Feb. 7, 1956 F. A. SCHMIDT 2,733,887

METAL CABINET HANGER

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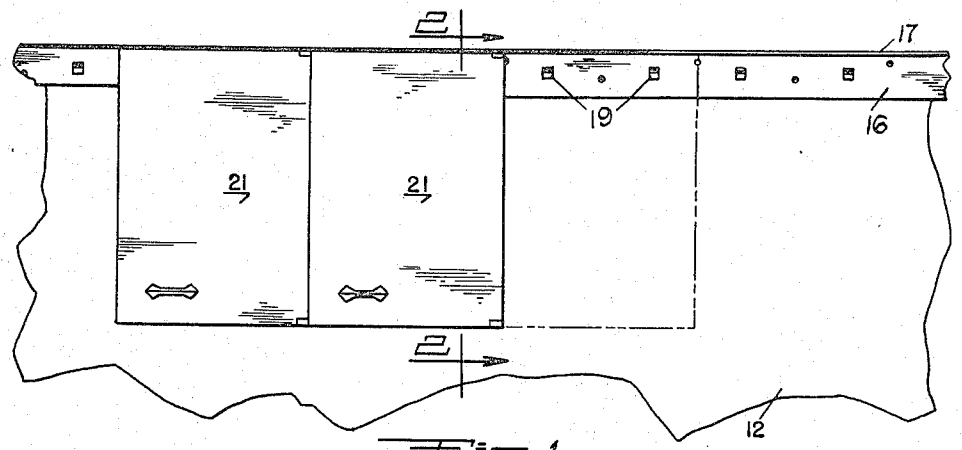


Fig. 1

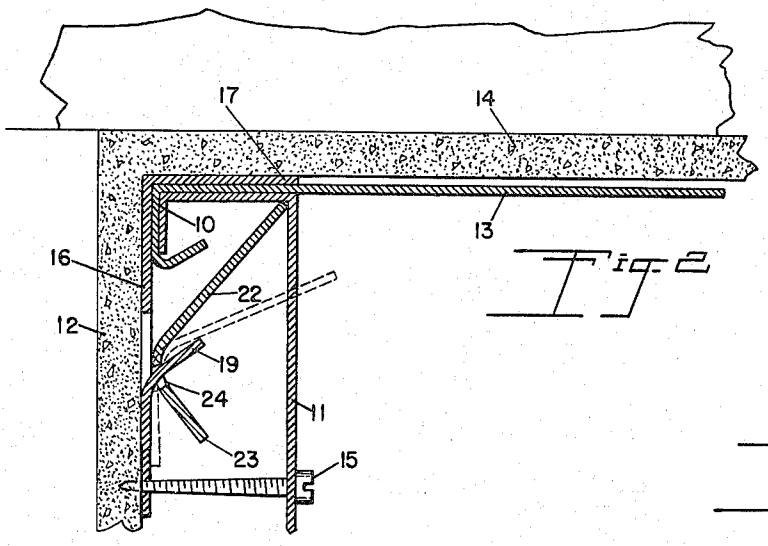


Fig. 2

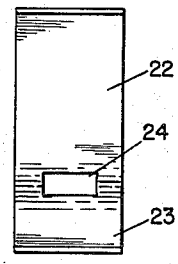


Fig. 3

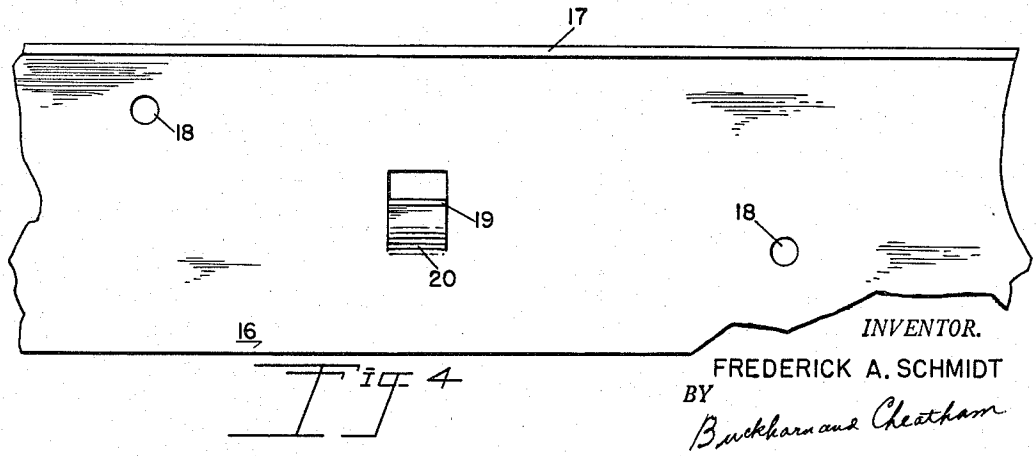


Fig. 4

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METAL CABINET HANGER

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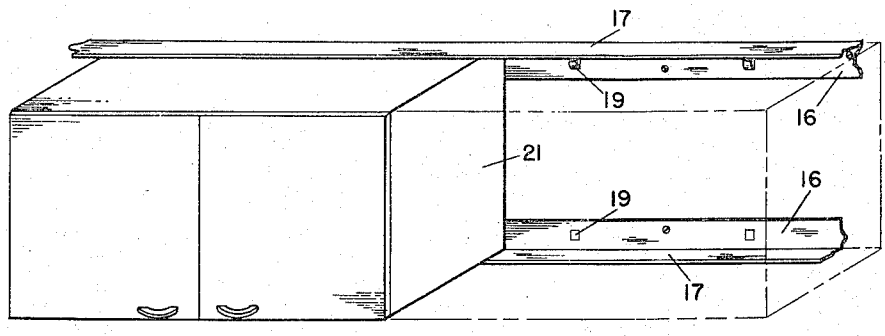


Fig 5

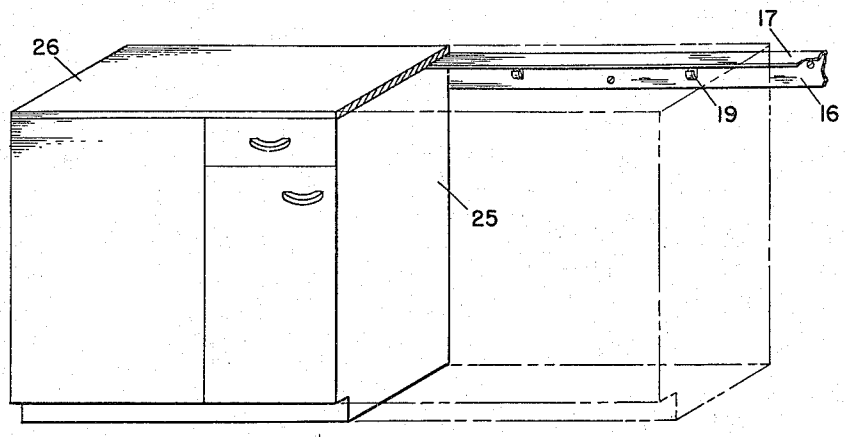


Fig 6

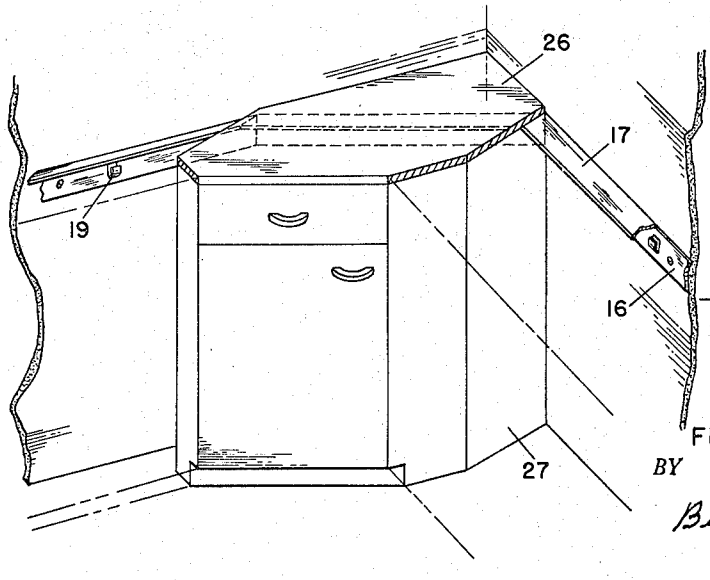


Fig 7

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METAL CABINET HANGER

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Application February 9, 1953, Serial No. 335,760

2 Claims. (Cl. 248—223)

The present invention comprises a hanger construction for sheet metal cabinets, particularly cabinets of the type having marginal portions projecting rearwardly from the plane of the rear wall as illustrated in the patent to Schmidt, No. 2,571,622, dated October 16, 1951. The present invention may be utilized in hanging wall cabinets at any height along a wall, but it is of particular interest in hanging ceiling cabinets, the invention being designed to hold the cabinets flush against the wall of the room and the ceiling of the room or a soffit therein. The invention has for its principal object the provision of means whereby a plurality of cabinets may be hung in horizontal alignment with each other, each being square with the ones adjacent to it and being hung firmly on the wall and drawn firmly up against the ceiling or other obstruction regardless of studding spacing and the character of the wall or ceiling and with a minimum amount of effort. The present invention also facilitates hanging cabinets in tight corners. A further advantage of the present invention is that considerable time is saved and the cost of materials required to hang cabinets is materially reduced.

A further object of the present invention is to eliminate the necessity for individual wood grounds which, in accordance with prior practice, were nailed to the studding prior to plastering the wall so as to provide means to fasten cabinets in position. This resulted in the necessity for designing the buildings to accommodate the cabinets, or tearing out a plastered wall and replastering the wall after plugging the wood grounds in position. By use of the present invention cabinets may be applied anywhere to any type of wall at any time without rebuilding the wall.

A further object of the present invention is to eliminate the prior art practice of hanging cabinets on a wall by the use of hooks attached to the cabinet which engage over a metal hanger strip fastened to the wall. Such a construction requires the provision of sufficient clearance so that the hook may be lifted over the lip of the hanger strip, with the result that the cabinet would be dropped down from a ceiling, and a molding would have to be provided to cover the resulting crack between the ceiling and the front upper edge of the cabinet.

A further object of the present invention is to provide a construction in which the use of predrilled holes in a hanger strip is avoided since sheet metal screws are utilized to fasten the cabinets to the hanger strip and these may be positioned anywhere by drilling through the cabinet and the hanger strip while the cabinet is temporarily held in its final location by hand or by shores.

A further object of the present invention is to provide means which not only secures a row of cabinets to a wall but at the same time forces the cabinets into alignment. Alignment both vertically and horizontally is simply achieved by making certain that a single hanger strip applied to the wall is level and straight.

A further object of the present invention is to provide a hanger strip which may be utilized to mount ceiling

cabinets or floor cabinets, and which may be easily cut on the job so as to accommodate any desired combination of cabinets fitted within any size room.

A further object of the present invention is to provide a strip of the character described which may be notched and bent to provide means for mounting corner cabinets.

A further object of the present invention is to provide means of the character described which may be utilized to hang cabinets without requiring workmen to locate studs or other framing members hidden inside of the wall.

A further object of the present invention is to provide a construction of the character described in which the mounting of the cabinet stresses the relatively thin sheet metal walls thereof in such manner as to prevent the cabinet from drooping or sagging away from a wall or ceiling.

The objects and advantages of the present invention may be more readily ascertained by inspection of the following specification taken in connection with the accompanying drawings wherein like numerals refer to like parts throughout and in which a preferred form of the invention is illustrated and described.

In the drawings,

Fig. 1 is a front view of a plurality of cabinets hung upon a wall by means of the present invention;

Fig. 2 is an enlarged detail taken substantially along the plane 2—2 of Fig. 1;

Fig. 3 is a front view of a hook member forming a part of the present invention;

Fig. 4 is a front view of a portion of a hanger strip forming a part of the present invention;

Fig. 5 illustrates a manner of using the present invention both above and below a row of wall cabinets for greater rigidity;

Fig. 6 illustrates the use of the present invention in the mounting of floor cabinets; and

Fig. 7 illustrates the use of the present invention in the mounting of a corner cabinet.

The present invention is of utility in connection with cabinets of the type comprising portions such as the flange **10** projecting rearwardly from the upper, rear edge of the cabinet, the flange portions spacing the rear wall **11** of the cabinet from the surface of the room wall **12**. The flange **10** lies along the upper, rear edge of the cabinet so that the top surface **13** of the cabinet may project to the outer edge of the flange **10** to provide an unbroken table top in the event the cabinet is used as a base cabinet, or so that the top of the cabinet may be drawn up against a ceiling **14**.

In accordance with the present invention, a hanger strip is first attached to the wall, the hanger strip preferably comprising an angle bar of sheet metal including a strip portion **16** adapted to fit against the wall **12** and a longitudinally extending flange **17** adapted to fit against the ceiling **14**. The strip portion **16** is preferably provided with a plurality of relatively closely spaced holes **18** which may be staggered, as illustrated in Fig. 4, through which screws or nails may be driven into the studding or sheathing so as to fasten the hanger strip to the wall. The strip portion **16** is provided with a plurality of tongues **19** struck from the material of the strip portion so as to extend upwardly and forwardly from the plane of the strip portion, the tongues being attached by roots **20** extending substantially parallel to the longitudinal direction of the hanger strip. A plurality of such tongues **19** are struck out in longitudinal alignment along the strip at such relatively close spacing that two or more of such tongues may be within the area covered by one of the smaller cabinets indicated at **21** in Fig. 1. In the event that the edge of a cabinet

should overlie one of the tongues 19, it may be easily hammered back into the plane of the strip portion 16.

A hook member is removably associated with each of the tongues 19, the hook member comprising a rectangular strip of sheet metal bent into an open L-shape so as to provide an upper leg 22 and a lower leg 23 defining an obtuse dihedral angle. Near the apex of the angle the hook member is provided with a transverse, open, rectangular slot 24 of such width as to embrace the side edges of the tongue 19 and of such vertical dimensions as to allow the hook freely to swing on the tongue. The upper leg 22 is of greater length than the width of the strip between the root 20 of the tongue 19 and the base of the flange 17, and of lesser length than the distance between the root of the tongue and the outer edge of the flange. The lower leg 23 may be of any convenient length, and need not be as long as the upper leg.

When several of the hook members have been placed upon the corresponding tongues 19, the weight of the upper leg will cause the hook member to swing into the position shown in dash outline in Fig. 2, thereby spacing the tip of the upper leg from the ceiling to such an extent that the projecting flange 10 on a cabinet may be hooked over the tops of the hook members. Then when the cabinet is pushed toward the wall the hook members rock to the position shown in full line in Fig. 2, pushing the top of the cabinet into firm engagement with the flange 17. While the cabinets are temporarily held in this position, either manually or by the use of shores, holes may be drilled through the rear wall 11 and the lower edge of the flange 16, through which sheet metal screws 15 are passed for engagement with the flange 16. The screws are inserted to such an extent as to stress the rear walls 11, thereby strengthening the cabinets and preventing them from sagging away from the wall or ceiling. The screws 15 may be placed anywhere, since there is no necessity to find the studs or other framing members behind the plaster or other surfacing of the wall.

Fig. 5 illustrates the use of a pair of oppositely disposed hanger strips in the mounting of wall cabinets, the cabinets being hung upon the tongues 19 of the upper strip as previously described. In this instance greater rigidity and strength is provided by mounting a lower strip upon the wall in position to support the lower rear edges of the cabinets, the strip being mounted with the flange 17 lowermost. In this strip the tongues 19 may be hammered back into the plane of the strip so as not to interfere with any portion of the cabinets, and the cabinets may be screwed to the lower strips or not, as desired.

Fig. 6 illustrates the use of the present invention in the mounting of wall cabinets 25, which rest upon the floor of the room and are usually covered with a table top 26 of plywood or other panel type construction material. In this instance the strip is attached to the wall as previously described, and the upper rear corners of the cabinets drawn firmly into the angle of the strip by means of the hooks and tongues as previously described. The advantage in this construction is that the mounting strip may be easily secured to the wall in exactly level position, and it may be mounted in an exactly straight line by the use of shims so as to eliminate the effect of irregularities and waves in the surface of the wall. Then by using the mounting strip as a reference the cabinets may be drawn into an exactly straight line and maintained in such position and in an exactly level condition

by the use of shims behind the lower corners of the cabinets and beneath the lower edges thereof.

Fig. 7 illustrates a construction similar to Fig. 8 in mounting a corner wall cabinet 27, in this instance the flange 17 of a continuous strip being notched so as to permit bending of the strip so that a portion thereof extends diagonally across the corner of the room in engagement with the rear upper edge of the corner cabinet. As in regard to Fig. 6, such a construction usually embodies a table top 26 which rests upon the top of the cabinet and the upper surface of the flange 17.

Having illustrated and described a preferred embodiment of the present invention, it should be apparent to those skilled in the art that the same permits of modification in arrangement and detail. I claim as my invention all such modifications as come within the true spirit and scope of the appended claims.

I claim:

1. A hanger construction for a sheet metal cabinet having a flange projecting rearwardly from its rear wall in the plane of its top, comprising a sheet metal hanger strip adapted to be fastened horizontally to a building wall, a tongue struck from said hanger strip with its root parallel to a longitudinal edge of the strip and extending upwardly and forwardly from the strip, and a hook member loosely mounted on said tongue, said hook member comprising an L-shaped strip of sheet metal having a slot near and parallel to the apex of the dihedral angle defined by the legs of the hook member and adapted to receive said tongue, said strip having a forwardly projecting flange along its upper edge, and the upper leg of said hook member when mounted on said tongue being of greater length than the width of said strip between the root of said tongue and the base of the forwardly projecting flange on said strip and of lesser length than the distance between the root of said tongue and the outer edge of said forwardly projecting flange whereby a cabinet supported on said hook member with the tip of said upper leg directed into the angle between the rear wall and the rearwardly projecting flange of the cabinet will be forced upwardly against said forwardly projecting flange on the hanger strip when the cabinet is forced toward the wall upon which the hanger strip is mounted.

2. A hanger construction for a sheet metal cabinet having flanges projecting rearwardly from its rear wall, comprising a metal hanger strip adapted to be fastened horizontally to a building wall, a tongue struck from said hanger strip with its root parallel to a longitudinal edge of the strip and extending upwardly and forwardly from the strip, and a hook member loosely mounted on said tongue, said hook member comprising an L-shaped strip of sheet metal having a slot near and parallel to the apex of the dihedral angle defined by the legs of the hook member and adapted to receive said tongue, said strip having a forwardly projecting flange along its upper edge, and at least one leg of said hook member being of greater length than the width of said strip between the root of said tongue and the base of the forwardly projecting flange and of lesser length than the distance between the root of said tongue and the outer edge of said forwardly projecting flange.

References Cited in the file of this patent

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