Dec. 8, 1953 H. G. KNUTH 2,661,994

SECTIONAL CABINET AND FILLER STRUCTURE THEREFOR

Filed Feb. 23, 1945 3 Sheets-Sheet 1

Fig. 1.

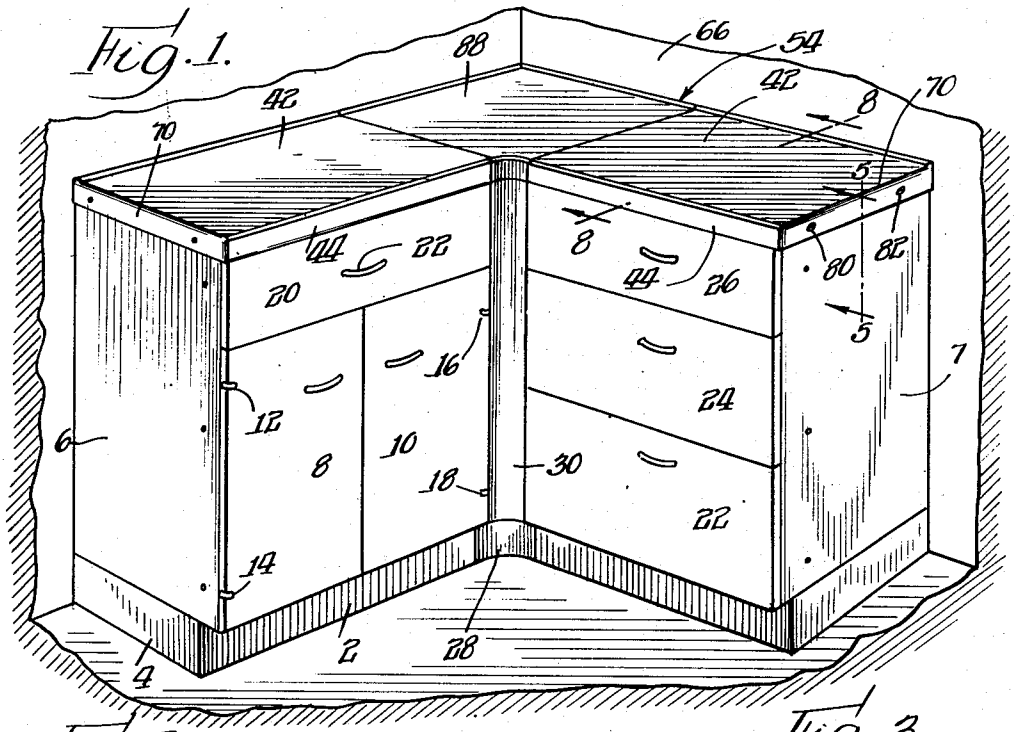


Fig. 2.

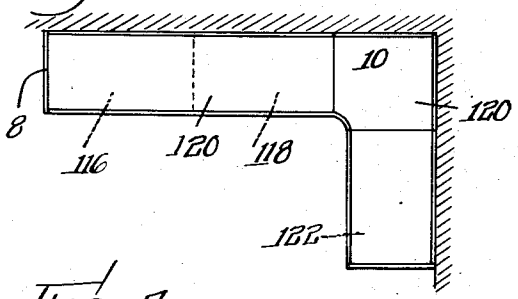


Fig. 3.

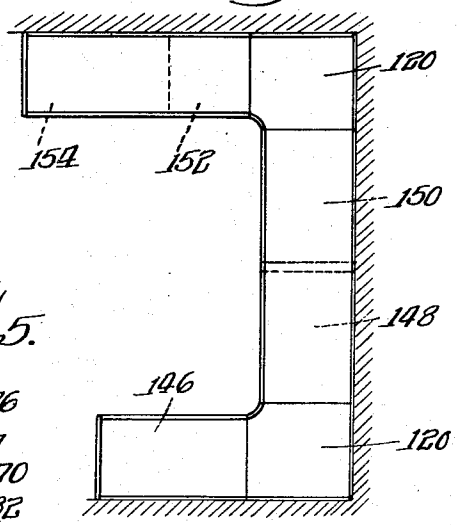


Fig. 4.

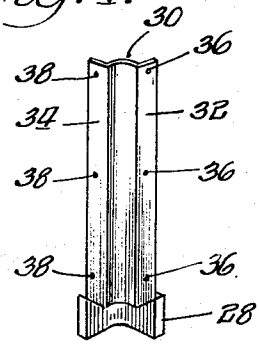
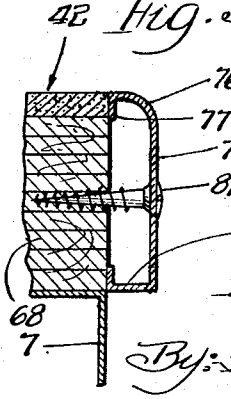


Fig. 5.



INVENTOR.
Harvey G. Knuth
By: Lyons, Moore, Olsen & Treyler
Attys.

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SECTIONAL CABINET AND FILLER STRUCTURE THEREFOR

Filed Feb. 23, 1945 3 Sheets-Sheet 2

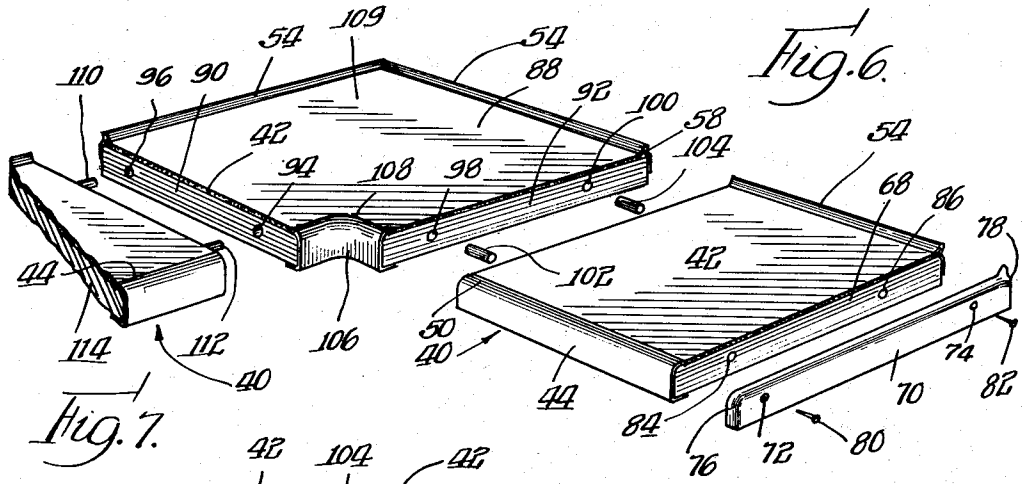


Fig. 6.

Fig. 7.

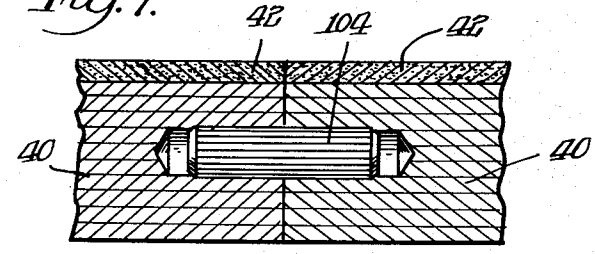
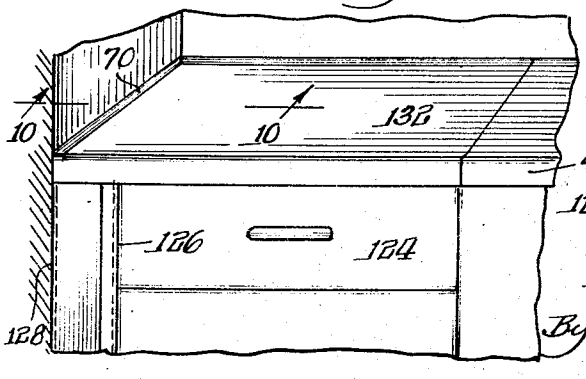


Fig. 8.

Fig. 9.



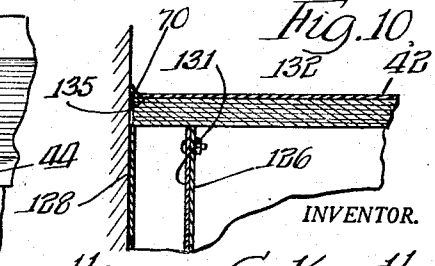


Fig. 10.

INVENTOR.

Harvey G. Knuth

By: Lyon, Moore, Olson & Treyler

Attys.

Dec. 8, 1953 H. G. KNUTH 2,661,994

SECTIONAL CABINET AND FILLER STRUCTURE THEREFOR

Filed Feb. 23, 1945 3 Sheets-Sheet 3

Fig. 11.

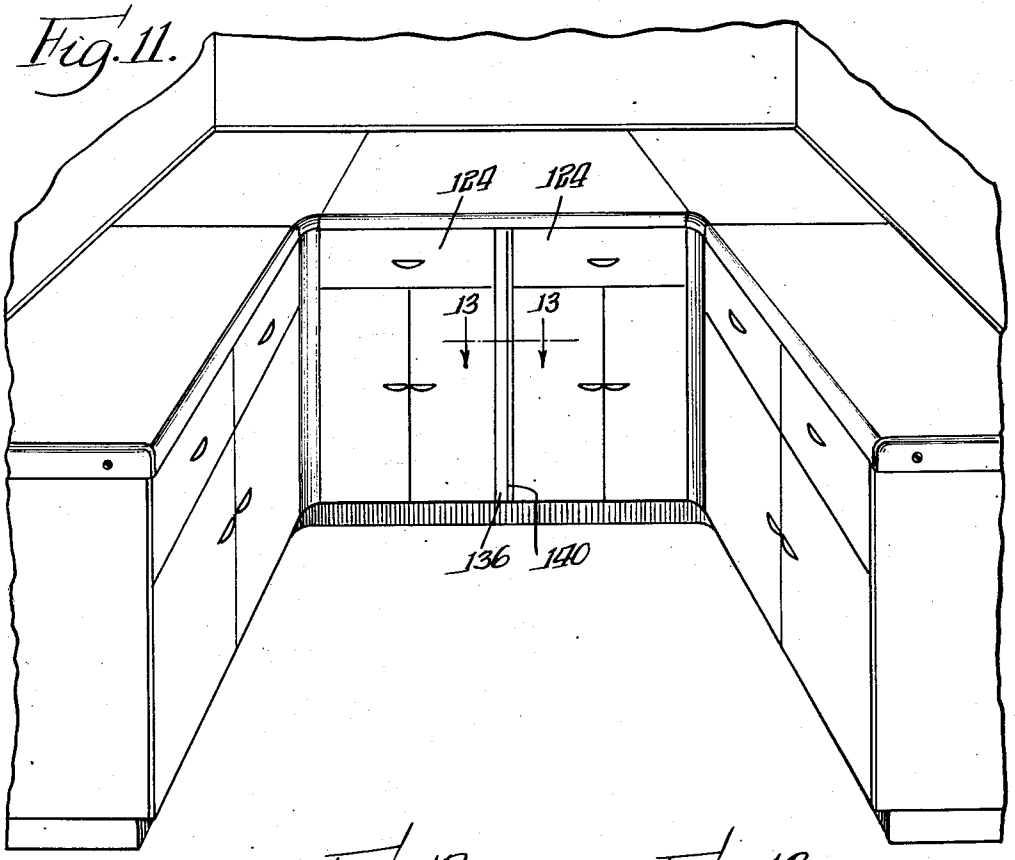


Fig. 12.

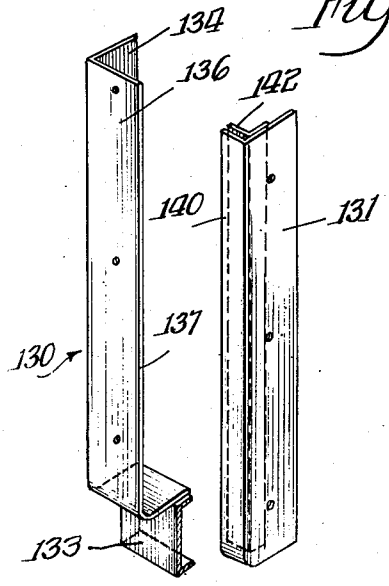
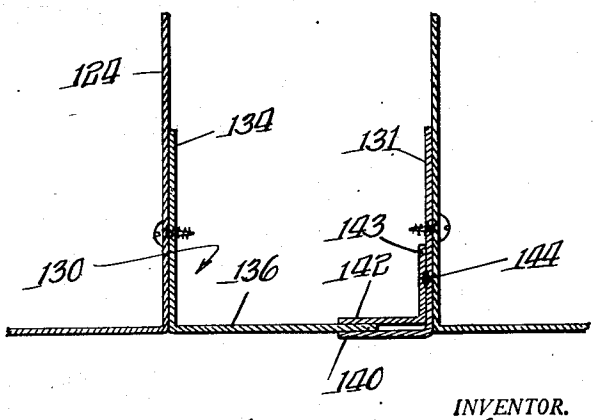


Fig. 13.



INVENTOR.
Harvey G. Knuth
BY
Lyon, Moore, Olson & Snyder
Attys.

Patented Dec. 8, 1953 2,661,994

UNITED STATES PATENT OFFICE

2,661,994

SECTIONAL CABINET AND FILLER STRUCTURE THEREFOR

Harvey G. Knuth, Elgin, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a corporation of Illinois

Application February 23, 1945, Serial No. 579,457

2 Claims. (Cl. 312—107)

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This invention relates to so called kitchen cabinet constructions.

Among the objects of the present invention is to provide a kitchen cabinet installation built up of a number of similar or various types of cabinets, such for instance as cabinets which contain vertical tiers of drawers, cabinets which have a single closure for the open front or a double closure for the open front, or in fact any present day type of cabinet, and the invention resides in finishing these cabinets in the same manner as heretofore finished, except that they are complete without any tops. In short, they are open at the top. The tops are manufactured separately in various lengths of a number of widths to correspond with the various widths of the separately built cabinets, which lengths may be cut to size to cover one or more juxtaposed cabinets, and wherein each such elongated top as an article of manufacture comprises a wooden, preferably plywood, substantially rectangular flat structure carrying metallic edging or facing along its front and back parallel sides, and carrying a linoleum top commensurate in area with the underlying area of the top, and a sheet metal or other material edging for the front and back which overlies and makes a waterproof seal, preferably being imbedded into the top surface of the linoleum, the other two opposed marginal end portions of the top being free of any edgings or facings, and being provided with means, specifically, dowel pin openings, whereby two of these top sections, including a corner and one or more straight lengths, may be assembled end to end in such a manner as to make a water-tight joint therebetween and particularly between the contiguous confronting edges of the linoleum at the top, by means of which construction a complete cabinet may be assembled which has a linoleum top coextensive with its length and wherein the front and back and side walls of the complete cabinet are provided with metallic or other material edgings making a water-tight seal with the linoleum or other top finish for the cabinet top.

Another object of the invention resides in providing a so-called kitchen cabinet installation including a number of finished open-topped cabinet constructions including a corner section, which are adapted to be rigidly secured together in any desired fashion and wherein a completed top having a linoleum or other material finish at the top closes the top of one or more of said sections in such a manner that the length of the single top is a multiple of the length of two or more of the underlying cabinets, whereby the

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junction between a plurality of the underlying cabinets is covered by a single elongated top structure presenting a smooth, unbroken linoleum or other material top surface for the underlying cabinets, and wherein this top surface is provided with continuous front and back metallic edges making a water-tight seal with the material of the cabinet top.

Yet another object of the invention resides in providing a specifically designed corner section which is adapted to unite the two legs of an L-shaped cabinet in such a manner as to provide at the corner junction a rounded frontal surface which joins with the end surfaces of the cabinets forming the legs of the L-shaped cabinet to provide a smooth front and a linoleum or other material top, the junctions of the separate cabinets at the top being free of metallic or other material edgings, and wherein the contiguous edges of the linoleum of the separate top sections are united together by a suitable adhesive such that after a predetermined amount of use the raw edges of the top material, particularly the linoleum, will substantially flow together to exclude dirt and moisture and present a substantially unbroken material top that is impervious to moisture, liquids, dirt and the like.

Yet another object of the invention resides in providing a kitchen cabinet which may be built up of two or more juxtaposed basal cabinet sections and separately completed top sections assemblable end to end, and wherein an end scriber plate may be utilized for covering the front of the cabinet to cover a void between the end section of the base of the cabinet and the adjacent cabinet wall where the space is not an exact multiple of the width of the particular cabinets used for the installation, and likewise whereby with a finished, completed cabinet top longer than the underlying cabinet but of selected length such that a piece of the top thereof may be sawed or cut off exactly to carry over to meet the adjacent wall which is spaced from the end of the selected cabinet, the additional length of the cabinet top beyond the end of the underlying cabinet corresponding exactly to the width of the end scriber plate, the cabinet installation will lie flush with the spaced adjacent wall so as to provide a neat appearance and whereby the gap between the cabinet and said wall is covered both at front and at the top.

Another object of the invention is to provide a distinct type of base corner angle for covering the front of the corner installation between the two legs of an L-shaped corner cabinet.

Another object of the invention is to provide

an end scriber plate and an end plate which may be used to close the end of a cabinet, said base corner angle, end scriber plate, and end plates and said cabinet being formed of sheet metal and the tops being formed of wood, preferably plywood, and topped with sheet material, such for instance as linoleum, and edged with metallic facings imbedded in the top of the linoleum in a liquid-tight manner, whereby to provide a continuous finished appearance for the cabinet.

Another object is to provide a rear metallic border edging for the top having a rear longitudinal recess for the reception of cement whereby the same is made tightly adherent to the wall to exclude moisture, the front edge portion of this facing being imbedded in the top surface of the linoleum of the top.

Other and further objects of the invention will be apparent from a perusal of the following specification when taken in connection with the accompanying drawings, wherein:

Figure 1 is a front perspective view of an L-shaped corner cabinet embodying my invention;

Figure 2 is a diagrammatic view of an L-shaped cabinet wherein one of the top sections corresponds in length with two of the underlying bottom sections;

Figure 3 is a C-shaped cabinet installation;

Figure 4 is a front view of the basal corner angle;

Figure 5 is a sectional view taken on the line 5—5 of Figure 1;

Figure 6 is a perspective view of the manner in which the separate cabinet tops are separately manufactured as articles;

Figure 7 is a section taken on the line 7—7 of Figure 8;

Figure 8 is a section taken on the line 8—8 of Figure 1;

Figure 9 is a view of the end scriber plate cut off to desired length to fill the front gap between the end of the cabinet and the adjacent wall, and showing also a cabinet top of greater length than the underlying cabinet and cut off to meet the adjacent wall;

Figure 10 is a section taken on the line 10—10 of Figure 9;

Figure 11 is a perspective view showing the use of a filler;

Figure 12 is a perspective view of the filler members; and

Figure 13 is a section taken on the line 13—13 of Figure 11.

Referring now in general to the invention, the same comprises a cabinet installation and method of assembling so that manufacturers and distributors may buy and keep inventories of a lesser number of parts. At the present time kitchen cabinets are made up of various combinations of units, each unit being a complete cabinet finished at bottom and top, and the cabinets are set end to end in assembled relation in the desired spot. In some instances kitchen cabinets are custom made, that is they are built to exact specification, which is very expensive. The present invention resides in manufacturing kitchen cabinet tops of desired lengths and desired widths for covering juxtaposed basal cabinet arrangements of various types, some with vertical tiers of drawers, some with single front closures, some with double front closures, some with hinged fronts swinging outwardly about horizontal pivots, and in fact any of the modern types of arrangements of cabinets are within the contemplation of the present invention in so far as the construction per se of the basal cabinet is concerned. The one departure resides in the fact that the cabinets at the top, as finished, are completely open.

The tops of the cabinets are manufactured separately as separate articles of manufacture and may comprise preferably a wooden rectangular elongated top section, preferably plywood, a finished sheet top material therefor, preferably linoleum, adherent to the top of the wooden section, the front and rear margins of the plywood linoleum top being faced with sheet metal rims or edge bindings the free edges of which at the top are preferably imbedded in the marginal edges of the linoleum in a waterproof and moisture-proof manner whereby the front and rear edges are suitably finished. Except for a corner top piece the two opposite parallel end edges of these elongated top sections are left free of edgings and are provided with means whereby one or two of the sections and the corner may be assembled together by means of registering dowel openings and interlocking dowel pins, the contiguous wall linoleum edges being suitably connected together by means of a cement so that the line between the linoleum sections is practically invisible. These finished top sections are secured in place to the cabinets by means of wood screws from beneath into the underside of the tops and also into angle brackets carried by the finished bottom cabinets. One of the advantages of the foregoing resides in the fact that by the use of completed, ready to install basal cabinet units and completed ready to install elongated top pieces, any combination of length or width may be readily arrived at from stock in inventory, either by precutting the elongated tops at the factory or at the job. For instance, in many cases a length of cabinets is built up of relatively short length, individual cabinets whereby great rigidity of individual cabinet construction may be obtained, the cabinet sections being suitably connected together by sheet metal screws or they may be simply installed end to end together and then a single cabinet top of a length multiple that of the underlying cabinets may be selected or cut on the job to overlie the length of juxtaposed cabinets and so that the junctions between the cabinets will be covered by a single top having a single unbroken sheet of linoleum, thereby positively excluding water and presenting a finished top both at the top and at the front and back edge facings. In this way a minimum number of tops need be kept in stock by the distributor than in the existing practices. Therefore a cabinet top construction and preferably an open top cabinet construction of the foregoing character not only entails a great saving to the manufacturer and distributor, but also permits the production and installation of a finished cabinet installation of any desired width and length providing any combination desired, and whereby hideous joints, which attract moisture and dirt between sections, are eliminated. In addition, great advantages are provided by the construction of the ends of the corners of the cabinet suiting the needs of the installation.

Referring now to the drawings it will be understood that the cabinet bottoms are formed of sheet metal of prebuilt finished construction. For instance, referring to Figure 1, there is shown a cabinet construction comprising two sections and a corner section. The section to the left of Figure 1 shows a base 2, which in a direction from front to back is not as long as the cabinet portion thereabove, of generally rectangular con-

struction and including a vertical side wall 4. It is of usual construction except that it is made of sheet metal. It includes a finished side wall 6, doors 8 and 10 hinged as at 12, 14, 16 and 18 to inner located but not shown vertical supports well known in the art. In addition this cabinet is provided with a drawer 20 having a handle 22. The cabinet to the right of Figure 1 is similar in construction except that it includes a vertical tier of drawers 22, 24 and 26.

In addition there is a corner structure which comprises a base corner angle as shown in Figure 4 including the right angled basal piece 28 formed of sheet metal having an integral upstanding curvilinear and elongated member 30 provided with oppositely extending flanges 32 and 34 each flange being suitably provided with spaced perforations 36 and 38. The flanges 32 and 34 of this basal piece are united by means of preferably metallic screws or bolts to the adjacent wall sections of the adjacent cabinet bases. In addition to the base corner angle there is a top for the corner which will be hereinafter described.

The manufactured tops for the basal sections of these cabinets comprise separate articles of manufacture. Each top consists essentially of a preferably elongated rectangular body portion 40, see Figure 8, herein shown as formed of plywood laminations. It is of substantial thickness and on its top surface carries an adherent of desired material plastic, but preferably sheet linoleum 42. This waterproof covering is cut to the size and shape of the elongated top portion 40 and secured thereto by suitable waterproof cement. In addition each elongated made up top 40 also includes front and back marginal edging or facing, preferably of sheet metal such as stainless sheet metal. For instance, the front edging 44 has an underlying, longitudinally extending flange 46 which will underlie the front edge of the laminated body portion of the top and is secured in place by fastening means such as a nail 48. The upper portion of this edging is finished smooth as at 50 and has an end 52 which is imbedded in a suitable groove formed in the front margin of the linoleum or other material top 42. This front edging 44 is coextensive with the length of the top section, as shown for instance in Figure 6. In addition there is a rear edging which comprises the sheet metal chromium plated band 54 attached to the rear wall of the body portion 40 by means of the fastener 56. This rear edging projects upwardly above the linoleum, thence inwardly as at 58 to provide a cement receiving pocket, thence folded inwardly upon itself as at 60, and thence it bends downwardly as at 62 and is provided with the free end 64 that is imbedded in a groove in the rear margin of the linoleum or other surface. The pocket 58 is adapted to receive waterproofing cement which adheres the folded part 60 snugly to the wall 66 so as to prevent water passing downwardly between the wall and the rear of the cabinet. This rear edging 54 is likewise coextensive with the length of the top section. In certain cases, as shown in Figure 6, the raw cut end 68 of the section may be closed by an end edging of a chromium finished or stainless sheet metal strip 70 suitably perforated as at 72 and 74 and having front and rear finished surfaces 76 and 78 to accord with the front and rear edgings 44 and 54 respectively. Fastening means 80 and 82 pass through the holes 72 and 74 into the raw edge 68 of the section whereby suitably to finish this end of the top where such strip is the outside end,

as shown in Figure 1. The strip 70 is provided with a rounded inwardly extending flange 76 corresponding to the flange 50 of the front edging 44 and also has a downwardly extending portion 77 which presses against the raw edge of the linoleum 42 by the fastening means 80 and 82 to provide a tight finish along this joining line. A bottom flange 79 also is held tightly against the lower edge of the body portion 40 as shown in Figure 5.

As shown in Figure 8 the top panels 40 are supported on longitudinal angle members 81 and 83 which are provided with openings to accommodate wood screws 85 and 87 which are screwed from inside the cabinets up into the under surface of the panels 40 to tightly hold them in place.

The corner top piece 88 shown in Figure 6 is provided with rear trim or edgings like 54 so as to lie flush with the wall and the two side edges 90 and 92 are left unfinished. They are preferably provided with dowel openings 94, 96, 98 and 100 for the reception of dowel pins 102 and 104 which dowel pins are elongated and are ribbed longitudinally so as to firmly engage and grip the walls of the openings 94, 96, 98 and 100, and to firmly unite the other top sections to the corner top section. In addition the front of the corner, as shown in Figure 6, of the top section 88 is notched and the notch is provided with a front chromium plated sheet metal edging of substantially curved cross section as shown at 106. The top edge 108 of this edging likewise is imbedded into a groove in the linoleum to form a sealed contact. This curved edging 106 overlies the top of the grooved central portion 30 of the base corner angle and makes a very pleasing finish. This corner top which is covered with a single piece of linoleum 109 is not only cemented to the wall by means of the recessed portion 58 of the two rear edgings 54 but is likewise supported by the top portion 30 and tops of the flanges 32 and 34 of the basal corner angle, and in addition the corner top is supported by means of the dowel pins 102, 104 of the section 42 and the dowel pins 110 and 112 of the adjacent top section 114. Before the corner and one or two top sections are united together as shown in Figure 7, the side walls of the linoleum 42 thereof are covered with a waterproof cement so that when the two top sections are dowelled together as shown in Figure 7 the cement will occupy the junction between the contiguous faces of the linoleum to cement it firmly together. Experience has shown that in the use of the cabinet, after a period of time these cemented together raw edges of the linoleum between two top sections will practically become as one, working together so that the junction will scarcely be visible and the junction will also be accordingly rendered completely waterproof, moisture-proof, and dustproof.

By reference to Figure 2, I have shown a construction wherein there are a plurality of underlying cabinets such as 116, 118 and 122. An elongated top 120 is cut to length to cover the cabinets 116 and 118. In addition there is provided a corner top 120 and still another elongated top is cut to cover the additional cabinet 122 which is disposed at right angles to the aligned cabinets 116 and 118. In the case of the cabinet 122 it will have its own cut length of cover section 42 which is coextensive in length with the underlying cabinet 122. However the top 120 for the two cabinets 116 and 118 is made or cut to a length on the job coextensive with the combined lengths of the two cabinets so that there is a

plywood body extending the over-all length of the two juxtaposed cabinets, covered with a piece of linoleum and trimmed along parallel front and back edges coextensive with the length of the two cabinets and joined as before described by dowels to one of the inturned faces 90 or 92 of the corner top 88. In this way, a dealer can carry a few top pieces of longer lengths of tops and then cut them to meet his requirements and thus actually reduce his inventory. Also, the junction of adjacent cabinets in this instance is completely eliminated by the use of the single-piece 120 overlying top with its single-piece linoleum top so that in this instance there is not even present a cemented together junction between two separate linoleum top pieces.

Attention is called to Figures 9, 10, 11 and 12 which show an arrangement utilized when a cabinet 124 has its outer edge 126 falling short of the adjacent wall 128 leaving a gap of space therebetween. In this type of cabinet I utilize the end scriber plates 130 and 131 shown in Figure 12 which include the basal portion 133 corresponding to the basal portion 2 of the cabinet and having the upstanding right angled flanges 134 and 136 of desired length. This construction is illustrated particularly in Figures 12 and 13 wherein the member 130 adjustably cooperates with the spaced flanges 140 and 142 of the upright 131. The flanges 140 and 142 of the upright 131 are sufficiently spaced apart and are constructed by welding a right angled piece 143 as at 144 so that the flange 136 of the piece 130 will slide relatively thereto to adjust the spacing between the two cabinets or between the wall and cabinet, or as shown in Figure 11, between two spaced cabinets 124. This latter installation arises where in return lines of cabinets forming a U-shaped arrangement, the two confronting cabinets 124 do not contact. That is, there is a space left between the two and it thereupon becomes necessary to fill in this space by the construction shown in Figures 12 and 13. In the construction shown in Figures 12 and 13 the flange 136 is in general cut down to fit the space to be filled and then the cut edge will be positioned between the opposed flanges 140 and 142. The ends of the flanges 140 and 142 are preferably given a finish, whereas the free edge 137 may be left unfinished. In both of these constructions of these filler parts, an elongated top 132 is preferably selected or cut which will extend across and cover both of the adjacent cabinets. This top 132, of course, includes the one-piece linoleum top 42 and the front and rear trim, but the ends are left unfinished except that one of the ends has openings therein for the reception of the dowel pins as hereinbefore described. In a construction such as illustrated in Figure 9 the top 132 is selected of such a length that it is longer than the underlying cabinet 124 whereby the top projects beyond the cabinet. However it is sawed off or cut off along the line 135, see Figure 10, so that it just fits in the space between the wall and the opposite end of the cabinet 124, overlying the cabinet 124 and also the top flanges 134 and 136 of the end scriber plate. In this construction these flanges 134 and 136 and the base may be either preselected or cut to a desired width so that they just fill the gap between the end 126 of the cabinet and the adjacent wall 128, as shown in Figures 9 and 10, and they are suitably fastened to the end 126 as shown at 139. In addition, the top 132 which overlies the cabinet 124 is cut from a length that is longer than the length of the cabinet 124 so that it projects therebeyond. However it is sawed off or cut off along the line 134 so that it just fits in the space between the wall and the opposite end of the cabinet 124 and overlies the cabinet 124 and also the top flanges 134 and 136 of the end scriber plate. Thus I provide a top piece in this instance which is cut not only to cover the underlying cabinet but also to cover the intervening space between the cabinet and the wall. Alternatively the end of the linoleum is either left exposed or provided with the cover molding or edging 54.

When the filler pieces are to be used to cover the distance between the cabinet 124 and the end wall 128 as shown in Figure 9, the angular filler piece 130 has its flange 134 merely abutting the wall and rests on the base 133. The piece 140 will therefore need no base.

Figure 3 shows another type of installation which includes two corner members 88, and the other arrangements of underlying cabinets such as 146, 148, 150, 152 and 154, all made in accordance with the principles of the present invention. This installation shows two corners 120, spaced apart, and an elongated single top piece cut to length to cover and close the tops of the two aligned cabinets 152 and 154 and making a dowelled tight joint with the edge of the corner 88. In addition there is another length of top cut to snugly fit between the two corners 88 and cover the tops of the aligned cabinets 148 and 150 and joined to the dowelled edge of the second corner 88. So also there is a third section of elongated top piece which covers the open topped cabinet 146 and is dowel jointed to the opposite end of the last mentioned corner 88 in the manner hereinbefore described. Thus in the installation shown in Figure 3, by using two top corners 88 and cutting off a length of preformed top which is exactly dimensioned to cover the cabinets 152 and 154 and the cabinets 148 and 150, and then cutting off or selecting another top piece of sufficient length to cover the cabinet 146, an installation such as shown in Figure 3 may be provided. This, it is of course understood, will be installed by dowelling the raw meeting edges of the elongated top sections and the corner sections 88 together and adhering the abutting cut edges of the waterproofing top covering together whereby to provide a substantially continuous, uninterrupted surface for the cabinet installations. As has been heretofore explained, the raw edges of the linoleum, when cut off and adhered together by means of an adhesive, provide a linoleum cover that in time will become practically as one working together so that a junction will scarcely be visible, and the junction will thus be rendered completely waterproof, moistureproof and dustproof, and the dowels which enter the underlying wooden laminations 40 will hold them tightly together in abutting flush relationship.

Obviously the invention is not limited to the specific details of construction disclosed herein but is capable of other modifications and changes without departing from the spirit and scope of the appended claims.

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

1. In a sectional kitchen cabinet, a cabinet open at the top and disposed with its back abutting a wall and one side spaced from an adjacent wall transverse to the first wall, a cover for said cabinet comprising a rectangular, substantially flat, body overlying the entire length of said cabinet and projecting therebeyond in abutting

relation to said transverse wall, and a filler structure comprising upstanding and overlapping face panels filling the space between the transverse wall and the adjacent side of the cabinet, one of said face panels having a transverse flange at one edge for abutting the transverse wall and the companion face panel having at one edge a transverse flange secured to the adjacent side of the cabinet.

2. A sectional kitchen cabinet comprising a pair of cabinet sections open at the top and spaced apart endwise, a top overlying said cabinet sections and covering the space therebetween, a filler structure comprising upstanding and overlapping face panels filling the space between the cabinet sections, one of said face panels having a transverse flange at one edge abutting and secured to the side of one cabinet and the companion face panel having a transverse flange at one edge abutting and secured to the side of the other cabinet section.

HARVEY G. KNUTH.

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