

March 11, 1958

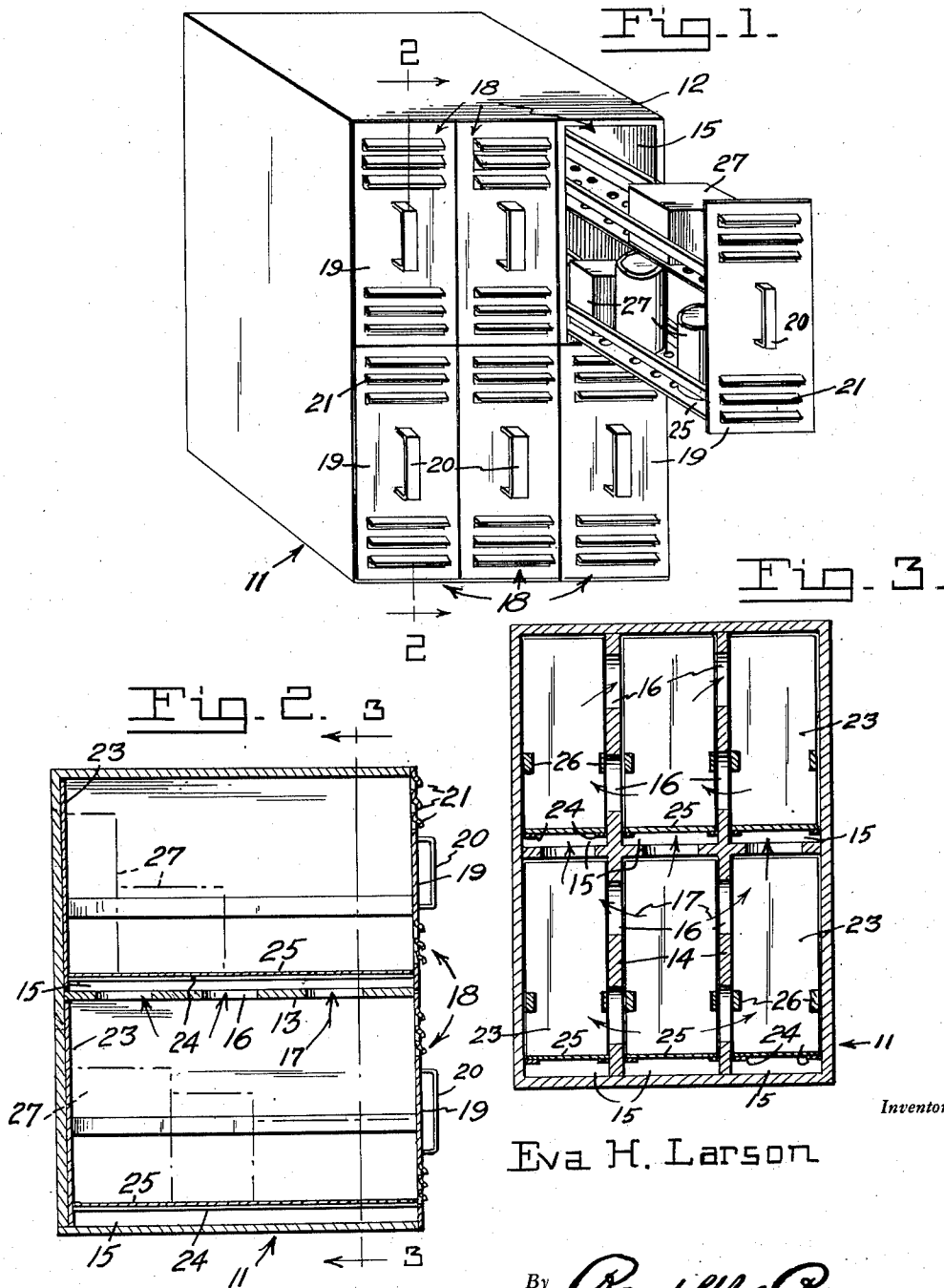
E. H. LARSON

2,826,475

FREEZER LOCKER

Original Filed April 22, 1946

2 Sheets-Sheet 1



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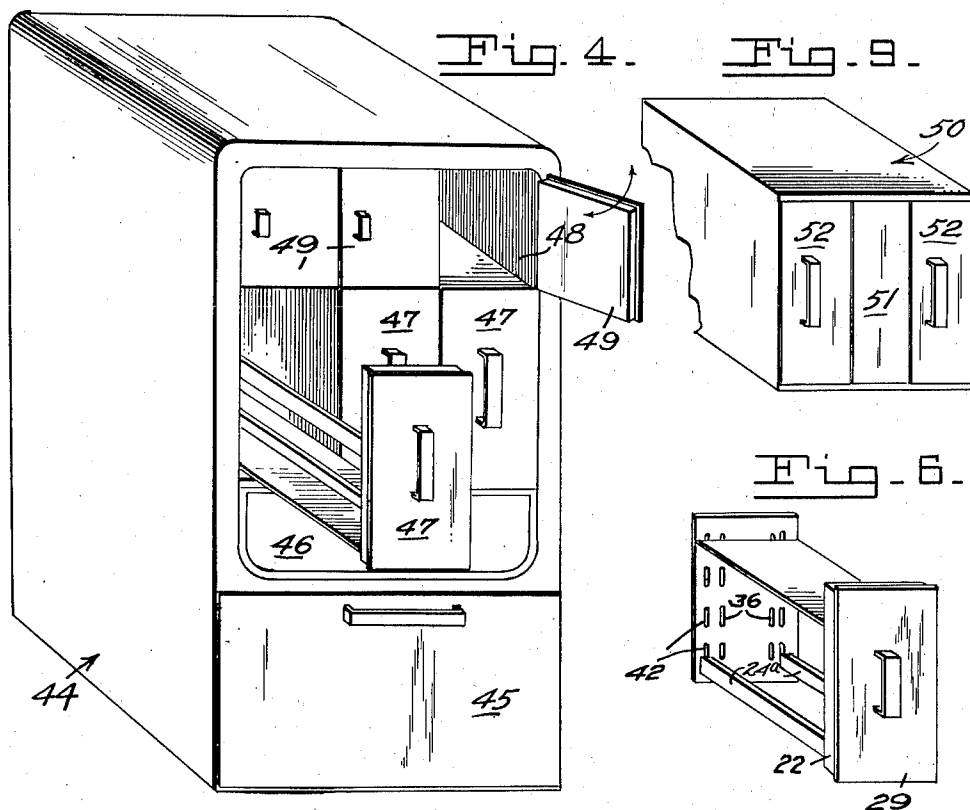
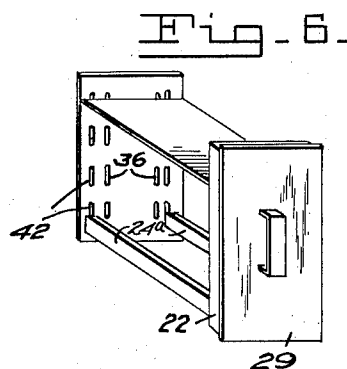
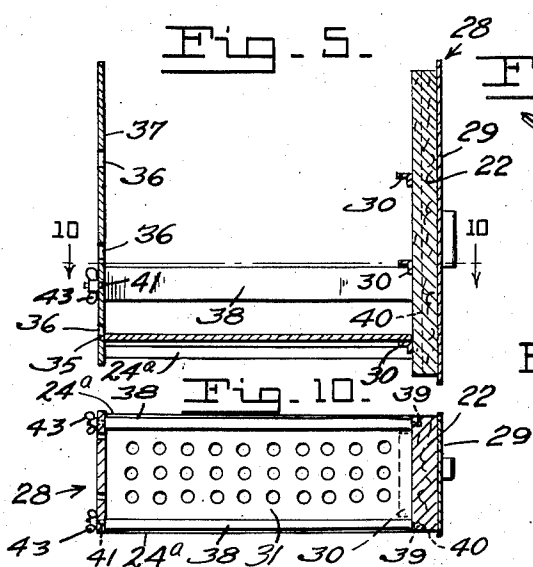
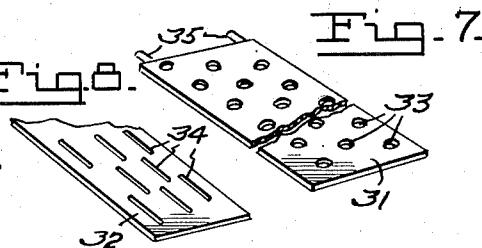
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FREEZER LOCKER

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Substituted for abandoned application Serial No. 664,019, April 22, 1946. This application August 22, 1955, Serial No. 530,068

1 Claim. (Cl. 312—330)

This application is a substitute for my prior application Serial No. 664,019, filed April 22, 1946, and now abandoned.

This invention relates to an improved construction of freezer locker or freezer unit and more particularly to an improved construction of food container which is constructed and designed to obviate the many difficulties and inconveniences inherent in applying and removing food, packages and containers stored in conventional compartments of freezer lockers or refrigerators.

It is a primary object of the present invention to provide a freezer locker or refrigerator for home use of extremely compact construction and which is provided with a plurality of drawers for containing the articles to be kept in a chilled condition, which drawers are especially constructed to facilitate the application of and the removal of articles from the drawers with a minimum of difficulty and inconvenience.

Still another object of the invention is to provide an improved drawer construction which will materially increase the storage space of a refrigerator or food locker and which will reduce the cold loss occurring when the locker is opened to apply articles thereto or remove articles therefrom.

Still another object of the invention is to provide a freezer locker or refrigerator utilizing a plurality of individual sliding drawers which will enable articles to be applied thereto or removed therefrom without the necessity of the shifting and moving of other articles and the resulting damage which is frequently thus caused.

Still a further object of the invention is to provide a refrigerator or freezing locker so constructed as to afford a maximum amount of circulation of cold air through and around each of the storage compartments thereof.

Various other objects and advantages of the invention will hereinafter become more fully apparent from the following description of the drawings, which illustrate preferred embodiments thereof, and wherein:

Figure 1 is a perspective view of one form of the improved freezer locker;

Figure 2 is a longitudinal vertical sectional view thereof taken substantially along a plane as indicated by the line 2—2 of Figure 1;

Figure 3 is a transverse vertical sectional view taken substantially along a plane as indicated by the line 3—3 of Figure 2;

Figure 4 is a perspective view of another form of the freezer locker or refrigerator;

Figure 5 is a longitudinal, vertical sectional view of one of the drawers removed therefrom;

Figure 6 is a perspective view of the drawer;

Figures 7 and 8 are perspective views of portions of two forms of shelves for use in the freezer drawers;

Figure 9 is a perspective view of another, small size freezer locker; and

Figure 10 is a horizontal sectional view of the freezer drawer taken substantially along a plane as indicated by the line 10—10 of Figure 5.

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Referring more particularly to the drawings, in Figures 1 to 3 one embodiment of the improved construction of freezer locker or refrigerator is disclosed. This freezer locker, designated generally 11, includes a casing 12 which is provided with suitably insulated walls and which is divided by a horizontal partition 13 and two vertical partitions 14 into six cells 15. The partitions 13 and 14 are each provided with a plurality of openings 16 to permit a free circulation of air back and forth between the cells 15, as indicated by the arrows 17. Each of the cells 15 slidably supports a drawer, designated generally 18.

As the present invention is not intended to cover any particular construction of freezing unit, no such unit has been disclosed in any of the views of the drawings, but it is to be understood that a conventional freezing unit of any desired type or construction could be utilized and located in one of the drawers 18.

Each of the drawers 18 includes a front wall 19 which is slightly larger than the cross sectional size of the cells 15 so as to abut against the outer, marginal edge of the cell in which said drawer is disposed, when in a closed position. The outer walls 19 are each provided with an outwardly projecting handle 20 and may be provided with louvers 21, as illustrated in Figures 1 and 2, but are preferably provided with an insulating wall 22, as best illustrated in Figures 5 and 10, disposed on the inner side thereof and sized to fit into the outer end of the cell in which the drawer is slidably disposed.

Each drawer 18 includes a rear wall 23 which is slightly smaller than the cross sectional area of the cells 15, for a purpose which will hereinafter become apparent. The front and rear walls 19 and 23 of each drawer 18 are preferably connected by a plurality of strips 24, which are disposed adjacent the bottom thereof, which may be utilized for supporting a drawer shelf 25 which rests thereon. Each of the drawers 18 is provided with one or more slats 26 adjacent each side edge thereof and which are located above the shelf 25. The slats 26 function to prevent lateral displacement of articles, as seen in dotted lines at 27 in Figure 2, which are supported upon the shelves 25 and within the drawers 18. The slats 26 permit a free circulation of air through the drawers 18, and the shelves 25 are preferably provided with openings or elongated slits, as illustrated in Figures 7 and 8, to enable the air to circulate upwardly and downwardly there-through.

From the foregoing it will be readily apparent that the drawers 18 can be individually opened by being drawn outwardly of the cells 15 and when so opened, as illustrated in Figure 1, the articles 27 contained therein may be readily removed therefrom or other articles applied thereto without disturbing the other contents of the drawer. Further, it will be readily apparent that the articles to be applied to or removed from the drawers 18 may be reached from the sides thereof thus enabling the drawers to be located at a higher level and to be accessible without the use of a stool or other means for elevating a person using the drawers. The rear walls 23 of the drawers 18 are closed so that when the drawers are extended said rear walls will substantially close the cells 15 to prevent escape of the cold air therefrom. As illustrated in Figures 1, 5 to 8 and 10, the drawers may be provided with a plurality of vertically spaced shelves which may be adjustably mounted in the individual drawers for adjustment to accommodate articles 27 of various sizes so as to most expeditiously utilize the drawer space. Likewise, when a plurality of shelves are utilized, a pair of slats are employed above and at the sides of each shelf for holding the articles contained on the shelves against lateral displacement. As seen in Figure 1, the retaining slats are preferably located relatively low with respect to the

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shelves so that the articles 27 may be easily removed from the shelves over the slats.

In Figures 5 to 8 and 10 a slightly modified construction of drawer, designated generally 28, is provided. The front wall 29 of the drawer 28 is provided with the insulating wall 22 on the inner side thereof, as previously described, and the inner side of the insulating wall 22 supports a plurality of horizontally disposed angle brackets 30 each of which is adapted to support the outer end of a shelf 31 or 32. The shelf 31, as seen in Figure 7, is provided with a plurality of apertures 33 and the shelf 32, seen in Figure 8, is provided with a plurality of elongated slits 34, which slits and apertures 33 permit the free circulation of air vertically through the drawers 28. The shelves 31 and 32 at their opposite inner ends are provided with projecting studs 35 which are adapted to be selectively received in vertically elongated openings 36 in the rear wall 37 of the drawer 28. The studs 35 combine with the brackets 30 for demountably supporting the shelves 32 in a plurality of vertically adjusted positions within the drawer 28. The drawer 28 is also provided with a pair of slats 38 for each shelf 31 or 32 which is employed therein. The slats 38 are located adjacent the side edges of the drawer 28 and are provided at their outer ends with studs 39 which engage vertical grooves 40 formed in the inner face of the insulating wall 22. The opposite inner ends of the slats 38 are provided with threaded studs 41 which extend through vertically elongated slots 42 of the rear wall 37, as best illustrated in Figure 6. The slots 42 and grooves 40 permit vertical adjustment of the slats 38 with respect to the shelf 31 or 32, with which a pair of slats are associated. The front wall 22, 29 and the rear wall 37 are connected by a plurality of strips 24a in the same manner that the strips 24 connect the walls 19 and 23. The threaded studs 41 carry wing nuts 43 which are adapted to be tightened for clamping the slats 38 in desired positions.

Thus it will be readily apparent that one or several shelves 31 or 32 may be disposed in each drawer 28 for most efficiently accommodating articles, packages or containers of various sizes.

Another construction of refrigerator or freezer locker, designated generally 44, is illustrated in Figure 4, and includes an enlarged bottom drawer 45 which may be of the same construction as the drawer 28, a shallower relatively wide vegetable drawer 46, disposed thereabove, a row of drawers 47, arranged above the drawer 46, and a horizontal row of compartments 48, at the top thereof. The compartments 48 are each preferably closed by a swinging door 49 and the center compartment thereof is preferably pro-

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vided to contain a conventional cooling unit. Each of the drawers 45, 46 and 47, though varying in size, may be constructed in the same manner as the drawer 28.

In Figure 9 a small sized freezer locker, designated generally 50, is illustrated. The locker 50 has a longitudinally disposed central portion 51 which provides a housing for a cooling unit, not shown, and is provided with a drawer 52 at each side thereof. The drawers 52 may be of the same construction as the drawer 28 to operate and be utilized in the same manner. The freezer locker 50 may be built to extend to a height so that the top thereof can be utilized as a table for conserving space in apartments and other dwellings where space is at a premium.

Although not disclosed, it will be readily apparent that the various drawer constructions, previously described and illustrated, may be mounted on rollers and guides in a manner similar to the well known mounting of metal file cabinet drawers.

Various modifications and changes are contemplated and may obviously be resorted to without departing from the spirit or scope of the invention as hereinafter defined by the appended claim.

I claim as my invention:

25 A drawer for refrigerators or freezer lockers, comprising a front wall, a rear wall, connecting strips connecting the front wall and rear wall, said front wall being provided with horizontal brackets on its inner side, at least one shelf having an end selectively engageable on said brackets, said shelf having studs projecting from its opposite end, and said rear wall being provided with vertically elongated openings for selectively receiving said studs to combine with the brackets for adjustably supporting the shelves between the front and rear walls, said studs and openings retaining the shelf against lateral displacement, said shelf fitting snugly between the front and rear walls, and vertically adjustable retaining members detachably supported by the front and rear walls adjacent the side edges of the drawer and above the shelf, said retaining members each having a portion for selectively and adjustably engaging an elongated opening of said rear wall.

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