US 20090050132A1

(19) **United States**

(12) **Patent Application Publication**

Betz et al.

(10) **Pub. No.: US 2009/0050132 A1**

(43) **Pub. Date: Feb. 26, 2009**

(54) **FIREPLACE ARRANGEMENT**

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(21) Appl. No.: **12/146,104**

(22) Filed: **Jun. 25, 2008**

Related U.S. Application Data

(60) Provisional application No. 60/946,185, filed on Jun. 26, 2007.

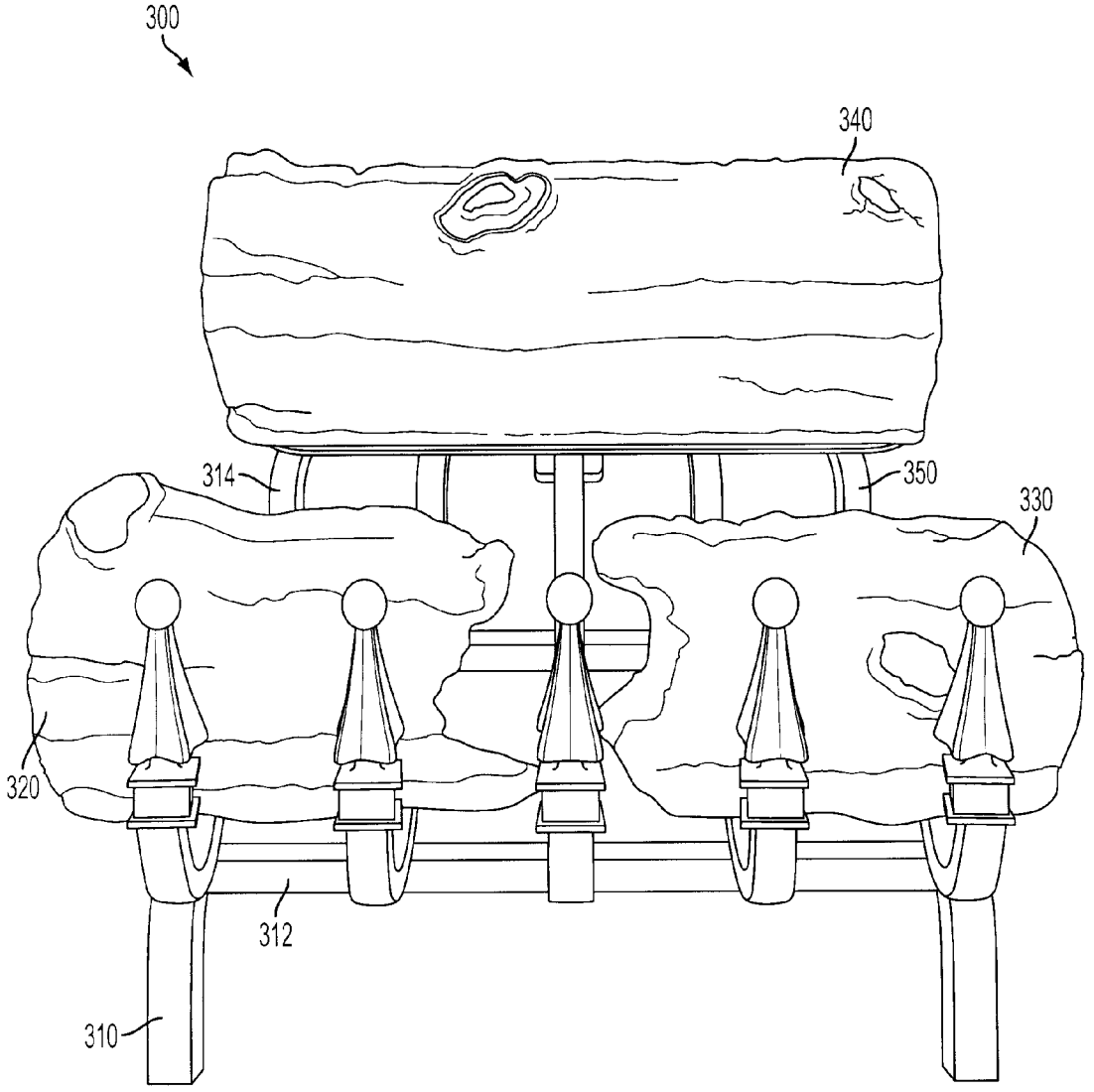
Publication Classification

(51) **Int. Cl.**
F24B 1/193 (2006.01)

(52) **U.S. Cl.** **126/540**

(57) **ABSTRACT**

A fireplace arrangement is provided with a grate and simulated logs that are arranged on the grate to provide the look and feel of a fireplace with natural wood logs. The simulated logs each have a securing element that is attached to a surface of the simulated log. The securing element is secured to at least one of the rail members of the grate. The securing element maintains the simulated logs in a set position on the grate.



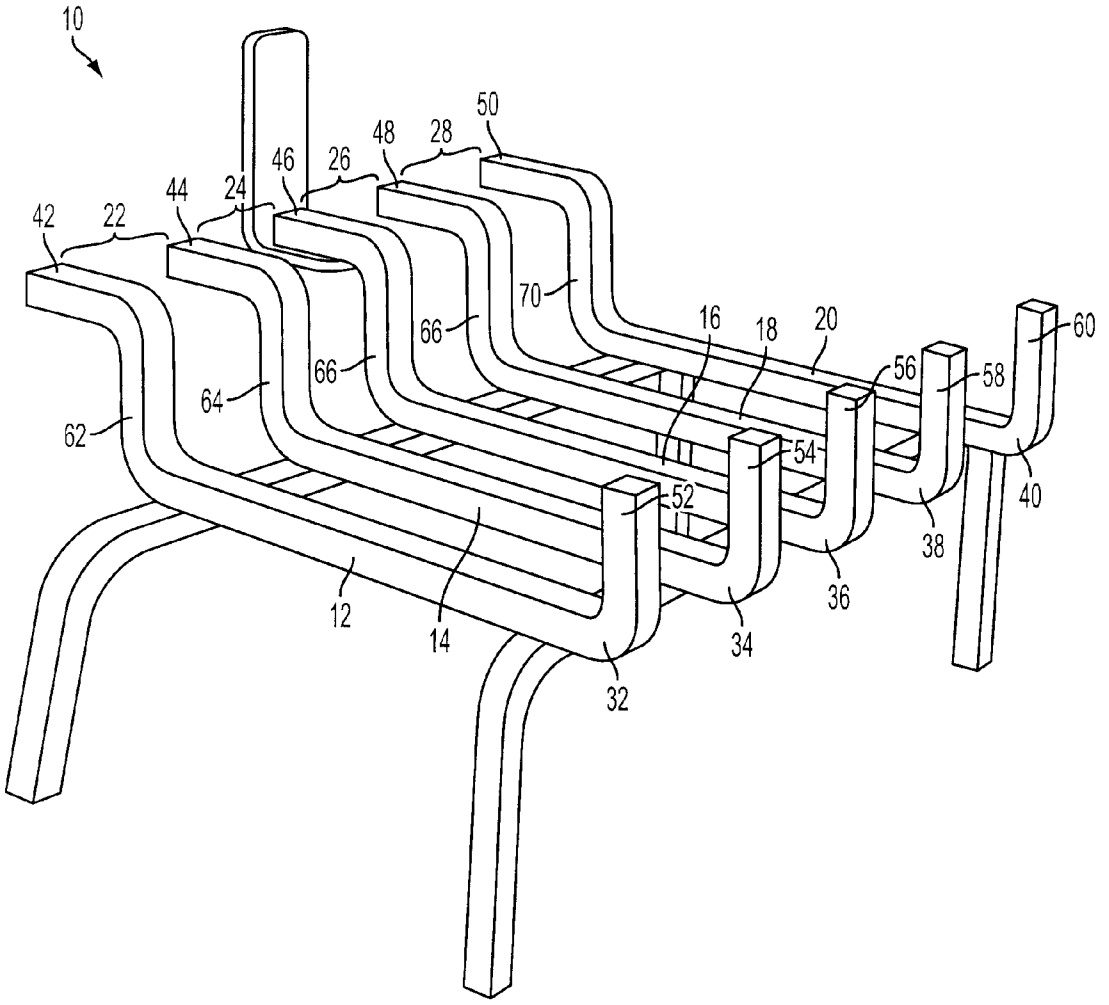


FIG. 1
PRIOR ART

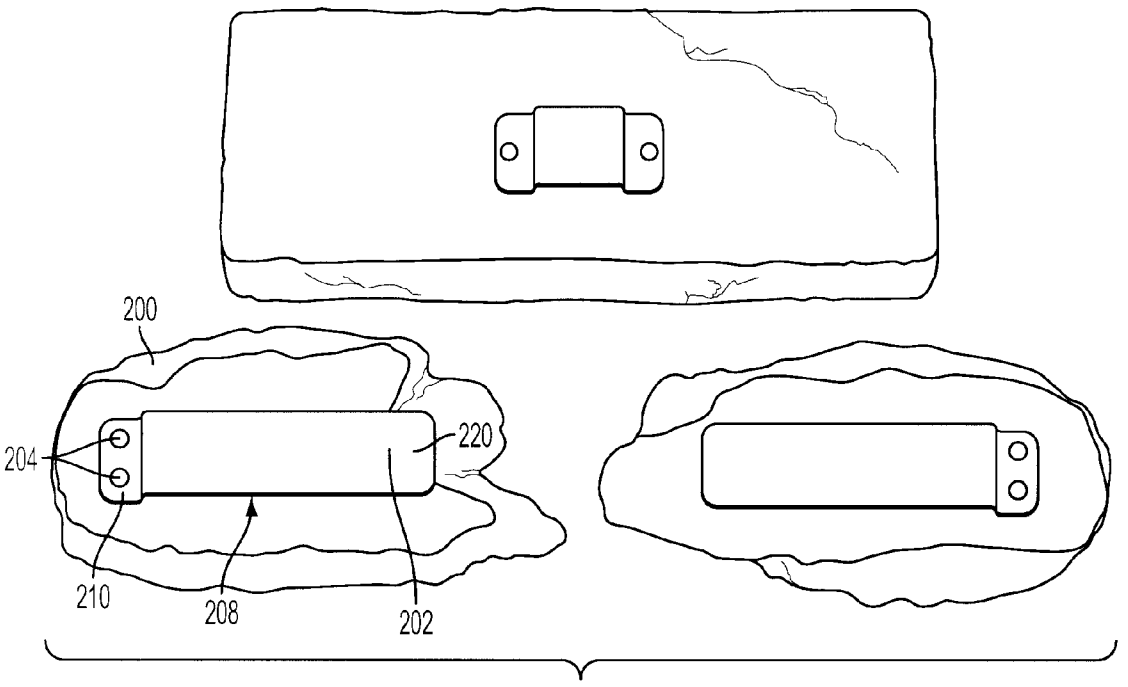


FIG. 2

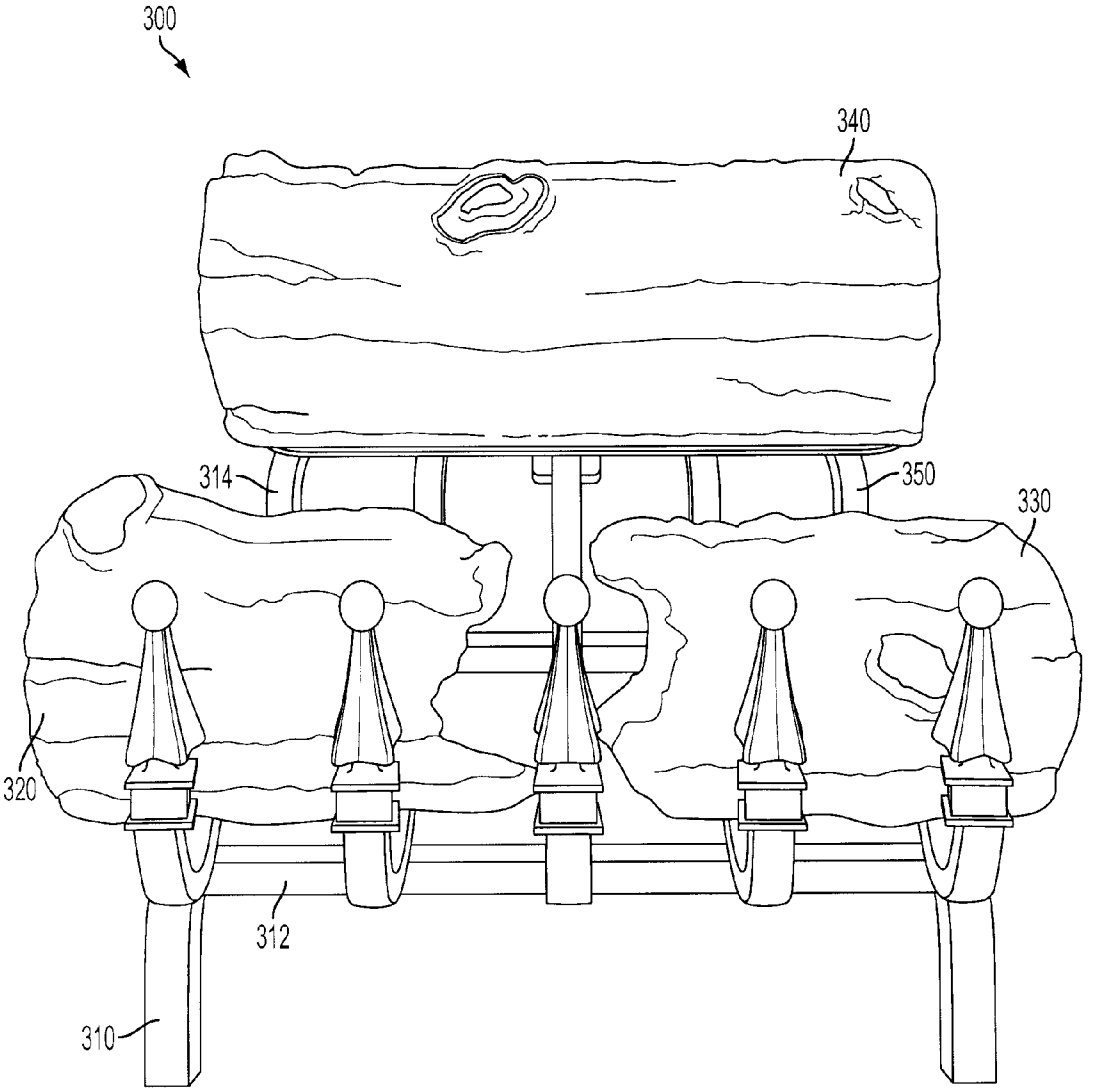


FIG. 3

FIREPLACE ARRANGEMENT

CROSS REFERENCE TO RELATED APPLICATION(S)

[0001] This is a non-provisional utility patent application claiming benefit of the filing date of U.S. provisional application Ser. No. 60/946,185 filed Jun. 26, 2007, and titled "Fireplace Arrangement", which is hereby incorporated by reference.

BACKGROUND OF THE INVENTION

[0002] 1. Technical Field

[0003] This invention relates to an arrangement for a simulated fire creation to replicate that of a natural fireplace arrangement. More specifically, a set of simulated logs are arranged to accept an artificial log that will not affect the integrity of the simulated logs while the artificial logs burn.

[0004] 2. Description Of The Prior Art

[0005] Many consumer dwellings include a fireplace in at least one room in the house. In the past, the fireplace was designed to provide heat to the dwelling during the cold winter months. However, with the development of technology, heating furnaces, and delivery of natural gas directly to each home, many fireplaces today are built for aesthetic purpose. Some of the fireplaces are artificial fireplaces that utilize natural gas to mimic a real fireplace. Other fireplaces merely remain unutilized since it requires work to maintain a fire in the fireplace that may not provide adequate heat.

[0006] It is known in the art that artificial logs may be used to create and maintain a fire in a fireplace with minimum work required. An artificial log, also known in the art as a man made burning log, is commonly made from a combination of sawdust and blended wax, and are therefore simple to ignite. Although an artificial log is simple to ignite, one artificial log does not provide the ambiance desired. Current designs of fireplace grates may accommodate an artificial log together with natural logs. The artificial log is generally used to ignite the fire and may be used to assist with ignition of one or more natural wood logs. For a person skilled in the art of maintaining a fire, the artificial log may function as an effective tool to start the fire and to ignite the natural wood logs. However, for a person not skilled in the art of maintaining a fire, there may be no desire to ignite the natural wood logs as the intent is merely to maintain a fire in the fireplace for aesthetic reasons and for a short or long period of time.

[0007] Fireplace grates have been designed to incorporate artificial logs of similar artificial ignition source. For example, U.S. Pat. No. 5,067,476 to Rhodes, Jr. presents a simulated log assembly that accommodates an artificial log to produce a realistic looking flame. The simulated logs are comprised of a cement material so that they do not burn when exposed to the flame of the artificial log. In addition, a pan is provided on the underside of the grate to trap ashes generated by combustion of the artificial log. Rhodes, Jr. discloses a preferable arrangement of the simulated logs on the grate and a vertical stacking arrangement. However, Rhodes, Jr. does not provide a tool to secure the simulated logs to the grate. This could affect the safety of the fireplace arrangement as well as affect the aesthetic viewing of the fireplace since movement of the simulated logs is likely when exposed to combustion.

[0008] In addition to Rhodes, Jr. there are other prior art patents that addresses utilizing an artificial log in combination with a simulated log assembly. Each of the prior art concerns positioning and placement of the assembly to accommodate either the simulated log assembly or the artificial log. However, there are shortcomings associated with the prior art. For example, the prior art does not address movement of the simulated log assembly as a reaction to burning of the artificial log. It is not unexpected that the heat and flame produced by the artificial log would create a reaction that may subject the simulated log assembly to movement. Any movement of either the artificial log, simulated assembly, or both may cause damage or create a dangerous condition.

[0009] Accordingly, there is a need for a simulated log assembly that accommodates an artificial log or equivalent fire igniting source in a safe and secure manner.

SUMMARY OF THE INVENTION

[0010] This invention comprises a fireplace grate that utilizes two or more segments of simulated logs to provide the look and feel of a natural wood fireplace both when the fireplace is in use and not in use.

[0011] Other features and advantages of this invention will become apparent from the following detailed description of the presently preferred embodiment of the invention, taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] FIG. **1** is a perspective view of a prior art fireplace grate.

[0013] FIG. **2** is rear view of a simulated log with a clip for securing the log to a secondary surface.

[0014] FIG. **3** is a front view of the fireplace with several simulated logs secured to the grate.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Overview

[0015] A simulated fireplace log set is provided to aesthetically provide an atmosphere of a real fireplace log set. The fireplace log set includes a grate and two or more logs, including one artificial log and one simulated log. The fireplace grate is designed to receive three or more segments of simulated logs in a safe and secure manner. The simulated fireplace logs are secured to the fireplace grate to prevent significant movement of the logs and to maintain the atmosphere of a fireplace with natural wood logs. In addition, the simulated fireplace logs are comprised of a material that enables them to withstand high temperatures without melting or affecting the integrity of the logs. Accordingly, two or more simulated logs are arranged on a grate to provide the presence of a natural fireplace log set during use and non-use of the fireplace.

Technical Details

[0016] An assembly is provided to produce a natural looking flame through the use of a combustible log member. FIG. **1** is a prior art illustration of a perspective view of a fire grate (**10**). The grate (**10**) includes a series of rail members (**12**), (**14**), (**16**), (**18**), and (**20**). The rail members are shown with spacing between adjacent members. More specifically, there is a spacing (**22**) between member (**12**) and (**14**), spacing (**24**) between member (**14**) and (**16**), spacing (**26**) between members (**16**) and (**18**), and spacing (**28**) between member (**18**) and (**20**). The spacing between adjacent rail members is sub-

stantially equal. However, in one embodiment, the spacing between members may be modified such that the spacing is either larger or smaller between various members.

[0017] Each of the rail members has a proximal end and a distal end. More specifically, rail member (**12**) has a proximal end (**32**) and a distal end (**42**), rail member (**14**) has a proximal end (**34**) and a distal end (**44**), rail member (**16**) has a proximal end (**36**) and a distal end (**46**), rail member (**18**) has a proximal end (**38**) and a distal end (**48**), and rail member (**20**) has a proximal end (**40**) and a distal end (**50**). As shown, the proximal end of each rail member has a first vertical extension. For example, rail member (**12**) has a first vertical extension (**52**), rail member (**14**) has a first vertical extension (**54**), rail member (**16**) has a first vertical extension (**56**), rail member (**18**) has a first vertical extension (**58**), and rail member (**20**) has a first vertical extension (**60**). In one embodiment, each of the first vertical extension members (**52**)-(**60**) is uniform in height. However, the invention should not be limited to the uniformity. For example, in one embodiment, the vertical extension members may be different heights. The first vertical extension functions as a barrier to prevent an object with a vertical height greater than the height of the vertical extension from departing from the grate (**10**). In addition to the first vertical extension members, the distal end of each rail member has a second vertical extension. For example, rail member (**12**) has a second vertical extension (**62**), rail member (**14**) has a second vertical extension (**64**), rail member (**16**) has a second vertical extension (**66**), rail member (**18**) has a second vertical extension (**68**), and rail member (**20**) has a second vertical extension (**70**). In one embodiment, each of the second vertical extension member (**62**)-(**70**) is uniform in height. However, the invention should not be limited to the uniformity. Furthermore, in one embodiment, the first and second vertical extension members may be equal in height or may be different heights. Accordingly, a set of vertical extension members are provided to maintain an artificial log within the confines of the fireplace grate.

[0018] FIG. **2** is a back side view (**200**) of a simulated log configured to be received by the grate (**10**) shown in FIG. **1**. As shown, the log (**200**) has a clip (**202**) secured thereto. The clip is secured to the simulated log by a permanent or temporary attachment element (**204**). An example of a permanent attachment element may include a nail or glue. Similarly, an example of a temporary attachment element may include a screw. The clip (**202**) has a proximal end (**210**) and a distal end (**220**). An aperture (**208**) is provided between the proximal end (**210**) and the distal end (**220**). The aperture (**208**) has a perimeter sized to be at least as large as the perimeter of one of the rail members (**12**)-(**20**) of the grate (**10**). To secure the log (**200**) to the grate, the aperture (**208**) of the clip (**202**) is placed over at least one of the rail members (**12**)-(**20**). The log (**200**) maintains communication with the grate (**10**) through the clip (**202**). In one embodiment, the clip (**202**) is temporarily attached to the log (**200**). This enables the log (**200**) to be placed on top of the grate (**10**) and for the clip (**202**) to be secured to the log (**200**) following placement on the grate (**10**) and in close proximity to at least one of the rail members (**12**)-(**20**). Accordingly, the simulated logs (**200**) may be placed on the grate (**10**) in a secured manner to prevent movement of the artificial log (**200**) as well as to provide a certain aesthetic view of the fireplace grate.

[0019] FIGS. **1** and **2** demonstrate the primary elements of the fireplace set that enables simulated logs to be secured to the fireplace grate. In one embodiment, a plurality of simulated logs is placed on the fireplace grate in a secure manner. FIG. **3** is a front view (**300**) of an artificial fireplace set. As shown, the fireplace set includes a fireplace grate (**310**) and three simulated log segments (**320**), (**330**), and (**340**). The fireplace grate has a raised portion (**350**). In one embodiment, the raised portion (**350**) is the back portion of the grate (**310**) as it enables logs to be viewed without an obstruction, or at least limited to partial obstructions from a log placed adjacent to a front portion (**312**) of the grate (**310**). Each of the simulated logs has a clip as shown in FIG. **2** to secure the log to the grate (**310**). As shown, two of the simulated logs (**320**) and (**330**) are adjacent to a front portion (**312**) of the grate (**310**), and one of the fireplace logs (**340**) is adjacent to the back portion (**314**) of the grate (**310**). In one embodiment, the three log segments (**320**), (**330**), and (**340**) are simulated logs that slide onto the grate (**310**) through an aperture provided in the physical structure of the associated clips.

[0020] Following placement of the simulated logs on the grate, an artificial log or ignitable element may be placed on the grate. In one embodiment, the artificial log or combustible element may be place on the grate prior to placement of one or more simulated logs on the grate. When the combustible log or element is ignited and a flame is present, this flame will resonate in the vicinity of the simulated log to simulate a fireplace with natural wood burning logs. The simulated log (s) is comprised of a material that enables it to withstand the heat generated by the flame. In one embodiment, the log is comprised of a ceramic material. However, the invention should not be limited to this material. Other materials may be used that enables the log to withstand high temperatures and to accommodate securing a clip thereto in a permanent or semi-permanent manner. Accordingly, the configuration of one or more simulated logs together with the arrangement of the artificial log or combustible element on the grate provides the atmosphere of a natural wood fireplace in a safe manner.

Advantages Over the Prior Art

[0021] The simulated logs are comprised of a material that enables them to withstand high temperatures. In addition, the clip element of the simulated logs enables the logs to be semi-permanently secured to a fireplace grate. It is known in the art that logs or other objects on or close to a fireplace grate may shift or otherwise move during combustion of a combustible element on the grate. The clip of the simulated log enables the simulated log to maintain a pre-set position on the grate and prevent movement of the log when subject to high temperatures associated with a flame. Prior to or following occurrence of a fire on or close to the grate, the simulated log(s) may be removed from the grate and re-arranged to provide a different look and feel to the grate. Similarly, the simulated log(s) may be removed from the grate and replaced with other simulated logs or with natural wood logs. In addition to placement of the simulated and artificial logs on the grate, the grate employed herein can function is a standard grate to accommodate natural wood product, or as a grate to accommodate a simulated fire from a combination of one or more simulated logs secured to the grate and one or more artificial logs or combustible elements. With the current art introduced in this provisional patent, the grate is designed to allow for the simulated logs to be removed by the user and therefore enabling the grate to be used for a natural wood fire. Accordingly, the presentation of the fireplace may be modi-

fied with a combination of logs and arrangements thereof depending on the intended use of the fireplace.

Alternative Embodiments

[0022] It will be appreciated that, although specific embodiments of the invention have been described herein for purposes of illustration, various modifications may be made without departing from the spirit and scope of the invention. In particular, in one embodiment, the simulated logs may be removed from the fireplace grate and replaced with natural wood logs. The fireplace grate may be used by a consumer to maintain a natural wood fire. Furthermore, in one embodiment, a crown attachment may be provided for the proximal and/or distal elements of the grate. Following placement of a simulated log on the grate, such as through a sliding movement, the crown attachment may be placed over the adjacent end of the grate as both a decorative and functional element of the grate. In one embodiment, the crown attachment may have a perimeter or circumference smaller than the aperture of the clip thereby enabling the simulated log to slide over the associated end of the grate. Similarly, in one embodiment, one or more natural wood logs may be placed adjacent to a simulated log on the grate. Accordingly, the scope of protection of this invention is limited only by the following claims and their equivalents.

We claim:

1. A fireplace apparatus comprising:

a log set, including a grate and at least one combustible log and at least one non-combustible log supported on the grate;

a mechanical attachment element secured to the non-combustible log;

the grate having at least one rail member; and

the attachment element having an aperture sized to be received by the rail member of the grate to secure the artificial log to the grate.

2. The apparatus of claim **1**, further comprising a crown attached to an end of the rail member.

3. The apparatus of claim **1**, wherein said non-combustible log is comprised of a material that withstands high temperatures.

4. The apparatus of claim **1**, wherein said non-combustible log does not combust when exposed to a flame.

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