.

In the drawings—Figure 1 is a perspective view of a grate embodying the invention, and showing the attachment arranged in position as an extension, and also as a guard to prevent heated coals falling out of the grate proper. Fig. 2 is a front elevation of the same, showing the attachment in position to close the draft of the grate proper. Fig. 3 is a horizontal section on the line  $x-x$ , Fig. 2. Fig. 4 is a central longitudinal section on the line  $y-y$ , Fig. 3.

Similar numerals of reference indicate corresponding parts in the several views.

Referring to the drawings, the numeral 1 designates a mantel having the ordinary arch and pillar supports, as at 2 and 3 in the accompanying drawings, but the improved device is adapted to be applied to any form of opening or arch communicating with a chimney-flue, and where a specified form of mantel, and parts thereof, is not employed, or in existence. Between the lower portions of the sides of the pillar-supports 3, as shown, and resting on a suitable hearth 4, is an ordinary form of basket grate 5, having the common form of separated horizontally-arranged bowed bars and the under transverse bars.

The improved device consists of plates 6, having flanges 7 on the outer sides thereof, and recessed in the back portion as at 7<sup>x</sup>. Each of the plates 6 is provided with open-

ings through which screws or bolts are passed for the purpose of securing the same in position either to a mantel frame having pillars 3, as shown, or to brickwork surrounding an opening leading to a flue, or to any other structure desired. One of the plates is formed with a series of teeth or serrations 8, which which extend transversely across the same from the flange 7 to the recess 7<sup>x</sup>. Detachably and movably fitted on the plate 6 and taking over the flanges 7 thereof, are slides 9 and 10, having portions thereof extending into the recesses 7<sup>x</sup>, and to the said slides 9 and 10 are attached a series of elongated grate-bars 11, which are bowed and stand sufficiently away from the similarly located bars of the grate-basket to prevent contact of the several parts and permit adjustment of the said bars 11 vertically. The uppermost bar 11 is provided with a ring, loop, or eye 12, centrally located thereon and suitably formed therewith or attached thereto, which is adapted to be engaged by a poker or other device for raising or lowering the attachment. Horizontally-disposed in the slide 9 is a spring-pin 13 having an inner beveled end 14 adapted to take over the teeth or serrations 8 of the flange 7, as hereinbefore referred to.

It will be understood that each of the slides 9 and 10 is formed with suitable grooves to fit over the flanges 7; and in applying the attachment it is let down over the top portion of the plates 6 from which it is readily removable when desired.

It will be understood that the attachment may be adjusted to any height, and when the bars of the same are located over the spaces in the bars of the grate-basket, thus stopping a considerable amount of the draft when the fire is burning too fast or to preserve the fire over night. If it is desired to have an additional bar 11 for the basket, the attachment is raised until said bar will be located above the uppermost bar of said basket, which arrangement may be continued as desired. When the fire is left for the purpose of retiring or vacating the room in which the grate is located, the attachment is adapted to be raised entirely above the bars of the basket and thereby prevent burning coal from falling out onto the floor, as in this position



the attachment is adapted to screen the entire opening above the basket.

When it is desired to have an ordinary form of grate, the attachment is readily removed, 5 as may be desired.

In manufacturing the herein described attachment, allowance will be made for contraction by cold or expansion by heat; and it can be constructed in artistic form or configuration and of neat appearance. 10

The advantages and conveniences of a device of this character are readily apparent and it is obvious that many minor changes might be made in the construction and arrangement of the parts without in the least 15 departing from the nature or spirit of the invention.

Having thus described the invention, what is claimed as new is—

20 1. The combination with a grate basket, of a sliding or adjustable grate-section comprising a series of longitudinally-disposed grate-bars of greater curvature than the bars of said basket and adapted to slide vertically in 25 front of the same, the bars of said grate-section

having slide-plates in connection with the ends thereof at right angles thereto and movable over a portion of the fireplace frame, and a catch for holding said slide-plates and the grate-bars carried thereby in adjusted position, substantially as described. 30

2. The combination with a grate-basket, of flanged plates secured on opposite side thereof and one of which is provided with a series of teeth or serrations, a grate section adapted 35 to pass over the said grate basket and having slides secured to the ends thereof movably mounted on said flanged plate, and a spring-actuated pin or catch extending through one of said slides and adapted to engage the teeth 40 or serrations of one of the said plates, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

MILTON CALHOUN HUTTON.

Witnesses:

J. A. MONTGOMERY,  
E. I. WATSON.