Disclosed is a charcoal lighter adapted to rapidly light a small quantity of charcoal for individual or small group use, wherein a housing having an upper and lower cavity is disclosed, the upper and lower terminations of the housing being open to allow charcoal to be inserted into the upper cavity and combustible material to be placed into the lower cavity. The lower cavity is substantially larger than the upper cavity, wherein an external handle is attached adjacent to the lower cavity to place the user's hand away from the lit charcoal producing heat. A row of apertures positioned radially about the lower cavity allow air to flow into the lower cavity and through the perforate divider grate separating the upper and lower cavity. The smaller upper cavity and handle placement away from the charcoal eliminates a heat shield requirement and provides a quickly lit individual quantity of charcoal.
CHARCOAL LIGHTER FOR INDIVIDUAL USE WITH PROTECTIVE HANDLE PLACEMENT

CROSS REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of U.S. Provisional Application No. 61/523,651 filed on Aug. 15, 2011, entitled “Charcoal for Two.” The patent application identification above is incorporated here by reference in its entirety to provide continuity of disclosure.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention
[0003] The present invention relates to charcoal starter and containers for lighting charcoal in smaller quantities. More specifically, the present invention relates to a handheld, segregated container for housing a small quantity of charcoal briquettes in an upper chamber and a quantity of ignitable kindling in a lower chamber for initiating charcoal burn.

[0004] Barbecue lighters and charcoal starters are devices that are utilized to ignite and preheat a quantity of charcoal before loading the charcoal onto a grill or into a fire pit prior to cooking a meal. These devices generally comprise a hollow member having a chamber for combustible material, such as newspaper or other suitable readily ignitable kindling, along with an upper chamber for loading unlit charcoal for long-term ignition. The two chambers are generally separated by a grill and the housing includes a handle with a heat shield to protect the user as he or she handles the device while loaded with burning charcoal. These devices permit a large quantity of charcoal to be rapidly ignited to the point of coal ignition, whereafter the burning coals can be transferred and utilized without further ignition assistance. This separates the user from the burning coals and allows an evenly distributed ignition of the coals prior to placement of a cooking surface or barbecue grate thereon.

[0005] A common problem associated with charcoal ignition is therefore solved, as large quantities of charcoal can be ignited uniformly and without continual assistance from an open flame assistant. However, the heretofore disclosed charcoal lighters generally include provisions that are not always suitable for smaller groups or individual users, and further for providing a structure that is inexpensive and protective of the user’s hands during operation. The heat radiated and conducted from the burning charcoal can be very intense, resulting in superficial burns for the user when handling those units not outfitted with a protective heat shield or those that include a handle sufficiently offset from the device upper chamber. Placement of a heat resistant layer between the burning coals and the handle is one common way to address this drawback; however, this increases the cost of the assembly and adds another component.

[0006] It is therefore desired to disclose a charcoal lighter device that includes an enlarged lower cavity and an upper portion sized to accommodate individual or smaller groups of users. The upper cavity includes enough volume to accept charcoal to cook individual meals rather than for larger groups, while also allowing for more rapid ignition and ash initiation. Further, the user handle is placed adjacent to the lower cavity and below the upper cavity containing the burning charcoal. This, therefore, provides an adequate offset between the user’s hand and heat emanating from the burning charcoal. The lower cavity includes burning starter material that rapidly burns and is consumed, providing an ignition source that is short lived and not a threat to handling the device in proximity thereto after a given time interval has passed wherein the charcoal briquettes are ready for use on the grill or fire pit area. The placement of the handle and the smaller upper cavity provide a uniquely designed structure that fulfills a need in the individual or smaller group users with a means to protect the user from intense heat. The ability to provide this function without a heat shield lowers the complexity of the device during manufacturing and further reduces cost to the consumer.

[0007] 2. Description of the Prior Art
[0008] Devices have been disclosed in the prior art that relate to charcoal starter devices. These include devices that have been patented and published in patent application publications, and generally relate to starter devices having handled housings with an enlarged upper cavity and a close proximity handle support shrouded by a heat shield protector. The forgoing is a list of devices deemed most relevant to the present disclosure, which are herein described for the purposes of highlighting and differentiating the unique aspects of the present invention, and further highlighting the drawbacks existing in the prior art.

[0009] Specifically, U.S. Pat. No. 5,638,807 to Flamenbaum discloses an improved charcoal starter and means of deploying the lit charcoal onto a grill surface without causing undue dispersion of lighted ashes into the air. The device includes an inner space having a top and bottom, a heat shield attaching to and shielding a hand along the side of the device, a plurality of apertures along the device and finally a release system for dispensing the lit charcoal from the device bottom. The release system includes a central post having a slideable push bar and a spring below the push bar. A two piece circular grate, a plurality of retractable support pegs, a trigger, a pivot arm and wire are utilized to drop incandescent charcoal onto a grill surface while minimizing outgoing amber or lit particles that can be flame hazards or burn hazards. The Flamenbaum device, while providing a unique means to dispense the coals, does not provide a structure that eliminates the need for a heat shield from the burning coals, as provided in the construction of the present invention.

[0010] Another such device is U.S. Pat. No. 5,230,325 to Williams, which discloses a charcoal lighter device that comprises a housing having an inner and outer concentric shell surrounding a central spigot separated into a top and bottom by a horizontal charcoal grate. Thermally insulative connector offset and connected each concentric shell from one another, while the inner shell terminates short of the upper shell bottom, providing space for combustible material to be placed and lit from underneath the grate. Air holes in the base provide a means for feeding air for combustion of the material, while a handle is provided centrally along the outer shell and spanning over the inner grate location. The Williams device provides a structure having offset shells that form an air gap serving as a thermal resistance to the user’s hand. However, the handle of the device is mounted in a similar fashion as the Flamenbaum device, wherein the handle is in adjacent to the upper portion housing the lit and high temperature charcoal.

[0011] Further, U.S. Pat. No. 4,604,986 to Barnes discloses a briquette lighting container comprising an upstanding housing, a handle and a heat shield that shrouds the handle from radiant and conducted heat from burning charcoal. Within the housing is an adjustable grate that regulates combustion,
while a separable base is provided for elevating the burning starter material and burning charcoal above a support surface. The heat shield is an offset flange member that creates an air gap for thermal resistance and a physical barrier to insulate the user's hand during operation of the device. As with the aforementioned devices, the Barnes device requires a heat shield to protect the user, as the placement of the handle is such that the user's hand is placed in proximity to the high temperature coals in the device upper compartment. The present invention provides a smaller upper volume for heating smaller portions of charcoal, while the user handle is placed well below the upper volume for elimination of any heat shield requirement.

Finally, U.S. Pat. No. 3,453,975 to Gunter discloses a charcoal starter, comprising an open ended tubular housing having a series of airway openings, an internal bead, an external handle means, and an internal perforate grate that is supported by the internal bead within the housing. Combustible material is placed below the perforate grate to ignite charcoal briquettes placed thereon, while the handle is placed along the exterior of the housing of the user to handle and dispense the lit charcoal as desired. The Gunter device provides not means to shield the user's hands, and further does not restrict the placement of the handle with regard to the upper cavity, wherein the present invention provides a lower-mounted handle away from a smaller upper cavity housing the lit charcoal. This provides an offset means without necessitating a heat shield for thermal protection.

The present invention provides an individual sized charcoal lighter that rapidly ignites and prepares charcoal for cooking or heating purposes. The lighter comprises a housing separated by a perforate grate into an upper and lower chamber, the upper chamber having a smaller overall volume than the lower chamber, and a user handle positioned below the upper chamber and adjacent to the lower chamber. The positioning of the handle removes the user's hand from the intense heat of the lit charcoal, while the serving size of the upper chamber is such that an individual can prepare charcoal briquettes without overuse or wasted charcoal thereafter. It is therefore submitted that the present invention substantially diverges in design elements from the prior art, and consequently it is clear that there is a need in the art for an improvement to existing charcoal lighter devices. In this regard the instant invention substantially fulfills these needs.

SUMMARY OF THE INVENTION

In view of the foregoing disadvantages inherent in the known types of charcoal lighter devices now present in the prior art, the present invention provides a new charcoal lighter housing that can be utilized for providing convenience for the user when lighting a small quantity of charcoal briquettes and preventing burns to the user's hand during operation.

It is therefore an object of the present invention to provide a new and improved charcoal lighter device that has all of the advantages of the prior art and none of the disadvantages.

It is another object of the present invention to provide a charcoal lighter device to provide a housing separated into an upper and lower chamber, the lower chamber being adapted to house consumable kindling or fire starting material and the upper chamber adapted to hold a small quantity of charcoal for individual or small group use.

Another object of the present invention is to provide a charcoal lighter device to provide a lower chamber having a plurality of air intake apertures and a perforate grate separating the two chambers, allowing air to flow over the first starting material and over the charcoal coils.

Yet another object of the present invention is to provide a charcoal lighter device that utilizes a user handle that is placed along the lower portion of the device housing, adjacent to the lower chamber and away from the upper chamber and further from its smoldering charcoal contents.

A further object of the present invention is to provide a charcoal lighter device that is simple in construction and one that requires no additional heat shield for protecting the user's hand when handling the device while the charcoal briquettes are lit.

Other objects, features and advantages of the present invention will become apparent from the following detailed description taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTIONS OF THE DRAWINGS

Although the characteristic features of this invention will be particularly pointed out in the claims, the invention itself and manner in which it may be made and used may be better understood after a review of the following description, taken in connection with the accompanying drawings wherein like numeral annotations are provided throughout.

FIG. 1 shows a cross section side view of the charcoal lighter housing of the present invention.

FIG. 2 shows a perspective side view of the present invention being used to light a quantity of charcoal.

FIG. 3 shows the present invention being utilized to transfer lit charcoal from the housing and into a barbecue grill.

DETAILED DESCRIPTION OF THE INVENTION

Reference is made herein to the attached drawings. 1, like reference numerals are used throughout the drawings to depict like or similar elements of the charcoal lighter device. For the purposes of presenting a brief and clear description of the present invention, the preferred embodiment will be discussed as used for lighting a small quantity of charcoal and for preventing burns on the user's hands while handling the device with ignited charcoal therein. The figures are intended for representative purposes only and should not be considered to be limiting in any respect.

Referring now to FIG. 1, there is shown a cross section side view of the charcoal lighter of the present invention, wherein the device includes a quantity of charcoal and combustible fire starting material loaded therein. The device itself comprises a housing having upstanding sidewalls and an internal volume separated by a perforate grate into an upper chamber and a lower chamber. The upper chamber is one wherein a small quantity of charcoal is housed and supported on the grate surface. This upper chamber is desired to be smaller in volume than the lower chamber, providing a smaller, more compact chamber for smaller quantities of charcoal and quicker light times prior to use as a source of heat for cooking. The lower chamber is one that is adapted to house a quantity of combustible starter material that is consumed by a flame, providing a shorter-term heat source that heats and ignites the charcoal thereafter through the grate. The sidewalls of the housing along the lower chamber include a plurality of airway apertures that allow air to flow over the combustible mate-
rial 15, through the grates 17 and over the charcoal during the heating process. The apertures also allow the user to insert a match or flame into the lower chamber for igniting the combustible material 15. The overall structure is one that provides a known function in preheating and igniting charcoal; however the upper chamber is adapted to be mounted far above the lower chamber, providing a smaller, individual-serving size of charcoal for cooking individual meals for small groups without wasted charcoal left over.

[0027] Mounted adjacent to the lower chamber 13 and externally from the housing interior is a user handle 12, projecting outward from the housing to provide a gripping surface for a user to hold the device and further to tilt it over when dispensing lit charcoal briquets. The handle 12 includes a pair of outward flanges and a vertical member surrounded by a thermally resistive material; however this does not provide the most benefit with regard to thermal protection. Rather the placement of the handle 12 with respect to the upper chamber and thus the lit charcoal 16 is paramount to removing the user’s hands from potential radiant and conducted heat therefrom. By placing the handle 12 below the upper chamber 14 and adjacent to the lower chamber 13, the handle 12 is away from the intense heat generated by the lit charcoal 16. The positioning of the perforate grate 17 therefore provides for a smaller upper chamber volume and a means to separate the handle portion from its location adjacent to the high temperature charcoal.

[0028] Referring now to FIG. 2, there is shown a perspective side view of the present invention being utilized to heat a smaller quantity of food, such as lighting the combustible starter material within the lower chamber 13 using a match 19 flame source. To set up the device, a quantity of charcoal is placed within the upper chamber 14 and a quantity of kindling starter material is placed within the lower chamber 13. The upper and lower terminations of the housing are open to allow charcoal to be freely inserted and dispensed, while the housing can be placed on a surface by placing the lower chamber over a quantity of the starter material to secure it therein. The apertures 16 in the lower chamber sidewalls provide for air infiltration and further for contacting the starter material with the flame source 19 to begin combustion and therefore heating of the charcoal within the upper chamber. The housing itself is preferably a hollow and cylindrical structure having the perforate divider grate positioned therein, while the handle 12 attaches to the housing exterior and the apertures are positioned about the lower chamber in a double row fashion. In another embodiment, the apertures 18 may be used as a stencil to spell out a product name or a phrase, including “MADE IN AMERICA.” This embodiment is one that provides a stylish design flare to the housing, while also providing the function of allowing air infiltration and a means to light the combustible material within the lower chamber.

[0029] Referring now to FIG. 3, there is shown a view of the housing being utilized as a means to transfer lit charcoal 16 into a barbeque grill 20 for cooking purposes. Once the starter material has been lit and consumed within the lower chamber of the housing, the charcoal has ignited and begins to ash as is normal. The heat from the ignited charcoal 16 spreads quickly from briquette to briquette within the small volume provided in the upper chamber, quickly bringing the charcoal to an operating and cooking temperature. Once this occurs, the user grasps the handle of the housing to position the charcoal over a grill or fire pit and tilts the housing over to dispense the lit charcoal thereinto for cooking of an individual meal or meal for a small group. Because of the handle position relative to the ignited coals, the user’s hand does not become burned and the handle does not require an additional heat shield member for user protection. Thus, the device provides a means to rapidly bring charcoal to operating temperature for small group and individual use, while also allowing ready handling of the device without fear of burns.

[0030] Conventional charcoal lighters are generally designed to light large amounts of charcoal for preparing food for large groups or over extended periods of cooking. For consumers who intend to cook for very small groups of people, the preparation of large quantities of charcoal can be highly inconvenient, as they must wait extensive periods of time for the larger amount of charcoal to ignite, while also leading to excessive charcoal waste if only small amounts of food are being prepared. Frequently replacing wasted charcoal may be expensive, wasteful and inconvenient over alternative such as gas burning grills and stoves. However, many individuals prefer the taste and quality of food prepared using charcoal over gas barbeque grills, therefore an alternative is required that does not lead to excessive charcoal use, waste and time spent preparing or cleaning up after the food preparation.

[0031] The present invention provides the ability to rapidly prepare a smaller quantity of charcoal for individual use or for use cooking smaller meals for fewer individuals. The housing of the present invention provides a small volume for rapid heating of a more suitable quantity charcoal, wherein the placement of the perforate grate between the housing upper and lower chamber create a larger space below the charcoal for starter material and for placement of the user handle, away from the heat-expelling charcoal in the upper chamber. The smaller quantity of charcoal and the larger volume for kindling facilitates optimal airflow for rapid and successful lighting of the briquets. Additionally, the unique design of this invention may provide just enough room in the top compartment to accommodate a precise amount of charcoal suitable for one or two people, ensuring that no charcoal is wasted. Young couples, empty nesters, traveling couples and individuals would find the device size, and its ability to prevent burns to one’s hands while handling, very convenient and efficient for cooking purposes. The absence of a heat shield reduces material and parts, facilitating manufacture and thus reduced cost for the end user while providing the same functional ability to prevent burns and rapidly ignite charcoal.

[0032] It is therefore submitted that the instant invention has been shown and described in what is considered to be the most practical and preferred embodiments. It is recognized, however, that departures may be made within the scope of the invention and that obvious modifications will occur to a person skilled in the art. With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

[0033] Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and
accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

I claim:

1) A charcoal lighter device, comprising:
   a hollowing housing having sidewalls, an open upper and
   lower termination and an interior volume;
   a perforate grate within said housing separating said hous-    ing interior volume into an upper chamber and lower
   chamber;
   said lower chamber being substantially larger in volume
   than said upper chamber, said grate being biased toward
   said housing upper;
   said upper chamber adapted to accept a small quantity of
   charcoal therein;
   said lower chamber adapted to accept fire starter material
   therein for igniting said upper chamber charcoal;
   said lower chamber sidewalls further comprising apertures
   for air flow and insertion of an ignition source;

   an external user handle connected adjacent to said lower
   chamber and below said upper chamber.

2) The device of claim 1, wherein said user hand further
   comprises a pair of outwardly protruding members connect-    ing to a vertical member, said vertical member having a
   thermally resistant cover thereover.

3) The device of claim 1, wherein said smaller upper chamber
   is adapted to support a small quantity of charcoal for
   individual meal or small group cooking.

4) The device of claim 1, wherein said apertures further
   comprise a stacked, double row of apertures radially spaced
   about said lower chamber sidewall.

5) The device of claim 1, wherein said apertures further
   comprise stencil letters or numbers to spell out a unique
   phrase or product name.

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