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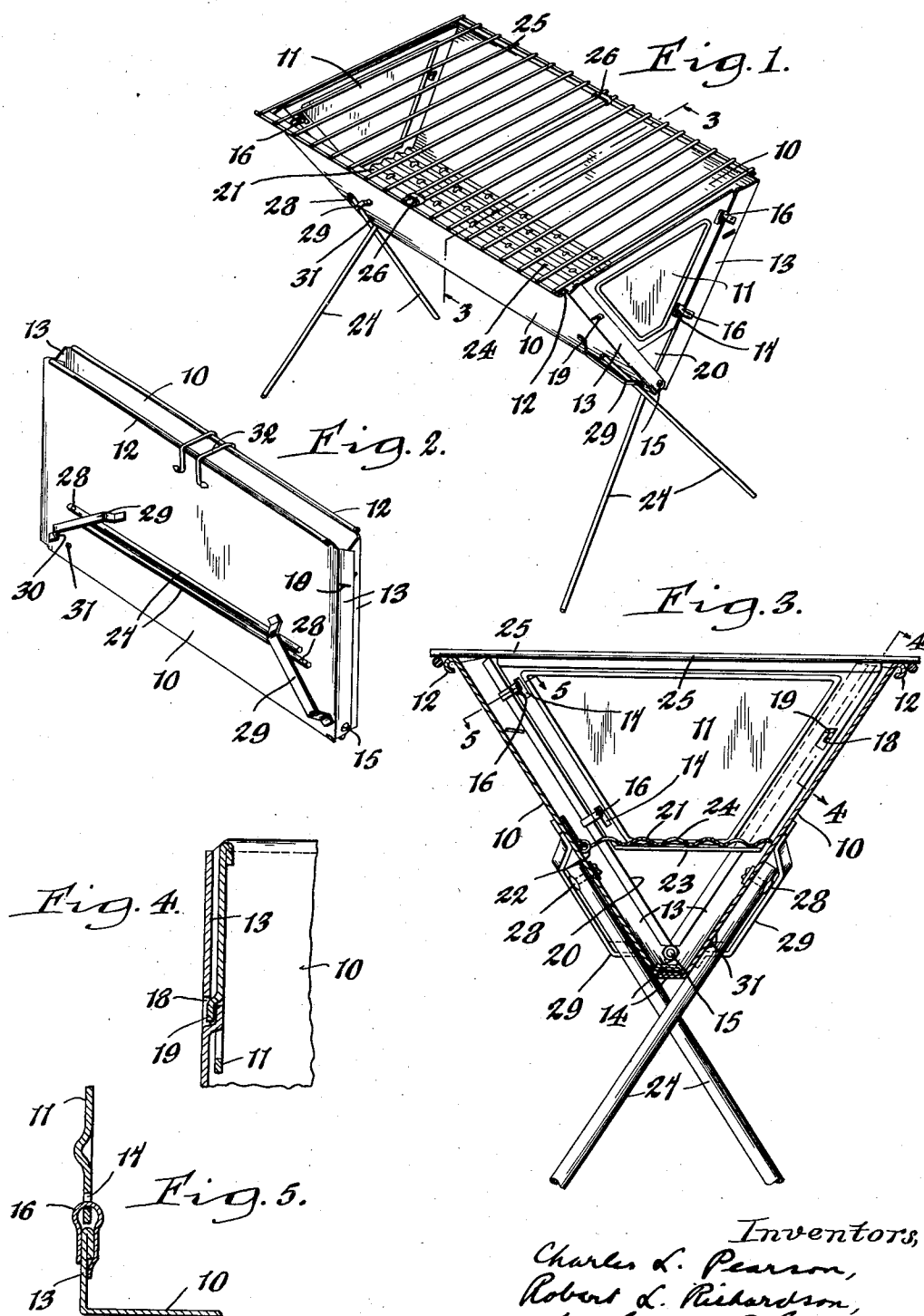
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CAMP STOVE OR THE LIKE

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CAMP STOVE OR THE LIKE

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This invention relates to improvements in collapsible camp stoves, particularly those of the kind which are adapted to burn fuel of a solid character, such as charcoal, coke and the like.

5 One object of the invention is to provide a stove of this character wherein the companion parts such as the sides and ends are counterparts and may be used interchangeably whereby to enable them to be formed by the same dies and to
10 be assembled with facility.

A further object is to provide a collapsible camp stove having foldable legs applied thereto for rigidly supporting the stove when in use and
15 which may be compactly folded when not in use, such legs serving further as handles to facilitate carrying the stove or for dumping its fire-contents.

A still further object is to provide a stove which is so designed that the fuel will burn freely and
20 uniformly, this object contemplating a stove having a substantially horizontal grate and a fire box closed on all sides above the grate.

A still further object is to so design the stove that fuel may be readily introduced into the fire
25 box.

In the accompanying drawings:

Figure 1 is a perspective view of a stove embodying the features of the invention. Figure 2 is a perspective view showing the stove in its
30 folded position. Figure 3 is an enlarged vertical section taken along line 3—3 of Figure 1. Figure 4 is an enlarged fragmentary section taken along line 4—4 of Figure 3. Figure 5 is a similar section taken along line 5—5 of the same figure.
35 Figure 6 is a side elevational view of the stove, the fire box being shown partly in section, and the grid folded back. Figure 7 is a top view thereof with the grid removed. Figure 8 is a fragmentary end view of the pivotally-connected
40 side walls of the fire box in their folded position. Similar characters of reference indicate corresponding parts throughout the several views.

The stove, as illustrated, includes rectangularly-shaped side walls 10 and triangularly-shaped
45 end walls 11 which form a substantially V-shaped fire box, the said walls preferably being in the form of sheet-metal stampings. The side walls 10 are counterparts. Each is formed with a reinforcing bead 12 along its upper edge, with flanges
50 13 along its opposite ends and with a flange 14 along its lower edge, the said side walls being pivotally connected by suitable connecting means 15 which pass through the flanges 13 near their lower ends. The side walls being counterparts,
55 it will be understood that one of the flanges 13

of each wall will fit against the outside of the cooperating flange of the other wall while the other flange will fit against the inside of the cooperating flange. The lower flanges 14 overlap, as best shown in Figure 3, when the stove is opened up
5 for use.

The end walls 11 are also counterparts. Hence one is pivotally connected to one side wall while the other is connected to the other side wall. For
10 this purpose, one of the flanges 13 of each side wall carries hinge loops 16 which pass through openings 17 formed in one edge of the end walls. The other flange of each side wall is preferably
15 formed with a slot 18 to accommodate a tang or latching member 19 which is pressed out of the opposite edge of the end walls. In this connection it will be noted that the openings 17 are elongated so that proper displacement of the end
20 walls 11 relative to the side walls can be effected to enable the ready insertion and removal of the tangs 19 into and out of their companion slots 18.

The end walls 11 are truncated. They terminate, therefore, a substantial distance above the lower ends of the side walls, whereby to provide openings 20, as shown in Figure 1, through
25 which air may enter the fire box below the grate. The latter is indicated at 21 and is preferably in the form of a perforated corrugated sheet. It is pivotally connected by strap hinges 22, shown
30 in Figures 3 and 7, and in its operative position is supported in a substantially horizontal plane by flanges 23 which are formed upon the end walls 11, the openings 24 and the longitudinal channels in the grate providing for the admission of
35 air to the fire box to create an effective draft and insure a uniform burning of the fuel.

The stove also includes a grid 25 for supporting the cooking utensils over the fire box. As shown and preferred, the grid is formed in two sections which are pivotally connected by links 26
40 so that either section may be opened, as shown in Figure 6, to enable fuel to be introduced into the fire box without disturbing the other section. The said links also enable the sections to be folded upon one another when the stove is not in use,
45 and to be contained between the folded side walls 10. This grid may contain more sections, if desired.

The legs of the stove are indicated at 27 and are so mounted as to be compactly folded when not in
50 use and unfolded to rigidly support the stove for use. Two of them are pivotally connected to each of the side walls 10, one at one end and the other at the other end. The pivots, which are indicated
55 at 28, are adapted to permit swinging movement

of the legs parallel to the side walls 10. Hence, when the side and end walls of the stove are open and the legs are moved to their unfolded or extended positions, the legs carried by one side wall cross those carried by the companion wall as best shown in Figures 1 and 2. A diagonally-extending strap or retainer loop 29 is applied to each side wall adjacent the opposite ends thereof and is associated with each of the legs 27. The said straps extend across the legs in the vicinity of the pivots 28. They are so formed that they provide end shoulders 30 which the legs engage as the latter are extended and just after they pass beyond the vertical or cambered position, as best shown in Figure 6. A teat or projection 31 is formed or provided upon the side walls 10 under each of the straps 29. The legs 27 are deflected slightly as they pass over the said projections, the latter being operative to resist return movement of the legs to their retracted positions.

It will be apparent that during movement of the legs to their extended or operative positions, the leg of each crossed pair which is first manipulated will pass beyond the associated projection 31 and engage the shoulder 30 of the associated strap 29. When the other leg is extended, however, the first leg will prevent it from moving far enough to engage the shoulder of the strap associated with it, the engagement of the two legs occurring just as the second leg passes over the projection 31 which is associated with it. In other words, each pair of crossed legs is held against movement in one direction by a shoulder 30 of one of the straps 29 while they are held against movement in the opposite direction by one of the projections 31, the particular shoulder and projection utilized depending upon the order in which the legs are extended. The mounting of the legs in the manner described not only effectually braces the stove when in use so that it will stand firm and rigid, but it has the further advantage that the stove may be picked up and carried by its legs, either to move it from one place to another or to dump the grate, without danger of its collapsing. In their retracted positions, the legs overlie the side walls 10 as best shown in Figure 2, the free end of each leg fitting behind the strap 29 associated with the adjacent leg.

When not in use, the stove is folded up into the compact self-contained unit shown in Figure 2. When it is desired to do this, assuming the grid to have been removed and the grate to have been dumped, the latter is swung upon the hinges 22 to a position against and substantially parallel with the side wall to which the said hinges are secured. Each of the end walls 11 is then released and swung to a position against the particular side wall 10 upon which it is mounted. After the grid is folded, it is arranged between the said side walls and the latter are closed so that they are substantially parallel with one another. During this latter operation the flanges 14 at the lower edges of the side walls separate, as best shown in Figure 8, and permit the discharge of any ashes which may have accumulated under the grate. The retraction of the legs and their arrangement along their respective side walls may be effected at any stage. When folded in the manner described, the stove is not only compact and self-contained but is of a shape which will enable its convenient storage in a small space. If desired, a pivoted retaining slip or catch 32 may be provided for

securely clamping the stove in its collapsed position.

While this improved camp stove is manifestly simple, compact and inexpensive in construction, its structural features assure a wide fire bed and an even distribution of heat without waste of fuel; they provide a separate fire and ash compartment and prevent any sparks or live ashes dropping to the ground, thus eliminating fire hazards; and the fire is fully protected from the wind and the heat is concentrated in such a way that it must pass upwardly through the cooking grid.

In the drawings, the grate 21 is shown as corrugated lengthwise, but, if desired, it may be corrugated crosswise of the stove.

We claim as our invention:

1. A collapsible camp stove, comprising pivotally-connected side walls movable to open and closed positions, a grid adapted to be supported by said side walls when the latter are in an open position, end walls, each of which is pivotally connected to one of said side walls and which is adapted to be detachably connected to the other, and supporting legs connected to said side walls.
2. A collapsible camp stove, comprising pivotally-connected, counterpart side walls movable to open and closed positions, a grid adapted to be supported by said side walls when the latter are in an open position, counterpart, foldable end walls, one of which is pivotally connected to each of said side walls and adapted to be detachably connected to the other, and supporting legs connected to said side walls.
3. A collapsible camp stove, comprising side walls pivotally connected to one another for movement to open and closed positions, foldable end walls, each of which is pivotally connected to one of said side walls and adapted to be detachably connected to the other when the side walls are in an open position, and a foldable grate pivotally connected to one of said side walls.
4. A collapsible camp stove, comprising side walls pivotally connected to one another for movement to open and closed positions, end walls, each of which is pivotally connected to one of said side walls and adapted to be detachably connected to the other when the side walls are in an open position, and a grate disposed in overlying relation and pivotally connected to one of said side walls intermediate the upper and lower edges thereof and movable to a position in which it extends substantially horizontally to the other of said side walls.
5. A collapsible camp stove, comprising side walls pivotally connected to one another for movement to open and closed positions, triangularly-shaped end walls, each of which is pivotally connected to one of said side walls to fold against the same in the closed position of such walls and adapted to be detachably connected to the other when the side walls are in an open position, and a foldable grate hinged to one of said side walls to fold against the same in the closed position of such walls and to span the latter in the open position thereof.
6. A collapsible camp stove, comprising side walls pivotally connected to one another for movement to open and closed positions, triangularly-shaped end walls, each of which is pivotally connected to one of said side walls and detachably connected to the other when the side walls are in an open position, said end walls terminating in spaced relation with respect to the

pivotal connections of said side walls to provide air intake openings, and a grate supported between said side walls and above said openings.

7. A collapsible camp stove, comprising side walls pivotally connected to one another for movement to open and closed positions, triangularly-shaped end walls, each of which is pivotally connected to one of said side walls and detachably connected to the other when the side walls are in an open position, said end walls terminating at their lower edges above the pivotal connections of said side walls to provide air intake openings and having flanges thereon, and a grate pivotally connected to one of said side walls to fold against the same in the closed position of such walls and to engage said flanges in the open position thereof.

8. A collapsible camp stove, comprising side walls flanged at their ends, said flanges being pivotally connected to permit said side walls to be moved to open and closed positions, end walls, each of which is pivotally connected to a flange of one of said side walls and detachably connected to a flange of the other when the side walls are in an open position, and a grate which is pivotally connected at one of its edges to one of said side walls for movement to a position substantially horizontally to the other of said side walls.

9. A collapsible camp stove, comprising side walls flanged at their ends, said flanges being pivotally connected to permit said side walls to be moved to open and closed positions, end walls, each of which is pivotally connected to a flange of one of said side walls, means for detachably connecting its other end to a flange of the opposing side wall when the side walls are in an open position, said end walls terminating at their lower edges above the pivotal connections of said flanges to provide air intake openings, a grate pivotally connected to one of said side walls for movement to a position above said openings, and pairs of supporting legs pivoted to the outside faces of said walls in parallel overlying relation thereto and movable to a projected unfolded supporting position extending beyond said side walls.

10. A collapsible camp stove, comprising side walls pivotally connected to one another for movement to open and closed positions, and a leg pivotally connected adjacent each end of each side wall for movement in the plane of the wall to extended and retracted positions, whereby when said side walls are in an open position, and said legs are extended, the companion legs at

the corresponding ends of said side walls cross each other.

11. A collapsible camp stove, comprising side walls pivotally connected to one another for movement to open and closed positions, end walls, one of which is pivotally connected to each of said side walls and detachably connected to the other, a grate pivotally connected to one of said side walls for movement to a position extending substantially horizontally to the other of said side walls, and a leg pivotally connected adjacent each end of each side wall for movement in the plane of the wall to extended and retracted positions, whereby when said side walls are in an open position, and said legs are extended, the companion legs at the corresponding ends of said side walls cross each other.

12. A collapsible camp stove, comprising side walls pivotally connected to one another for movement to open and closed positions, triangularly-shaped end walls, each of which is pivotally connected to one of said side walls and detachably connected to the other when the side walls are in an open position, said end walls terminating in spaced relation with respect to the pivotal connections of said side walls to provide air intake openings, a grate pivotally connected to one of said side walls and movable to a position above said openings and extending substantially horizontally to the other side walls, a grid supported by said side walls, and a leg pivotally connected adjacent each end of each side wall for movement in the plane of the wall to extended and retracted positions, whereby when said side walls are in an open position, and said legs are extended, the companion legs at the corresponding ends of said side walls cross each other, said legs in their retracted positions overlying said side walls substantially at right-angles with respect to their extended positions.

13. A camp stove, comprising compartment-forming side walls pivoted to each other for movement to open and closed positions, the lower ends of said walls terminating in opposing flanges for closing the lower end of the resultant compartment, foldable end walls connected to said side walls and terminating at their lower edges above the flanged ends of such side walls to provide draft openings, and a foldable grate disposed between the side walls to divide the compartment into a fire box and ash pit.

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