United States Patent

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[54] **PORTABLE FIRE BASKET**
2 Claims, 3 Drawing Figs.

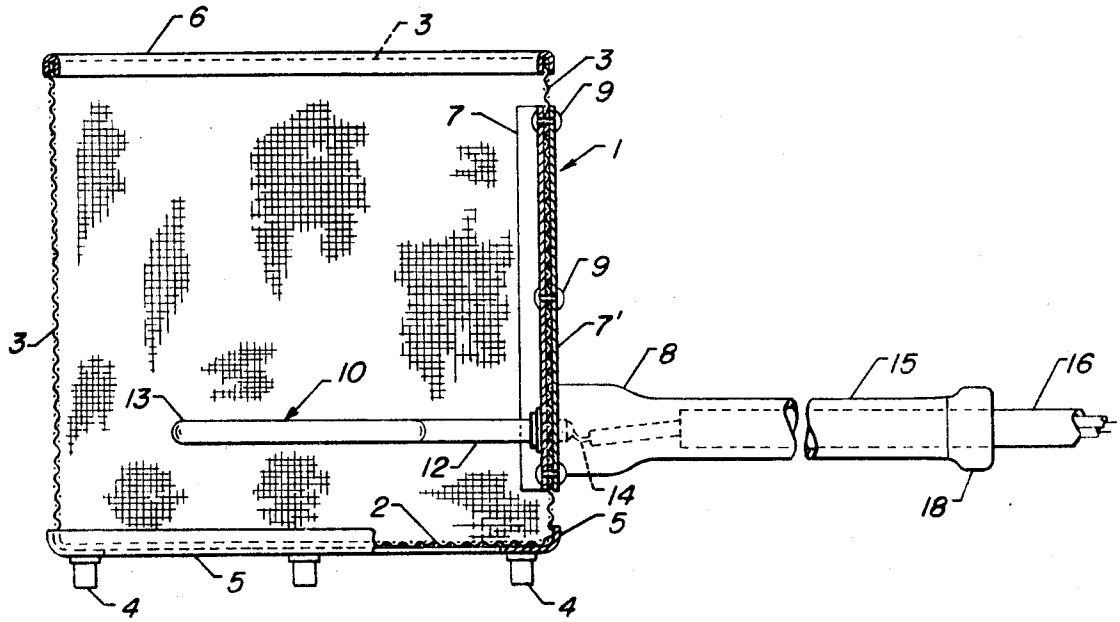
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44/35, 126/25, 219/260
[51] **Int. Cl.** **F23b 1/**
[50] **Field of Search** 219/260–1,
267–70; 317/98; 110/1F, 8E, 18, 21, 28D; 126/25B,
59.5; 44/40

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ABSTRACT: A fire basket device for solid fuels such as charcoal briquets, etc. which contains in combination therewith an electrical igniter device, said fire basket being portable in nature.



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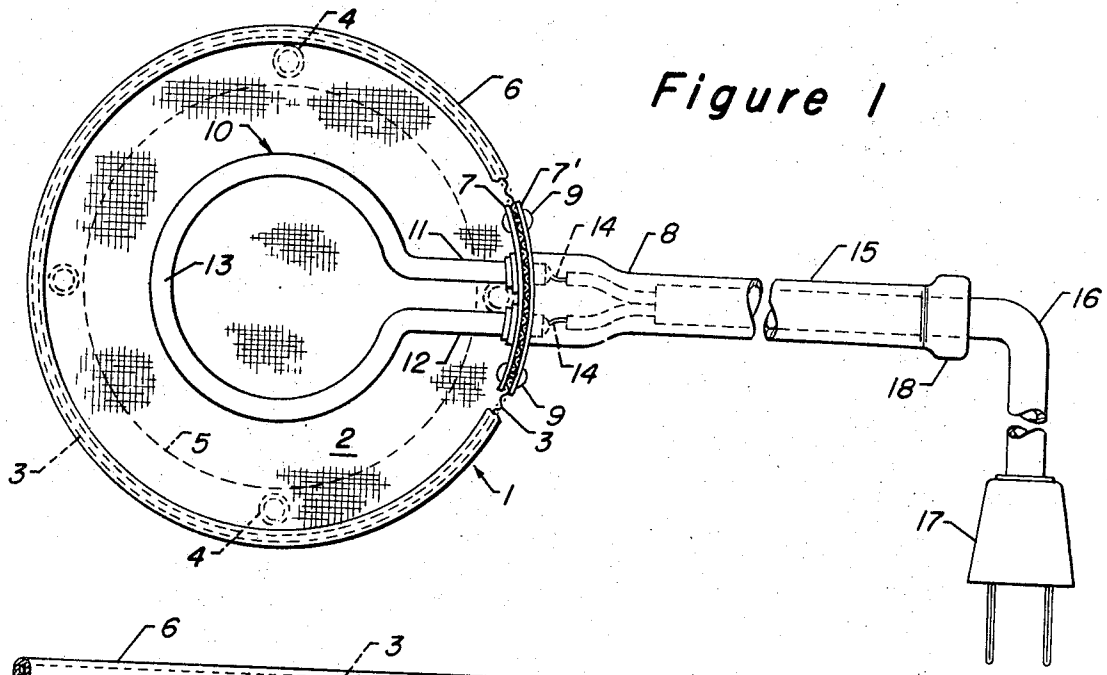


Figure 1

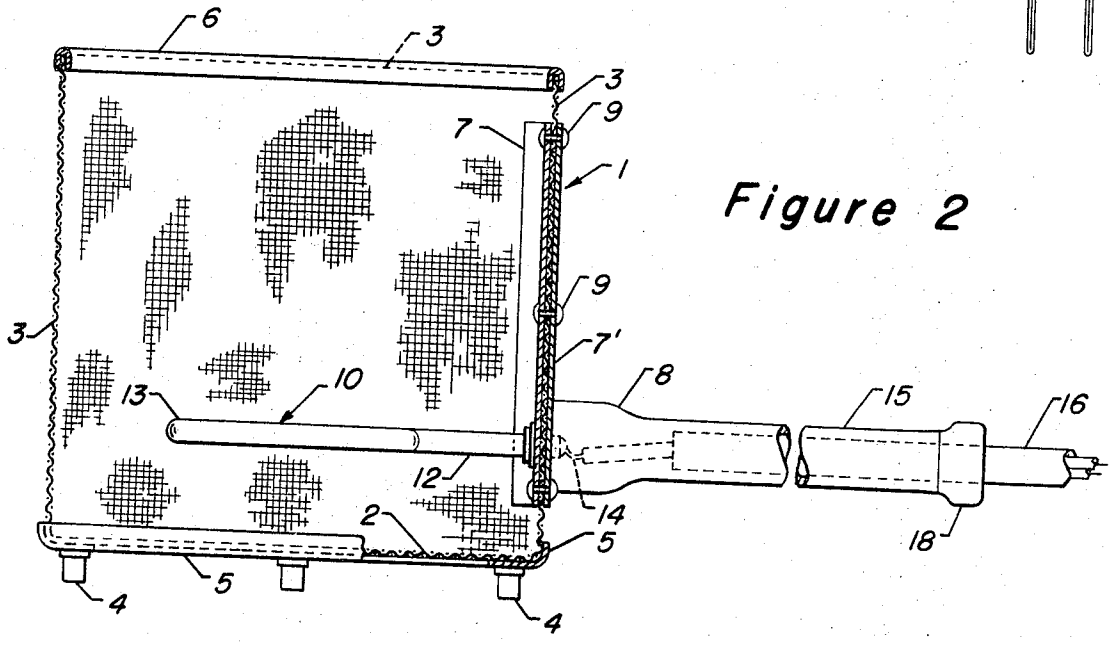


Figure 2

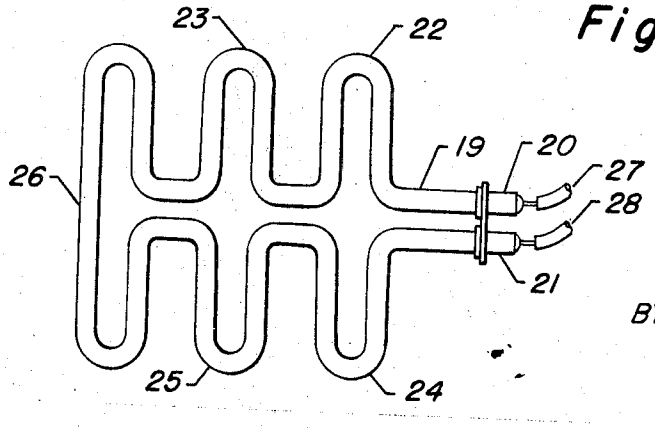


Figure 3

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PORTABLE FIRE BASKET

This invention relates to a device which is adapted to contain solid fuels. More particularly, this invention relates to a container adapted to contain solid fuels and which has incorporated therein an electrical igniting element, said container being portable in nature.

Heretofore, when utilizing solid fuel elements such as charcoal briquets or other types of solid fuel, it has been necessary to initiate the combustion of the fuel by some outside means. These means include the use of paper, wood, or some other kindling material having a relatively low ignition temperature, or in the alternative, a volatile chemical such as lighter fluid, gasoline, or other liquid which also possesses a low ignition point. However, the use of these materials may be dangerous and a considerable hazard in starting the fire may exist, especially when an inexperienced person attempts to ignite the solid fuel.

I have now discovered that the ignition of a solid fuel may be accomplished in a relatively simple manner by providing a portable fire basket which contains the solid fuel such as charcoal with an electrical ignition device whereby the solid fuel may be ignited in a relatively safe and harmless manner and thereafter the fuel may then, after ignition thereof, be transferred to the grill while in an ignited state and thereafter utilized as a source of heat for the cooking of the food. By making this device portable in nature, it will be simple for the device to be used in any place which is readily accessible to a source of electric energy such as electric outlets in a house or, if so desired, the cigarette lighter of an automobile. By utilizing the latter source of electrical energy it will be possible to use the device in any place such as parks or other recreational facilities which are not usually provided with electrical outlets. In addition, another advantageous feature of the device of the present invention is that the solid fuel which, as hereinbefore set forth, may be in the form of charcoal briquets, is easily stacked in the device in such a manner so as to attain maximum heating and ignition of the fuel without having to adjust or reposition the individual pieces of fuel, thus requiring a minimum amount of attention on the part of the user thereof.

The prior art is replete with electrical ignition devices and with grills which are utilized for barbecuing, etc. Such ignition devices include electrical fire starters which are adapted to be placed in a grill and thereafter withdrawn subsequent to the ignition of the fuel. Other devices which are described in the prior art include grills or heaters or fire tray assembly supports, the latter three devices presumably allowing some type of electrical device to be placed therein. However, in contradistinction to these devices, the present invention, as hereinbefore set forth, relates to the use of a portable device comprising a fire basket which contains in combination therewith an electrical igniter device which is relatively light in weight and easily portable from one place to another.

It is, therefore, an object of this invention to provide a relatively inexpensive and easily portable device for initiating the combustion of solid fuels.

Another object of this invention is to provide a fuel container device which provides, in combination a fire basket and electrical igniter, said device being portable in structure to permit the ignition and subsequent transfer of a solid fuel to a cooking device such as a barbecue grill, etc.

In one aspect an embodiment of this invention resides in a fire basket for solid fuels which comprises in combination a basket portion adapted to contain solid fuels consisting of a bottom section and side walls extending upwardly therefrom, said bottom section and side walls being constructed of a heat-resistant metal, and an ignition device consisting of a heat conductive element, a heat resistant handle and electrical connection means extending from said heat conductive element through said handle to a source of electrical energy.

Other objects and embodiments will be found in the following further detailed description of the present invention.

This invention consists in the following details as well as the combination of the portable container and electric ignition device, said invention being more fully understood in the following further detailed description as well as the accompanying drawings in which:

FIG. 1 is a top plan view of the structure of the invention, said structure comprising a fire basket and electrical ignition device;

FIG. 2 is a side elevational view of the fire basket and the electrical ignition device; and

FIG. 3 is one modification of the electrical ignition device.

Referring now in greater detail to the drawings in which similar reference characters refer to similar parts, there is shown in FIGS. 1 and 2 a solid fuel container 1 which consists of a bottom section 2, and side walls 3. The container for the solid fuels will consist of a fire resistant material such as metals including stainless steel or other steels which consist of iron along with other metals such as nickel, copper, manganese, etc., or other combination of metals, the metals being able to withstand the heat which is generated by the ignited fuel without altering the physical characteristics thereof. The bottom section and side walls may be made of a wire mesh or, if so desired, they may comprise perforated plates, the perforations being of a sufficient magnitude to permit sufficient ventilation for the ignition and continued burning of the solid fuel. The particular configuration of the container may be in any form such as circular, rectangular, square, oval, etc. The bottom section of the container which, for purposes of this invention, is referred to in the specification and appended claims as a fire basket may be provided with means 4 which are adapted to receive leg members, not shown in the drawing, whereby the fire basket may be placed in an upright position on said legs at some distance from the ground or floor depending upon where the fire basket is to be utilized. These legs may be of any suitable length ranging from 6 to about 18 inches or more. In addition, if so desired, the legs may be removed from the socket means, said socket means containing in one modification thereof, threads whereby the legs may be maintained in a stable position, and the fire basket set on the ground or any other place on socket means 4. Alternatively, bottom section 2 of fire basket 1 may be devoid of socket means 4 and the fire basket may then be placed directly on the ground. The bottom portion of the fire basket and the side wall portion thereof are securely maintained in the desired form in relation to one another by means of a collar or sleeve 5, said collar or sleeve maintaining said bottom portion 2 and said side walls 3 in a fixed relation to one another. In addition, the side wall portion of the fire basket, has provided on the upper edge thereof a second sleeve 6 which may consist of a metal ring or U-shaped member whereby the upper edges of said side wall 3 do not contain any sharp projections thus furthering the safety with which the device of the present invention may be used.

The fire basket is also provided along one portion of side wall 3 thereof with plates 7 and 7′ containing an orifice through which the electrical ignition means 8 is passed. Plates 7 and 7′ are attached to side wall 3 by means of fastenings 9 which may consist of bolts, rivets, screws, or any other means for maintaining plates 7 and 7′ in a rigid position against side wall 3 and in a fixed relationship to one another.

The electrical ignition device 8 comprises a heat conductive element 10 which may be of any configuration and may be formed of any heat conductive material such as a metal possessing excellent heat transmitting properties. As shown in FIG. 1, one form of the heating element 10 comprises two arms 11 and 12 extending substantially parallel to each other for a predetermined length and thereafter extending outwardly and forming a loop portion 13 at the extremity thereof. As shown in FIG. 2 of the drawing, heating element 10 extends into the fire basket through a lower portion of the side wall and lies in a plane parallel to bottom portion 2 of fire basket 1. If so desired, heat element 10 may be composed of a heat resistant tubular material such as metal which contains a high resistance wire or wires which are not shown in the drawing. The

high resistance wire or wires are connected to a low resistance, high conducting pair of wires **14** which extend through handle **15**. Handle **15** is constructed of a heat resistant material such as a ceramic or plastic material which is characterized by low conductive and heat resistant physical characteristics. The handle is securely attached to plate **7** by conventional means such as lockwashers, rivets, etc. in such a manner so that a stable and rigidly fixed relationship exists between handle **15** and fire basket **1**, thereby rendering the fire basket portable in nature. Handle **15** may be any length desired and in the preferred embodiment of the invention is of sufficient length so that the hand of the user of the fire basket is positioned a sufficient distance from the fire basket so as to obviate the use of protective gloves, the distance being sufficient so that any heat from the ignited solid fuel will not affect the comfort of the user. As shown in FIGS. **1** and **2**, the end of handle **15** opposite to fire basket **1** is provided with a conventional electric cord **16** and plug **17** which is adapted to be connected into a source of electrical energy. However, it is also contemplated within the scope of this invention that portion **18** of handle **15** may itself be provided with connecting means, either male or female in nature, so that the cord may be detached from the device thereby providing more portability to the fire basket without the attendant danger of having an electrical cord swinging about and creating a potential source of peril to the user of the fire basket device. In an alternative manner, it is also contemplated within the scope of this invention that handle **15** may be provided with attaching means not shown in the drawing whereby the handle may be disengaged from fire basket **1** and removed thereby facilitating the packaging and storing of fire basket **1** and handle **15**.

FIG. **3** illustrates a second modification of heat element **10**. In this modification heating element **19** consists of two arms **20** and **21** extending into fire basket **1** in a manner similar to that shown in FIG. **1** and **2**. That is, the heating element **19** extends into the fire basket through a lower portion of side wall **3** and lies in a plane substantially parallel to the bottom portion **2** of fire basket **1**. Arms **20** and **21** of heating element **19** possess a configuration whereby arm **20** has loops **22** and **23** and arm **21** has loops **24** and **25**. Arms **20** and **21** meet at the outer end in an elongated loop **26**. As in heating element **10**, arms **20** and **21** of heat element **19** may be solid in nature or may be tubular, in the latter case the tubular material containing a high resistance wire which is in turn connected to a low resistance high conducting pair of wires **27** and **28**. These low conducting wires extend into handle **15** and are in turn connected to the two poles of a conventional electrical cord **16**.

It is now readily apparent that the device of the present invention may be utilized to safely and effectively ignite a bed of solid fuel positioned in the fire basket without the attendant danger which may be present when having to utilize an extraneous source of ignition power such as liquid hydrocarbons, paper, wood, etc. In addition the device of the present invention has the added advantage of being portable in nature so that, if so desired, a relatively small amount of solid fuel may be ignited utilizing the least amount of electric current necessary to cause ignition and thereafter transferring the ignited fuel to a barbecue grill which may contain an additional amount of solid fuel which will in turn ignite from the burning fuel which is deposited therewith.

Although the device of the present invention has been described with reference to the drawings, it should be apparent that many modifications and changes may be made, both as to the shape and form of the electrical ignition device and the fire basket itself, the illustrative embodiments having been shown in the drawings, without departing from the spirit and scope of the invention, and that the present invention is not limited to the particular preferred embodiments which have been shown and described herein.

I claim:

1. A fire basket for solid fuels which comprises in combination a basket portion adapted to contain solid fuels consisting of a bottom section and side walls extending upwardly therefrom, said bottom section and side walls being constructed of a heat-resistant metal wire mesh, said bottom section is provided with means to receive leg members, and an ignition device consisting of a heat conductive element, a heat resistant handle and electrical connection means extending from said heat conductive element through said handle to a source of electrical energy, said heat conductive element extends into said fire basket from a position in the lower portion of said side walls parallel to said bottom section of said fire basket, and said heat resistant handle is stably connected to said side walls of said fire basket whereby said basket may be rendered portable.

2. The fire basket as set forth in claim **1** in which said fire basket possesses a cylindrical configuration.