

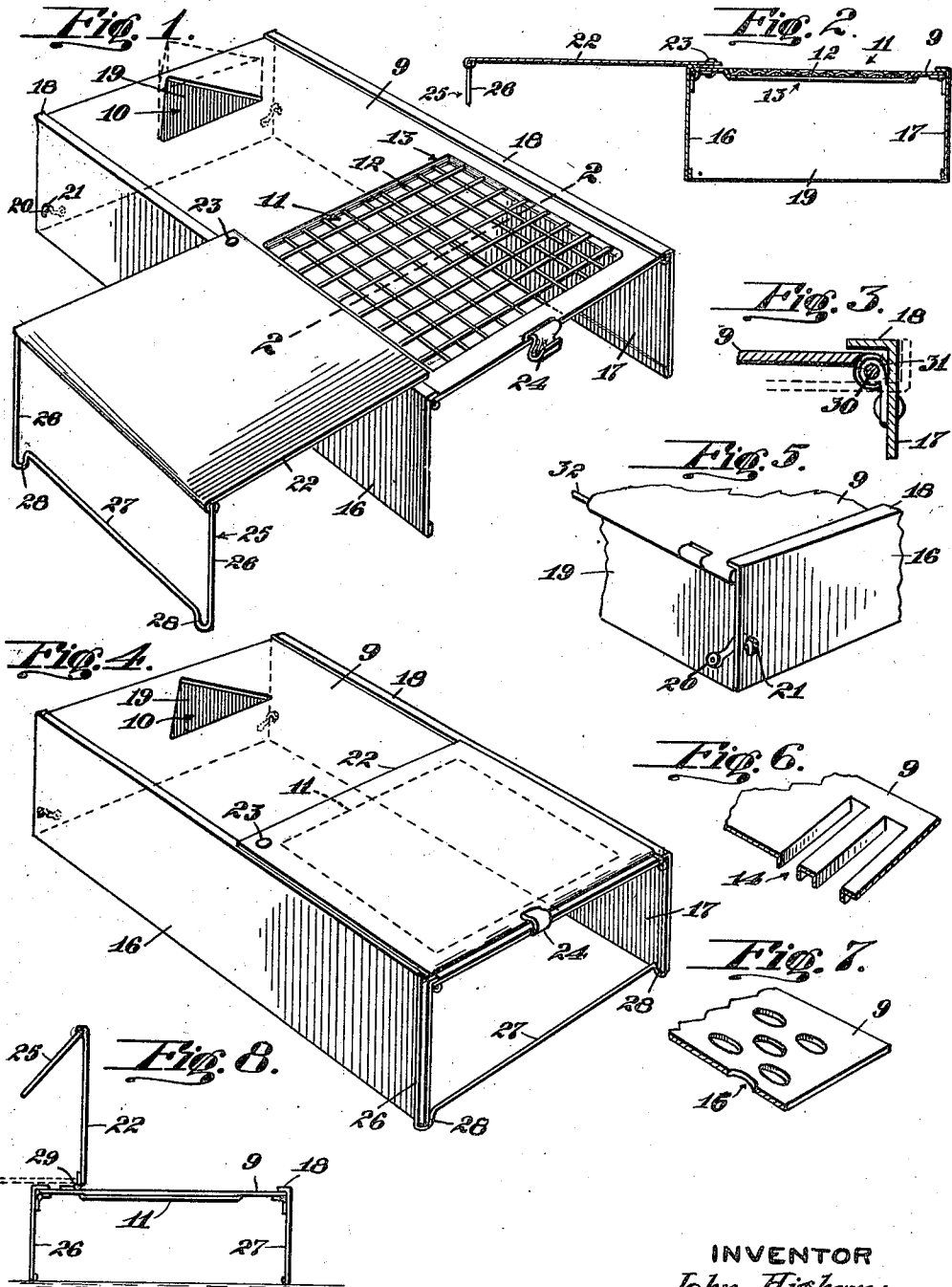
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COMBINED STOVE AND GRILL

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COMBINED STOVE AND GRILL.

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To all whom it may concern:

Be it known that I, JOHN HIGHAM, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Combined Stoves and Grills, of which the following is a specification.

This invention relates to a collapsible or foldable stove, and particularly pertains to a combined stove and grill which is especially adapted for campers' use.

An object of this invention is to provide a foldable stove which embodies a combined top, grill and shelf portions so that it may be utilized to several purposes at the same time.

Another object is to provide a foldable stove having a number of hingedly connected parts so arranged that when folded together a thin flat package is obtained, and having fastening and reinforcing means of such character that when the stove is assembled in its open position, the various parts will be securely tied together in such manner as to effectively brace the stove to render it strong, substantial, and hold it against accidental collapse.

Other objects will appear hereinafter. The invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a perspective view showing the stove in its open position with the shelf portion extended and the grill exposed.

Figure 2 is a view in section as seen on the line 2—2 of Figure 1.

Figure 3 is an enlarged detail in section showing the manner of forming the joint between the top and side portions of the stove and showing in dotted lines the manner of folding the sides against the underside of the top.

Figure 4 is a perspective view of the stove showing the shelf as closed over the grill.

Figure 5 is a detail in perspective of a rear corner of the stove showing the manner of fastening the back panel to the side panels.

Figures 6 and 7 are details in perspective illustrating modifications of the grill construction.

Figure 8 is a view in front elevation showing a modified form of the shelf mounting.

More specifically, 9 indicates the stove top comprising a plate of sheet metal which is formed with a stove pipe opening 10 and has an open or grill portion 11 preferably

formed as shown in Figure 1, that is by placing a latticed grid 12 over an opening 13 in the stove top. The grill may be formed by cutting slots 14 in the stove top, as shown in Figure 6, or by forming openings 15 of any desired shape as shown for example in Figure 7.

The grill constitutes a substantial part of the stove top and is preferably located at the forward end of the latter so as to provide an expanse of surface between it and the stove pipe opening, thus enabling the stove being used as a grill and as a stove at the same time.

Hingedly secured to the longitudinal edges of the top plate are side panels 16 and 17 which are formed with inturned flanges 18 along their hinged edges adapted to extend over the edges of the top plate when the side panels are disposed at right angles to the top plate in their open position, as shown in Figure 3. These flanges serve both to close the joint between the side panels and the top panel and to act as a stop to limit outward swinging movement of the panels and then serve to brace the stove laterally when the side panels are opened and spread apart under pressure so that the flanges will bear on the stove top.

An end panel 19 is hinged on the rear end of the top panel to extend between the side panels to form the back wall of the stove and to hold the rear ends of the latter in their open position. Hooks 20 on the back panel are engageable with openings 21 in the side panels to hold the back panel in its open position, as shown in Figure 6.

A combined cover and shelf panel 22 is mounted on the top plate and is adapted to be swung to extend over the grill to close the latter and is preferably pivoted at one corner, as indicated at 23 adjacent to one side of the top plate and close to one corner of the grill so that it may be swung horizontally and disposed either over the grill or to one side of the stove; the panel 22 being of such size as to close the grill when arranged thereover. A catch 24 is provided for fastening the cover-shelf panel in its closed position.

The cover-shelf being formed of sheet metal and adapted to project beyond the edge of the top plate a major portion of its length it is necessary to provide a support for the outer end of the panel which is here shown as comprising a leg member 25 consisting

of a wire bent to form side portions 26—26 connected by a cross portion 27. The side portions are bent inwardly and engage with the forward corners of the cover-shelf panel 5 to form a pivotal connection with the latter whereby the leg member may be folded to lie against the panel or arranged to extend perpendicular thereto. The leg member is adapted to be utilized as a tie for the forward ends of the side panels when the latter are in their open position and the cover closed, and for which purpose U-bends 10 28—28 are formed at the intersection of the side portions and the cross portion which are arranged to be positioned astride the lower edges of the side panels, as shown in Figure 4.

In some instances the cover-shelf panel may be mounted on the top plate by a hinge 20 29 so that it may swing vertically, as shown in Figure 8, but as this arrangement exposes the smoked side of the panel uppermost when it is extended as a shelf the pivotal mounting is preferred.

In forming the hinged connection between the stove top 9 and the side panels 16—17 the longitudinal edges of the top are beaded over a wire 30 which reinforces the side edges of the top panel, and portions of the lead are cut away to expose the wire so that loop members 31 riveted on the side panels may be engaged with the wire to form a hinge as shown in Figure 3. Wire 30 may be beaded in the front and rear ends 35 of the top panel on which the catch 24 and the hinges of the back panel may be mounted.

The operation of the invention is apparent from the foregoing, it being seen that when it is desired to employ the article 40 solely as a stove the side panels and the end panel are swung to their open position and connected together by the hooks and the cover-shelf panel is disposed over the grill. A stove pipe of suitable construction 45 may then be connected to the opening in the stove top as indicated in dotted lines in Figure 1. When it is desired to employ the grill, as in broiling and toasting or where the direct action of flames is desired, the cover-panel is swung to extend from the 50 side of the stove and the leg member thereon is swung down to provide a substantial support for the outer end of the shelf. A stove top area being provided between the grill 55 and the stove pipe affords a place on which cooking utensils may be placed to carry on a cooking operation at the same time the grill is being used; the shelf affording a convenient support for articles to be kept 60 warm or which could be placed on the shelf more advantageously than elsewhere. When it is desired to use the stove wholly as such, the grill is covered by disposing the cover-panel thereover, in which position it may be 65 securely held by the catch.

In folding the stove, the cover-panel is positioned over the top plate with the leg member folded against the underside of the cover-panel, the back panel is disconnected from the side panels and is swung inwardly 70 against the underside of the top plate, and the side panels are swung inwardly to extend over the end panel, thus forming a thin flat package which will occupy a minimum of space and may be readily transported. 75

I claim:

1. A combined foldable camp stove and grill comprising a top plate formed with a stove pipe opening and having a grill portion spaced from the stove pipe opening to provide an expanse of stove top surface between the grill and the stove pipe hole, a cover-shelf panel mounted to swing on the top plate and adapted to extend over the grill to cover same and to be swung to extend to one side of the stove to expose the grill and form a shelf, and a foldable leg member on the cover-shelf panel adapted to support the outer portion of the panel when it is in its extended position. 80 85 90

2. A combined foldable camp stove and grill comprising a top plate formed with a stove pipe opening and having a grill portion spaced from the stove pipe opening to provide an expanse of stove top surface between the grill and the stove pipe hole, a cover-shelf panel mounted to swing horizontally on the top plate and adapted to extend over the grill to cover same and to be swung to extend to one side of the stove to expose the grill and form a shelf, and a foldable leg member on the cover-shelf panel adapted to support the outer portion of the panel when it is in its extended position. 95 100 105

3. A combined foldable camp stove and grill comprising a top plate formed with a stove pipe opening and having a grill portion spaced from the stove pipe opening to provide an expanse of stove top surface between the grill and the stove pipe hole, a cover-shelf panel mounted to swing on the top plate and adapted to extend over the grill to cover same and to be swung to extend to one side of the stove to expose the grill and form a shelf, a foldable leg member on the cover-shelf panel adapted to support the outer portion of the panel when it is in its extended position, a pair of side panels hinged on the longitudinal edges of the top plate adapted to depend downwardly therefrom, and means on said leg member for engaging said panels and holding them against movement in their open position. 110 115 120

4. A combined foldable camp stove and grill comprising a top plate formed with a stove pipe opening and having a grill portion spaced from the stove pipe opening to provide an expanse of stove top surface between the grill and the stove pipe hole, a 125 130

cover-shelf panel mounted to swing horizontally on the top plate and adapted to extend over the grill to cover same and to be swung to extend to one side of the stove to expose the grill and form a shelf, a foldable leg member on the cover-shelf panel adapted to support the outer portion of the panel when it is in its extended position, and a latch for holding the cover-shelf panel in its closed position.

5. In a foldable combined camp stove and grill, a rectangular top plate having a grill portion and a wide area adjoining the grill portion, a pair of side panels hinged to the longitudinal edges of the top panel to swing inwardly against the underside thereof and adapted to be positioned perpendicular thereto, said side panels formed with inwardly extending flanges on their hinged edges adapted to project over the top of the top panel along the edges thereof to limit the outward swinging movement of the side panels and also close the joint between the panels and the top plate, an end panel hinged to the top panel to extend between the side panels when the latter are disposed in their open position, and means for engaging the end panel with the side panels.

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