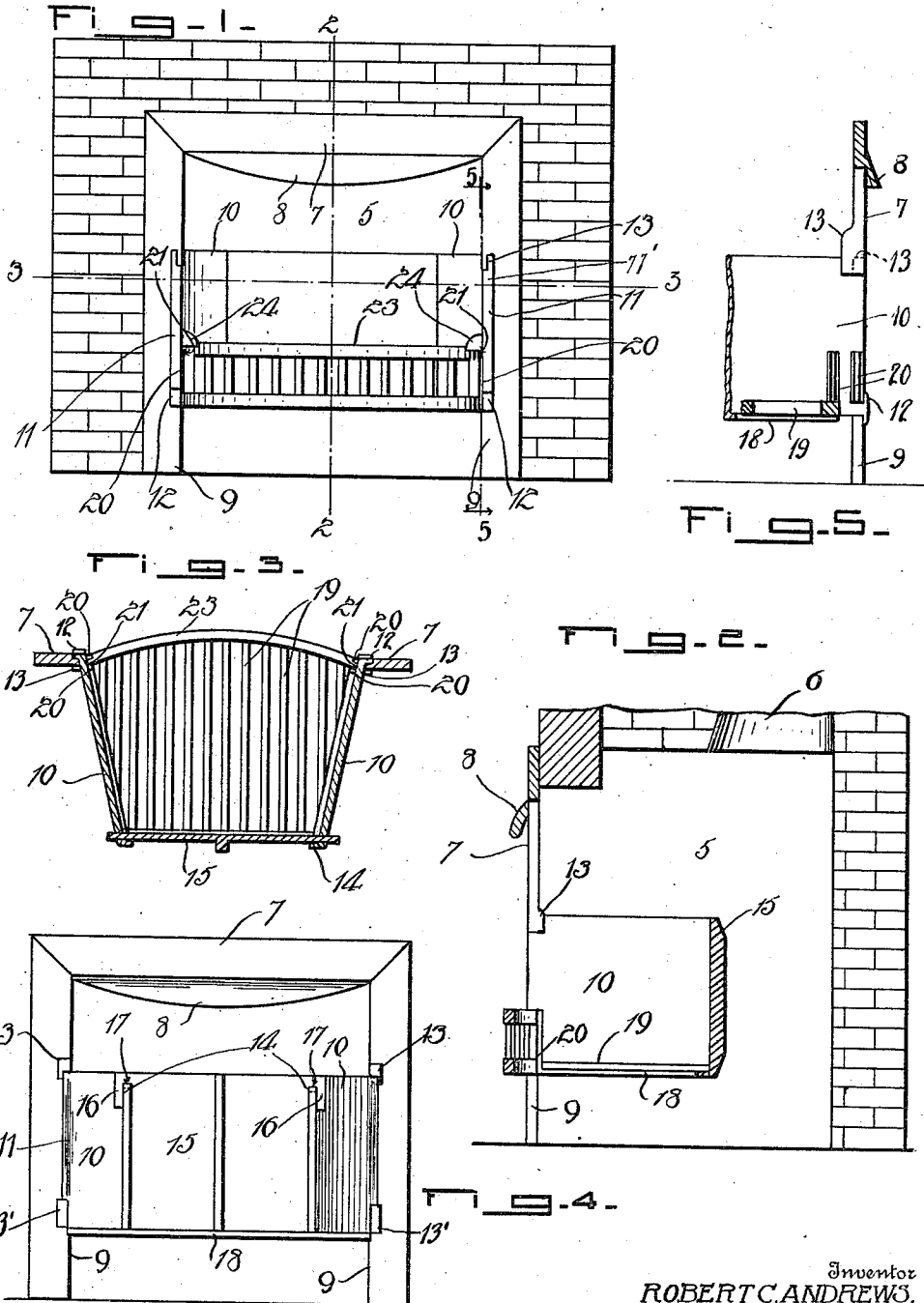


R. C. ANDREWS.  
FIREPLACE GRATE.  
APPLICATION FILED APR. 12, 1909.

989,474.

Patented Apr. 11, 1911.



Witnesses  
C. C. Chandler.  
M. H. Miller.

Inventor  
ROBERT C. ANDREWS.

By *[Signature]*

Attorneys

# UNITED STATES PATENT OFFICE.

ROBERT C. ANDREWS, OF HIGH POINT, NORTH CAROLINA.

## FIREPLACE-GRATE.

989,474.

Specification of Letters Patent.

Patented Apr. 11, 1911.

Application filed April 12, 1909. Serial No. 489,397.

*To all whom it may concern:*

Be it known that I, ROBERT C. ANDREWS, a citizen of the United States, residing at High Point, in the county of Guilford, State of North Carolina, have invented certain new and useful Improvements in Fireplace-Grates; 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.

The invention relates to a fireplace grate and more particularly to the class of portable fireplace grates.

The primary object of the invention is the provision of a fireplace grate of this character which is adapted to be positioned in an open fireplace and due to the peculiar construction and arrangement thereof the said grate is held therein by its own weight without the necessity or requirement of bonding means as is ordinarily required in the setting of grates now in use.

Another object of the invention is the provision of a fireplace grate of this character which will insure as nearly perfect combustion of the fuel as is possible and the same being of a collapsible type that will permit it to be mounted and dismounted in the ordinary fireplace by an inexperienced person and which is capable of ready and easy transportation.

Another object of the invention is the provision of a fireplace grate which is simple in construction, readily and easily set up or knocked down as the occasion demands, thoroughly efficient in operation, economical and inexpensive in the manufacture.

With these and other objects in view, the invention consists in the construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawings, which disclose the preferred form of embodiment of the invention, and as brought out in the claims hereunto appended.

In the drawings:—Figure 1 is a front elevation of the invention, the same being mounted in an open fireplace of the usual construction. Fig. 2 is a sectional view on the line 2—2 of Fig. 1. Fig. 3 is a transverse horizontal sectional view on the line 3—3 of Fig. 1. Fig. 4 is a rear elevation with the grate removed from the fireplace. Fig. 5 is a fragmentary sectional view on the line 5—5 of Fig. 1.

Similar reference characters indicate corresponding parts throughout the several views in the drawings.

Referring to the drawings by numerals 5 60 designates generally an open fire place, preferably constructed of brick and is of the ordinary well-known character, having a chimney provided with a draft flue 6, the fireplace being merely shown for the sake of convenience to properly illustrate the manner of carrying the invention into practice.

The fire grate comprises a front inverted U-shaped section or casting 7 provided at its top cross connecting piece with an outwardly bowed or arched deflector portion 8 so as to assure the conveyance of the smoke and products of combustion through the flue 6 of the fire place. The front section or casting 7 has its inner face resting against the outer surface of the front wall of the fire place when the fire grate is mounted for use in the said fire place, the manner of mounting of the said grate being hereinafter more fully described.

Detachably connected to the supporting leg portions 9 of the front frame or section 7 are rearwardly converging solid side walls 10 of a knock down grate proper, the side walls being formed at their front edges with outturned strips or flanges 11 which are adapted to fit in correspondingly shaped recesses 11' provided at the inner edges of the said leg portions between the extremities thereof. These strips when fitted in the said recesses 11' will have their inner and outer faces flush with the inner and outer faces respectively of the leg portions of said frame. The lower extremities of the strips 11 are provided with stop ears 12 the same extending beyond the said lower extremities of the strips and abut against the outer faces of the leg portions of the frame 7, the latter being provided at the upper terminals of the recesses 11' at its inner face with shoulders or lugs 13 which engage the strips 11 and in this manner the side walls 10 are securely mounted on the said frame 7 and extend rearwardly in converging relation to each other therefrom. The said strips are further provided with abutment blocks 13' near their lower edges to engage with the leg portions of the said frame.

Projecting inwardly from the rear edges of the side walls are flanges 14 for the detachable mounting of a solid back wall 15, the same being formed with spaced L-shaped

extensions 16 depending from the top edge and projecting from the end edges thereof to permit the hanging of the back walls upon the side walls, the flanges 14 engaging the rear faces of the said back wall. The upper corners of the side walls 10 are notched as at 17 to prevent the inward tilting of the back wall within the grate proper. Provided at the lower edges of the side and back walls are inturned flanges 18 upon which rest an open grate bottom 19, the same being capable of removal from between the said walls as the occasion may demand. Formed at the front edges of the side walls 10 and projecting inwardly from the inner faces thereof are spaced vertical guide ribs 20 between which is slidably fitted the opposite ends of a detachable front wall 23. This front wall at its upper edge is provided with offset pieces 24 which latter engage the upper ends of the guide ribs 20 and serve to limit the sliding movement of the front wall when being mounted between the guide ribs of the side walls.

In the positioning of the grate in the fire place after being set up the frame 7 will have its inner face contact with the marginal edges circumscribing the opening in the said fireplace and by this disposition and the weight of the grate proper the said frame will be properly held in contact with and bearing against the front wall of the fire-

place so as to maintain the grate in working position and against accidental displacement without the necessity of the use of fasteners or other bonding mediums to effect the setting of the grate.

What is claimed is:—

A fireplace grate comprising an inverted U-shaped front section having recesses provided in the vertical inner edge portions thereof at a point spaced from the ends of said section, vertical side sections having outturned flanges correspondingly shaped to fit in the recesses in said front section and adapted to engage therein, lugs formed on the outturned flanges and adapted to contact with the outer faces of the front section, lugs formed on the front section and adapted to contact with the inner faces of said flanges at their upper ends, a vertical rear section detachably connected with said side sections and having inturned supporting flanges, a grated bottom supported by the last mentioned flanges, and an outwardly bowed vertical front piece detachably supported upon said side sections.

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

ROBERT C. ANDREWS.

Witnesses:

J. P. MYERS,  
R. H. SECHREST.