Oct. 6, 1953 L. L. BURKE 2,654,648

SEVERABLE COUNTER TOP FOR KITCHEN CABINET INSTALLATION

Filed Sept. 1, 1950 3 Sheets-Sheet 1

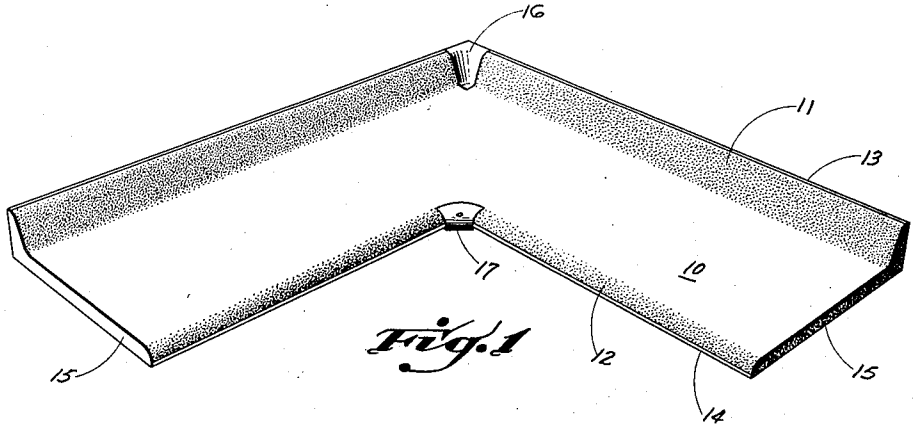


Fig. 1

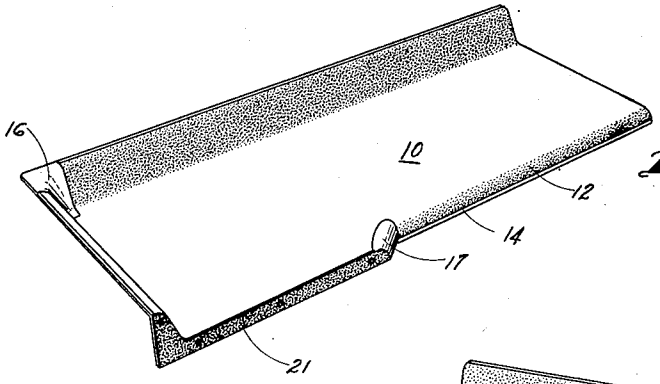


Fig. 2

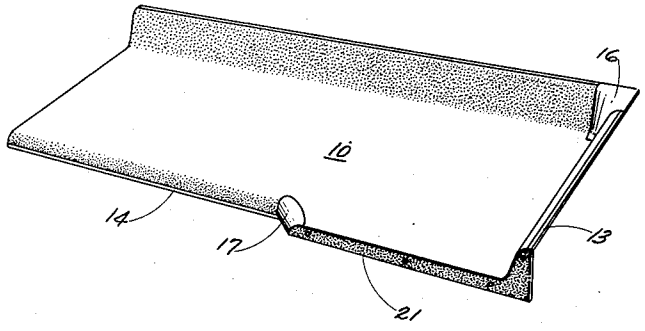


Fig. 3

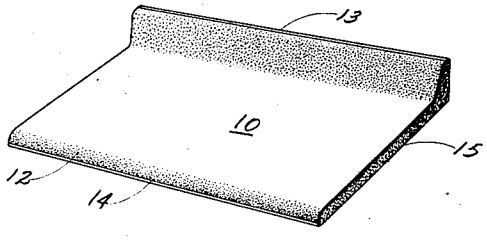


Fig. 4

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SEVERABLE COUNTER TOP FOR KITCHEN CABINET INSTALLATION

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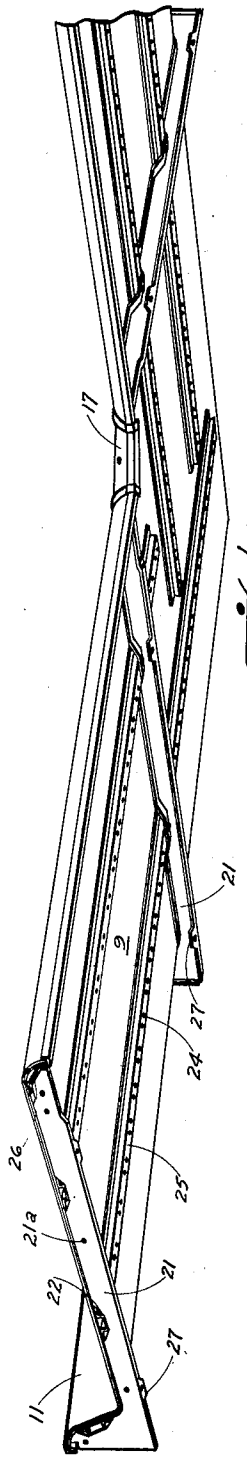


Fig. 5

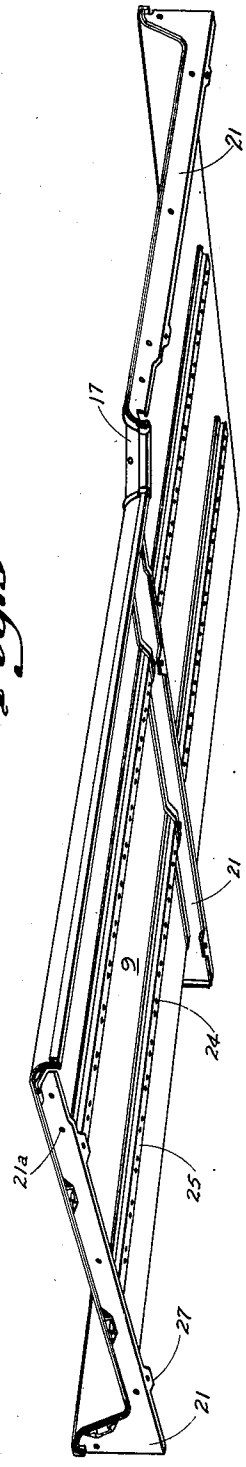


Fig. 6

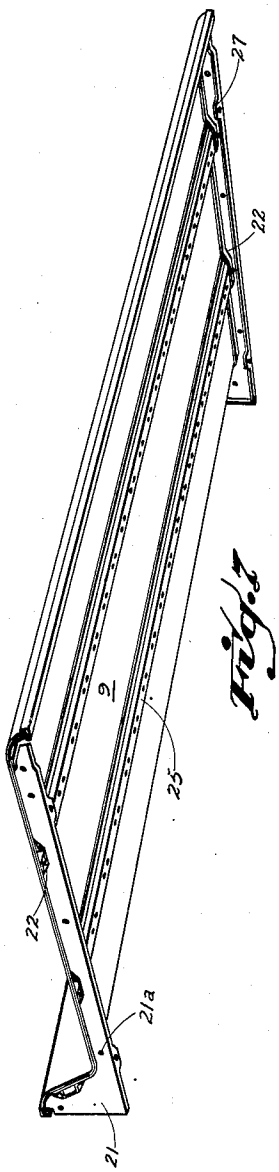


Fig. 7

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SEVERABLE COUNTER TOP FOR KITCHEN CABINET INSTALLATION

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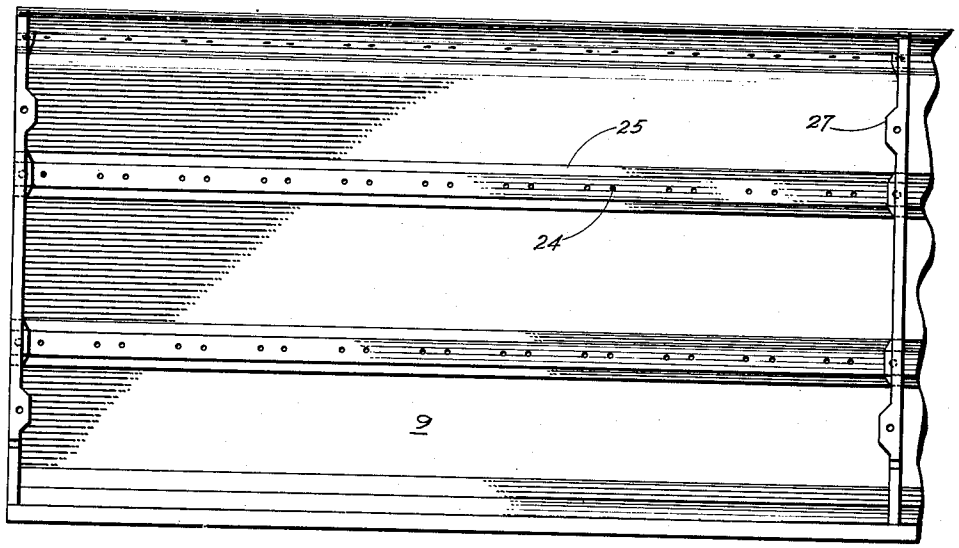


Fig. 8

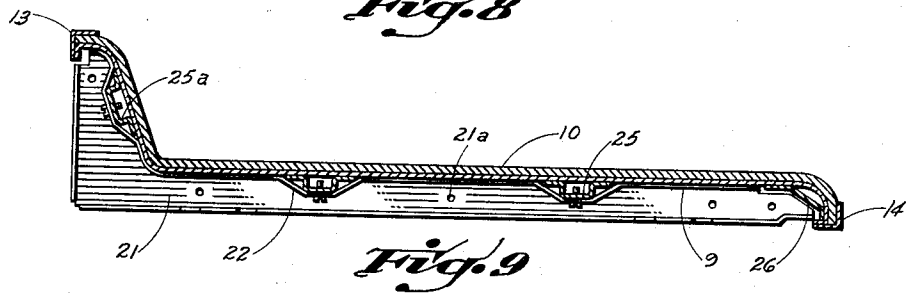


Fig. 9

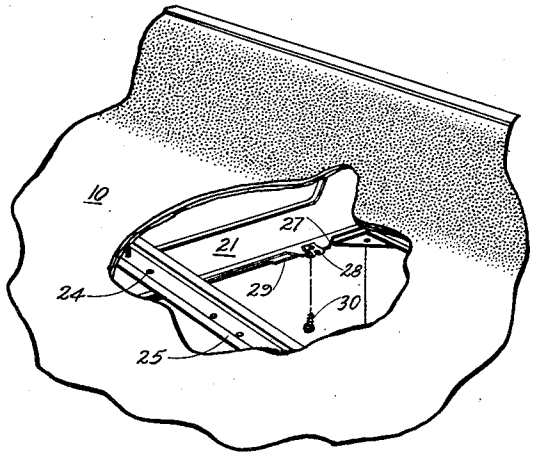


Fig. 10

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SEVERABLE COUNTER TOP FOR KITCHEN CABINET INSTALLATION

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Application September 1, 1950, Serial No. 182,688

3 Claims. (Cl. 311—106)

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This invention relates to kitchen cabinets and is particularly concerned with tops therefor.

It has heretofore been difficult to provide a counter top for a kitchen cabinet which reasonably fits the desiderata dictated by the requirements of both the manufacturer and consumer of this type of merchandise. To facilitate manufacture tops have heretofore been made in sections of standard length with the result that, when installed in many locations, difficulty was encountered in fitting the standard lengths to the space to be covered. In order to solve this problem, manufacturers have in the past made various types of improvisations, often unsatisfactory, to construct a continuous counter top fully occupying and making available for use the space provided.

It is therefore an important object of the present invention to provide a counter top which may be readily cut to length as required to fit a particular space.

Another object of the present invention is to provide a counter top structure which is extremely rigid but which may be readily cut to length without the use of special tools.

A still further object of this invention is the provision of a counter top which may be cut to length and assembled for a particular space without sacrificing any of the desirable qualities of the top, such as strength, rigidity and impenetrability to liquids.

The present invention permits the manufacture of a composition counter top which extends continuously over the entire area of its support and is fully reinforced by strengthening members positioned underneath the support. Counter tops made according to the principles of the present invention can be produced with great precision so that a number of sections can be joined to form a long top and trim strips may be easily and accurately applied to make liquid tight joints between the sections to reduce the likelihood of liquid seeping into the supporting structure.

Objects of the invention include the achievement of these ends.

The novel features that are considered characteristic of this invention are set forth in the appended claims; the invention itself, however, both as to organization and use, together with additional objects and advantages thereof, will best be understood from the following description of specific embodiments when read in conjunction with the accompanying drawings, in which:

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Fig. 1 is a perspective view of a continuous corner counter top constructed according to the principles of the invention;

Fig. 2 is a counter top for a cabinet or counter in which the working area at the corner of a room is to be completed by the addition of another top section at the left side of the top shown;

Fig. 3 is similar to Fig. 2 but reversed side for side;

Fig. 4 is a perspective of a continuous straight section of a counter top;

Fig. 5 is a perspective view looking upward at the underside of a counter top of the type shown in Fig. 1;

Fig. 6 is a perspective view of the underside of a counter top of the type shown in Fig. 3;

Fig. 7 is a perspective view of the underside of a counter top section shown in Fig. 4;

Fig. 8 is a fragmentary bottom plan view of a counter top made according to the present invention;

Fig. 9 is a cross-sectional view of any of the counter tops shown in the previous figures with certain parts shown in elevation; and

Fig. 10 is a fragmentary perspective view with parts broken away to show the means by which the top is secured to the cabinets comprising the supporting structure upon which it is mounted.

In Figs. 1 to 4 the top 10, which is continuous throughout the entire area thereof and forms a unitary crevice-free top over a plurality of lower cabinets (not shown), includes a backguard portion 11, a curved front edge portion 12, a back trim 13, a front trim 14, and a side portion 15. The side portion may comprise a transverse rib hereinafter more particularly described and designated in the subsequent figures by reference numeral 21, or it may comprise a sheet of composition similar to the top 10 secured to a transverse rib 21.

In addition, each of the tops shown in the first three figures includes a rear corner reinforcement 16 and a front corner reinforcement 17.

The top 10 is constructed of a flat smooth layer of laminated vinyl chloride secured uniformly to a flat smooth steel base member 9, as particularly shown in detail in Fig. 9. The vinyl chloride layer may be applied by coating it with an aqueous dispersion of rubber, such as latex treated with compounding ingredients that will permit it to set on the application of heat. A similar coating is applied to the top surface of

steel base member 9. These two members are secured together in a suitable press and heated to approximately 150 degrees Fahrenheit for a short period during which the compressed members cool and become bonded. The result is that the vinyl chloride layer is very uniform and tenaciously secured to the metal so that it is inseparable therefrom for all practical purposes.

An important feature of the present invention is the provision of longitudinal reinforcing ribs 25 secured, as by spot welding prior to the application of the vinyl chloride layer, to the underside of base member 9 and extending substantially the length of the counter top. In the embodiment shown in Fig. 5 the remote rib 25 extends continuously almost to the backguard of the adjacent counter member, whereas the ribs on this adjacent member are terminated short of the backguard of the first member. This is shown clearly in Fig. 5.

Spaced at uniform intervals along the bottom surface of ribs 25 are pairs of holes 24. These are used for securing transverse ribs 21 to the longitudinal ribs as shown. Should it be necessary to cut the counter top to a length different from that in which it is supplied by the factory, these openings 24 facilitate attachment of the transverse rib near the cut end of the counter member.

Detachable supports or ribs 21 are spaced at intervals in order to support fully the structure described. Ribs 21 have channel-shaped cross sections as shown clearly in Figs. 5, 6, 7 and 9 and are provided with cut-outs 22 for the reception of longitudinal ribs 25. Thus the longitudinal reinforcing ribs are supported at substantially uniform spaced base points at the cut-out portions or ribs 21 and are firmly secured thereto by fastening means, such as screws, shown in Fig. 9 extending into openings 24 which may be suitably tapped. Additional ribs 25a are provided along the rear portion of the backguard 11 and are similarly secured at cut-outs provided in the transverse supporting ribs 21, as also shown clearly in Fig. 9.

A reinforcing plate 26 is provided to reinforce the curved front edge of the counter top. A trim member 14 is secured along this front edge, and a rear trim member 13 is secured along the back edge of the backguard 11 as previously described and as shown clearly in Fig. 9.

The structures described are secured to a supporting structure, for instance a base cabinet, as shown in Fig. 10. Members 21 are provided with ears 27 struck out therefrom in position to rest on top of flange 29 of a side wall of the base cabinet. Openings are provided in flange 29 and ears 27 which are aligned with each other so that the members may be secured together by fastening means. One simple method of joining the members is by the use of a clip 28, the top surface of which is threaded for the reception of screw 30. After the clip is placed over the aligned holes, screw 30 is received in the threaded portion of fastener 28.

With the aid of a hack saw, table saw or band saw provided with metal-cutting blades, the assembly may be easily cut to any desired length by severance along a line at right angles to the longitudinal reinforcing ribs. The supporting ribs 21 may be relocated as required and secured to these ribs so that the counter top may be fitted into odd shaped spaces peculiar to particular homes. In each case, a rib 21 is always provided at the end to maintain that portion of the counter top in proper alignment and to give it adequate support.

It should be noted in the various figures that the lateral faces of supporting ribs 21 also are provided at intervals with holes 21a. These holes facilitate joining counter sections end to end to create a long continuous counter top. Thus the end supporting rib of one counter top section may be butted against that of another section and bolts passed through holes 21a for the attachment of the sections to one another.

It is recognized that supporting ribs 21 can readily be replaced at the ends of a counter by special sections which facilitate attachment of the counter to another unit such as a sink.

As has been stated hereinbefore, holes 24 are provided in pairs at uniform intervals. By providing kitchen base cabinets made in widths which are integral multiples of this interval, attachment of ribs 21 directly to the walls of the base cabinets, as shown in Fig. 10, and to the counter top is greatly facilitated. Such attachment is made by superposing the counter top relative to the base cabinets with holes 24 in position above the side walls of the cabinets.

In other words, a counter top may be easily assembled to any base structure composed of a plurality of base cabinets, the width of each of which is some integral multiple of the spacing between the pairs of holes 24. These holes are provided in pairs so that right or left hand reinforcing ribs 21 may be employed as desired to facilitate attachment to particular base cabinets. Figs. 5, 6 and 7 illustrate the use of such right and left hand reinforcing ribs.

Occasionally, a counter top must be fitted to a space of such a length that the top cannot be severed adjacent holes 24. This problem is easily solved by drilling holes in longitudinal ribs 25 to receive the screws by which ribs 21 are attached. In this way the top may be fully supported from its one extremity to its opposite extremity and supporting members are provided underneath all edges of the counter to permit attachment of trim strips as desired. This is an important feature from the viewpoint of sealing the counter top to prevent leakage of liquids underneath it.

It should also be noticed that an extremely strong structure is provided by the present invention since the supporting ribs 21 are securely bolted to ribs 25 regardless of their location.

In summary, the present invention provides a counter top having longitudinal reinforcing ribs secured to the underside of a base member to the top of which is bonded a composition protective layer. Transverse reinforcing ribs are secured at intervals to the longitudinal ribs and may be positioned longitudinally as desired, particularly to facilitate installation of the counter top to base cabinets without sacrificing any desirable qualities of the top.

Having described my invention, I claim:

1. A counter top installation comprising a plurality of coplanar counter top components in end to end alignment, each component comprising a supporting sheet formed to define an up-turned backguard, a horizontal base member in front of the backguard and a downwardly curved edge forward of the base member; a plurality of longitudinal reinforcing ribs rigidly secured to the underside of each counter top component coextensive with said base member and backguard; a plurality of separable front-to-back supports, each support including an upstanding rear por-

tion for supporting the backguard and defining recesses along its top side for bearing relationship against the ribs while permitting bearing engagement of the remainder of each support against the underside of the associated counter top component; said ribs having a plurality of fastener-receiving openings at spaced intervals permitting attachment of said supports at predetermined points along said ribs, a support being secured closely adjacent the end of each counter top component; and fasteners for securing said supports to said ribs and for joining the ribs at the contiguous aligned ends of adjacent counter top components.

2. In combination in a counter top installation, a counter top component including a horizontal base member and an upturned backguard, a plurality of channel shaped longitudinal reinforcing ribs permanently secured to the underside of said base member and backguard, said ribs being coextensive with the length of said counter top component, said ribs including a plurality of fastener-receiving openings at spaced intervals, a plurality of transverse supports of channel shaped cross section, each support including an upstanding rear portion for supporting said backguard and defining recesses along its top side for bearing engagement with said ribs while also permitting bearing engagement of the remainder of each support against the underside of said counter top component, and fastening means for securing said transverse supports to said ribs at predetermined intervals along the length of said counter top component.

3. In combination, a counter top component including a supporting sheet formed to define an up-turned backguard, a horizontal base member in front of the backguard and a downwardly

curved edge forward of the base member; a plurality of longitudinal reinforcing ribs rigidly secured to the underside of said counter top component coextensive with said base member and backguard; a plurality of separable front-to-back supports, each support including an upstanding rear portion for supporting the backguard and defining recesses along its top side for bearing relationship against the ribs while permitting bearing engagement of the remainder of each support against the underside of the associated counter top component; said ribs having a plurality of fastener-receiving openings at spaced intervals permitting attachment of said supports at predetermined points along said ribs; and fasteners for securing said supports to said ribs.

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