July 24, 1934. O. M. SUMMERS 1,967,455

SHELF CLAMP

Filed July 30, 1931

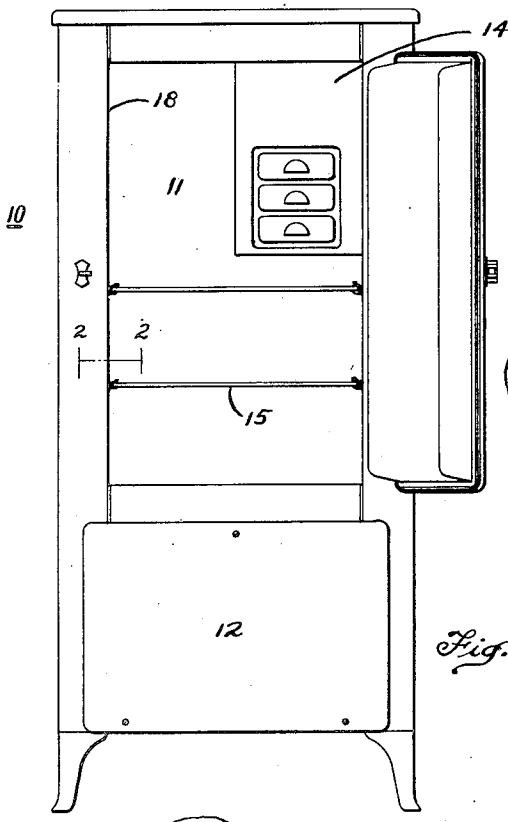


Fig. 1

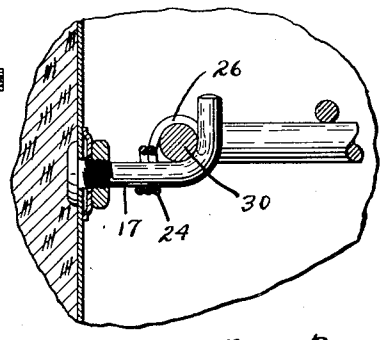


Fig. 3

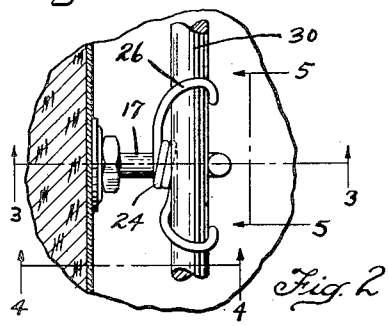


Fig. 2

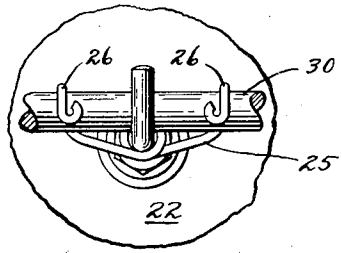


Fig. 5

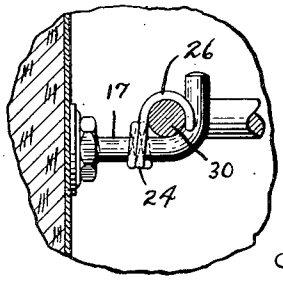


Fig. 4

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SHELF CLAMP

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Application July 30, 1931, Serial No. 554,059

7 Claims. (Cl. 211—153)

This invention relates to refrigerated cabinets generally and specifically to cabinets having means for rigidly and securely locking removable shelves in position therein.

The objects of my invention are to provide means for locking shelves in position within the cabinets and more particularly to provide resilient spring slips cooperating with the shelves and their supports for locking the shelves in position on said supports, thereby preventing rattling or accidental displacing thereof during shipment of such cabinets.

Further objects and advantages of the present invention will be apparent from the following description, reference being had to the accompanying drawings, wherein a preferred form of the present invention is clearly shown.

In the drawing:

Fig. 1 is a view in elevation of a refrigerator cabinet embodying my invention;

Fig. 2 is a detailed sectional view taken on the line 2—2 of Fig. 1;

Fig. 3 is a detailed sectional view taken on the line 3—3 of Fig. 2;

Fig. 4 is a detailed sectional view taken on the line 4—4 of Fig. 2, and

Fig. 5 is a view in elevation taken substantially on the line 5—5 of Fig. 2.

To illustrate my invention I have shown a refrigerator cabinet generally designated at 10 having formed therein an insulated food compartment 11 and a machinery compartment 12. Within the food compartment 11 is supported an evaporator element 14, connecting to a heat dissipating unit, not shown, located within the machinery compartment 12. This heat dissipating unit may be either an absorption unit or a compression unit of the conventional type.

Also within the food compartment 11 there are provided shelves 15, which, for convenience, are shown as wire shelves. These shelves are removably supported on hoops 17 secured to the inner lining 18 of the food compartment by means of the flange integral with the nut 20 and the washer 21.

My invention has particular reference to means for locking the shelves 15 in position and to this end I have shown means generally designated at 22 cooperating with said supporting hook 17 and with said shelves 15 for accomplishing this function.

Referring to Figs. 2 to 5 inclusive, I have shown the means 22 as a spring clip formed of a continuous piece of metal such as metal wire bent spirally at its middle portion as shown at 24 and provided with outwardly extending arms 25, each arm being bent upwardly and then curved downwardly to form the curved portion 26. The clip is used in operation by slipping the spiral portion 24 over the hook member 17 and by springing the curved portions 26 over the end member 30 of the wire shelf 15.

In the manufacture of these clips there is provided sufficient spring tension in the arms 25 to hold the shelves 15 securely against the hook members 17. These spring clips may be readily and easily assembled and after assembling are extremely efficient in securely locking the shelves in position. The shelves may be removed by slipping the curved portions 26 over the end members 30 of the wire shelves.

Thus by my invention, rattling or vibration particularly during shipment, which tends to cut through the tinned or other protective covering of the shelf and the peg, is substantially prevented.

While the form of embodiment of the invention as herein disclosed constitutes a preferred form, it is to be understood that other forms might be adopted, all coming within the scope of the claims which follow.

What is claimed is as follows:

1. In combination with a shelf supporting means having a shelf removably supported thereon, means for locking said shelf in position comprising a spring-like member having a spiral portion supported by said shelf-supporting means and laterally extending arms engaging said shelf.

2. In combination with a shelf supporting means having a shelf removably supported thereon, means for locking said shelf in position comprising a spring-like member having a spiral portion supported by said shelf-supporting means and laterally extending arms curved around a portion of said shelf.

3. In combination with a shelf supporting means having a shelf removably supported thereon, means for locking said shelf in position comprising a continuous metal wire formed with a spiral portion supported by said shelf supporting means and laterally extending curved arms partially surrounding a portion of said shelf.

4. In combination with a hook and a shelf removably supported on the hook, means for locking said shelf in position on said hook comprising a continuous spring-like metal wire formed with a spiral portion engaging said hook and laterally extending curved arms engaging said shelf.

5. In combination a support and a shelf re-

movably supported on the support, means for resiliently clamping said shelf in position on said support comprising a continuous spring-like metal wire formed with a portion engaging said support and laterally extending arms engaging said shelf.

6. The combination of a shelf support having a shank portion extending laterally and substantially horizontally from the mounting point thereof, a shelf having an end extending across the shank portion of said support, a spring clip having a portion thereof extending across and bearing against the underside of said support and having curved ends fitting over and engaging the end of said shelf on opposite sides of the support to resiliently clamp the shelf to said support.

7. The combination of a shelf support having a shank portion extending laterally from the mounting point thereof and provided with an upturned end, a shelf having an end extending across the shank portion of said support intermediate the upturned end and the point of mounting thereof, a spring clip having portions thereof defining the walls of an opening, which opening receives the upturned end of said shelf support to permit application of the clip to said support, said clip having a portion engaging the shank portion of said support and having other portions fitting over and engaging the end of said shelf on opposite sides of said support to resiliently clamp the shelf to said support.

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