J. STANITZ

SINK AND TABLE TOP CONSTRUCTION.

Filed Feb. 13, 1953

3 Sheets-Sheet 1

Fig. 1

Fig. 2

INVENTOR.
Jacques Stanitz
BY
Frease & Bishop

ATTORNEYS
The invention relates to combined kitchen sink and table top unit construction and more particularly to trim construction for the front and rear edges of a sink and table top unit which trim construction is the same as and substantially continuous with front and rear trim means on the tops of kitchen base cabinets laterally adjacent one or both ends of the sink and table top unit.

Kitchen equipment used and installed in modern kitchens ordinarily includes a sink with drainboards or side work surfaces, and cabinets with top counter or work surfaces extending from one or both ends of the sink or the drainboards which may extend from either or both sides of the sink.

The sink unit may comprise a porcelain or porcelain enameled bowl portion from which integral porcelain or porcelain enameled drainboards may extend laterally from either or both sides of the sink bowl; or the sink unit may include merely a similar bowl portion with one or more laterally adjacent table top work surfaces formed or covered with some desired surfacing material such as linoleum, rubber, plastic, or even separate porcelain enameled surfacing members.

The tops of the cabinets adjacent either or both ends of the sink unit may be provided with a similar surfacing material, rubber, plastic or porcelain enameled top surfacing material. It is customary to provide the cabinets with a distinctive or attractive trim member at the front edge thereof and to provide the rear or wall abutting edge of the cabinet top with a cove-like upstanding trim member.

The sink units, however, when formed entirely of porcelain or porcelain enameled material including a bowl and one or more drainboards ordinarily have included a front porcelain or porcelain enameled rolled rim and a rear upstanding porcelain or porcelain enameled splash-back. Sinks comprising a bowl alone without adjacent work surfaces ordinarily are constructed in the same manner with the front rolled rim and the rear upstanding splash-back formed integrally as a part of the porcelain or porcelain enameled member.

When such sink units are installed in a kitchen with adjacent base cabinets, the uniform appearance of the front nose and rear upstanding trim members on the cabinets is broken by the porcelain or porcelain enameled surfaced front rim and rear splash-back portions of the sink unit, thus detracting from the over-all appearance of the kitchen equipment installation.

Sometimes it is possible in custom built installations to use a flat rim sink in the sink unit and maintain continuity or similarity of front and rear cabinet top trim along the sink unit by cutting a hole in the table top where the sink is to be located and by mounting a flat rim sink on the table top below such hole. However, the manufacture and installation of such constructions is very expensive and, therefore, little used.

For years there has been an unsatisfied need for a kitchen equipment construction in which the same trim elements, giving a uniform appearance along cabinet tops and intervening sink units, could be used with sink units that comprised a porcelain or porcelain enameled bowl and integral drainboards, or that included a porcelain or porcelain enameled bowl and adjacent work surfaces at either side of the bowl formed of some other material as a part of the sink unit, preferably the same material that is used as the top surfacing material for the adjacent cabinets.

This problem has been further complicated by several requirements. One is the forming of a satisfactory trim joint between the front and rear trim members of the cabinet tops and the cabinet top surfacing material such as linoleum, sheet rubber, plastic sheet material, or porcelain enameled sheet material, which in some cases is mounted on and extends upward from a cabinet top base member a distance depending upon the thickness of the particular surfacing material used. This joint from the standpoint of appearance and sanitation must not present a crack or recess wherein food particles, dirt or other foreign material can collect.

The second requirement is of forming a satisfactory joint between the trim members and surfaces of porcelain or porcelain enameled portions of the sink unit whether such sink member is formed of porcelain enameled steel, or of cast metal with a porcelain enameled coating, or of china. The latter difficulty is further involved because it is difficult in manufacturing sinks, whether of sheet metal or cast metal or china, to maintain close tolerances in the thickness of the walls or the levelness of the surfaces thereof.

Accordingly, it is a general object of the present invention to provide a new front and rear trimmed kitchen sink or sink-top unit construction in which the same trim means is used that is used on the tops of adjacent cabinets so as to present uniform appearance to the entire kitchen sink and cabinet installation.

Furthermore, it is an object of the present invention to provide a new trim construction for sinks and sink-top units in which a satisfactory bond or joint may be made between the trim members and the sink or sink-top members utilizing the same trim members that are used in trimming the tops of adjacent base cabinets.

Likewise, it is an object of the present invention to provide a new sink and sink-top construction having front and rear trim members in which a satisfactory joint can be made between the trim members and porcelain or porcelain enameled surfaces of sink members.

Also, it is an object of the present invention to provide a new sink and sink-top construction having front and rear trim members in which the sink unit may include a porcelain enameled bowl portion and work top surfaces adjacent the bowl portion formed of a different material, and in which a satisfactory joint may be made between integral trim members extending along the front and rear edges of both the porcelain or porcelain enameled bowl portion and the adjacent surfaces of different material.

Finally, it is an object of the present invention to provide a new sink and sink-top unit construction with front and rear trim members which avoids prior art difficulties, satisfactorily solves problems existing in the art, and incorporates the foregoing advantages in a simple, effective and inexpensive manner.

These and other objects and advantages apparent to those skilled in the art from the following description and claims may be obtained, the stated results achieved, and the described difficulties overcome, by the devices, constructions, arrangements, combinations, subcombinations, parts and elements which comprise the present invention, the nature of which is set forth in the following general statement, preferred embodiments of which—illustrative of the best modes in which applicant has con-
templated applying the principles—are set forth in the following description and shown in the drawings, and which are particularly and distinctly pointed out and set forth in the appended claims forming part hereof.

The nature of the improvements in sink and sink-top unit construction may be stated in general terms as preferably including a rectangular sink member formed of porcelain or porcelain enameled material having a flat-top surface within the confines of which a bowl or bowls and laterally extending drain-boards are formed, said flat-top surface being integral and being formed at each of its edges with a downturned flange terminating in an inverted flange; said sink also sometimes including as a unit a similar rectangular sink member or panel with a bowl or bowls only, formed in the flat-top surface thereof, and one or more adjacent rectangular flat-top work surface top members or panels, said work surface top members each being formed at its edges with a downturned flange terminating in an inverted flange; there being a continuous recess formed at the front and rear edges of each sink member or panel and the adjacent work top members or panels, channel-shaped preferably rounded trim members secured to the front portions of the sink or sink-top members or panels of the sink unit, a rear cove-like preferably curved upstanding trim member secured to the rear portions of the sink or sink-top members or panels of the sink unit, said trim members each being formed with a base portion and a resilient, preferably stainless steel covering having a projecting springy double thickness flange offset set from the base portion, and said trim member offsets being engaged in the front and rear flat surface recesses of the sink or sink top members or panels of the sink unit with the springy flanges of the trim members engaged against the flat surfaces of the sink unit members.

By way of example, preferred embodiments of the improved construction are illustrated in the accompanying drawings forming part hereof wherein:

Figure 1 is a perspective view of one embodiment of the improved sink-top unit construction;

Fig. 2 is a similar view of another embodiment of improved sink unit construction;

Fig. 3 is an enlarged longitudinal section looking in the direction of the arrows 3—3, Fig. 1, with certain parts broken away;

Fig. 4 is a lateral section of the construction shown in Fig. 1 looking in the direction of the arrows 4—4, Fig. 1;

Fig. 5 is a further enlarged section illustrating the construction of the joint between the front trim member and sink bowl member of the sink unit taken on the line 5—5, Fig. 1;

Fig. 6 is a similar view of the joint between the front trim member and work surface panel of the sink unit shown in Fig. 1 taken on the line 6—6, Fig. 1;

Fig. 7 is an enlarged sectional view taken on the line 7—7, Fig. 1, illustrating the joint between the rear trim member and the sink member of the sink unit shown in Fig. 1;

Fig. 8 is a similar view taken on the line 8—8, Fig. 1, illustrating the joint between the rear trim member and the work surface panel of the sink unit shown in Fig. 1;

Fig. 9 is an enlarged longitudinal section with parts broken away through the sink unit shown in Fig. 2 taken on the line 9—9, Fig. 2;

Fig. 10 is an enlarged section taken on the line 10—10, Fig. 2;

Fig. 11 is a similar section taken on the line 11—11, Fig. 2;

Fig. 12 is an enlarged fragmentary section taken on the line 12—12, Fig. 2; and

Fig. 13 is a similar section taken on the line 13—13, Fig. 2.

Similar numerals refer to similar parts throughout the various figures of the drawings.

The improved sink or sink-top construction is indicated generally at 1 in Figs. 1 and 3 through 8 as including a rectangular sink panel member generally indicated at 2 and adjacent work surface panel members generally indicated at 3, and said sink and work surface panels each having a front trim member generally indicated at 4, and each said panel having a rear trim member generally indicated at 5, and end trim cap members 6 and 7.

The rectangular sink panel member 2 includes a flat-top surface portion 8 within the confines of which a sink bowl 9 having a opening 10 is formed. The flat-top surface portion 8 of the sink panel member 2 terminates at each side edge in a downturned flange 11 terminating in an inverted flange 12 (Fig. 3), terminates at its rear edge in a similar downturned flange 13 terminating in an inverted flange 14, and terminates at its front edge in a curved downturned flange 15 terminating in an inverted flange 16.

The sink panel member 2 having the parts or elements thus described may be formed of steel with a vitreous enameled coating thereon, as shown, or may be formed as an enamel coated cast metal member or as a china or porcelain member, the latter of which of necessity would have greater wall thicknesses. It is understood that when enamel coated sink or sink panel members are referred to herein, such terms include either enameled steel, enameled cast metal, or porcelain members.

Each work surface panel member 3 preferably includes a rectangular sink metal base panel member 17 which may have channel reinforcing members 18 secured to the underside thereof, the flat-top base member 17 terminating in downturned flanges 19 and inverted flanges 20 at each side and rear edge, and terminating at its front edge in a curved downturned flange 21 terminating in an inverted flange 22. On the top surface of each work panel base member 17 a sheet of surfaced material 23 may be provided formed of any desired material such as rubber, linoleum or plastic sheet material, or the work panel members 3 may be formed in one piece including the base and surface portions 17 and 23 thereof with downturned and inverted flanges of porcelain enameled coated sink steel or synthetic rubber coated steel or stainless steel or stainless clad steel or plastic sheet material preformed or molded to the desired shape.

In any event, the panel members 3 are formed with and have a straight edge offset or recess 24 at the front edge of the applied material 23 and a similar straight edge offset or recess 25 at the rear edge of the applied material 23 (Figs. 6 and 8). If the panel members 3 are formed integrally of porcelain enameled or molded plastic material as described, similar recesses will be formed or molded therein.

Along the front edge of each enameled sink panel 2, a recess 24' is formed having the same depth and the approximate shape of the recess 24, and a similar offset or recess 25' is formed adjacent the rear edge of the sink panel member 2 having the same depth and a shape similar to the depth and shape of the recess 25.

The front nosing trim members 4 are each formed with a channel-shaped sheet metal base portion 26 preferably sheathed with a strip of stainless steel surfacing material 27. The lower inner edge of the stainless steel sheet 27 is wrapped around the lower inner edge of the lower flange 29 of the nosing base member 26, and the upper edge portion of the stainless steel sheet 27 is bent on itself double thickness to form a flange 30 terminating in an offset portion 31 engaged under the upper flange 32 of the nosing base member 26.

The double thickness flange 30 of the stainless steel sheet is preferably pretensioned by being angled slightly downward (viewing Fig. 5) so as to have some springy resilience; and the offset formed by the flange 30 and offset portion 31 is complementary, respectively to the offsets 24' and 24 in the sink and work panel members 2 and 3.
The front nosing members 4 may be secured to their respective sink or panel member 2 or 3 by screws 33 engaged between the nosing trim member flange 29, the sink panel flange 16 and the work panel flange 22 (Figs. 5 and 6), thus presenting a visually continuous trim for the front edge of the sink top unit 1 illustrated in Fig. 1.

The rear trim members 5 each have an upstanding curved cove shape as illustrated particularly in Figs. 7 and 8, and may be formed of a sheet metal base member 30, the sink panel being an upper rear vertical flange 35 and a lower horizontal flange 36 provided with angled brace members 37 preferably welded thereto. The rear trim base member 34 is similarly sheathed with a thin stainless steel surfaced member 38, the upper edge of which is engaged around the flange 35 at 39. The stainless steel sheath 38 is best reversely on itself at the lower end of the cove portion 40 of base member 34 to form a double thickness flange 41, and is then wrapped along and around the flange 36 as indicated at 42, there being an offset or recess 43 formed at the rear of flange 41 generally complementary to the offsets or recesses 25 and 26. The flange 41, like the flange 38, is prestressed or angled slightly downward, viewing Fig. 7, so as to have some springy resilience.

The rear upstanding trim members 5 are each secured to their respective sink or work panel members 2 or 3 by bolts 44 extending through the rear portions 45 and 46 of the sink panel base member 17 between the offsets 25' and 25 respectively and the rear edges thereof as shown in Figs. 7 and 8, thus providing a visually continuous upstanding rear trim member across the back of the sink and work panels 2 and 3 of the sink-top unit 1 illustrated in Fig. 1.

The end caps 6 and 7 may be secured to the sink top unit 1 by a frictional snap fit engagement with the turned flange 20 of the work panel members 3 and similar flanges on the cap members 6 and 7; and bolts 48 (Figs. 7 and 8) may be provided engaging the rear flanges 49 of the end caps 6 and 7 with the downturned flange 35 of the rear trim base member 34.

In assembling the various members of the sink-top unit 1 together, a T-shaped seal strip 50 coated with water-proofing or mastic may be inserted and interposed between the downturned sink panel side flanges 11 and the adjacent downturned side flanges 19 of the work panel members 3 (Fig. 3). The side flanges 11 and 19 of adjacent panel sections are secured together by bolts 47 extending through spaced holes therein which are aligned with one another and with spaced holes in the intermediate leg portion of the T-shaped seal strip 50.

When the front and rear trim members 4 and 5 are thus assembled to the sink and work panel members 2 and 3, the springy flanges 30 and 41 resiliently engage the flat-top surfaces 8 of the sink panel 2 and the flat-top surface of the surfacing material 23 on the work panels 3 covering the complementary offsets 24, 24' and 31 at the front and 25, 25' and 43 at the rear so that no cracks or crevices are present in the exposed surfaces of the unit for the collection of food particles, dirt or other foreign material.

Moreover, the overlap of the springy flanges 30 and 41 with respect to the offset or recessed joints between the trim members 4 and 5 and the panel members 2 and 3 is sufficient to cover and conceal the different sized depressions which may be formed between the offsets 25'—43 and 25—43 at the rear and 24—31 and 24—31 at the front, which have different sizes or shapes in consequence of the different character of the porcelain enamel surfaced surface on the sink panel 2 and the surfacing material 23 on the work panels 3.

Moreover, the springiness of the flanges 30 and 41 is sufficient to accommodate and permit the flanges to tightly seal against the different surfacing materials on the panel members 2 and 3. This is of extreme importance because the flat-top surface 8 of the sink panel 2, although intended to be flat and level, is not always exactly flat and level because of the characteristics of porcelain enamel surfaces which may vary slightly in levelness or thickness due to the enameling operation. Likewise, there may be some softness in the surfacing material 23 of work panels 3 in being formed of plastic material, rubber, linoleum or the like, as compared with an enameled surface, so that the springy flanges 30 and 41 accommodate and seal tightly against the surfaces of different softness.

The same trim members 4 and 5 may also be applied to the tops of cabinets placed adjacent to sink units made in accordance with the present invention so that a complete kitchen installation of cabinets and a sink unit presents a uniform appearance throughout the installation without the interruptions present in prior installations where the front edge and upstanding splash-back of a sink member was formed of porcelain enamel coated surfaces having a different appearance than the trim member appearance.

A modified improved sink or sink-top construction is indicated generally at 51 in Figs. 2 and 9 through 13 and includes a rectangular sink panel member generally indicated at 52 having front and rear trim members 4 and 5 identical in cross section with trim members 4 and 5 of unit 1 but of lengths and shapes equal to the aggregate length of the sink and drainboards as a unit in order that a one piece continuous trim is provided front and back for the porcelain enamel sink assembly. The assembled unit is also provided with end trim cap members 6 and 7, identical with cap members 6 and 7 of unit 1.

The rectangular sink panel member 52 includes a flat-top surface portion 53 within the confines of which a sink bowl 54 having a drain opening 55 is formed. Drainboard portions 56 and 57 may also be formed within the confines of the flat-top surface portion 53 of the sink panel member 52.

It is to be understood that the sink panel member 52 has a usual or standard width from front to back but may have any desired length from end to end and may include a bowl and one drainboard portion at either the right or left of the bowl, or a bowl and two drainboard portions, as shown, or two or more bowls either without or with one or more adjacent drainboards.

The flat-top portion 53 of the sink member 52 terminates at each side edge in a downturned flange 58 (Fig. 9) which in turn terminates in an intumated flange 59; and terminates at its rear edge in a similar downturned flange 60 terminating in an intumated flange 61; and terminates at its front in a curved downturned flange 62 terminating in an intumated flange 63.

As shown in Figs. 10 and 11, the shape of the downturned and intumated flanges 62 and 63 at the front of the sink member 52 is the same adjacent both bowl portion 54 and the drainboard portions 56 and 57; and likewise the shape of the downturned flange 60 and intumated flange 61 at the rear of the sink member 52 is the same adjacent both the bowl portion 54 and the drainboard portions 56 and 57, as shown in Figs. 12 and 13.

The sink panel member 52 having the parts or elements thus described may be formed of porcelain enamel coating thereon, as shown, or may be formed as an enameled coated cast metal member or as a china or porcelain member, the latter of which of necessity would have greater wall thicknesses. It is understood that when enamel coated sink or sink panel members are referred to herein, such term will include either enameled steel, enameled cast metal, or porcelain member.

The sink panel member 52 is also formed with and has a straight edged offset or recess 64 adjacent its front edge and a similar straight edged offset or recess 65 adjacent its rear edge for receiving the offsets of the front and rear trim members 4 and 5 which are constructed in the same manner as and are identical in cross section.
with front and rear edge trim members 4 and 5 described above and have the springy double thickness stainless steel sheathing flanges 30 and 41. The front trim member 4 is assembled to the sink panel member 52, in the same manner as described above, by screws 66 engaged with turned flange 63; and the rear trim member 5 is assembled to the rear edge of the sink panel member 52 by bolts 67. The end caps 6 and 7 may be secured to the sink-top member 52 by a frictional snap-on engagement with the turned side flanges 69 and bolts 69 secured to the rear trim member 5.

When the front and rear trim members 4 and 5 are assembled to the sink member 52 as described, the springy flanges 30 and 41 of the trim members resiliently engage the flat-top surface 53 of the sink member 52 and properly seat and seal against the same in the manner previously described irrespective of slight variations in levelness and thickness of the porcelain enameled surfaces of the sink member.

Thus, trim members of the same cross section and differing only in length are used for the sink unit 51 and for the sink top unit 1 and for the tops of cabinets that may be placed adjacent to either a sink unit 1 or 51 so that a kitchen equipment installation presents a uniform appearance throughout, without regard to the particular character of sink unit installed therein.

In the new construction, the same front and rear trim members are used for the sink units that are used for adjacent cabinet tops and the trim members or a portion thereof engage and seat directly upon a flat enamel surface. The trim members that thus seat and seal directly against the flat surfaces of the panel or panels of the sink unit being trimmed each include an overlapping springy double thickness stainless steel flange and may be continuous at both front and back whether the sink unit comprises one or a plurality of panels.

Accordingly, the improved sink and sink-top construction provides a uniform appearance for sink units installed as a part of a kitchen equipment installation consistent with the appearance presented by adjacent cabinet tops irrespective of the specific character of the panel or panels of which the sink unit is composed while including at least an enameled sink member panel; provides a new sink or sink-top construction which overcomes the described prior art difficulties and accomplishes the foregoing objects and new results; and provides a construction which is easy and inexpensive to manufacture, assemble and install.

In the foregoing description, certain terms have been used for brevity, clearness and understanding; but no unnecessary limitations are to be implied thereby beyond the requirements of the prior art, because such terms are used for descriptive purposes herein and not for the purpose of limitation and are intended to be broadly construed.

Moreover, the embodiments of the improved construction illustrated and described are by way of example, and the scope of the present invention is not limited to the exact details of construction of the various parts shown or described.

Having thus described the features of the invention, the manufacture and assembly of preferred embodiments thereof, and the advantageous, new and useful results obtained thereby; the new and useful devices, constructions, arrangements, combinations, subcombinations, parts and elements, and reasonable mechanical equivalents thereof obvious to those skilled in the art, are set forth in the appended claims.

I claim:

1. A sink-top construction, a sink unit including a rectangular porcelain enameled sink panel member having a flat-top surface and a depressed bowl portion formed integrally within the confines of the flat-top surface, integral downturned flanges at the front, rear and side edges of the sink panel member, downward shouldered offsets formed in the enameled flat-top surface adjacent and parallel to each of the front and rear edges, a generally channel shaped front trim member mounted on and surrounding the front edge portion of the sink panel member with the top horizontal flange of said front trim member seated in the downward offset adjacent the front edge, a rear trim member having downward shouldered offsets formed in the enameled flat-top surface and parallel to each of the front and rear edges, a generally channel shaped front trim member mounted on and surrounding the front edge portion of the sink panel member with said horizontal portion seated in the downward offset adjacent the rear edge, thin metal sheathing covering the trim members and clamped between said trim members and the downward offsets in the sink panel member, said sheathing being bent double to form resilient flanges projecting from said trim members parallel to the plane of the flat-top surface and said double bent resilient flanges engaging the enameled flat-top surface and covering the joints between the sheathed edges of the trim members and the offset shoulders.

2. The sink-top construction set forth in claim 1 in which the sink unit also includes at least one work panel member having a flat-top surface mounted adjacent at least one side edge of the sink panel member, the work panel member having integral downturned flanges at the front, rear and side edges thereof, the work panel member having downward shouldered offsets formed in the flat-top surface adjacent and parallel to each of the front and rear edges forming similar to and in continuous alignment with the sink panel member downward offsets, the work panel member having a generally channel shaped front trim member mounted on and surrounding the front edge portion with the top horizontal flange of said front trim member seated in the downward offset adjacent the front edge, the work panel member having a rear trim member having an upstanding portion and a horizontal portion mounted thereon with said horizontal portion seated in the downward offset adjacent the rear edge, said front and rear trim members being mounted in continuous alignment along both said work and sink panel members, and thin metal sheathing covering the work panel trim members and clamped between said trim members and the downward offsets in the work panel member, said sheathing being bent double to form resilient flanges projecting from said trim members parallel to the plane of the flat-top surface and in continuous alignment with the resilient flanges on the sink panel member, said double bent resilient flanges engaging the flat-top work panel surface and covering the joints between the sheathed edges of the work panel trim members and the work panel offset shoulders.

3. In the sink-top construction, an integral porcelain enameled sink unit including a bowl portion and at least one work surface portion, the work surface portion being adjacent at least one side of the bowl portion, the sink unit having a flat-top surface surrounding the bowl and work surface portions, integral downturned flanges at the front, rear, and side edges of the sink unit, downward shouldered offsets formed in the enameled flat-top surface adjacent and parallel to each of the front and rear edges, a generally channel shaped front trim member mounted on and surrounding the front edge portion of the sink unit with downward shouldered offsets formed in the enameled flat-top surface adjacent and parallel to each of the front and rear edges, a rear trim member seated in the downward offset adjacent the front edge, a rear trim member having an upstanding portion and a horizontal portion mounted on the sink unit with said horizontal portion seated in the downward offset adjacent the rear edge, thin metal sheathing covering the trim members and clamped between said trim members and the downward offsets in the sink unit, said sheathing being bent double to form resilient flanges projecting from said trim members parallel to the plane of the flat-top surface.
surface, and said double bent resilient flanges engaging the enameled flat-top surface and covering the joint between the sheathed edges of the trim members and the offset shoulders.

References Cited in the file of this patent

UNITED STATES PATENTS

1,778,330 Ramstead Oct. 14, 1930

2,721,833

2,303,634 2,439,027 2,492,541 2,539,464 2,614,014

Haberstump Apr. 6, 1948
Stanitz Dec. 27, 1949
Stanitz Jan. 30, 1951
Norquist Oct. 14, 1952

Stanitz