May 22, 1962 E. KEENEY 3,035,566

CHARCOAL BURNER

Filed Aug. 21, 1958

Fig. 1.

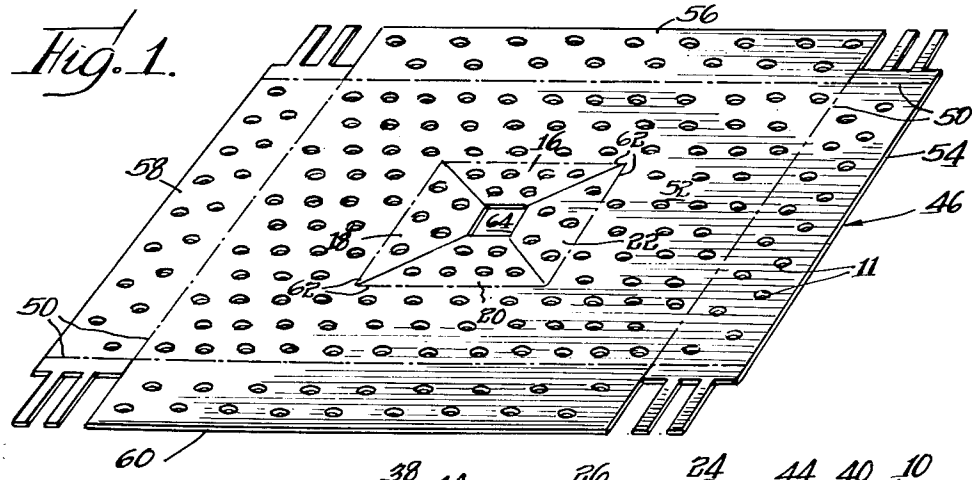


Fig. 2.

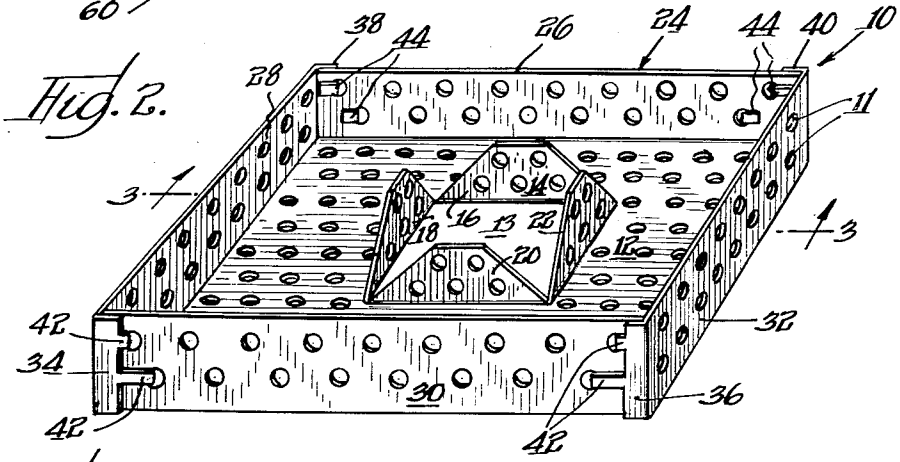
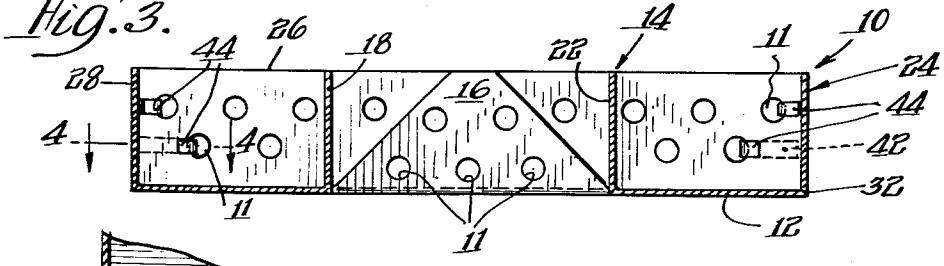


Fig. 3.



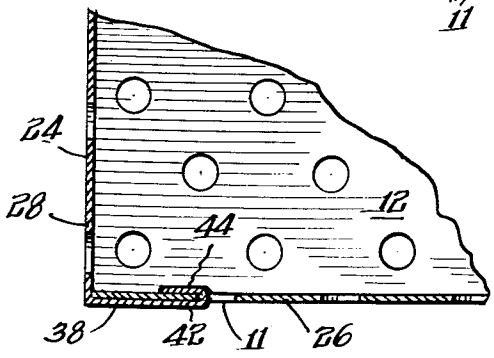


Fig. 4.

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United States Patent Office 3,035,566 Patented May 22, 1962

3,035,566

CHARCOAL BURNER

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Filed Aug. 21, 1958, Ser. No. 756,330
6 Claims. (Cl. 126—25)

This invention relates generally to picnic cooking devices and more particularly to a charcoal burner which may be used alone or in combination with conventional grills.

When charcoal briquets are burned in conventional grills a solid bed of fire results. This solid bed of fire is undesirable for proper cooking because the heat rising from the fire will always vortex to the center of the bed and produce a center "hot spot." This causes uneven heating, center burning and raw edge cooking of the food.

The instant invention provides a structure that has a central opening in the bottom of the container to produce an annular bed for the burning charcoal and thereby eliminate the center "hot spot." Thus, when a pan or other cooking utensil or meat is placed above the container, in proper spaced relation, a more uniform heating is obtained. That is, the heat is distributed evenly over the upper surface of the burning fuel and the center "hot spot" is eliminated.

An object of the present invention is to provide an improved charcoal burning device that yields an even heat and prevents a hot center.

Another object of the present invention is to provide a low cost charcoal burner, which is simple in structure, and economical to manufacture.

A still further object of the invention is to provide a charcoal burner which produces an annular bed for the coals.

A still further object of the present invention is to provide a preformed blank of foraminous sheet material which is so designed that it is ready for forming manually into a charcoal burner at the time of use without the necessity of tools.

Other objects and advantages of this present invention will be apparent from the following description and the accompanying drawings wherein:

FIG. 1 is a perspective view of a preformed blank of perforated material embodying the instant invention;

FIG. 2 is a perspective view showing the assembled burner;

FIG. 3 is a cross sectional view taken along line 3—3 of FIG. 2; and

FIG. 4 is a fragmentary sectional view taken substantially along line 4—4 of FIG. 3.

Referring now more specifically to the drawings, and first to FIGS. 2–4, there will be seen a charcoal burner designated generally by the numeral **10** incorporating the principles of this invention.

The burner **10** is made of relatively heavy gauge aluminum foil or thin sheet stock more or less uniformly perforated throughout by perforations **11** and comprises a flat bottom **12** having an opening **13** in the center portion thereof; an inner upstanding wall **14** adjacent the opening **13** comprising sections **16, 18, 20** and **22** being integrally connected thereto; and an outer upstanding wall **24** comprising sections **26, 28, 30** and **32** integrally connected to the peripheral edge of the bottom **12**. Wall sections **28** and **32** are provided at corresponding ends with extended portions or flanges **34** and **36** respectively which are oriented at right angles and overlap wall **30**. Similarly, the other ends of wall sections **28** and **32** are provided with extending portions or flanges **38** and **40** for overlapping wall section **26**. Flanges **34, 36, 38** and **40** are provided with tabs **42** for insertion in certain of the perforations **11** in the adjacent wall sections **26** and **30**.

Ends **44** of tabs **42**, as shown in FIG. 4, are bent around the wall section **26** thereby interlocking the adjacent wall sections.

FIG. 1 illustrates a preformed blank of perforated sheet material designated generally by the numeral **46** for forming into the charcoal burner **10** as described hereinbefore.

The sheet or blank **46**, preferably of aluminum foil of relatively heavy gauge, is provided with the plurality of perforations **11** as by a punching operation, although it is contemplated that a perforated or foraminous blank could be otherwise provided.

Score lines **50** impressed on the sheet **46** extend completely across the blank spaced inwardly from and parallel to the edges. Lines **50** define a central body portion **52**, and edge portions **54, 56, 58** and **60**. The central body portion **52** becomes the bottom and inner walls of the charcoal burner when it is set up, and edge portions **54—60** become the outer walls and the flanges and tabs therein.

The center of body portion **52** has score lines **62** thereon for defining the inner wall. A criss-cross cut is formed in the bottom **52** diagonally from the corners of the score lines **62** to the corners of a central aperture **64** to define the inner wall sections **16, 18, 20** and **22**.

It is to be understood that the general configuration of the burner **10**, although illustrated as square, may be of any other satisfactory shape. Also, the foraminous sheet material may be expanded metal, or hardware cloth, or perforated metallic foil. Aluminum foil of relatively heavy gauge is preferred because of the ease of handling and fabricating the device and because of the economical use of material. Further, while the perferred embodiment shown in the drawings has tabs at both ends of oppositely disposed outer side wall sections, the tabs or tab may be formed at one end of each side wall section. One or more tabs may be used depending at least in part on the height of the interior and outer side walls. The central aperture **13** necessarily has a width at least twice the height of the inner walls, and the inner and outer walls are conveniently of the same height.

It is to be understood that the specific embodiments of the invention as herein shown and described have been set forth for illustrated purposes only. Various changes in structure will no doubt occur to those skilled in the art and are to be understood as forming a part of the invention insofar as they fall within the spirit and scope of the appended claims.

The invention is claimed as follows:

1. A charcoal burning container formed from an integral and substantially flat foraminous blank having outer scoring spaced inwardly from the periphery of the blank and inner scoring adjacent the center of the blank and enclosing a central area; and comprising a foraminous bottom, outer foraminous wall means directed upwardly from the bottom along the outer scoring to form a foraminous peripheral outer wall of the container, and inner foraminous wall means directed upwarly from the bottom along the inner scoring to form a foraminous peripheral inner wall of the container and a central opening, the foraminous bottom between the inner and outer wall means defining therewith a charcoal supporting and burning bed around said central opening substantially eliminating vortex effects when burning the charcoal therein.

2. A charcoal burning container as claimed in claim 1, wherein the inner wall means comprises a plurality of foraminous wall sections.

3. A charcoal burning container as claimed in claim 2, wherein the foraminous wall sections are substantially of the same height as the outer wall means.

4. A charcoal burning container as claimed in claim 1,

wherein the outer wall means includes separate wall sections with at least two adjacent lapped edges with one edge having tab means engageable in the foramina in the adjacent edge.

5. A charcoal burning container as claimed in claim 1, wherein the outer wall means is in the form of a regular polygon comprising plural foraminous sections joined together by tab means on one section engaging foramina on an adjacent section.

6. A charcoal burning container as claimed in claim 1, wherein the inner wall means is in the form of a regular polygon comprising plural foraminous wall sections.

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