Nov. 12, 1940. J. LANGSAM 2,221,098

PORTABLE PICNIC STOVE

Filed Dec. 10, 1938 2 Sheets-Sheet 1

Fig. 1.

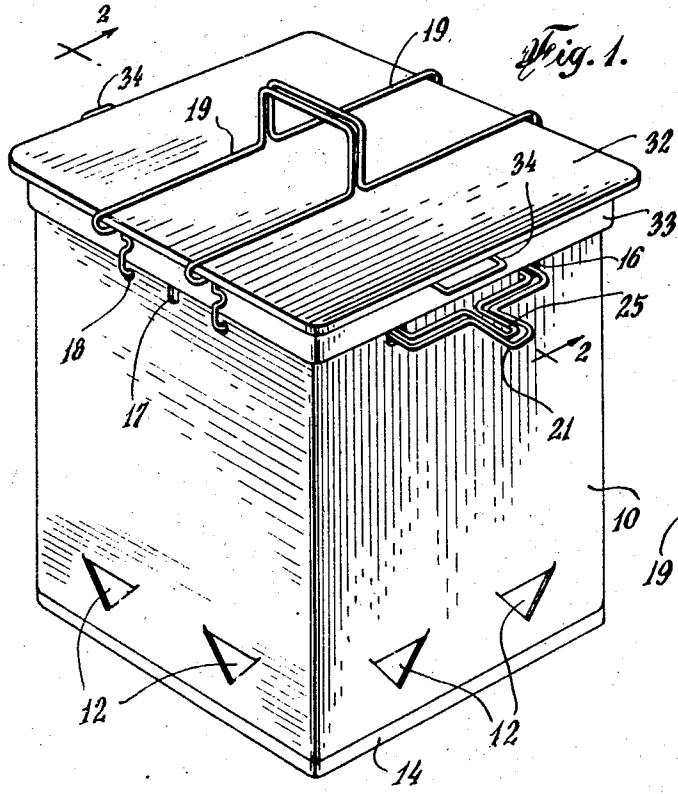


Fig. 3.

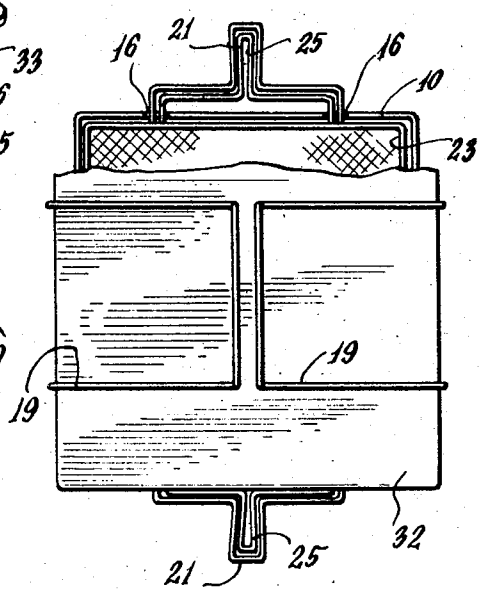


Fig. 2.

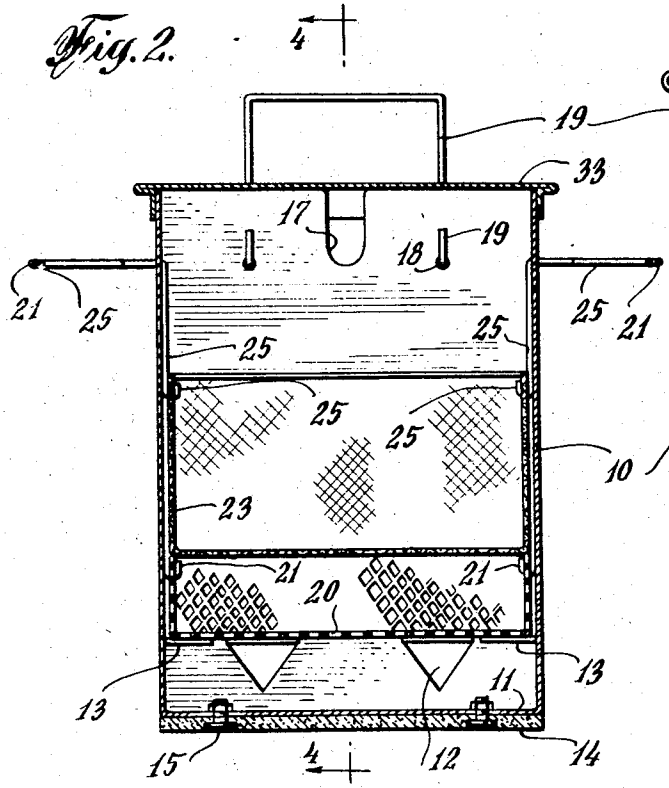
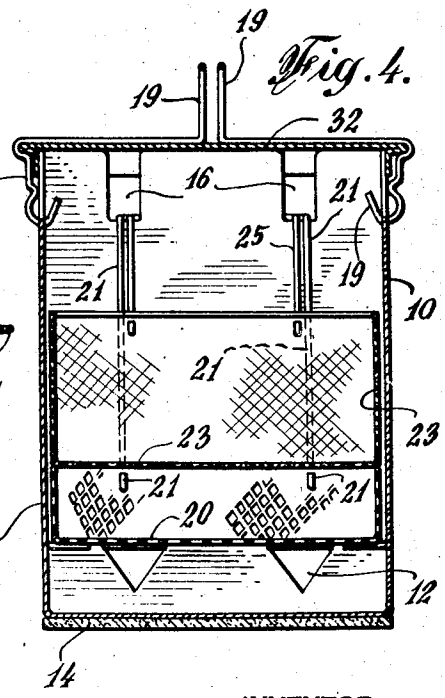


Fig. 4.



INVENTOR
Joseph Langsam
BY
Gilbert R. Jackman
ATTORNEY

Nov. 12, 1940. J. LANGSAM 2,221,098

PORTABLE PICNIC STOVE

Filed Dec. 10, 1938 2 Sheets-Sheet 2

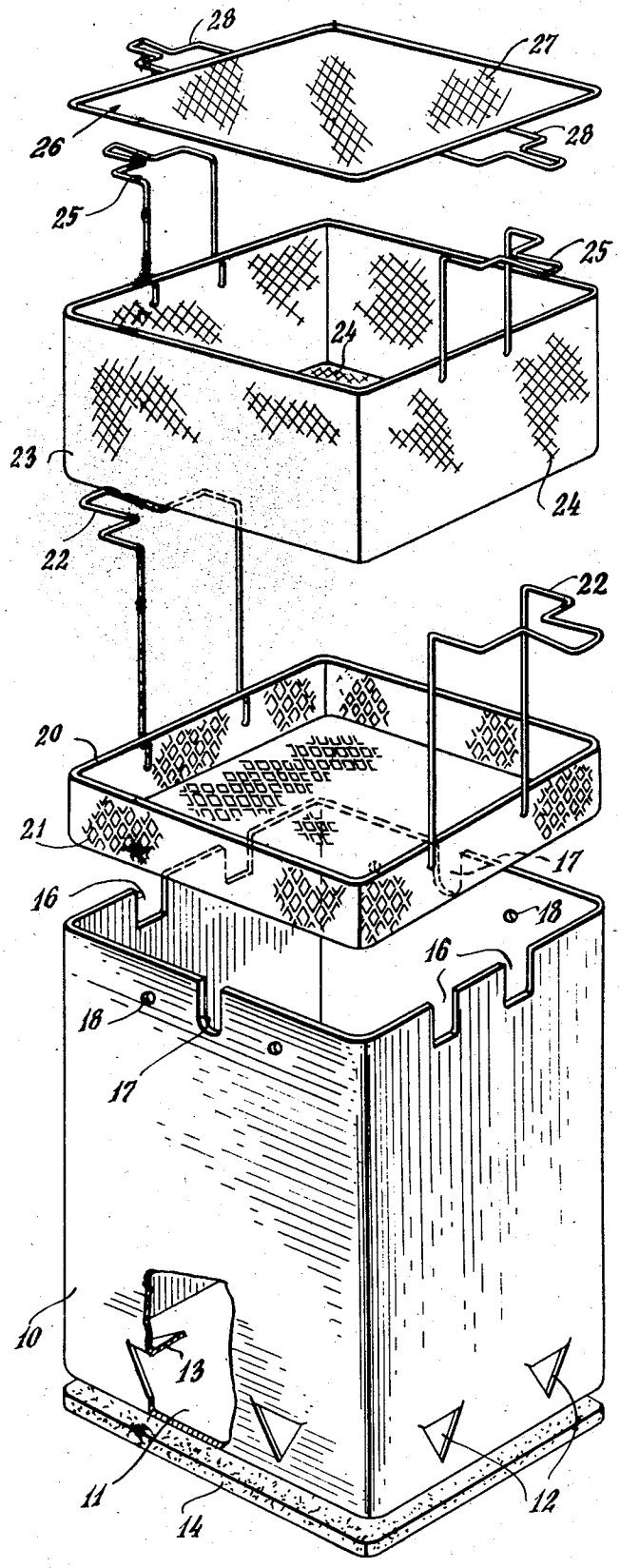


Fig. 5.

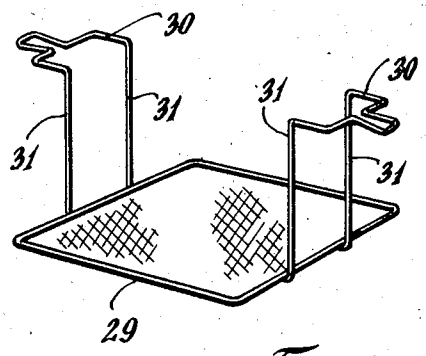


Fig. 7.

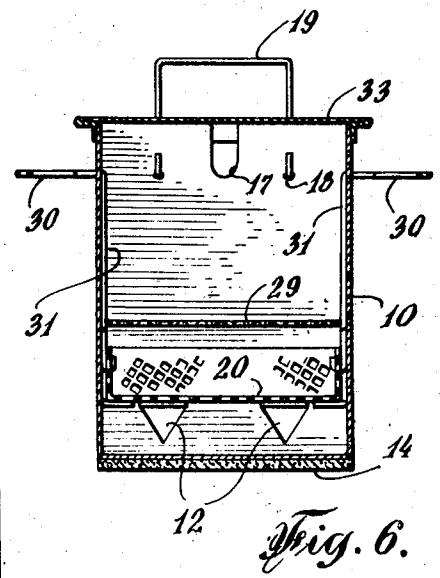


Fig. 6.

INVENTOR
Joseph Langsam
BY
Gilbert R. Jackman
ATTORNEY

Patented Nov. 12, 1940 2,221,098

UNITED STATES PATENT OFFICE

2,221,098

PORTABLE PICNIC STOVE

Joseph Langsam, Flushing, N. Y.

Application December 10, 1938, Serial No. 244,967

8 Claims. (Cl. 126—29)

My invention relates to an improved type of portable camping or picnic stove.

At present, stoves of this character are crude, inadequate and usually a source of danger due to the fact that the hot embers are always exposed to the wind, and may thus ignite leaves, paper or clothing, resulting, in some instances, in the starting of forest fires.

The fundamental purpose of my invention is to obviate this danger, to provide means for quick kindling and burning of the fuel, and to permit, simultaneously, two or more processes of cooking, and also to keep hot, food already cooked.

A further purpose of my invention is to conserve the necessary heat for cooking, and thus provide an economical use of fuel, the waste of the latter being an inherent defect of picnic stoves now in general use.

Another feature of my invention is that the picnic stove herein described can be safely carried from one place to another while the fuel is still burning without disturbing the process of cooking, and without the risk of dropping hot coals or ashes.

The manner in which I have effected these improvements will be understood from the description that follows, and from an inspection of the drawings, of which,

Fig. 1 is a perspective view of the outside of the ensemble.

Fig. 2 is a longitudinal section as indicated by the pitch lines and arrows 2—2 in Fig. 1.

Fig. 3 is a top view, with a portion of the cover removed.

Fig. 4 is a longitudinal section as indicated by the pitch lines and arrows 4—4 in Fig. 2.

Fig. 5 is a detailed perspective of the several parts.

Fig. 6 is similar to Fig. 2, except that there is a substitution of units.

Fig. 7 is a perspective of a variation of the top unit shown in Fig. 5.

Referring to the drawings:

My invention consists essentially of a metallic box or casing, 10, preferably of sheet-iron construction, closed at the bottom, 11, and open at the top. While this box or casing, is square or rectangular in cross-section, it is to be understood that it may be made cylindrical in cross-section, or have any suitable conformation.

Situated near the lower end of said box, 10, around the periphery thereof, are the openings 12, spaced at suitable intervals. These openings 12 are preferably made by pressing in a portion of the lateral surface of the box 10, thus forming the lugs 13, as shown in the cut-away portion of Fig. 5.

Attached to the bottom 11 of the box 10 is the heat-resisting plate 14, made of any appropriate material, such as a mixture of asbestos and fire-clay, held to the bottom 11 by means of the bolts 15. It is to be understood, however, that the said bolts 15 may be replaced by rivets, or by lugs formed from the surface of the box 10. It is also to be understood that, while the plate 14 is shown outside the box 10, it may be placed within the said box 10, or may be substituted for the bottom 11 of the box 10.

At the upper edge of the box 10, on two opposite sides are provided the rectangular openings 16; while on the other two opposite sides are the openings 17, made preferably with circular contours at their lower extremities, and the holes 18. The said openings 16 are of sufficient size to afford a means of escape of the hot gases.

Engaging the holes 18 are the handles 19. It is to be understood that, while these handles 19 are shown hooked into the holes 18, they may be fastened to the box 10 by means of hinges or any other suitable devices.

Slidably fitting the box 10 is the metallic tray or container 20, the surface of which is provided with apertures 21, the upper portion of its handles 22 articulating with the openings 16 of the box 10, and supported on the lower edges of said openings 16.

Slidably fitting the box 10 is the metallic tray or container 23 the surface of which is shown made of heavy wire mesh 24, the lower edge of said surface being supported by the upper edge of the container 20, and the upper portion of its handles 25 articulating with the openings 16 of the box 10. The tray 23 may also be supported by means of the handles 25 resting in the openings 16 of the box 10.

Slidably fitting the box 10 is the metallic tray 26, the surface of which is shown made of heavy wire mesh 27, the said tray 26 being supported by the handles 28, which articulate with the openings 16 of the box 10, and rest upon the lower edges of said openings 16.

In Fig. 7 is shown a tray 29, similar to the tray 26, except that the handles 30 of said tray 29 are provided with vertical extensions 31, permitting the tray 29 to be supported, by the articulation of the handles 30 with the openings 16 of the box 10, at a lower level than in the case of the tray 26, as shown in Fig. 6.

While the container 20 is shown with stamped-out openings 21, and while the container 23 and

the trays 26 and 29 are shown made of wire mesh, it is to be understood that any one or all of the said containers or trays may be made in any suitable form; that is, their surfaces may be stamped-out, reticulated, foraminated or made of sheet metal, with no openings.

Snugly fitting the top of the box 10 is the cover 32 whose upper surface extends beyond the flanged portion 33, and is provided with the handles 34.

The operation of my invention is as follows:

The container or grate 20, provided with suitable fuel, such as kindling and charcoal, is placed in position within the box 10, and the fuel ignited by passing a lighted taper thru one of the apertures 12. The container 23 is then lowered into position as shown in Figs. 2 and 4, and may then be used for roasting potatoes, apples, etc., or for supporting pots for boiling foods, or used for both processes of cooking at the same time. Attention is called to the fact that no portable oven is required with this stove, the casing 10, with its cover 32, comprising in itself an oven.

If desired, the container 23 may be replaced by the tray 29, which can then be used for supporting meats to be broiled.

Also, after meats have been initially broiled and it is desired to continue cooking them slowly while at the same time engaging in roasting and boiling other foods, the container 23, supporting the said foods is placed in position, and the broiled meats are placed on the tray 26, which is now placed in position. It will thus be seen that two or more processes of cooking can take place simultaneously. If, after the broiling process is finished, and it is desired to keep the broiled meats hot, the cover 32, in inverted position, is placed on the said meats, and the cover and the tray 26 are turned over, the tray 26 removed, and the cover 32 placed in normal position on top of casing 10.

When it is desired to roast marshmallows or pieces of meat on a spit or skewer, the said spit or skewer can be placed on the arcuate edges of the openings 17.

If it be desired to fry foodstuffs, such as eggs or pancakes, a metal tray, similar to tray 26, but not perforated, can be utilized.

As a means of conserving fuel and at the same time keeping the cooked food hot, the cover 32 is placed in position, the waste gases having a ready means of escape thru the apertures 16 and 17.

Furthermore, when the food is cooked and ready to be served, it may be placed on top of the cover 32. To prevent potatoes, frankfurters, etc. from rolling off, the cover 32 can be placed in an inverted position, the flanged portion 33 acting as a barrier for this purpose.

Finally, if while the cooking process is continuing, it should be found necessary, because of a storm or any other reason, to place the stove under a shelter or in an automobile, the cover 32 is placed in position, and the ensemble lifted by means of the handles 19 and placed where desired, without spilling ignited fuel, or endangering any substance upon which the ensemble is placed. If it should be desired to clean out the bottom of the stove, all the trays and the cover can be lifted out simultaneously by means of the handles 21, 25 and 28. It should also be noted that the handles 19 serve a double purpose: first, to afford a means of lifting the entire ensemble; and secondly, while so used, to provide a means of holding the cover 32 securely in position as shown in Fig. 1.

It is to be understood that the drawings herein are merely illustrative in character and that I reserve the right to make such departures therefrom as the exigencies of commercial practice may dictate, while remaining fairly within the scope of the appended claims.

I claim:

1. In a portable picnic stove of the class described, the combination of a metallic box or casing, open at its upper end, and closed at its lower end, having lateral openings adjacent to its lower end and along its upper perimeter, adjustable handles for said box or casing, a removable metallic grate slidably fitting the interior of said box or casing, removable metallic trays of open construction slidably fitting the interior of said box or casing, baffle plates integral with and situated near the bottom of the lateral surfaces of said box or casing, and a metallic removable flanged cover for said box or casing.

2. In a portable picnic stove of the class described, the combination of a metallic box or casing open at its upper end and closed at its lower end having lateral openings adjacent to its lower end and along its upper perimeter, adjustable handles for said box or casing, baffle plates integral with and situated near the bottom of the lateral surfaces of said box or casing, removable metallic trays slidably fitting the interior of said box or casing, supports for said trays and a removable metallic flanged cover for said box or casing.

3. In a portable picnic stove of the class described, the combination of a metallic box or casing open at its upper end and closed at its lower end having openings adjacent to its lower end and along its upper perimeter, adjustable handles for said box or casing, baffle plates integral with and situated near the bottom of the lateral surfaces of said box or casing, removable metallic trays slidably fitting the interior of said box or casing, supporting means for said trays, and a removable metallic flanged cover for said box or casing.

4. In a portable picnic stove of the class described, the combination of a metallic box or casing open at its upper end and closed at its lower end having openings adjacent to its lower end and along its upper perimeter, baffle plates integral with and situated near the bottom of the lateral surfaces of said box or casing, removable metallic trays slidably fitting the interior of said box or casing, supporting means for said trays, a removable metallic flanged cover for said box or casing, and adjustable means for holding said cover in position.

5. In a portable picnic stove of the class described, the combination of a metallic box or casing open at its upper end and closed at its lower end, having lateral openings adjacent to its lower end and along its upper perimeter, adjustable handles for said box or casing, baffle plates integral with and situated near the bottom of the lateral surfaces of said box or casing, removable metallic trays slidably fitting the interior of said box or casing, handles integral with said trays bent at right angles to the axis of said box or casing, and a removable metallic cover for said box or casing.

6. In a portable picnic stove of the class described, the combination of a metallic box or casing, open at its upper end and closed at its

lower end, having lateral openings adjacent to its lower end and along its upper perimeter, adjustable handles for said box or casing, a removable metallic grate slidably fitting the interior of said box or casing, metallic removable trays of open construction slidably fitting the interior of said box or casing, supporting handles attached to said grate and trays, baffle plates integral with and situated near the bottom of the lateral surfaces of said box or casing, and a metallic removable flanged cover for said box or casing.

7. In a portable picnic stove of the class described, the combination of a metallic box or casing, open at its upper end and closed at its lower end, removable metallic trays slidably fitting the interior of said box or casing, nesting handles attached to said trays, said handles being bent at approximately right angles to the axis of said box or casing, baffle plates integral with and situated near the bottom of the lateral surfaces of said box or casing, said baffle plates being adapted to baffle and spread out the incoming air to the underside of said trays, a removable metallic cover for said box or casing, and means for holding said cover securely in position.

8. In a portable picnic stove of the class described, the combination of a metallic box or casing open at its upper end and closed at its lower end, removable metallic trays slidably fitting the interior of said box or casing, nesting handles attached to said trays, said handles being bent at approximately right angles to the axis of said box or casing, means adapted to baffle and spread out the incoming air to the undersides of said trays, a removable metallic cover for said box or casing, and means for holding said cover securely in position.

JOSEPH LANGSAM.