



# UNITED STATES PATENT OFFICE.

WILLIAM IRA BAGLEY, OF KNOXVILLE, TENNESSEE, ASSIGNOR OF ONE-HALF TO JAMES W. HISCOCK, OF SAME PLACE.

## GRATE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 618,766, dated January 31, 1899.

Application filed April 2, 1898. Serial No. 676,182. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM IRA BAGLEY, a citizen of the United States, residing at Knoxville, in the county of Knox and State of Tennessee, have invented a new and useful Grate Attachment, of which the following is a specification.

My invention relates to grates, and more especially to a grate attachment in the form of a removable and adjustable shelf to be secured to the grate in front of the fire box or basket or immediately over the same for heating sad-irons, toasting bread, or analogous purposes.

The object of my invention is to provide a shelf attachment for grates which may be attached to or removed from any of the ordinary grates now in use in either its forward or rear position, as before mentioned; and with this object in view my invention consists in a shelf of cast-iron made in skeleton form to permit of the passage of the heat to the articles placed upon it and provided with improved adjustable means for attaching it to the basket of the grate either in front of or directly over the fire-box and means for removing it from either position, substantially as hereinafter described, and afterward specifically pointed out in the claim.

In order to enable others skilled in the art which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of a grate equipped with a shelf attachment constructed in accordance with my invention, the shelf being attached to the grate in its outer position. Fig. 2 is a sectional plan view illustrating the same parts in the same position. Fig. 3 is a view similar to Fig. 2, illustrating the grate with the shelf in its inner position. Fig. 4 is a vertical section on the line 4 4 of Fig. 2. Fig. 5 is an inverted transverse view of the shelf detached. Fig. 6 is a fragmentary detail view illustrating a slightly-modified construction.

Like letters of reference mark the same parts wherever they occur in the different figures of the drawings.

Referring to the drawings by letters, A indicates the front upper bar of a grate of any ordinary or well-known construction.

B indicates my improved shelf, which is cast of skeleton form and provided with a downwardly-projecting front and side flange C. One edge D of the shelf is formed on an inward curve, so as to closely conform to the contour of the front bar A of the grate when the shelf is in its outer position. A central hole E is formed in the shelf for receiving the poker or lifter usually accompanying a stove or grate, in order to raise the shelf off the grate and reverse it in position.

Projecting downwardly from the curved edge D of the grate are lugs F F, and a short distance inside of these lugs brackets G depend from the under surface of the shelf. These brackets may be cast solid with the shelf; but in some instances it would be preferable to form the brackets of separate pieces and bolt them to the shelf, as illustrated in Fig. 6. This latter construction would be especially useful in adapting the shelf for attachment to the various forms of grates now in use and will insure a perfect fit upon any grate ordinarily used.

The construction of my invention will be readily understood from the foregoing description, and its operation will be obvious to any one skilled in the art.

To secure the shelf in its outer position, projecting entirely in front of the grate, it is only necessary to place it in position with the lugs F overhanging the front bar A of the grate, inside of the front bar, and permit the outer edge of the shelf to drop until the brackets G contact with the front of the grate, by which means, when the brackets are adjusted to suit the particular grate to which the shelf is to be applied, the shelf may be held in a true horizontal position to receive any article which it may be desired to place thereon. To reverse the shelf in position when it is too hot to be handled by the hands, a lifter or poker may be inserted through the hole E in the center

of the shelf, the central position of the hole insuring the balance of the shelf upon the poker or lifter, when the shelf may be reversed in position and secured immediately  
5 over the fire in the grate by engaging the lugs F outside of the front bar A of the grate and the brackets G against the inside of the grate-basket, the brackets in this instance serving the same purpose as in the first-named adjustment—namely, to keep the shelf in a horizontal position.  
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While I have illustrated and described what I now consider efficient means for carrying out my improvement, I do not wish to be understood as restricting myself to the exact details  
15 of construction shown and described, but hold that such slight changes or variations as might suggest themselves to the ordinary mechanic would properly fall within the limit and scope  
20 of my invention.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent of the United States, is—

The herein-described removable and reversible shelf for grates, having one edge curved  
25 inward and provided with front and end, downwardly-projecting flanges, downwardly-projecting lugs at the curved edge, and a central opening to receive a poker or handle, in combination with brackets G depending from the  
30 under side of the shelf in line with and a short distance inside of the lugs, having slotted horizontal flanges in contact with the shelf, and bolts passing through the slots in the flanges and entering the shelf from beneath for ad-  
35 justably securing the brackets to the shelf, substantially as described.

WILLIAM IRA BAGLEY.

Witnesses:

R. C. McCLAIN,  
W. M. DUNCAN.