Jan. 30, 1923. 1,443,612.

E. A. BARFIELD.

GRATE BASKET.

FILED APR. 11, 1922.

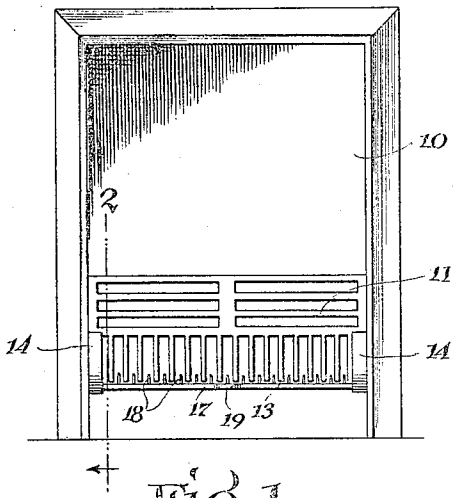


Fig. 1.

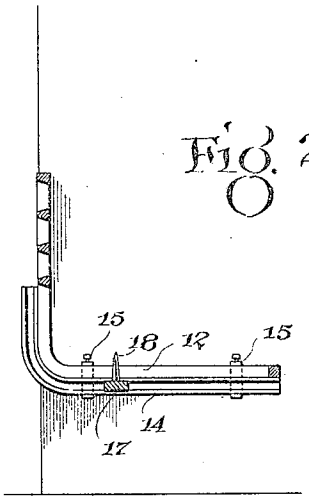


Fig. 2.

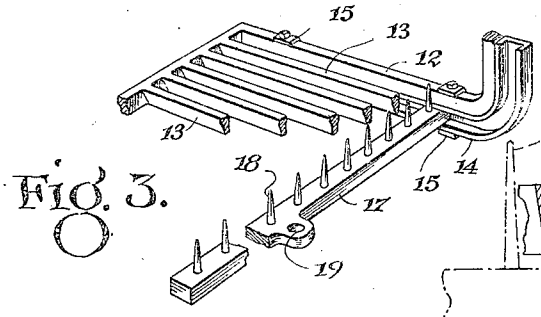


Fig. 3.

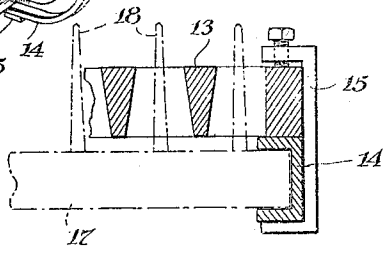


Fig. 4.

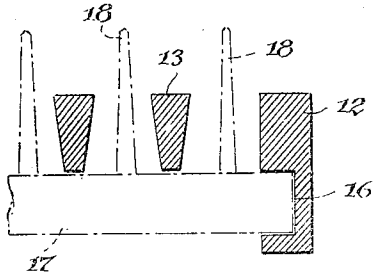


Fig. 5.

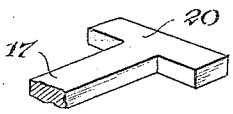


Fig. 6.

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UNITED STATES PATENT OFFICE.

ERNEST A. BARFIELD, OF MACON, GEORGIA.

GRATE BASKET.

Application filed April 11, 1922. Serial No. 551,511.

To all whom it may concern:

Be it known that I, ERNEST A. BARFIELD, citizen of the United States, residing at Macon, in the county of Bibb and State of Georgia, have invented certain new and useful Improvements in Grate Baskets, of which the following is a specification.

This invention relates to fuel burning devices and more especially to what are known as coal baskets, these being the type of grates being used in open fire places to burn coal.

The invention particularly relates to a shaking or cleaning device for coal baskets.

It is well understood that the ordinary manner of cleaning a grate in a coal basket is to draw the end of a poker back and forth between the grate bars, the poker being inserted from beneath the grate.

The most important object of the present invention is to provide an improved and simple device by means of which the entire grate may be cleaned out at one operation and that without the employment of any complicated mechanism.

A second important object of the invention is to provide a device of this character which may be applied to any existing grate.

With the above and other objects in view, the invention consists in general of certain novel details of construction and combinations of parts hereinafter fully described, illustrated in the accompanying drawings, and specifically claimed.

In the accompanying drawings, like characters of reference indicate like parts in the several views, and:—

Figure 1 is a front elevation of a grate equipped with this invention.

Figure 2 is a detail section to an enlarged scale, on the line 2—2 on Figure 1.

Figure 3 is a perspective view of a portion of a grate equipped with this invention.

Figure 4 is a detail section through one of the side bars of the grate disclosing the manner of securing the attachment thereto when the same is formed separately from the grate.

Figure 5 is a view similar to Figure 4 but showing the grate as constructed when the attachment is built in.

Figure 6 is a detail perspective showing a modified end for the main bar of the device.

In the accompanying drawings there has been shown the fireplace 10 having the usual coal basket 11 provided with side frame members 12 and grate bars 13. In the form shown in Figures 1 to 4 inclusive the device is indicated as detachable from the grate or coal basket and consists of a pair of channel members 14 conforming in shape to the end bars 12 and secured beneath such end bars by means of clamps 15. In the form shown in Figure 5 the end bars 12 extend below the grate bars 13 and their confronting faces are channeled as at 16. In each case a main shaker bar 17 has its ends resting in said channels and extends transversely of the grate beneath the bars 13. Projecting upward from this transverse bar 17 is a series of teeth 18 and each of these teeth extends up between adjacent grate bars 13 and projects above the top of these bars for a short distance, as for instance a half inch or so. At the middle of the front of the bar 17 is an eye 19 for engagement by the bent end of a poker. If desired the bar 17 may have its ends T shaped to form heads 20 the better to guide it in the channels and in such an instance one or both ends of the channels are preferably without curvature and may be left open.

In operation it is merely necessary to hook the eye 19 with the poker and draw the bar 17 back and forth. As this is done the teeth 18 effectually rake out the ashes at the bottom of the grate and thus permit free draft through the coal.

There has thus been provided a simple and efficient device of the kind described and for the purposes specified.

It is obvious that minor changes may be made in the form and construction of the invention without departing from the material principles thereof. It is not therefore desired to confine the invention to the exact form herein shown and described, but it is wished to include all such as properly come within the scope claimed.

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

1. The combination with a basket grate having parallel grate bars; of a main shaker bar extending transversely beneath said grate bars, teeth carried by said main shaker bar and extending upwardly between the grate bars, means for supporting and guiding said main shaker bar, and channels at the end of the grate wherein the ends of the main shaker bar are slidably mounted, said channels extending from back to front of the grate and having their forward ends curved upward and open.

2. An attachment for basket grates comprising a pair of channels adapted to fit beneath the end members of a grate, said channels extending from back to front of the grate and having their forward ends curved upward and open, clamps for detachably securing said channels to said end members, a main shaker bar having its ends mounted in the channels for movement longitudinally thereof, and teeth projecting upward from said shaker bar and adapted to enter the space between the bars of the grate.

In testimony whereof I affix my signature.

ERNEST A. BARFIELD.