United States Patent

[11] 3,582,250

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[54] **GAS FIRED FIREPLACE BASKET**
3 Claims, 4 Drawing Figs.

[52] **U.S. Cl.** **431/125,** 126/164
[51] **Int. Cl.** **F23h 13/00**
[50] **Field of Search** 431/125; 126/127, 164, 165, 92

[56] **References Cited**

UNITED STATES PATENTS

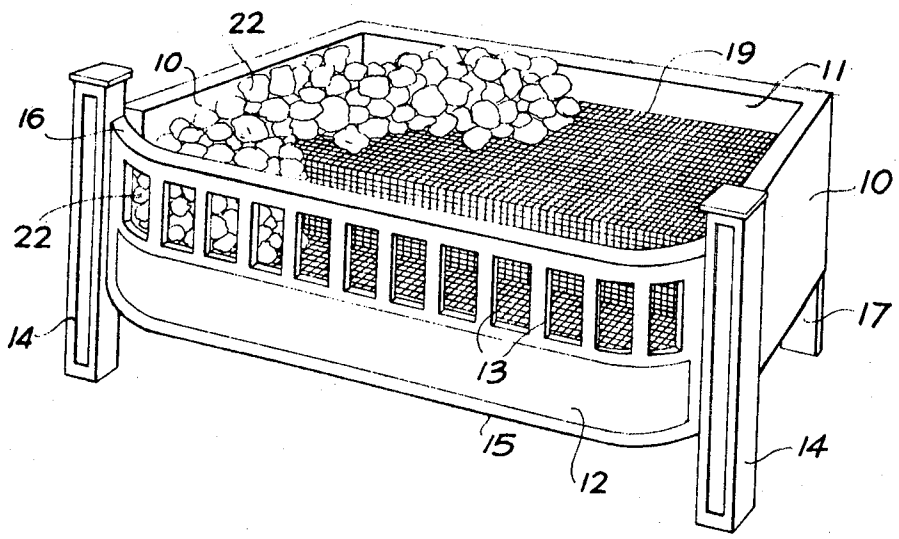
2,879,761	3/1959	Foster et al.	431/125X

FOREIGN PATENTS

23,482	1909	Great Britain	126/127

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ABSTRACT: A gas fired fireplace basket which simulates a coal fire and incorporates a plurality of gas burners beneath a screen which in turn supports a plurality of pieces of noncombustible material in a loosely disposed shallow layer. A transversely extending deepened pocket in the screen locates pieces of the noncombustible material adjacent cut away areas in the front portion of the fire basket.



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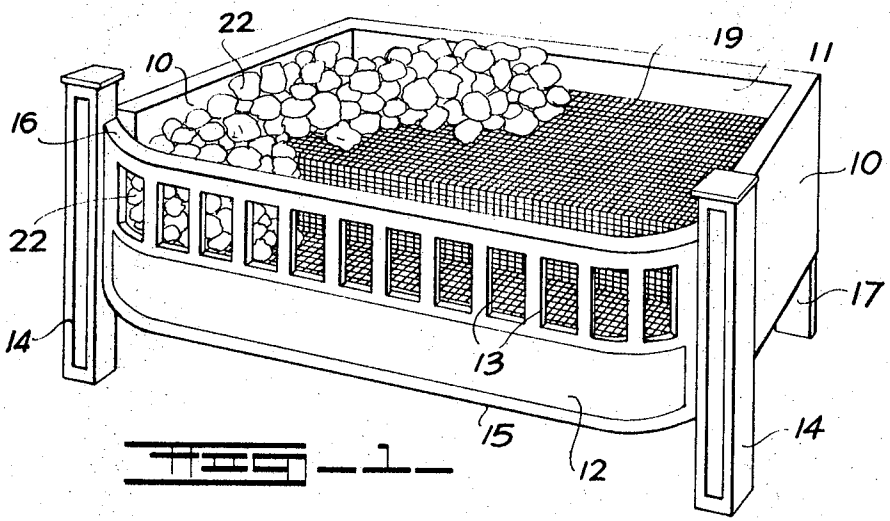


FIG. 1

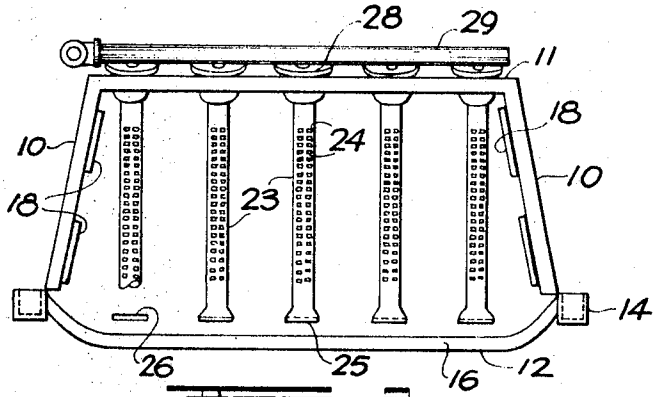


FIG. 2

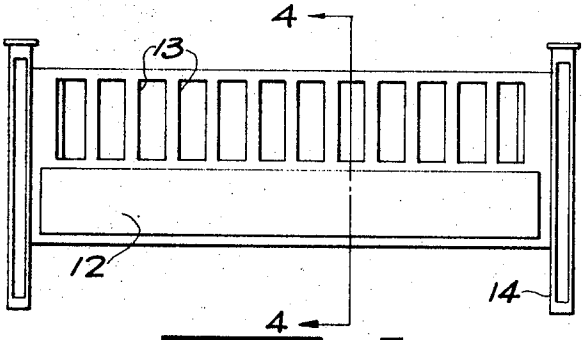


FIG. 3

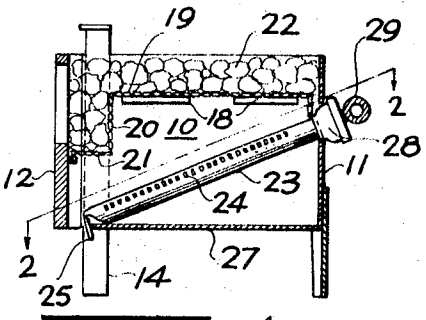


FIG. 4

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GAS FIRED FIREPLACE BASKET

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to gas burning devices of the type normally employed in fireplaces and the like for heating and creating a visually attractive conversation center.

2. Description of the Prior Art

Prior structures of this type have located the noncombustible material in substantially horizontal layers above the gas burners so that the heat therefrom is largely directed upwardly unless reflective means are employed. Such devices are found in U.S. Pats. No. 2,362,972 and No. 3,227,149. Other prior art constructions incorporate means between the burners and the noncombustible layer of material such as found in U.S. Pat. No. 1,259,029 No. 3,087,041 and No. 3,322,179. This invention provides a realistic appearing fire basket arranged so that the noncombustible material heated by the gas burners can and will direct radiant heat horizontally from the basket and over a wide area without the use of reflective means.

SUMMARY OF THE INVENTION

A gas fired fireplace basket having gas burners beneath and behind a layer of noncombustible material which extends both horizontally and vertically so as to direct radiant heat horizontally and vertically therefrom when said gas burners are operating.

DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective elevation of the gas fired fireplace basket with some of the noncombustible material removed.

FIG. 2 is a cross-sectional elevation of the fireplace basket.

FIG. 3 is a front plan view of the fireplace basket.

FIG. 4 is a cross section on line 4–4 of FIG. 3 and section lines 2–2 on FIG. 4 indicate the cross section of FIG. 2.

DESCRIPTION OF THE PREFERRED EMBODIMENT

In its preferred form the gas fired fireplace basket of this invention is comprised of spaced end portions **10** a back **11** and an apertured bowed front portion **12** wherein the apertures are indicated at **13**. The ends of the front portion **12** are supported by legs **14** which extend below the lower edge **15** of the front portion **12** and above the upper edge **16** thereof. Secondary legs **17** are secured to the back portion **11** and support the basket thus formed. The side portions **10** and the back portion **11** are provided with inturned flanges **18** inwardly from their uppermost edges so that they will support a section of stainless steel mesh **19**. The forward portion of the mesh **19** has a vertical flange **20** and an out-turned flange **21** on its lower edge as best seen in FIGS. **1** and **4** of the drawings. The forward portion of the mesh comprising the vertical flange **20** and the out-turned flange **21** thus form along with the apertured front portion **12** of the basket a transversely extending pocket in which pieces of noncombustible material **22** such as lava ash or the like may be positioned and it will be understood by those skilled in the art that additional pieces of lava ash or the like are positioned on the horizontal upper surface of the mesh **19** so that when the gas fired fire basket is viewed it appears to be filled with burning coal.

In order that the pieces of noncombustible material **22** may be heated, some to incandescence, a plurality of burner tubes **23** are angularly positioned in the basket and beneath the stainless steel mesh **19** as best seen in FIGS. **2** and **4** of the drawings. Each of the burner tubes **23** is apertured longitudinally thereof as at **24**. The foremost ends of the burner tubes **23** are closed and provided with down turned tabs **25** which register in slots **26** in a bottom portion **27** of the basket. The apertures **24** in the burner tubes **23** are arranged to form **88** ports per row, the rows being located 45° from center, 90° apart and those skilled in the art will observe that the plurality of burner tubes **23**, each of which is provided with two rows of apertures, **24**, together with the angular positioning of the burner tubes **23** provides efficient means for heating the noncombustible material **22**. Each of the burner tubes **23** includes a mixer portion **28** and a communicating section connected with a transverse manifold **29**, one end of which is closed and the other end of which is adapted to be placed in communication with the source of fuel gas.

The above described gas fired fireplace basket achieves unusual heating and visual effects by its novel arrangement of the burner tubes and the relation thereto of the noncombustible material supported in the novel configuration by the stainless steel mesh **19** together with the relatively wide open area of the front portion of the basket through which the heated noncombustible material may be readily seen and the radiant heat therefrom delivered horizontally over a wide area.

Although but one embodiment of the present invention has been illustrated and described, it will be apparent to those skilled in the art that various changes and modifications may be made therein without departing from the spirit of the invention. Having thus described my invention, what I claim is:

1. In a gas fired fireplace basket having an apertured front wall and a perforated horizontal member positioned adjacent the top thereof for holding pieces of noncombustible material in elevated relation therein, said perforated member having a portion thereof adjacent said apertured front wall offset with respect to the remainder by a vertical portion thereof which is spaced with respect to said apertured front wall and forming a narrow vertical area for additional pieces of said noncombustible material arranged in a vertical layer against said apertured front wall, gas burners positioned beneath the horizontal and offset portions of said perforated member and means for connecting said burners to a fuel source.

2. The gas fired fireplace basket set forth in claim 1 and wherein the apertures are located in the upper half thereof and comprise an area equal to at least half the area of said upper half of said front wall.

3. The gas fired fireplace basket set forth in claim 1 and wherein the burners are tubular burners arranged in said basket in angular relation from the front to the rear of said basket with the front portions of said burners lying beneath the offset portion of said perforated member and the back portions of said burners lying adjacent the rearmost edge of said perforated member.