May 14, 1968 R. H. PETERSON 3,382,861

HEARTH LOG APPARATUS

Filed Nov. 23, 1965

FIG. 1.

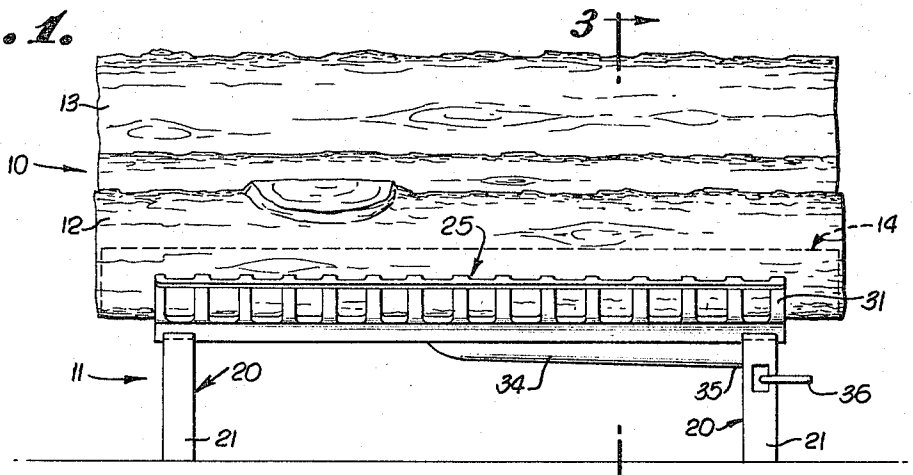


FIG. 2.

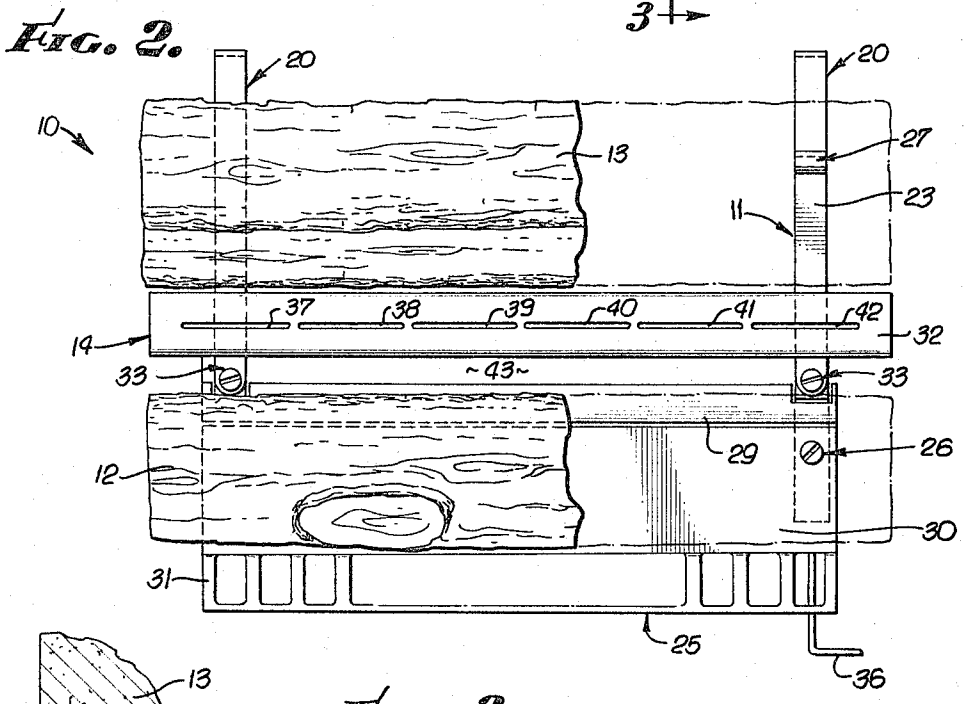
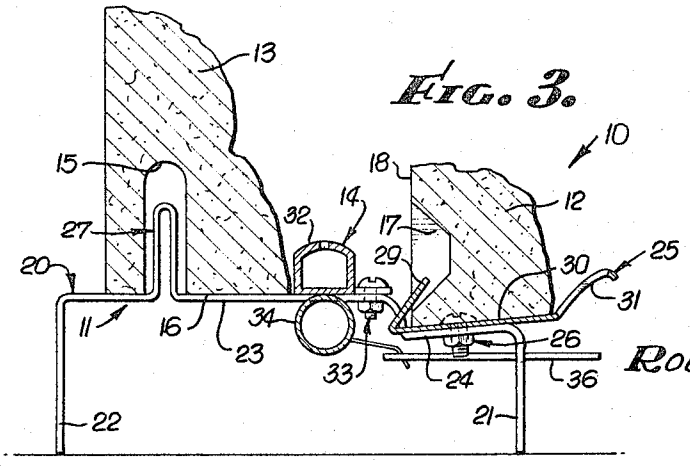


FIG. 3.



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HEARTH LOG APPARATUS

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ABSTRACT OF THE DISCLOSURE

The disclosure concerns hearth log apparatus incorporating a refractory log or logs and a supporting cradle constructed to be easily assembled to conceal a gas releasing burner, and which effects production of sheets of flame rising from between the logs.

This invention relates generally to hearth log apparatus and more particularly concerns the provision of improved hearth fire equipment, including refractory logs, that eliminates the inconvenience and expense associated with natural hearth log fires while retaining the advantages of such fires.

It is a major object of the invention to provide hearth log apparatus comprising a cradle, refractory log means carried on the cradle to simulate a natural log bearing hearth when viewed from the front of the cradle, shoulder structure on the cradle interfitting the log means to resist lateral dislodgment of the log means off the cradle, and gas burner structure extending in such gas releasing proximity to the log means as to effect production of a flame pattern adjacent the log means, the burner being concealed from direct exposure to view from the front side of the cradle.

Unusually advantageous features of the invention include the provision of the charm and warmth of a natural log fire without work, inconvenience and expense; the lack of need to clean ashes from the hearth; the absence of dangerous spark formation; the provision of interfitting tongue and groove structure associated with the cradle and log means to locate and prevent dislodgment of the logs; and the provision of sheet flame producing gas burner structure concealed from direct exposure from the front side of the cradle.

These and other objects and advantages of the invention, as well as the details of an illustrative embodiment, will be more fully understood from the following detailed description of the drawings, in which:

FIG. 1 is a front elevation showing the hearth log, cradle and burner assembly;

FIG. 2 is a top plan view of the FIG. 1 assembly; and

FIG. 3 is a vertical section taken on line 3—3 of FIG. 1.

The hearth log apparatus **10** shown in the figures comprises a cradle **11**, refractory log means such as front and rear logs **12** and **13** carried on the cradle to simulate a natural log bearing hearth when viewed from the front of the cradle, shoulder structure on the cradle interfitting the log means to resist lateral dislodgment of the log means off the cradle, and gas burner structure **14** extending in such gas releasing proximity to the log means as to produce a flame pattern adjacent the log means, the burner ports being concealed from direct exposure to view from the front side of the cradle.

The logs **12** and **13** may typically consist of refractory material, as for example cement, brick or ceramic ingredients molded to have their front faces resembling natural logs, as indicated in the drawings. Also, the rear log has recesses **15** sunk upwardly into the lower side **16** thereof, and the front log has a laterally elongated recess **17** sunk into the rearward side **18** thereof, for purposes as will appear.

The cradle **11** includes two like metallic straps **20** which are spaced apart lengthwise of the logs. Each strap includes forward and rearward legs **21** and **22**, a horizontal portion **23** supporting the rear log **13** and burner structure, and a downwardly offset generally horizontal portion **24** supporting a cradle grate **25**. The latter is typically attached as by fasteners **26** to the strap portions **24**.

Furthermore, the straps **20** include upwardly projecting bends **27** defining tongues received in the grooving **15** or recesses sunk into the rear log **13**, thereby providing the interfit resisting lateral dislodgment of the rear log off the cradle. In this regard, the rear log may therefore be placed downwardly onto the cradle and lifted upwardly therefrom, providing easy assembly and disassembly.

The cradle grate **25** may be formed of sheet metal to have a tongue **29** projecting forwardly and upwardly for reception into the recess **17** sunk in the rear side of the front log **12**, as the latter is placed downwardly on the cradle. In this regard, the front log tends to gravitate leftwardly and downwardly toward interfitting relation with the tongue **29** due to the slightly leftwardly and downwardly inclined surface **30** of the cradle grate upon which the front log rests. The grate also includes a tongue portion **31** which forms a grille, as better seen in FIG. 2, at the front side of the front log.

The burner unit **14** includes an upper portion **32** which is hollow and which extends horizontally between the front and rear logs, while concealed from direct exposure to view from the front side of the cradle. Suitable attachment of the burner to the cradle is afforded by fasteners **33**. Gas may be supplied to the burner portion **32** by ducting **34** extending directly beneath the portion **32**, there being a control valve associated with that ducting in the general area **35**. A rotatable handle **36** carried by the cradle is adjustable to control such gas valving.

The burner portion **32** has horizontally elongated port slots **37–42** adapted to release gas productive of sheet flame rising between the logs **12** and **13**. These ports are concealed from direct exposure to view from the front side of the cradle, and air currents rising upwardly about the burner, and particularly in the open space **43**, mix with the gas and sheet flame to cause the latter to play realistically between the logs and also over the front surface of the rear log. This creates a realistic hearth effect with the advantages mentioned in the introduction, and also without the disadvantages previously referred to.

I claim:

1. Hearth log apparatus, comprising a cradle, refractory log means carried on the cradle to simulate a natural log bearing hearth when viewed from the front of the cradle, shoulder structure on the cradle loosely interfitting the log means to resist lateral dislodgment of the log means off the cradle, said shoulder structure penetrating the log means for concealment thereby, and gas burner structure extending in such gas releasing proximity to the log means as to effect production of a flame pattern adjacent the log means, the burner ports being concealed from direct exposure to view from the front side of the cradle, the log means having bottom surface extent bearing directly on the cradle in spaced relation to said shoulder structure so that log means weight is substantially completely transmitted to the cradle independently of said shoulder structure.

2. Apparatus as defined in claim **1** in which said shoulder structure is defined by a tongue concealed from direct exposure to view from the front side of the cradle.

3. Apparatus as defined in claim **2** in which the log means includes front and rear logs with the burner extending to release gas productive of sheet flame rising therebetween.

4. Apparatus as defined in claim **3** in which the rear

log has a recess sunk upwardly into the lower side thereof to receive said tongue as the rear log is placed downwardly on the cradle, said recess having front to rear dimensioning that is larger than the front to rear dimensioning of the tongue so that the rear log and tongue have loose interfit.

5. Apparatus as defined in claim 3 in which the cradle has an upper surface inclined rearwardly and downwardly to receive the main weight of the front log, the tongue projects forwardly and upwardly, the front log having a recess at the rearward side thereof to receive the tongue as the front log is placed downwardly on and slides rearwardly on said inclined surface of the cradle.

6. Apparatus as defined in claim 2 in which said shoulder structure is defined by forward and rearwardly spaced tongues concealed from direct exposure to view at the front side of the cradle, the log means including front and rear logs with the burner extending to release gas productive of flame rising therebetween, the rear log having a recess to receive the rear tongue as the rear log is placed on the cradle, and the front log having a recess to receive

the forward tongue as the front log is placed on the cradle, said recess being oversize in relation to said tongues so that the tongues and logs have loosely interfitting relation.

7. Apparatus as defined in claim 6 in which the burner defines a generally horizontally elongated gas passing duct and gas releasing slotting extending along one side of said duct.

8. Apparatus as defined in claim 1 in which the burner defines a generally horizontally elongated gas passing duct and gas releasing slotting extending along one side of said duct.

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