Feb. 2, 1926. 1,571,438

H. S. SCHOPF

PROVISION SAFE

Filed April 2, 1925

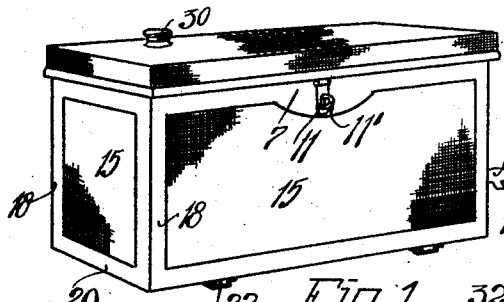


Fig. 1

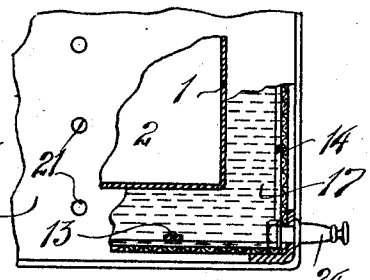


Fig. 2

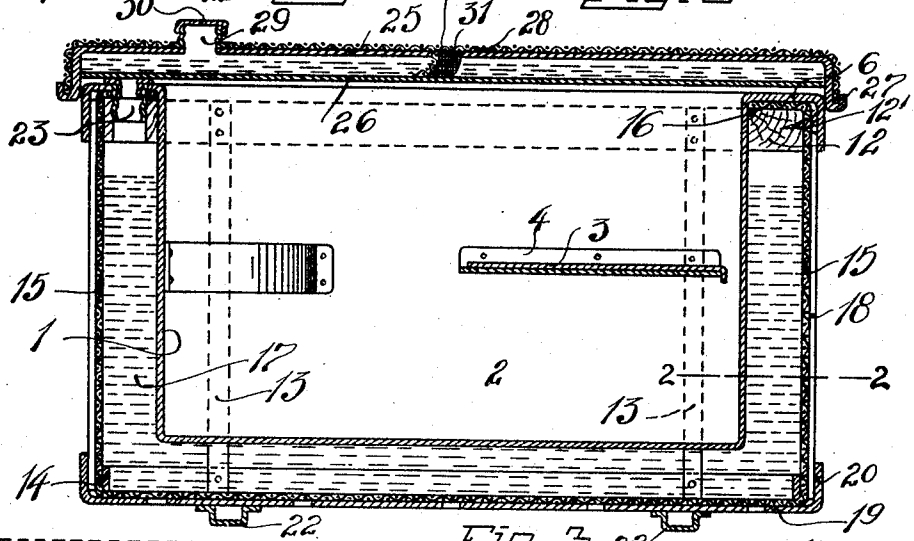


Fig. 3

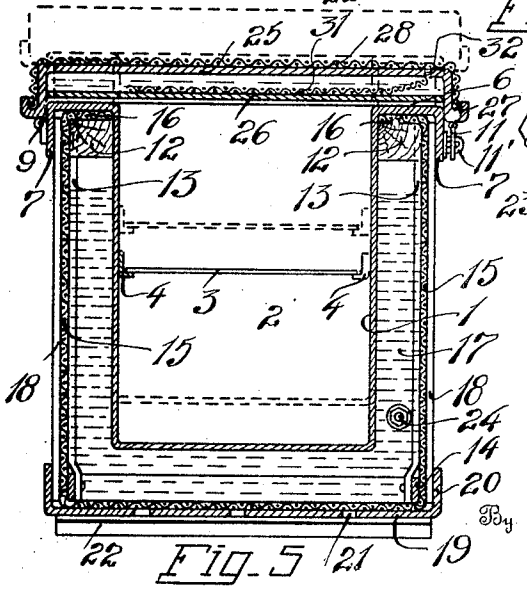


Fig. 5

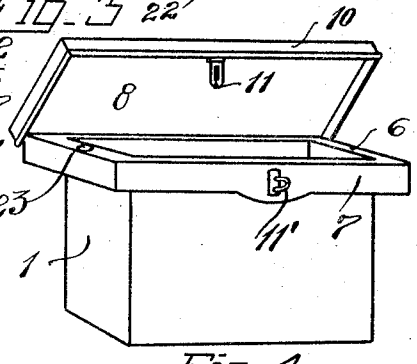


Fig. 4

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UNITED STATES PATENT OFFICE.

HENRY S. SCHOPF, OF SPOKANE, WASHINGTON.

PROVISION SAFE.

Application filed April 2, 1925. Serial No. 20,131.

To all whom it may concern:

Be it known that I, HENRY S. SCHOPF, a citizen of the United States, residing at Spokane, in Spokane County, and State of Washington, have invented certain new and useful Improvements in Provision Safes, of which the following is a specification.

My present invention relates to improvements in provision safes of the external evaporative cooler type having porous walls.

While the safe or cooler of my invention is designed especially for camping purposes, and transportation as on the running or foot board of an automobile, it is also well adapted for household or domestic use, in maintaining provisions and food products in sanitary condition.

The primary object of the invention is the provision of an evaporative cooler or provision safe which is comparatively inexpensive in cost of manufacture, simple in construction in order that its parts may with facility be assembled, and when required its parts may be replenished or replaced. By the combination and arrangement of its parts according to my invention the cooler or provision safe is well braced to form a rigid structure that is durable, and the water jacket surrounding all parts of the provision receptacle is arranged to perform its functions with efficiency.

The invention consists in certain novel combinations and arrangements of parts as will hereinafter be more fully set forth and claimed.

In the accompanying drawings I have illustrated one complete example of the physical embodiment of my invention wherein the parts are combined and arranged according to the best mode I have thus far devised for the practical application of the principles of my invention.

Figure 1 is a perspective view of a provision safe embodying the principles of my invention.

Figure 2 is a detail sectional view at the lower corner of the safe showing the drain cock or faucet as at line 2—2 of Figure 3.

Figure 3 is a longitudinal vertical sectional view of the safe.

Figure 4 is a perspective view of the food box with the cover removed or turned back on its hinges.

Figure 5 is a transverse vertical sectional view of the safe.

In carrying out my invention I utilize an inner metallic box 1 of rectangular oblong shape to form a provision compartment 2. Within this compartment a suitable number of removable shelves 3 may be supported on the side brackets 4, 4.

For the accommodation of milk bottles or other bottles a supporting clip 5 is shown in Figure 3 and it will be apparent that any suitable number of these supporting devices may be used within the provision chamber for convenience in storing various articles of food.

The receptacle or box 1 has an open top and at the upper edges of its vertical walls angular, flat flanges 6 are fashioned to extend laterally from the box. These flanges terminate in vertical flanges 7 spaced from the body of the box and projecting downwardly from the flat horizontal flanges 6.

A lid or cover indicated as a whole by the number 8 in Figure 4 is hinged at 9 at the rear of the receptacle or box to a part of the flange 7, and a flange 10 of the lid is adapted to fit closely over the flanged top of the box when the lid is closed.

By means of a pivoted hasp 11 on the lid and a keeper 11′ on the front flange 7 of the receptacle, the lid may be fastened or locked in position.

When in use the receptacle or box is surrounded on all sides, top and bottom by water or water jackets having porous walls through which the water may evaporate for cooling purposes.

For supporting the receptacle or box within the water jacket I provide a rectangular, horizontally disposed wood frame 12 having an inner opening of proper size to receive the body of the box, and screws 12′ are used to fasten the wood frame under the horizontal flange 6 and within the vertical flange 7, as indicated in Figure 3.

The wood frame is supported by means of vertical posts or metal straps 13 spaced from the ends and sides of the box and screwed at their upper ends to the wood frame.

At their lower ends the posts are secured to a metallic rectangular, horizontal frame 14. The wood frame 12 and the metal frame 13—14 are covered with a sheathing 15 of absorbent porous material, such as a flax fabric or coarse linen fabric. This sheathing extends across the bottom of the metal frame and forms end and side walls spaced from the inner receptacle 1. The upper edges of the sheathing, as 16, are turned

over the top of the wood frame 12 and secured thereto in suitable manner. As seen in Figure 5 the flanges 6 of the receptacle rest upon the inwardly turned edges 16 forming a closed chamber or water jacket 17 having inner solid or non-porous walls, and outer porous walls formed by the sheathing 15.

An outer frame is provided for the sheathing or porous walls which frame comprises angular corner posts 18 secured at their upper ends to the wood frame 12 within the flanges 7, of the receptacle and a bottom plate 19, below the bottom of the sheathing. This bottom plate has an upturned flange 20 extending around its edges to receive the posts 18 which are attached to the flange. The bottom plate is perforated as at 21 to permit circulation of air through the perforations or openings for contact with the wet bottom portion of the sheathing for cooling purposes. The flanges of the bottom plate and the metal rectangular frame portion 14 form outer and inner braces for maintaining the shape of the porous walls of the water jacket, and the angular corner posts 18 retain the vertical corners of the sheathing in shape.

On the exterior bottom of the bottom plate are arranged a pair of spaced hollow cleats 22 which are adapted to act as supports to elevate the safe slightly and also especially adapted for use with straps or other attaching devices when fastening the safe to the running board or other part of an automobile.

The chamber 17 within the water jacket may be filled with water through a filling nozzle 23, which is normally closed by the hinged lid, and a drain cock or faucet 24 is located near the bottom of the jacket at one corner for draining or with drawing the water from the jacket when not required.

The hinged lid also includes a water jacket for the upper part of the safe, the spaced top and bottom plates 25 and 26 of the lid forming walls for the jacket, and the flange 10 of the lid is beaded at 27 to secure the edges of a sheathing 28 which covers the lid. The sheathing is also of porous material and covers the entire outer area of the hinged lid conforming to the rectangular shape of the metal parts or structure. A filling nozzle 29, normally closed by a cap 30 is provided in the top at the front of the lid near one corner.

The sheathing on the exterior of the lid is moistened by capillary attraction from the interior of the lid or water jacket by means of a wick 31 within the water jacket which has an end passed up through an opening 32 in the top plate 25 of the lid and preferably fixed to the exterior sheathing to provide the necessary contact for feed of moisture by capillary attraction. The opening for the wick is preferably near the free edge of the hinged lid in order that when the lid is turned back on its hinges the water will not run through the opening as would be the case if said opening were near the hinged edge of the lid.

It will be apparent that the interior or food compartment is water tight and substantially air tight, and its entire exterior area is jacketed with water for cooling purposes by the evaporative process.

The sheathing for the lid and safe is stretched comparatively taut and is held or retained in shape by its edge devices, the corner posts and horizontal frame parts giving a panel effect with neat appearance for the exterior of the safe as seen in Figure 1.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is—

1. The combination with a flanged bottom plate having exterior corner posts and intermediate posts and an upper frame member supported on said intermediate posts, of a porous sheathing supported within said plate and posts and exterior of the upper frame, a food compartment suspended within the upper frame to form a water jacket within the sheathing, and a lid having a water jacket for said compartment.

2. The combination with a perforated bottom plate having corner posts and intermediate posts and an upper frame member supported on said intermediate posts, of a porous sheathing supported within the bottom plate and corner posts and exterior of the upper frame, a nonporous food box having a top horizontal flange and side flange fitted over said sheathing and upper frame member and forming a water jacket within the sheathing, and a lid having a water jacket for said food box.

3. The combination with a flanged rectangular, perforated bottom plate having exterior corner posts, intermediate posts, and an upper frame member supported on said intermediate posts, of a porous sheathing supported within the bottom plate and corner posts and exterior of the upper frame member, a lower rectangular frame member within the sheathing and fixed to the bottom plate, a rectangular food box having a top horizontal flange and vertical flange projecting therefrom fitted over the upper frame member for supporting said box and forming a water jacket within the sheathing, a lid hinged to the food box and fashioned with a water jacket, and a porous sheathing over said jacket.

In testimony whereof I affix my signature.

HENRY S. SCHOPF.