

May 15, 1928.

J. F. BRITTON

1,669,852

CAMP STOVE

Filed June 9, 1927

4 Sheets-Sheet 1

Fig. 1.

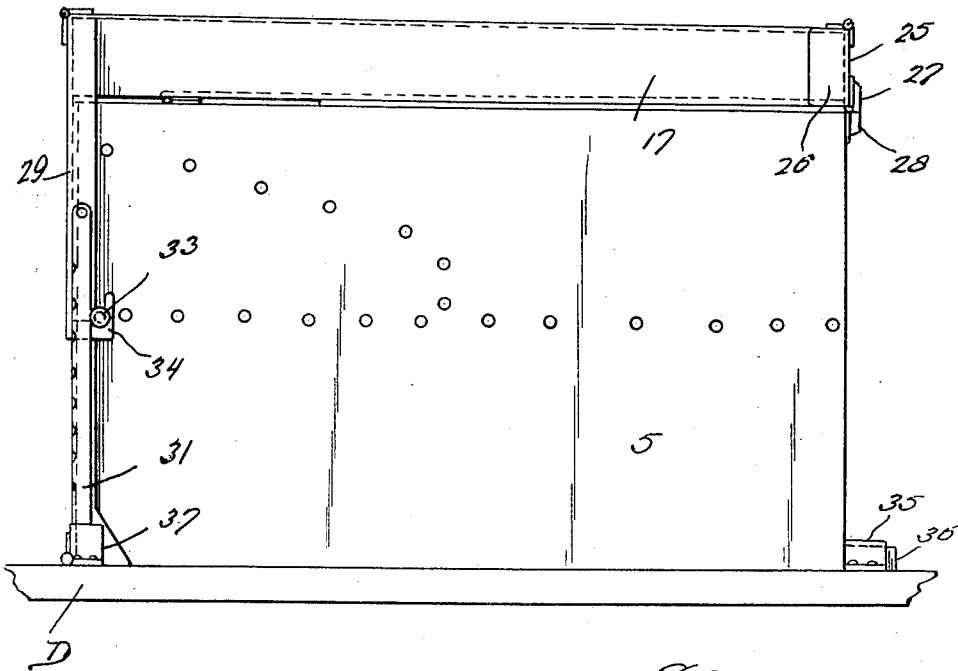


Fig. 2.

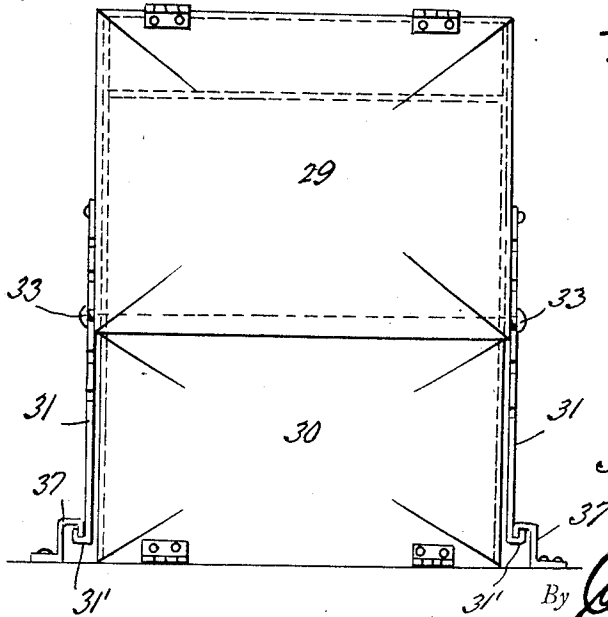
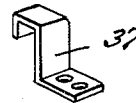


Fig. 10.



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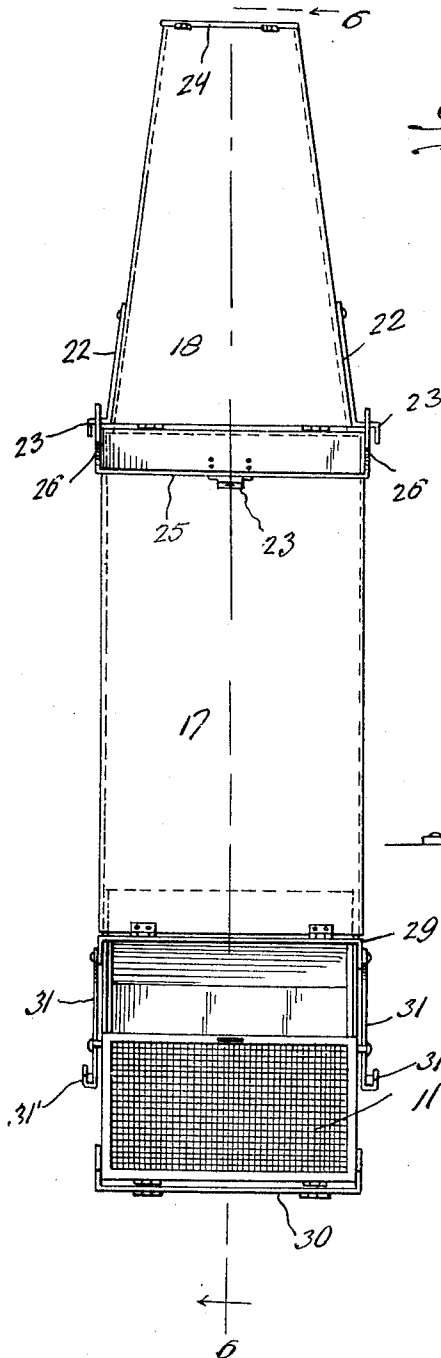


Fig. 4.

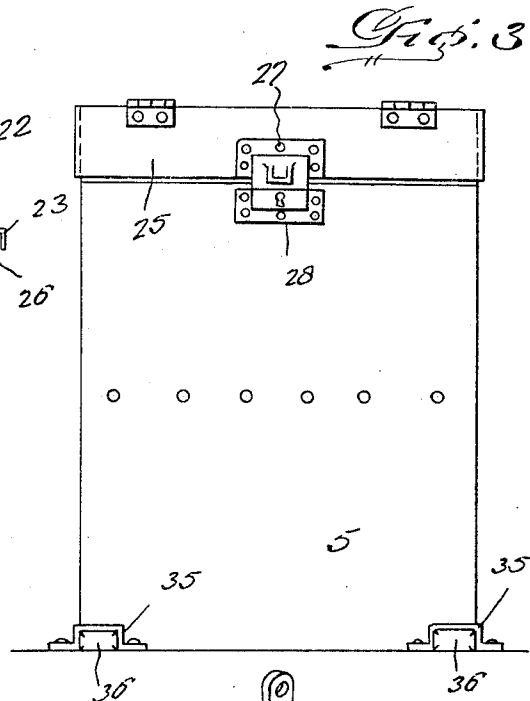


Fig. 3.

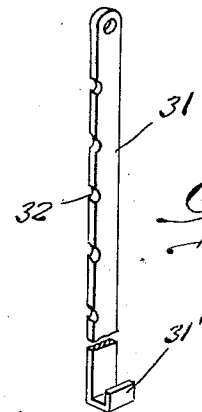


Fig. 11.

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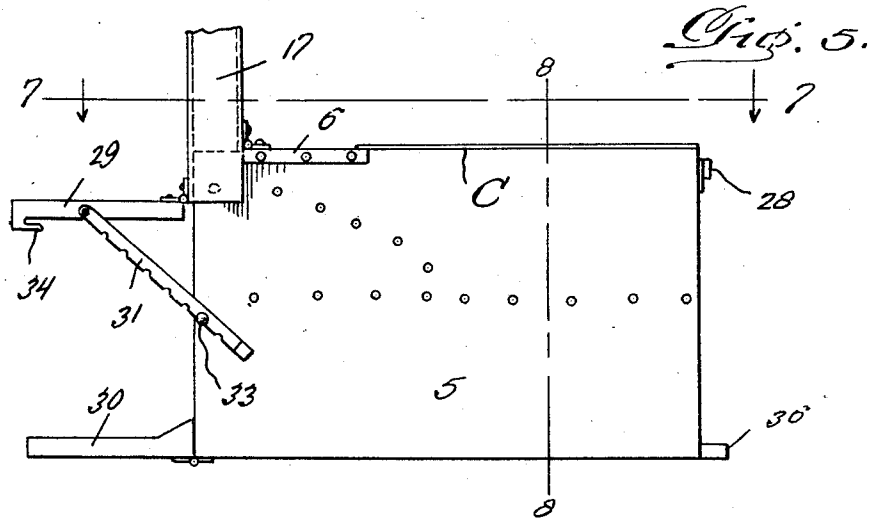
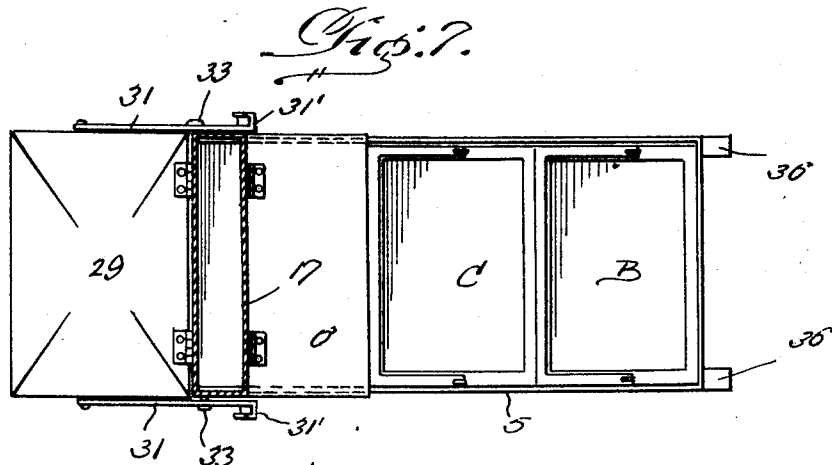
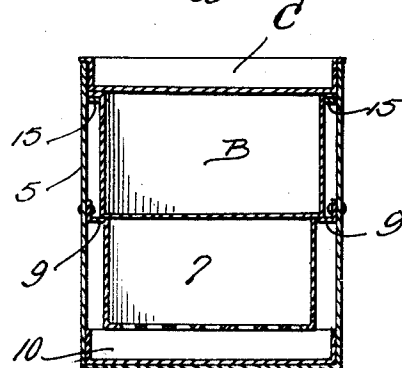
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4 Sheets-Sheet 3



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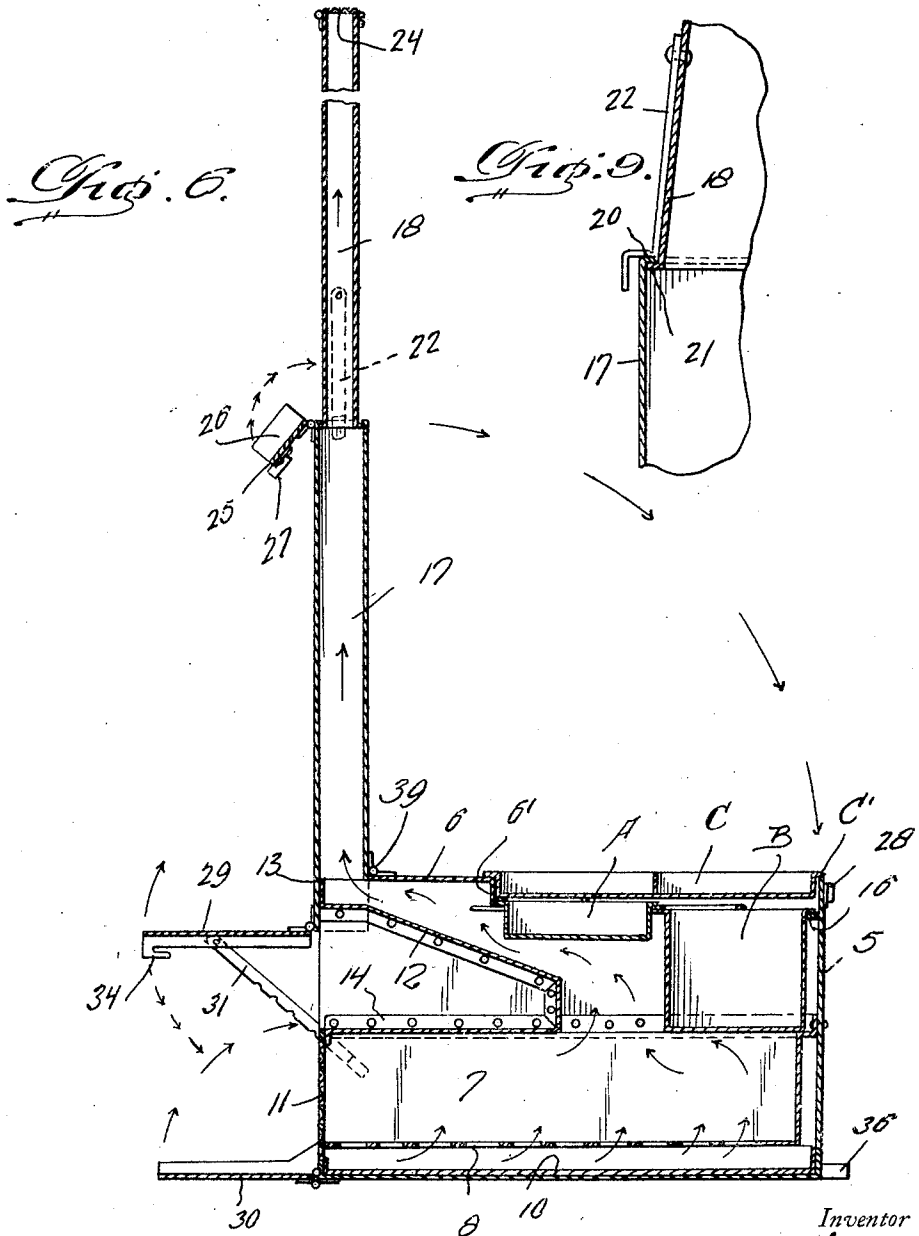
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CAMP STOVE

Filed June 9, 1927

4 Sheets-Sheet 4



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UNITED STATES PATENT OFFICE.

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CAMP STOVE.

Application filed June 9, 1927. Serial No. 197,599.

This invention relates to new and useful improvements in stoves primarily adapted for use in camps and the like, the invention being characterized by its relatively simple construction and association of the various parts so as to enable the stove to be readily set up for use.

In carrying out the present invention there is provided a camp stove that may be carried upon the running board of an automobile or disposed upon any supporting surface, means being provided to facilitate the rigid anchoring of the stove to the running board or other support when certain structural elements thereof are swung into inoperative position.

The construction of the present camp stove is such as to resemble a trunk or the like when not in use and arranged upon the running board of an automobile and within which may be disposed various articles, tools, or the like necessary to a tourist or camper.

In the drawings wherein like reference characters indicate corresponding parts throughout the several views of the same:

Figure 1 is an outer side elevation of my improved camp oven rigidly anchored to the running board of an automobile or other suitable support, the oven being disclosed in closed up position.

Figure 2 is a front end elevation, the fire box and oven doors being closed.

Figure 3 is a rear end elevation when in closed up position.

Figure 4 is a front end elevation when set up for use.

Figure 5 is an outer side elevation of the oven when set up for use, the fire box and oven doors being in open position and the smoke stack being fragmentarily disclosed.

Figure 6 is a detail longitudinal section through the entire oven when in set up condition for use.

Figure 7 is a horizontal section taken substantially upon the line 7—7 of Figure 5, the line being taken through the smoke stack at a point directly above the body of the device.

Figure 8 is a transverse section taken substantially upon the line 8—8 of Figure 5.

Figure 9 is a fragmentary longitudinal section through the adjacent ends of the telescopic sections of the smoke stack for more

clearly disclosing the manner of maintaining the sections in extended position.

Figure 10 is a perspective view of one of a pair of brackets permanently attached to the automobile running board or other support for the oven to facilitate the anchoring of the same thereto, and

Figure 11 is a perspective view of one of the combined oven door supporting and unit locking arms that form an essential feature of the present invention.

Now having particular reference to the drawings, my novel oven consists of a sheet metal housing 5, preferably of rectangular formation open at its front end as more clearly indicated in Figure 6 and open throughout the major length of the top thereof, a rigid panel 6 being attached to the top of the housing in slightly spaced relation with the forward edge thereof as clearly disclosed in Figures 5, 6, and 7.

Arranged longitudinally within the housing 5 at a point slightly above the bottom wall thereof is a sheet metal fire box 7 open at its top side and having perforations 8 at the bottom thereof, see Figures 6 and 8. Surrounding the upper edge of the fire box 7 is a channel flange 9 riveted to the sides and closed end of the housing as clearly indicated in Figure 8.

As clearly disclosed in Figures 6 and 8, the fire box 7 is supported in position above the bottom of the housing 5 so as to provide an air space therebetween. There is removably arranged upon the bottom wall of the housing directly beneath the fire box an ash pan 10. The outer end of this fire box 7 is open and equipped with a fire screen 11 hinged at its lower edge to the bottom wall of the fire box directly in front of the ash pan 10.

Arranged within the housing 5 at the forward open end thereof and supported upon the opposite sides of the fire box channel flange 9 is a sheet metal oven 12 open at its front side and having an inclined top wall, again see Figure 6. The forward edge of this oven top wall is extended horizontally beneath the top of the housing 5, while the forward edge thereof is bent upwardly as at 13 for closing the forward end of the housing above the oven top wall. This oven only consists of a bottom wall, a top wall and a

connecting rear end wall, all of which are formed at their edges with inwardly extending flanges 14 to facilitate the riveting of the oven within the housing 5, certain of the connecting rivets between the fire box 7 and housing serving to connect the oven within said housing.

Arranged horizontally upon the inner surfaces of the housing side walls above the oven 12 and directly beneath the open top thereof are ribs 15—15, the rear edge of the top panel 6 being formed with a depending flange 6' that is in turn formed at its lower edge with an inwardly extending flange as clearly indicated in Figure 6. Also upon the inner side of the housing back wall is a rib 16 extending between the side ribs 15—15, said ribs serving to support a pair of cooking vessels A and B, the upper open ends of which are flanged for resting upon the ribs 15—15 and the adjacent rib 16 and the flange of the panel 6. As disclosed in Figure 6 the rearmost pan B is of great depth and also rests at its lower end upon the channel at the open top side of the fire box 7, the vessel A being of shallow depth and spaced from the inclined top wall of the oven 12 so as to permit the smoke from the fire box 7 to pass between the oven and pan as indicated by the arrows in Figure 6.

Furthermore, the adjacent flanges of the vessels A and B overlap to prevent the passage of smoke therebetween. When the vessels A and B are not desired for use, a frying surface may be provided at the top of the housing by arranging a relatively elongated multi-compartment pan C within the open top of the housing which pan C is flanged around its edge as at C' for resting upon the edges of the housing side and rear end walls as well as the adjacent edge of the top panel 6.

The invention further consists of a novel smoke stack including a pair of flat-like sections 17 and 18, the section 18 being constructed for telescopic engagement within the section 17 as clearly disclosed in Figures 4, 6 and 9. The opposite ends of these smoke stack sections are open as is also the lower edge of the rear wall of the section 17. The side and front walls of the section 17 extend beyond the lower edge of the rear wall thereof for engagement over the front and sides of the housing when the smoke stack is raised to the position more clearly indicated in Figures 4, 5 and 6.

The upper end of the section 17 is flanged inwardly as at 20 while the lower end of the section 18 is flanged outwardly as at 21, said flanges engaging when the section 18 is drawn upwardly to the extended position disclosed in detail in Figure 9. To maintain the section 18 in upwardly extended position the opposite sides thereof at the lower end of said section are provided with longitudi-

nally extending spring strips 22—22, the upper ends of which are riveted to the sides of the section 18, while the lower ends thereof are provided with lateral extensions 23—23 for engaging upon the upper end of the section 17 when the section 18 is extended as clearly illustrated in said detail view, Figure 9. Obviously by springing the strip 22—22 in an outward direction and then swinging the same to a reverse position upon the sides of the section 18 which is of conical formation the section 18 may be lowered into the section 17.

The upper end of the section 18 is provided with a suitable fire screen 24, while hinged to the front wall of the section 17 at the upper end thereof is a lid 25 provided at its ends with right angular skirts 26—26 for engaging over the sides of the section 17 when said lid is swung to closed position after the section 18 has been telescoped into the main section 17. The free edge of this lid 25 is equipped with one unit of a conventional trunk lock 27, the lock pin of which is adapted for engagement within a keeper 28 at the upper edge of the rear wall of the housing 5 when the smoke stack is swung over into position upon the top of the housing as clearly disclosed in Figure 3.

Hinged to the lower edge of the front wall of the smoke stack section 18 is an oven door 29, while hinged to the forward edge of the bottom wall of the housing 5 is a fire box door 30, the dimensions of the oven door 29—29 being such that the lower edge thereof will overlap the upper edge of the fire box door 30 when said doors are swung to closed position as more clearly indicated in Figure 2. Each of the doors 29 and 30 is provided with inwardly directed flanges at their opposite ends, while pivoted to the flanges of the door 29 are arms 31—31, the outer edges thereof being notched as at 32 for engaging with pins 33—33 upon the opposite side walls of the housing 5 for maintaining the door 29 in predetermined elevated position.

The lower ends of the side flanges of the door 29 are formed with hooks 34—34 for engagement with said pins 33—33 after the arms 31—31 have been removed therefrom and the door moved to completely closed position. For engagement with the pins 33—33 after the arms 31—31 have been removed therefrom and the door moved to completely closed position and the smoke stack construction swung rearwardly upon the top of the housing as indicated by the dotted lines in Figure 6. Obviously the association of the door 29 with the section 17 of the smoke stack will cause the vertical movement of the doors 29 when the smoke stack is swung rearwardly to cause the locking of the door 29 by the engage-

ment of the hooks 34—34 with the pins 33—33.

The smoke stack is hingedly connected at its lower rear edge portion to the forward edge of the panel 6 as clearly illustrated at 39 in Figure 6 and this in such a manner as to permit the smoke stack when in a telescoped condition to swing rearwardly over the top of the housing 5 in the manner as indicated by the arrows.

For facilitating the anchoring of the stove to an automobile running board or other support D, said running board or support is provided with a pair of transversely aligned socket members 35—35 for receiving a pair of cleats 36—36 upon the rear end wall of the stove housing 5 at the bottom thereof. Arranged in longitudinally spaced relation with the socket members 35—35 are transversely aligned brackets 37—37 hooked at their upper end as clearly indicated in Figures 2 and 10. The lower ends of the oven door attached pivotal arms 31—31 are hooked as at 31' for engaging with the hooks of the brackets 37—37 when the door 29 is raised by the swinging of the smoke stack in position upon the top of the housing 5 as clearly disclosed in Figures 1 and 2.

It will thus be seen that I have provided a highly novel, simple, and useful camper's stove that is well adapted for all the purposes heretofore designated, even though I have herein shown and described the invention as consisting of certain detail structural elements it is nevertheless to be understood that departures may be had therefrom without affecting the spirit and scope of the appended claims.

Having thus described the invention, what I claim is:—

1. In a camp stove of the character described, a housing open at one end, and at its top side, a stationary panel arranged transversely between the front and rear ends of the housing, a fire box arranged longitudinally within the housing and supported partially above the bottom wall thereof, an oven arranged within the housing above the fire box open at its front end and terminating within the rear end of the housing, the open top of the housing in back of the panel provided for receiving cooking utensils to close that portion of the housing top wall, and a smoke stack arranged upon the top wall of the housing at the forward end thereof, and having communication with the interior of the housing above said oven.

2. In a camp stove of the character described, a housing, a fire box within the housing, an oven arranged within the housing above said fire box, said housing being open at its forward end, the top wall of the housing being provided with an opening above the oven, a smoke stack hinged to the top of the housing above the opening and having

communication therewith, and means between the smoke stack and housing to permit of the locking of the stack to the housing when the said stack is swung downwardly upon the top wall thereof.

3. In a camp stove of the character described, a housing, a fire box within the housing, an oven arranged within the housing above said fire box, said housing being open at its forward end, the top wall of the housing being provided with an opening above the oven, a smoke stack hinged to the top of the housing above the opening and having communication therewith, and means between the smoke stack and housing to permit of the locking of the stack to the housing when the said stack is swung downwardly upon the top wall thereof, said smoke stack consisting of a pair of telescopic sections, a hinged lid for the upper end of the lower section when the upper section is telescoped therein, said locking means being provided between the lid and the housing to facilitate the locking of the smoke stack in position upon said housing.

4. In a camp stove of the character described, a housing open at its forward end and having an opening in its top side, a fire box arranged longitudinally within the housing, an oven open at its front end and arranged within the housing at a position above the fire box, a smoke stack hinged at one end to the top wall of the housing above said opening for having communication with the interior of the housing when arranged vertically with respect thereto, said hinged connection between the stack and housing permitting the stack to be swung downwardly upon the housing.

5. In a camp stove of the character described, a housing open at its forward end and having an opening in its top side, a fire box arranged longitudinally within the housing, an oven open at its front end and arranged within the housing at a position above the fire box, a smoke stack hinged at one end to the top wall of the housing above said opening and having communication with the interior of the housing when arranged vertically with respect thereto, said hinged connection between the stack and housing permitting the stack to be swung downwardly upon the housing, a hinged door for the open end of the housing in front of the fire box, a hinged door for the open end of the housing in front of said oven, the second door being of a width to overlap the edge of the first mentioned door when said doors are closed, and means between the upper door, the housing and said smoke stack to cause the automatic locking of the upper door in overlapped arrangement with respect to the lower door when said smoke stack is swung rearwardly upon the top of the housing.

6. In a camp stove of the character described, a housing open at its forward end and having an opening in its top side, a fire box arranged longitudinally within the housing, an oven open at its front end and arranged within the housing at a position above the fire box, a smoke stack hinged at one end to the top wall of the housing above said opening for having communication with the interior of the housing when arranged vertically with respect thereto, said hinged connection between the stack and housing permitting the stack to be swung downwardly upon the housing, a hinged door for the open end of the housing in front of the fire box, a hinged door for the open end of the housing in front of said oven, the second door being of a width to overlap the edge of the first mentioned door when said doors are closed, means between the upper door, the housing and said smoke stack to cause the automatic locking of the upper door in overlapped arrangement with respect to the lower door when said smoke stack is swung rearwardly upon the top of the housing, and means associated with the stove and a support to cause the rigid locking of the stove to the support simultaneously with the swinging of the smoke stack into position upon the top of the housing.

7. In a camp stove of the character described, a housing open at its front end and at its top side, a transverse panel arranged upon the open top of the housing adjacent one end thereof for partially closing the top of the housing, the opening in back of the panel provided for receiving a cooking utensil and the opening in front of the panel providing an egress for smoke, a fire box arranged longitudinally within the housing, hinged doors for the open end of the housing, and a smoke stack arranged upon the top wall of the housing and having communication with the interior of the housing through the opening at the forward end of said panel.

8. In a camp stove of the character described, a housing open at its front end and at its top side, a transverse panel arranged upon the open top of the housing adjacent one end thereof for partially closing the top of the housing, an opening in back of the panel provided for receiving a cooking utensil and the opening in front of the panel providing an egress for smoke, a fire box arranged longitudinally within the housing, hinged doors for the open end of the housing, and a smoke stack arranged upon the top wall of the housing and having communication with the interior of the housing through the opening at the forward end of said panel, said smoke stack being hinged to the housing top wall so as to permit the same to be swung downwardly upon the top wall of said housing.

9. In a camp stove of the character described, a housing open at its front end and at its top side, a transverse panel arranged upon the open top of the housing adjacent one end thereof for partially closing the top of the housing, an opening in back of the panel provided for receiving a cooking utensil and the opening in front of the panel providing an egress for smoke, a fire box arranged longitudinally within the housing, hinged doors for the open end of the housing, a smoke stack arranged upon the top wall of the housing and having communication with the interior of the housing through the opening at the forward end of said panel, said smoke stack being hinged to the housing top wall so as to permit the same to be swung downwardly upon the top wall of said housing, and means between the upper end of the smoke stack and the housing to lock the stack to the housing when positioned upon the top wall thereof.

10. In a camp stove of the character described, a housing open at its front end, a fire box arranged longitudinally within the housing and having openings in its bottom wall, said fire box being supported within the housing in spaced relation with the bottom wall thereof for providing an air passage, an oven arranged within the housing above said fire box and being open at one end, the top wall of the housing above said oven being provided with a smoke discharge opening, a smoke stack hingedly arranged upon the top wall of the housing directly above the smoke passage and having communication with the interior of the housing there-through, a hinged door for the open end of the housing in front of the fire box, a hinged door upon the open end of the housing in front of said oven, and means between the lower end of the smoke stack, said housing and one of the doors to cause the locking engagement of the doors in closed position when the smoke stack is swung downwardly into position upon the top wall of the housing.

11. In a camp stove of the character described, a housing open at one end, a fire box arranged within the housing, the top wall of the housing being provided with a smoke discharged opening, a smoke stack hinged to the top of the housing adjacent said opening and having communication with the interior of the housing through said opening, a door for the forward end of the housing hinged to the lower edge of the front wall of the smoke stack, means for holding the door in open position, and means between the door and housing to cause the rigid locking of the door simultaneously with the swinging of the smoke stack into position upon the top wall of the housing.

12. In a camp stove of the character described, a housing open at one end, a fire box

arranged within the housing, the top wall of the housing being provided with a smoke discharge opening, a smoke stack hinged to the top of the housing adjacent said opening and having communication with the interior of the housing hinged to the lower edge of the front wall of the smoke stack, means for holding the door in open position, means between the door and housing to cause the rigid locking of the door simultaneously with the swinging of the smoke stack into position upon the top wall of the housing, and means between the housing and the smoke stack to cause the locking of the smoke stack in position upon the top wall of the housing.

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said housing being open at one end, the top wall of the housing being provided with a smoke discharge opening, a smoke stack hinged to the top of the housing adjacent the opening, and having communication with the interior of the housing through said opening, a door for the open end of the housing hinged to the lower edge of the front wall of the smoke stack, a support for the stove and means between the support, said housing, and said hinged door to cause the locking of the housing to the support when the door is lowered, and the smoke stack is swung downwardly into position upon the top of the housing.

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In testimony whereof I affix my signature.

13. In combination, a camp stove including a housing, a fire box within the housing,

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