Sept. 4, 1956 L. LEVINE 2,761,552

LUNCH BOXES

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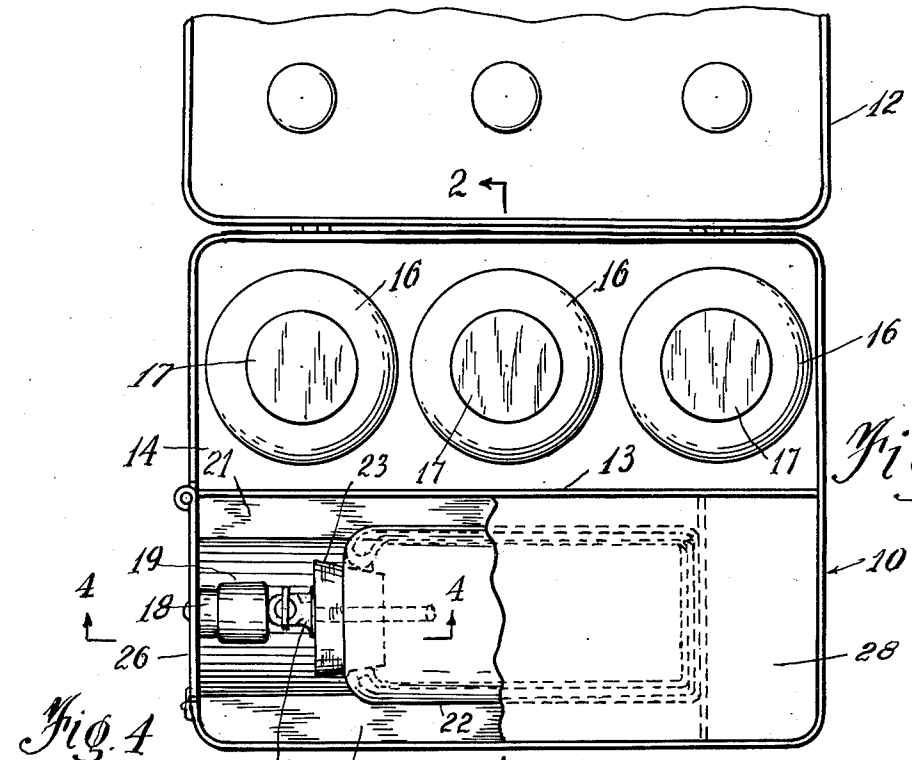
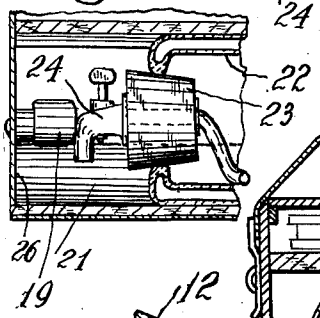


Fig. 1

Fig. 4



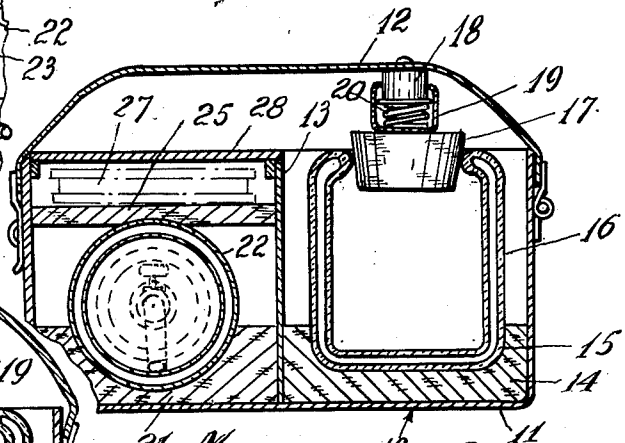


Fig. 2

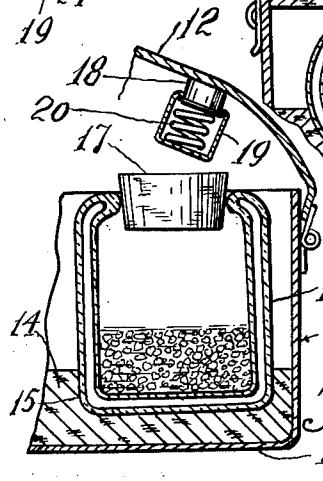


Fig. 3

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LUNCH BOXES

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3 Claims. (Cl. 206—4)

This invention relates to lunch boxes and particularly to lunch boxes incorporating containers of the vacuum or Dewar type.

The problem of packing food for lunches away from home has always been one of great importance to workers, schoolchildren, employers and wives and mothers. It has long been recognized that warm food at lunch makes for greater production, more energy and better health. There have been many attempts made to solve the problem of packing warm foods so as to retain their heat, flavor and appetizing quality over periods of a halfday or longer. Many complex vacuum containers have been proposed for use either alone or as a part of a lunch box. In general these devices have been too complex in operation or too complex and expensive to build. In addition to expense, the complexity of these structures has made them difficult to fill and eat from.

The present invention provides a lunch box structure which permits the easy packing of hot food and the easy removal thereof and which is inexpensive to manufacture and simple to make.

It is accordingly an object of the present invention to provide a lunch box structure for the packing and carrying of a variety of hot foods while maintaining their temperature, flavor and appetite appeal.

It is another object of this invention to provide a lunch box structure having a plurality of vacuum containers for hot solid foods with resilient means for sealing said containers against expulsion of the stoppers.

Another object of this invention is to provide a lunch box structure having novel resilient means maintaining the closures of several vacuum containers in sealing relationship until it is desired that the containers be open.

Still another object of the invention is to provide a lunch box structure carrying separate vacuum containers for solid food and liquid wherein the liquid or portion thereof may be withdrawn without exposing the food containers.

Other objects, advantages and purposes of this invention will become apparent from a consideration of the following description and the accompanying drawings in which:

Figure 1 is a top plan of a lunch box according to this invention with the lid open and partly broken away.

Figure 2 is a section on the line 2—2 of the lunch box of Figure 1 with the lid closed.

Figure 3 is a fragmentary section on the line 2—2 of Figure 1 with the lid of the lunch box partially open.

Figure 4 is a section on the line 4—4 of Figure 1.

Referring to the drawings there is illustrated a sheet metal box 10 having a bottom 11 and hinged lid 12. The bottom is divided vertically by a partition 13 into two longitudinal segments. One of these segments is provided with a support member 14 of cork or similar material with recesses 15 to hold vacuum containers. A plurality of vacuum containers 16 preferably with wide mouths for holding hot solid foods are removably fitted in the recesses 15. Corks or like stoppers 17 close the

containers 16. A resilient plunger mechanism is mounted on the lid 12 to bear on each stopper 17 when the lid is closed. Each plunger mechanism is made up of a base 18 fixed to the lid 12, a plunger 19 movable on the base 18 between limits and a spring 20 between the base 18 and plunger 19 urging the plunger and base apart.

The second segment of the lunch box is provided with a base 21 of cork, light wood or the like having a semi-cylindrical hollow therein to receive an elongated vacuum bottle 22 for liquids. The bottle 22 is fitted with a stopper 23 and faucet 24. A hold down member or shelf 25 is fitted in the second segment above bottle 22 and between the partition 13 and the outer wall of the lunch box. Preferably this hold down member or shelf is provided with a semi-cylindrical hollow. A hinged access door 26 is provided at one end of the lunch box 10 opening into the compartment formed by member 21, partition 13, hold down shelf 25 and the sides of the lunch box. The door 26 is provided with a resilient plunger mechanism identical with that described in connection with the lid 12. In short a base 18 is mounted on the door. A plunger 19 is slidable on the base 18 and a spring 20 acts between the base and plunger to urge them apart. The resilient plunger bears against the faucet 24 to hold the stopper 23 tightly in the bottle 22 and to keep the bottle from shifting. In filling the bottle 22, it is slidably removed from between members 21 and 25 through door 26, filled and reinserted between members 21 and 25. When it is desired to remove the portion of the liquid in bottle 22, the door 26 is opened, the bottle is slid out to clear the faucet 24 and liquid is readily withdrawn.

The shelf 25 is preferably used for receiving sandwiches 27 and the like solid food to be consumed without heating. A cover 28 is frictionally fitted over the shelf 25 to protect the sandwiches and to aid in retarding the drying out of the bread.

The lunch box of this invention will effectively maintain hot solid foods in good edible condition in the containers 16 and will prevent the stoppers 17 from being accidentally dislodged. At the same time liquid may be preserved and periodically used from the bottle 22 without exposing the solid food or the containers 16 to the air.

While the present preferred embodiment of this invention has been illustrated and described hereinabove, it will be understood that this invention may be otherwise embodied within the scope of the following claims.

I claim:

1. A lunch box comprising an outer generally rectangular shell having a hinged lid, partition means dividing the shell into two side by side elongated compartments opening toward the lid, a base in one of said compartments having a plurality of spaced apart recessess therein, a plurality of vacuum bottles adapted to fit in said recesses with the mouth opening toward the hinged lid, stoppers in said mouth openings, a plurality of independent spring loaded compressible plungers on the hinged lid equal in number to the number of recesses and arranged to center over the recesses when the lid is closed, centering and limiting means in the plungers maintaining the plungers on a substantially constant axis a shelf in the other compartment generally transverse to the partition and parallel to the bottom of the lunch box forming a closed shell in said compartment, a hinged recess door at one end of said compartment in the end wall of the outer shell, an elongated vacuum bottle slidable in said closed shell, a stopper in said bottle, faucet means on said stopper adapted to rest adjacent the hinged access door and spring loaded compressible plunger on the access door adapted to bear on the faucet whereby to hold the faucet and stopper in position in the vacuum

bottle said plunger having a centering means maintaining said plunger on a substantially constant axis.

2. A lunch box as claimed in claim 1 wherein the shelf forms with the partition a tray for solid food above the closed shell.

3. A lunch box as claimed in claim 1 wherein the spring loaded plungers comprise a circular base having a stop member adjacent one end, a hollow cylindrical plunger on said base, a flange on the plunger engageable against the stop on the base and spring means between the base and plunger urging the plunger and base apart to bring the flange in contact with the stop.

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