The invention relates to sliding lids for cabinets.

The object of the invention is to provide simple and efficient means for slidably guiding a pair of lids which, when closed, are coplaner and which are adapted to pass over one another when either is opened.

A feature of the invention consists in providing guiding-means for the lids in their sliding movement which comprises tracks or guides fixed on the cabinet and tracks or guides on the lids.

Other objects of the invention will appear from the detail description.

The invention consists in the several novel features which are hereinafter set forth and are more particularly defined by claims at the conclusion hereof.

In the drawings: Fig. 1 is a perspective of a refrigerating or cooking cabinet embodying the invention, with the lids closed and portions of the cabinet walls broken away for illustrative purposes. Fig. 2 is a side elevation of the lids, one of them being shown open, the cabinet being shown in section. Fig. 3 is a detail perspective of one of the guide shoes which ride on the track sections fixed in the cabinet. Fig. 4 is a detail perspective of one of the guide-shoes which ride on both the track-section fixed to the cabinet and the track-section on the lids. Fig. 5 is a vertical longitudinal section through the lids and one end of the cabinet. Fig. 6 is a section taken on line 6-6 of Fig. 5. Fig. 7 is a section taken on line 7-7 of Fig. 5. Fig. 8 is a perspective of a cooling cabinet with the lids closed.

The invention is embodied in a cooling or refrigerating cabinet 10, the walls of which are hollow and contain insulating material. A door 13 is usually provided in the front of the cabinet to provide access to the lower portion of the cabinet.

Lids or doors 11 and 12 fit into the openings in the top of the cabinet and, while in their closed position, are coplaner and disposed end-to-end to form a top and a closure for the cabinet. Each lid comprises a rectangular frame built up of side bars 14, an outer end bar 15 and an inner end bar 16, which are rigidly secured together. Bars 14, 15 and 16 are each provided with inwardly extending top and bottom flanges which provide channels for a hollow wall which is composed of seamless metal top and bottom plates 18 and 19 having interfitting marginal flanges 20 around the sides and ends thereof. The flanges fit in said channels. A top liner 21 of linoleum fits over the top sheet 18 of the hollow wall and its margins extend under all of the upper flanges in the bars of the rectangular frame on each lid.

Each lid is provided adjacent its outer end and on each of its sides with a long depending leg 22 which is provided at its lower end with a laterally and outwardly extending shoe 24 and adjacent its inner end on each of its sides with a short depending leg 25 which is provided with an inwardly extending shoe 26. These legs are secured, as by welding or any other suitable means, to the side-bars 14 of the lids. When the lids are closed, shoes 24 rest on incline track-sections 27 which connect with channel-bars 28 which form horizontal track-sections for said shoes 24 after the latter have been lifted vertically to a level where one lid will be elevated above the plane of, and so as to clear, the other lid. Channel-bars 28 at their inner ends connect with and terminate at upwardly inclined track-sections 29 which are joined by an elevated horizontal track-section 30. Shoes 26 on the short legs 25 at the inner ends of the lids, when the lids are closed, rest on the inner ends of the track-sections 28 adjacent the upwardly inclined track-sections 29. The side bars 14 of each of the lids have outwardly extending flanges, the lower 14a of which, while the lid is closed, is aligned with the elevated track-section 30. Shoes 26 extend inwardly from the legs 25 so that, during the initial inward shift of a lid toward its open position, these shoes will ride on inclined track-sections 29 over track-section 30 and, during its continuing movement, into the flanges 14a of the closed lid. The inclined track-sections 27 and 29 for each lid are substantially parallel so that, when each lid is moved inwardly, both of its ends will be symmetrically lifted to initially elevate the entire lid above the plane of the closed lid. After the shoes 24 and 26 pass off the inclines 27, 29, respectively, the lid will be elevated to clear, and be free to move over, the closed lid. After the lid has been elevated, shoes 24 will ride on track-section 28 and shoes 25 will ride on track-sections 14a on the closed lid.

In operation, the lids will be normally closed, as shown in Figs. 1 and 8, and both of the lids 11 and 12 will be coplaner and fit in end-to-end relation and close the top of the cabinet. When access is to be had to either end of the space in the cabinet, the lid over the portion of the cabinet to which access is desired, will be shifted longitudinally of the cabinet. As the lid is shifted inwardly, shoes 24 and 26 will simultaneously ride upwardly on inclined track-sections 27, 29, respectively, until they pass onto horizontal track-sections 28 and 30, at which
time the shifted lid will be elevated sufficiently to slide over the closed lid. As the movement of the lid is continued to increase the area of the opening, the shoes 24 will ride on the track-sections 28, which are fixed to the cabinet-wall and shoes 26 will ride from track-section 30 onto the flanges 14* of the closed lid, as illustrated in Fig. 2. The reverse shift of the open lid will cause it to travel horizontally over the closed lid until shoes 26, 24 reach inclined track-sections 29, 27 and then they will ride downwardly on said sections until the lid has passed into its closed position, so that lids will be coplanar and in end-to-end relation. During the opening and closing of a lid, the track-sections 30 serve to switch the shoes 26 onto and off the track-sections 14*.

A cross-bar 35 extends between and is fixed to, the front and rear walls of the cabinet under the track-sections 29, 30. In order to permit the switching of the shoes 26 from the elevated track-section 30 to the track-section 14* on the lids, the inner end bar 16 of each lid terminates over the inner end of the incline track-sections 28 and outwardly of section 30. Each bar 16 is provided with a horizontal flange 16* to reduce the gap between the lids. Each lid has a handle 34 secured to the top thereof.

The invention exemplifies a cabinet with sliding lids which are adapted to slide over one another and in which the guiding or track-system includes sections fixed to the cabinet-wall and sections on the lids. This simplifies the guide-structure. The lids are also built up of frames and hollow walls with linoleum covers, which makes it possible to utilize the tops of the lids as table space or for service.

The invention is not to be understood as restricted to the details set forth, since these may be modified within the scope of the appended claims, without departing from the spirit and scope of the invention.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:

1. The combination with a cabinet having an opening in the top thereof, of a pair of slideable lids for closing the opening, and arranged in end-to-end relation, of a pair of long depending legs at the outer end of each lid, a pair of short legs depending from the inner end of each lid and a track-system for the legs for horizontally guiding one lid over the other, comprising inclined switch-sections inside of and adjacent the outer ends of the cabinet, a pair of inclined switch-sections for the short legs at the inner ends of the lids, horizontal track-sections between the upper ends of the switch-sections for the long legs and the lower ends of the switch-sections for the short legs, and horizontal track-sections on and extending substantially from the inner to the outer end of the lids on which the short legs will ride when raised.

2. The combination with a cabinet having an opening in the top thereof, of a pair of lids for closing said opening and arranged in end-to-end relation, a pair of depending legs adjacent each end of, and secured to, the lids, respectively, and provided with shoes extending laterally from the legs and provided with inclined switch-sections, horizontal track-sections between the switch-sections, formed of flanges projecting inwardly from the faces of the cabinet, and track-sections formed of flanges extending outwardly from the sides of the lids.

3. The combination with a cabinet having an opening therein, of a pair of lids in end-to-end relation for closing said opening, a pair of depending legs adjacent each end of, and secured to, the lids and provided with shoes extending laterally from the legs and provided with inclined switch-sections, horizontal track-sections between the inclined sections and formed of flanges projecting inwardly from the faces of the cabinet, and track-sections formed of flanges extending outwardly from the sides of the lids.

4. The combination with a cabinet having an opening therein, of a pair of lids in end-to-end relation for closing said opening, a pair of depending legs adjacent each end of, and secured to, the lids, respectively, and provided with shoes extending laterally from the legs and provided with upturned ends and a track-system for the legs for slidably guiding one lid over the other, comprising inclined switch-sections, horizontal track-sections between the switch-sections, formed of flanges projecting inwardly from the faces of the cabinet and track-sections formed of flanges on, and projecting from, the sides of the lids, the shoes on the legs at the outer ends of the lids projecting from the legs towards the cabinet and the shoes on the legs at the inner ends of the lid projecting inwardly from the legs.

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