March 13, 1956 W. B. WOLFSON ET AL 2,738,260

FIRE KINDLING DEVICE

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Fig. 1.

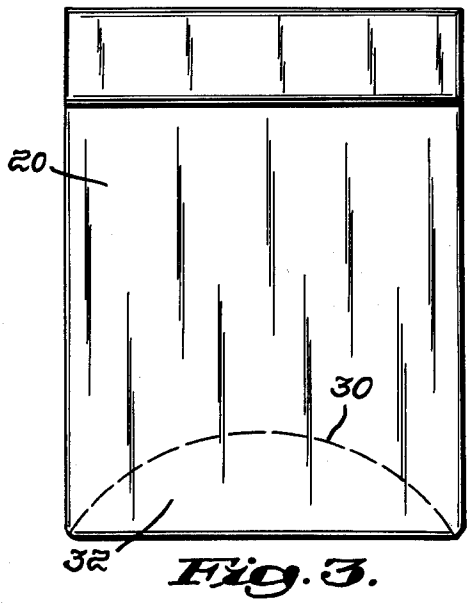


Fig. 2.

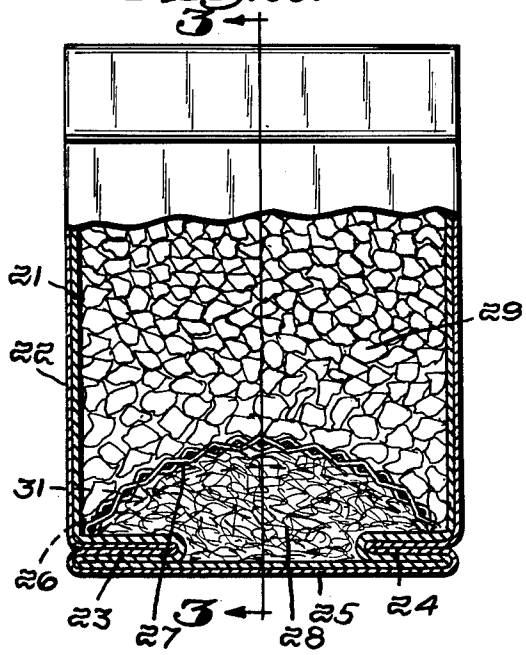


Fig. 3.

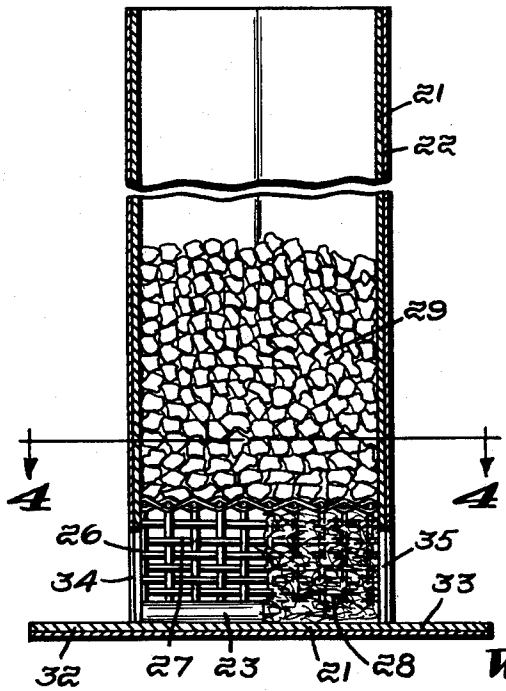
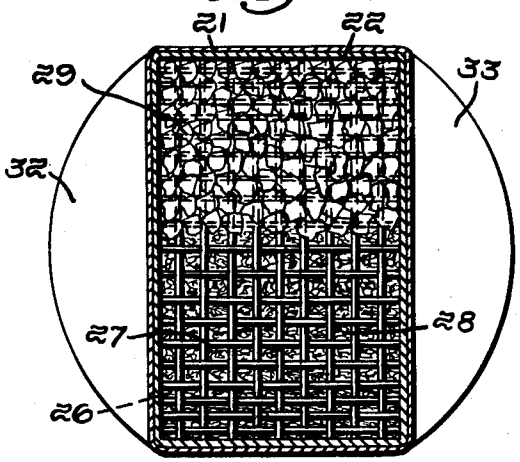


Fig. 4.



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Fig. 5.

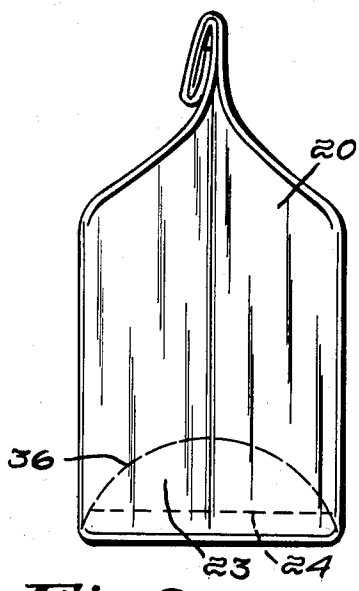


Fig. 6.

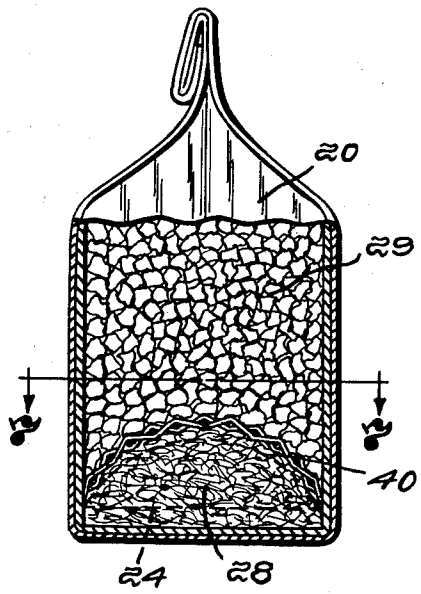


Fig. 9.

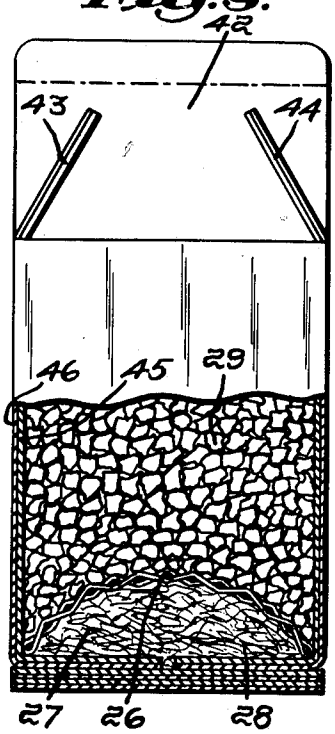


Fig. 7.

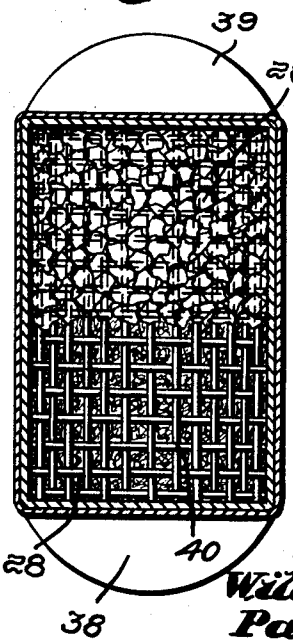
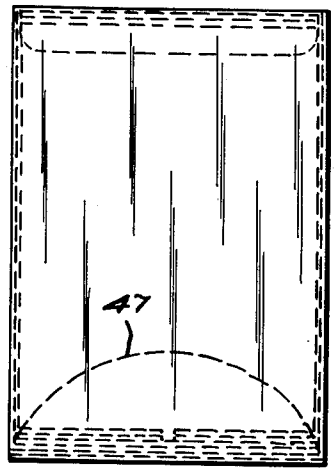


Fig. 8.



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FIRE KINDLING DEVICE

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Application March 16, 1953, Serial No. 342,374

4 Claims. (Cl. 44—40)

This invention relates to fire kindling devices and more particularly to a container for fuels such as charcoal, incorporating a kindling element for rapidly and evenly igniting the fuel.

Charcoal and similar fuels, such as briquettes made from pulverized coal or compressed wood shavings, are frequently used for indoor fireplaces and for outdoor cooking fires. These fuels cannot be readily ignited with a match, and ordinarily some other, more combustible material must be used as kindling. In order to obtain an even bed of coals, as is especially desirable for cooking, the fire must be laid with some degree of skill and allowed to burn down for some time.

The object of this invention is to eliminate much of the time, inconvenience, and dirt associated with preparing a fire with charcoal and similar fuels, by providing a packaged unit which contains kindling material as well as a portion of fuel sufficient for a fire. The device here disclosed need only be ignited with a match. Thereafter the fuel is quickly and uniformly ignited by the kindling material and is distributed so as to form an even bed of coals without further attention.

The device consists in general of a bag or box with a laminated wall having an inner layer of combustible material and a thin outer layer of incombustible material such as aluminum foil. A curved, perforated partition is inserted near the bottom forming a lower chamber in which a kindling material is placed. The charcoal or other fuel is placed in the container on top of the partition. Provision is made for tearing openings in suitable locations near the bottom so that the kindling may be lighted by a match. The top of the container is opened before lighting, so that the container serves in effect as a chimney which insures a good draft through the fuel. The combustible inner wall catches fire from the kindling and helps to ignite the charcoal uniformly all around, while the outer wall holds the contents of the container together. After a time, the outer wall bursts and the partition flattens out under the weight of the fuel, and the ignited fuel is distributed to form an even flat bed. No handling of the fuel is required.

In the drawings illustrating the invention:

Fig. 1 is a front elevation of a bag form of container embodying the invention,

Fig. 2 is a front elevation of the container shown partially in cross-section,

Fig. 3 is a cross-section taken along the line 3—3 of Fig. 2,

Fig. 4 is a cross-section taken along line 4—4 of Fig. 3,

Fig. 5 is a side elevation of a modification of the device,

Fig. 6 is a side elevation, partially in cross-section of the modification shown in Fig. 5,

Fig. 7 is a cross-section taken along line 7—7 of Fig. 6,

Fig. 8 is a side elevation of another modification of the device, and

Fig. 9 is a front elevation, partially in cross-section, of the device shown in Fig. 8.

In Figs. 1–4, the container 20 is formed in the manner

of a conventional paper bag from a laminated sheet material consisting of an inside layer 21 of combustible, relatively tough material such as heavy paper, and a thin outer layer 22 of incombustible material such as aluminum foil. The bag is spread to form a flat bottom 25 and conventional corner folds 23 and 24. A flexible grate 26, made for example of heavy wire screening of greater width than the bottom 25, is bent in the form of an arch and inserted in the bottom of the bag, leaving a compartment 27. The grate is detained in bent form by the side walls of the bag. The compartment 27 is filled with a readily ignitable kindling material 28 such as excelsior, paper scraps or strips, or wood shavings. The fuel 29, which may be charcoal, briquettes, or other suitable fuel, is placed on top of the grate 29 and fills the bag part way to the top. The top of the bag is folded over as in Figs. 1 and 6 to form a dust-tight and easily transportable package. A pair of scored or printed lines 30 and 31 define arcuate flaps 32 and 33 in the front and rear of the bag.

When the device is to be used the bag is cut or torn along lines 30 and 31 and flaps 32 and 33 laid flat as in Figs. 3 and 4, leaving openings 34 and 35 on either side of grate 26, and the top of the bag is opened. The kindling material 28 may be readily lighted by inserting a match through opening 34 or 35. The strong upward draft immediately created through the openings and top of the bag causes rapid ignition of the fuel 29. The foil outer wall serves to prevent local burning through of the bag so that the fuel remains confined until thoroughly ignited, and also confines the heat so as to speed up ignition of the fuel. The inner wall 21 also starts to burn, especially at the corner folds 23 and 24, where the wall is in direct contact with the kindling material. When the wall of the bag has been sufficiently weakened by the burning away of the inner layer, the foil outer layer 22 breaks and releases grate 26 and the fuel. The grate immediately flattens out and the fuel falls down, distributing itself so as to form an even flat bed of burning coals.

In Figs. 5–7 the arrangement of the kindling material and fuel in the laminated bag 20 is substantially the same as in Figs. 1–4, but the grate 40 is arched from front to rear of the bag instead of side to side. The score lines or markings 36, 37 are placed on the sides of the bag above the corner folds 23, 24 and the flaps 38, 39 are torn and laid down as shown in Fig. 7. The device functions as previously described.

In Figs. 8 and 9 the container is made in the form of a carton 41 having a conventional top closure consisting of a top flat 42 and sidewings 43 and 44. The walls of the carton consist of an inner layer 45 of cardboard or paper board, and an outer layer 46 of foil. The fuel grate and kindling are arranged as in the bag 20, the grate 26 being retained by the walls in arched shape. Score lines or markings as exemplified by line 47 indicate where the box is to be cut or torn to form openings into either side of the lower compartment 27. When top and side flaps of the device are opened as shown in Fig. 9, the kindling material may be lighted through the side openings. When the cardboard inner wall has been consumed, the foil outer wall collapses and permits the grate to flatten out as in the bag version of the device.

What is claimed is:

1. A fire kindling device comprising: a container having a laminated wall consisting of an inner, relatively tough layer of combustible material and an outer, relatively weak layer of incombustible material; a perforated, resilient partition having a free dimension in one direction larger than that of the container, said partition being retained by said wall in bent form within said container and dividing said container into an upper and a lower compartment; a readily combustible kindling material dis-

posed in said lower compartment; and fuel disposed in said upper compartment.

2. A fire kindling device comprising: a container having a generally rectangular bottom and an inner wall of combustible material surrounded by an outer wall of incombustible material; a perforated, arcuate, resilient partition having its ends resting on said bottom and being retained in arcuate shape by said walls; a marking generally conforming to the shape of said partition and defining an arcuate flap in said walls; a readily combustible kindling material disposed in said container below said partition; and fuel disposed in said container above said partition.

3. A fire kindling device comprising: a container having a wall composed at least partially of combustible material; a perforated, resilient partition having a free dimension in one direction larger than that of the container, said partition being retained by said wall in bent form within said container; a readily combustible kindling material disposed in said container below said partition; and fuel disposed in said container above said partitions.

4. A fire kindling device comprising: a container having an inner wall of combustible material surrounded by an outer wall of incombustible material; a perforated, resilient partition having a free dimension in one direction larger than that of the container, said partition being retained by said walls in bent form within said container; a readily combustible kindling material disposed in said container below said partition; and fuel disposed in said container above said partitions.

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