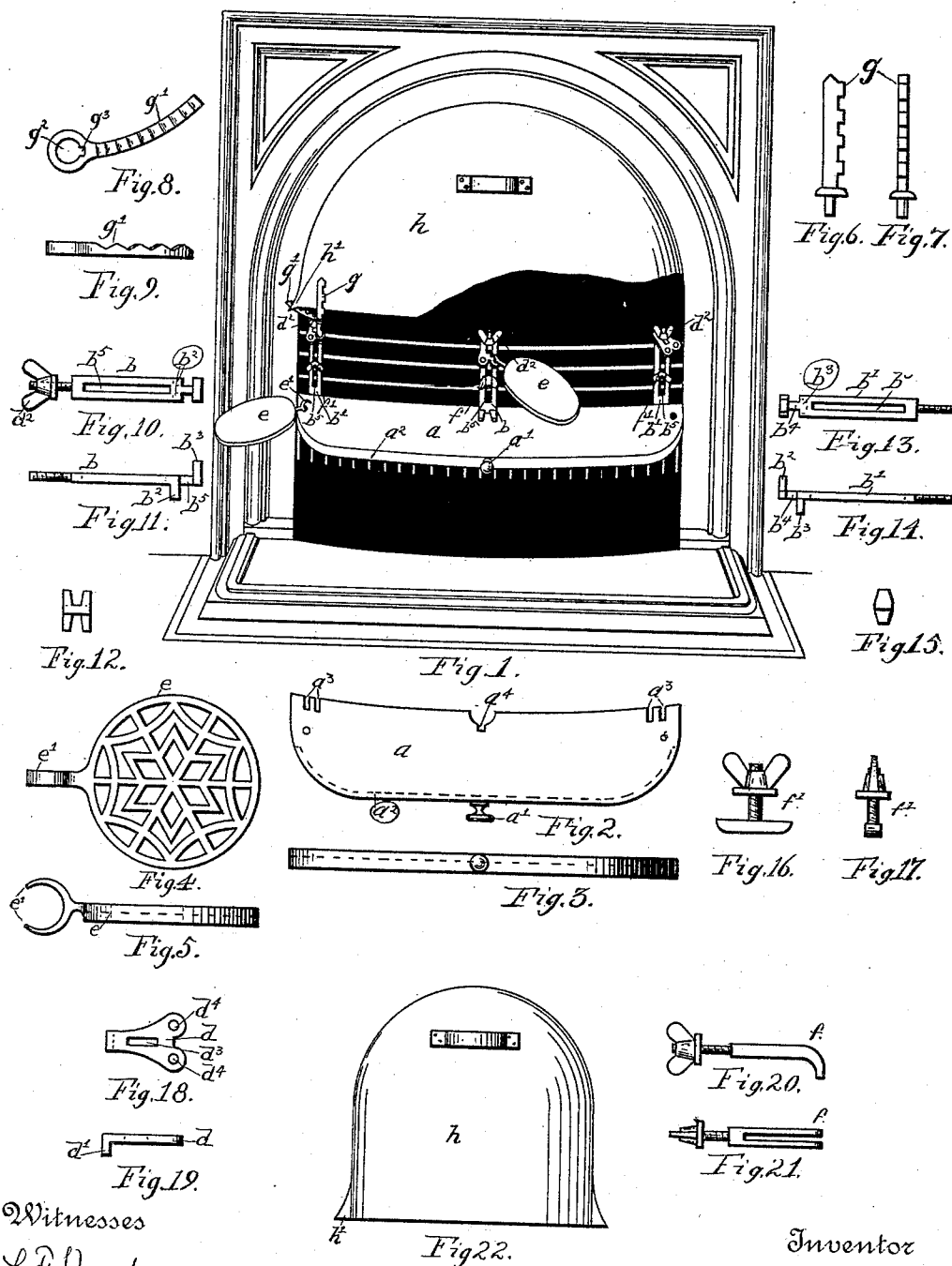


(No Model.)

G. W. DAVIS.
GRATE ATTACHMENT.

No. 464,930.

Patented Dec. 8, 1891.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE W. DAVIS, OF MEMPHIS, TENNESSEE.

GRATE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 464,930, dated December 8, 1891.

Application filed June 16, 1891. Serial No. 396,490. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. DAVIS, a citizen of the United States, and a resident of Memphis, in the county of Shelby and State of Tennessee, have made new and useful Improvements in Grate Attachments; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to grate attachments, having more particular reference to the production of a device for heating and cooking articles and adjusting a blower whereby the odor of the article being cooked may be caused to ascend the chimney, the details of all of which are shown in the accompanying drawings, and will be hereinafter fully described.

In the drawings, Figure 1 is a front perspective elevation of a grate with attachment in place. Figs. 2 and 3 are respectively a plan and front edge view of the shelf in the form applied to a grate having an oval front. Figs. 4 and 5 are respectively a plan and edge view of the trivet. Figs. 6 and 7 are a side and edge view, respectively, of the dentated standard. Figs. 8 and 9 show, respectively, a plan and edge view of the curved bracket-arm having elongated or key-seated hole for passing over the standard shown in Figs. 6 and 7. Figs. 10, 11, and 12 are views of the central pendent bracket, being in the order mentioned a back, an edge, and a lower end view thereof. Figs. 13, 14, and 15 are respectively front, edge, and lower end views of the end supporting pendent brackets. Figs. 16 and 17 show elongated head-securing bolts. Figs. 18 and 19 show, respectively, a plan and an edge view of the perforated top dog. Figs. 20 and 21 are views of the center securing-bolt. Fig. 22 is a detail in front elevation of the blower, showing the lips which rest on the arms shown in Figs. 8 and 9.

The shelf *a*, preferably of cast metal, is made of the desired size and conforms at the back edge to the horizontal contour of the

grate-basket, the front edge being of any desired form, and may, if desired, be of fanciful shape or design, a handle *a'* being provided for handling the shelf. A flange *a²* is formed projecting downwardly from the under side of said shelf and extending along the front edge and back along the end edges, near as possible to the grate-basket, said flange being for the purpose of preventing any ashes raised in the stirring of the fire from passing upwardly and gathering upon the draperies or in the cooking utensils. This shelf *a* is removably secured in place in the desired position across the grate-basket by a set of brackets, *b* representing the center one, (best shown in Figs. 10, 11, and 12,) and *b'* being the end ones, which differ slightly in detail from said center brackets *b*, both, however, having lips *b²* and *b³* projecting in opposite directions from the bottom end of each bracket, the lips *b²* of the end brackets pressing on and projecting partly across the under side of the shelf *a*, the neck *b⁴* entering one of the notches *a³*, Fig. 2, and the lips *b²* of the central bracket pressing on the upper side of the said shelf *a*, the neck *b⁵* entering the notch *a⁴* in said shelf. The lip *b³* on each of the brackets project under the proper one of the grate-bars and from the stationary jaw of a clamp, as will be presently seen. The upper ends of the brackets are reduced and screw-threaded, and upon this reduced portion of each of said brackets fits the part *d*, (best shown in Figs. 18 and 19,) the lips *d'* thereon projecting back of the grate-bar and forming a grapple, and the fly-nut *d²* is secured on above said part *d*, and by tightening same the grate-bars are securely clamped and the brackets held in place. The hole *d³* may be elongated, as shown in Fig. 18, to allow adjustment for different widths of grate-bars. The part *d* is provided with apertures *d⁴* for the curved arms *e'* of the trivet *e*, which is made reversible by means of a bifurcated curved arm vertically disposed on the edge thereof. The brackets *b* and *b'* are provided with slots *b⁵*, the bolt *f* (shown in Figs. 20 and 21) passing through the slots in the bracket *b* and hooking over the grate-bar and tending to resist the upward motion of said bracket, and hence press-

ing the lip b^3 against the shelf a . The end brackets b' are held in place by bar-headed bolts f' , (shown in Figs. 16 and 17,) one of which presses through the slot in each bracket and catches back of two grate-bars. Set in one of the holes d^4 of each of the two end pieces d is a standard g , which has one edge dentated, and over each of these standards slips an arm g' by reason of a hole g^2 therein having a notch g^3 , which if turned into juxtaposition with the said teeth will slip over them; but if turned away from them the arm remains seated in one of the interdental spaces, in which it may be turned in a horizontal plane. This arm may be roughened or dentated on its upper surface, if desired, to prevent the slipping off of the blower h . Said blower has lips h' , which are provided in case the blower is not wide enough to reach said arms, the object being to allow the said arms to be placed at one side out of the way without the necessity of enlarging said blower. Thus it will be seen that the said blower may be lowering or elevating, the said arms g being adjusted to direct the draft so as to promote combustion to the desired extent or simply carry the odors resultant from cooking up the chimney.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a device of the class specified, the standards secured to the grate and arms ver-

tically adjustable thereon and a blower adapted to be seated upon said adjustable arms, for the purpose specified. 35

2. In a device of the class specified, the two standards carrying the arms for supporting the blower, and the blower h having lips h' thereon adapted to rest on said arms, substantially as specified. 40

3. In a device of the class specified, the plate d , secured to the grate and having an aperture therein, in combination with the trivet e , having curved arm e' , for the purpose specified. 45

4. In a device of the class specified, a shelf having a notch in its back edge and a bracket clamped to the grate-basket, said bracket having a forwardly-projecting lug adapted to rest under the said shelf and a neck adapted to enter the notch in said shelf and prevent the uprising of the back edge thereof, substantially as and for the purpose set forth. 50

5. In a device of the class specified, the shelf a , supported by brackets clamped to the grate-basket and extending under said shelf, and another bracket also clamped to said grate-basket and bearing on the top of said shelf. 60

In testimony whereof I hereunto affix my signature in presence of two witnesses.

GEO. W. DAVIS.

Witnesses:

R. A. JORDAN,
N. T. TRIGG.