Aug. 27, 1963 J. A. TILLER 3,101,486

LAVATORY FIXTURE

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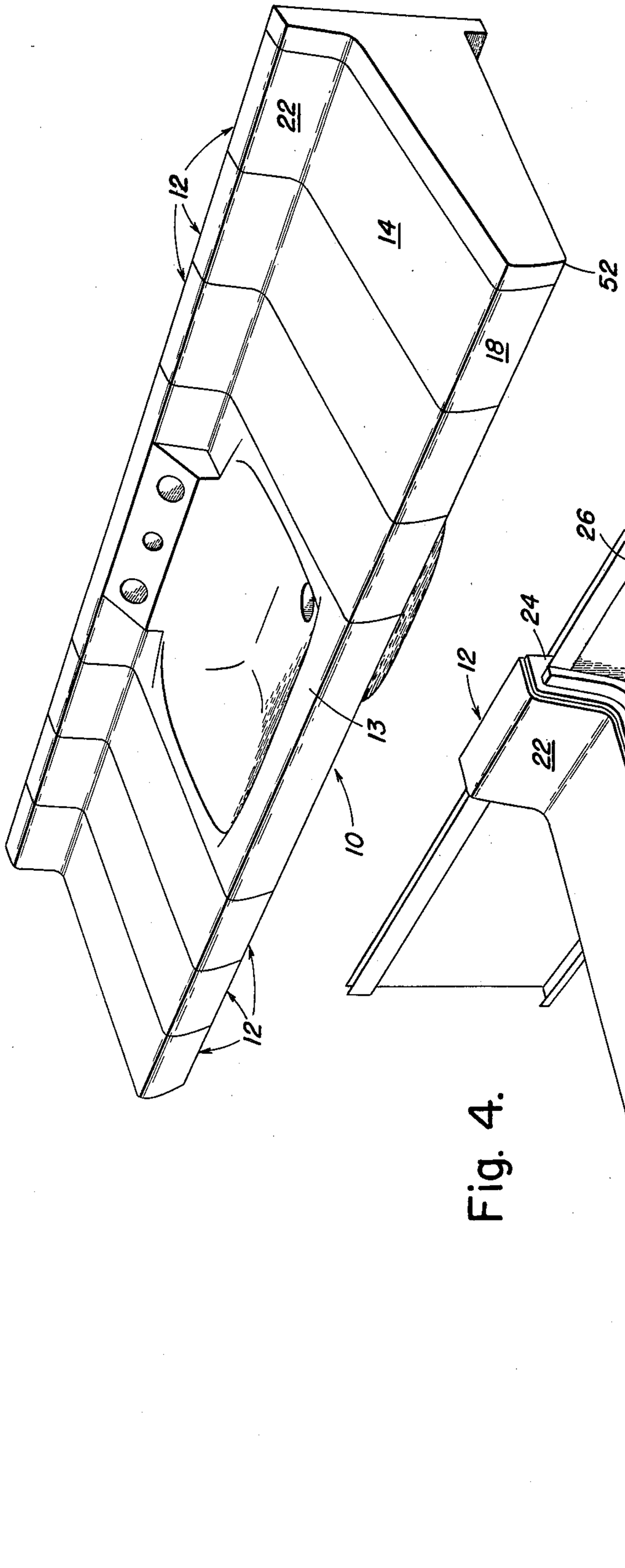

Fig. 1.

Fig. 4.

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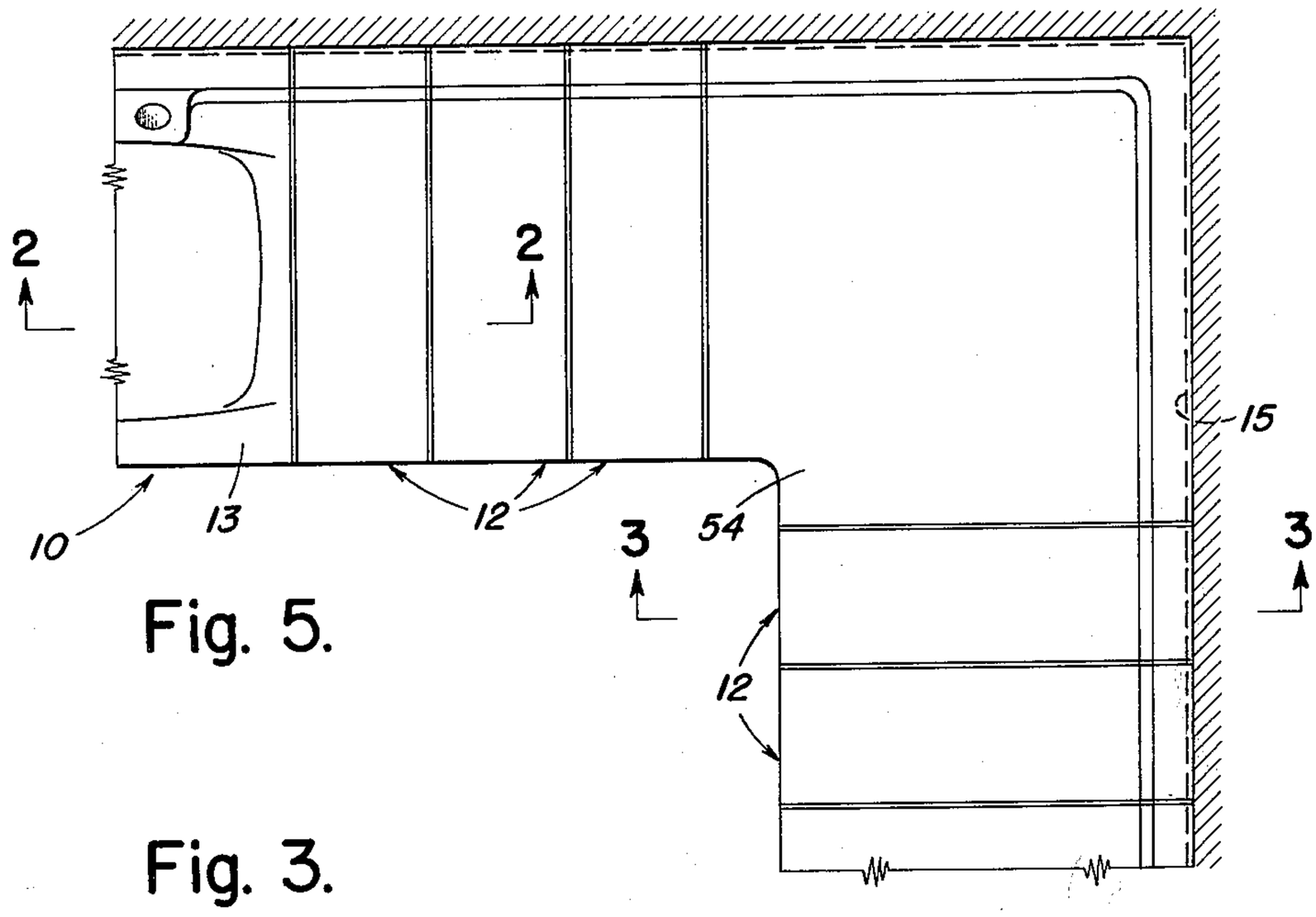

Fig. 5.

Fig. 3.

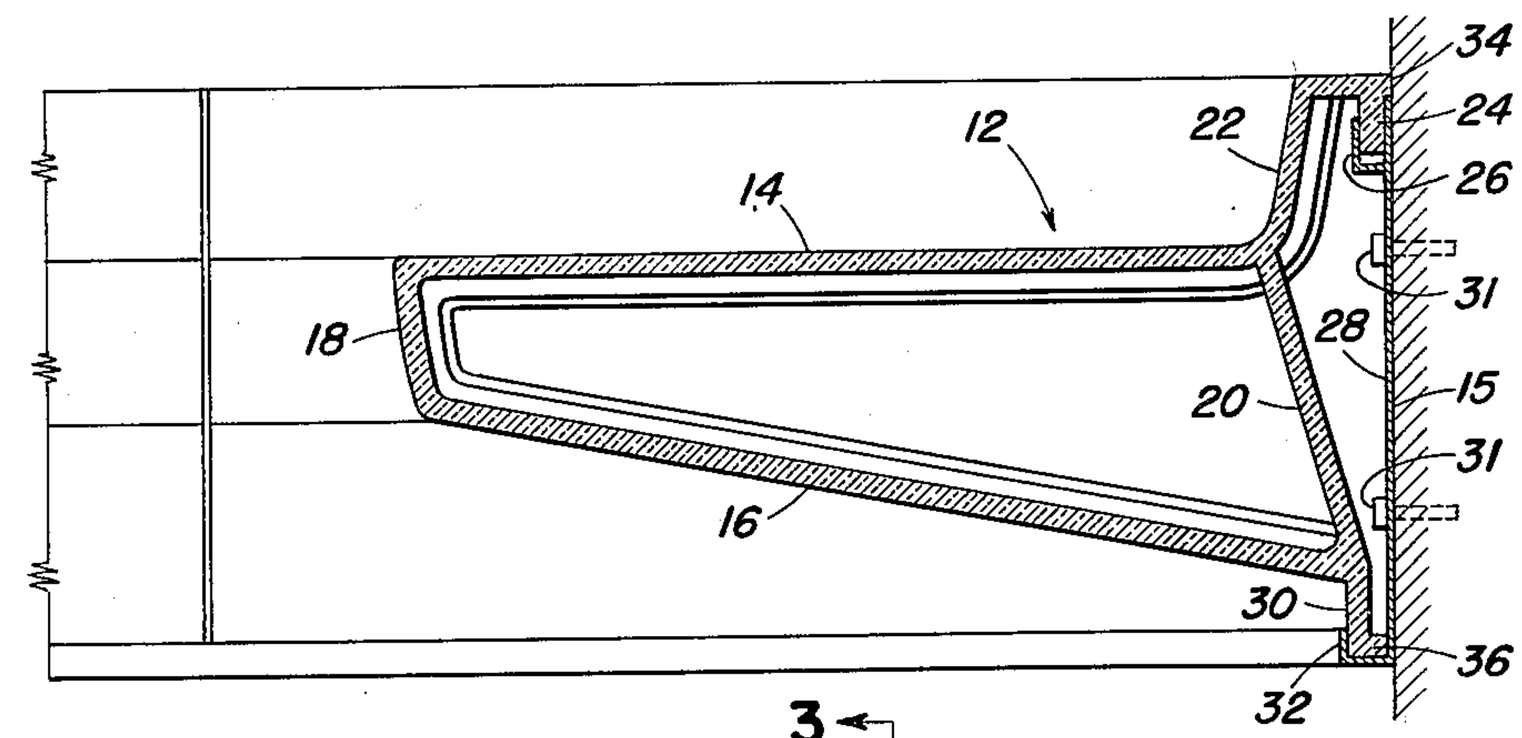

Fig. 2.

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LAVATORY FIXTURE

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13 Claims. (Cl. 4—170)

The present invention relates to lavatory fixtures and more particularly to extension counters and to wall supporting supports for such fixtures and extension counters.

Heretofore most sinks and lavatories have been manufactured in a particular size. To deviate from this size counters have been custom built adjoining said lavatories, and are frequently of wood with a linoleum or plastic covering. This type of structure was therefore expensive to make and difficult to keep clean. Also such counters or extensions required additional cabinet or substructures for support.

It is an object of this invention to provide porcelainized lavatory fixtures which are variable as to their arrangement and which will not have to be custom built to fit into any particular bathroom or kitchen.

Another object is to provide sectional ceramic lavatory fixtures which can be assembled side by side to obtain the size and arrangement of lavatory fixture desired.

A further object is to provide a method and apparatus for supporting and attaching porcelainized ceramic lavatory fixtures to a wall.

Another object is to provide counter extension fixtures which are of simple design and easy to install.

Other objects and features of the invention will appear as the description of the particular embodiment selected to illustrate the invention progresses. In the accompanying drawings, which form a part of this specification, like characters of reference have been applied to corresponding parts throughout the several views which make up the drawings.

FIGURE 1 is a perspective view of a counter installed adjacent to a lavatory.

FIGURE 2 is a partial vertical sectional view of the counter taken along the line 2—2 of FIGURE 5.

FIGURE 3 is a vertical sectional view taken along the line 3—3 of FIGURE 2.

FIGURE 4 is a perspective view of one of the counter sections of FIGURE 1 shown installed on a wall.

FIGURE 5 is a plan view of counter having a corner piece.

FIGURE 1 shows a counter, constructed according to this invention, installed on each side of a lavatory 10. The counter is made up of a number of counter sections 12 which may be constructed or cast from the same material, such as for example, vitreous china, as that used in the construction of the lavatory 10. The counter sections 12 are joined to each other and may be joined to the lavatory 10 to provide a counter which forms a continuation of the upper rim 13 of the lavatory 10.

Each counter section 12 is of a generally hollow construction open at either side. The upper wall 14 of each counter section 12 extends in a substantially horizontal direction to provide a substantial flat counter top when the section 12 is installed on a substantially vertical wall 15. The bottom surface 16 of each counter section 12 may slope downwardly from front to rear as shown in FIGURE 3. The downward slope of the bottom surface 16 provides a more structurally sound section, particularly when the section is supported on a wall 15 as shown in FIGURE 3. A frontal surface 18 is provided to join the front portions of the upper surface 14 and the lower surface 16. A structural rib or rear wall 20 may also be provided toward the rear of each counter

section 12 to join the upper and lower surfaces 14 and 16 respectively to increase the rigidity of the counter sections 12 and form a T-shape configuration therewith.

The upper surface 14, may terminate short of the wall 15 and a generally upward extending portion or splash wall 22 may be formed integral with the upper surface 14 for preventing utensils or articles on the counter top from being pushed against the wall 15 to damage or mar the surface thereof. The upward extending portion 22 also prevents water which may be spilled on the counter surface 14 from leaking between the wall 15 and the counter sections 12.

In order to support the weight of each section 12 on the wall 15, a downward extending lip or flange 30 formed integral with the section 12 is provided at the lower portion of each counter section. The flange 30 fits into a channel member 32 secured firmly to the wall 15. The channel member 32 serves as a support to receive the flange 30 and thereby support the weight of the section 12 and hold it against the wall 15. The channel member 32 may be formed along one edge of a structural member such as a steel plate 28 which extends across the width of the counter and which has openings to permit fastening means, such as the screws 31, to secure the plate 28 to the wall 15.

The upper portion of each section 12 is prevented from coming away from the wall 15 by means of a downwardly extending lip or flange 24 which is formed integral with the section 12 and which also fits into a channel member 26 secured to the wall 15. The upper channel member 26 may be formed along one edge of a single steel plate 28 on which the lower channel member 32 is also formed. Although it is preferable (for reasons that will be explained later) that the lower channel member 32 support the weight of each counter section, the spacing between the channels 26 and 32, and/or the spacing between the flanges 24 and 30, may be designed such that only the upper channel 26 supports the weight of the sections 12.

In this regard it will be noted that if the distance between the bottom faces of the upper and lower flanges 24 and 30 respectively is not exactly equal to the distance between the bottom surfaces of the channels 26 and 32 respectively, then one of the flanges 24 or 36 will not contact the bottom of one of the channel members 26 or 32. For example, if the distance between the flanges 24 and 30 was slightly greater than the distance between the channels 26 and 32, then only the lower flange 30 would contact the bottom of the lower channel 32 to support the weight of the counter section 12. If the relationship of the above-mentioned distances were reversed, then only the upper channel member 26 would support the weight of the section 12. If desired the above-mentioned distances may be made so that the weight of the section 12 would be carried by both channel members 26 and 32.

When certain materials having a greater compressive strength than tensile strength, such as vitreous china are used in making the counter sections, it is preferable that only the lower channel member 32 support the weight of the sections 12. Since the lower weight-supporting flange 30 will be subjected to compressive stress rather than tensile strength. If the upper flange 24 carried the weight of each counter section 12, such upper flange 24 would be subjected to tensile stress and would be more apt to break as compared to the case where the lower flange 30 supports the weight. Regardless of which channel member 26 and/or 32 supports the weight of the counter sections, both channel members will prevent the section 12 from coming away from the wall 15.

Guide lugs 34 and 36 may be provided adjacent to the lips 24 and 30 respectively to provide a snug fit for

the lips 24 and 30 in the channel members 26 and 32. Also the lugs 34 and 36 will engage the wall 15 to insure a snug fit therewith. It will be noted in the embodiment of FIGURE 3 that all the portions of the section 12 shown cross hatched are formed or cast as one integral member.

In order to join the sections 12 to one another, slip joint type of interlocking means comprising an underlapping lip 40 is provided along one side of each counter section 12 as shown in FIGURE 2. The lip 40 is formed beneath and extends beyond one side edge of one section 12 and extends beneath an opposite side edge 42 of an adjacent section 12. Due to the tongue and groove type of interlocking means, each counter section will be supported against relative vertical movement by its adjoining counter sections.

If a completely waterproof counter top is desired, sealing means 44, such as waterproof tile cement or mastic, may be provided between the underlapping portions. A slight indentation 46 may be provided on each section 12 adjacent to the side edge 42 and this indentation 46 may also be provided with sealing means 48 similar to the sealant 44 used between the overlapping portions 40 and 42 of the sections 12. The side edge 42 will abut at an adjoining counter section so that the indentation 46 will provide a minimum width exposure of the sealing means between counter sections, thereby enhancing visual appearance.

As shown in FIGURE 2 one counter section may be placed adjacent to the lavatory 10 to provide a continuation of the rim 13 of the lavatory 10. If a single metal plate 28 as described previously, is used for supporting the counter sections 12 on the wall 15, the channel 32 of the metal plate 28 may also be used to support the lavatory 10 on the wall 15 such as shown and described in my copending application, Serial No. 181,907, filed March 23, 1962, now Patent 3,099,019, issued July 30, 1963.

Thus a single metal plate 28 may extend across the width of the lavatory 10 and the counter sections 12 on either side of the lavatory for supporting the entire unit consisting of the counter sections and the lavatory. A single plate lines all of the extensions level with the lavatory.

FIGURE 4 shows a perspective view of one counter section 12. Although the underlapping lip 40 is shown as extending along one side of the top, frontal and bottom surfaces 14, 18, and 16, respectively, a counter section 12 may be constructed so that the underlapping lip 40 extends only along the side of the top wall 14 or only along the side of the top and frontal surfaces 14 and 18 respectively.

Also as shown in FIGURE 4, the underlapping lip 40 need not extend along the side of the flanges 24 and 30. This provides a more structurally sound flange 24 or 30 for supporting the weight of the counter section 12. The underlapping lip 40 between each of the counter sections 12 locks the sections 12 together so that the individual counter sections are held in place, not only by the channel members 26 and 32, but also by adjoining counter sections.

The counter sections 12 are easily installed on the wall 15 simply by placing the rear portion of the section 12 against the wall 15 and guiding it downwardly until one or both of the lips 24 or 30 (preferably just the lower flange 30) are bottomed in one or both of the channel members 26 or 32. The counter section is then slid laterally until the underlapping lip 40 extends under an adjoining counter section 12 as shown in FIGURE 2. The sealing means 44 may be placed on the underlapping lip 40 and the indentation 48 before the counter section 12 is slid laterally toward an adjoining counter section 12. After the counter section 12 is slid laterally, the excess sealant 44 may be removed.

To provide a finished appearance, an end piece 52 for enclosing the last section of the counter top is provided as shown in FIGURE 1. Also a corner piece 54 as shown

in FIGURE 5 may be provided where it is desirous to extend the counter around a corner of a room. Although the corner piece 54 is shown as extending around an inside corner, a corner piece may be provided to extend around an outside corner.

It will be noted that this counter may be as long or as short as desired merely by adding or taking away one or more of the counter sections 12. Each counter section 12 may be made of the same general shape so that they are interchangeable. Such construction provides flexibility in adapting the counter to meet individual requirements at each particular installation. Since the counter is completely supported by the wall 15, no substructure is required. The counter may be quickly and economically installed without requiring any special tools or equipment.

The invention hereinabove described may be varied in construction within the scope of the claims, for the particular device selected to illustrate the invention is but one of many possible embodiments of the same. The invention, therefore, is not to be restricted to the precise details of the structure shown and described.

What is claimed is:

1. A wall mounted counter, comprising a plurality of structural members having interlocking configurations on either side, said members each having a generally horizontal surface suitable as a counter top, said structural members being arranged adjacent to one another so that the said generally horizontal surfaces define a continuous counter top, means for interlocking adjacent structural members against relative vertical movement and means formed integral with each of said structural members for supporting the weight thereof on the side of a substantially vertical wall.

2. A wall mounted counter, comprising a plurality of integral hollow mold formed structural members arranged side by side adjacent to one another to define a substantially horizontal surface suitable as a counter top, tongue and groove means for joining adjacent structural members to one another side by side, and means having a pair of downwardly extending flanges formed integral with said structural members for supporting the weight thereof on a substantially vertical wall.

3. A counter adapted to be supported on a wall, comprising a plurality of mold formed hollow counter sections arranged adjacent to one another, each of said counter sections being formed as a single structural member, each of said structural members having slip joint interlocking means formed on either side thereof for interlocking adjoining counter sections to each other, said members having a generally flat surface suitable as a counter top and means formed integral with said members for securing said members to a substantially vertical wall independently of a floor support.

4. A mold formed integral structural member adapted to be connected to like mold formed structural members to form a wall mounted counter, comprising a generally flat top member having a surface suitable as a counter top, a bottom wall arranged beneath said top member and having a downward flange formed therewith, a frontal member connecting said top member and bottom member, an upwardly extending splash member integrally connected with said top member and having a downwardly extending flange formed thereon and common wall brackets for supporting said flanges and lining up said members to form an integrated counter.

5. In a structural member as set forth in claim 4 and having interlocking tongue and groove means formed on the sides of said structural members to prevent relative up and down movement between said members.

6. A wall mounted counter made up of a plurality of counter top sections, comprising adjacent mold formed hollow structural members having a generally flat top surface suitable as a counter top, said members having a side edge formed with a slip joint to laterally lock with

the adjacent edge of an adjacent structural member, sealing means between said slip joints to form a watertight seal therebetween, and means having a pair of downwardly extending flanges for supporting said structural members on a wall bracket independently of a floor support.

7. A structural member adapted to be connected to like structural members to form a wall mounted counter top, comprising a molded integral top, front, and bottom wall, said top and bottom walls having a header forming a T-shape therewith, said T-shaped header having a flange adapted to support said wall mounted counter top on the side of a wall, and slip joints formed on the side surfaces of said front and bottom walls to interlock said members against relative vertical movement.

8. A structural china member for use in a wall mounted counter top, comprising an integral top, front, and bottom wall, a splash wall extending generally upwardly above said top wall, a rear wall interconnecting said splash wall and said bottom wall and extending therebelow, said splash wall having a flanged portion extending beyond the inside surface of said splash and rear walls and downwardly for supporting the structural member on a substantially vertical wall.

9. A wall mounted counter adapted to form a horizontally extending continuation of an upper rim of a lavatory, the combination comprising a plurality of hollow structural members arranged adjacent to said lavatory and adjacent to each other, said hollow structural members having top walls forming a surface suitable as a counter top, means having tongue and groove surfaces formed integral with said structural members for interlocking the structural members to each other and to the lavatory, and means formed integral with said structural members for supporting the counter on a substantially vertical wall at a common elevation.

10. A counter adapted to be mounted on an upright structure, comprising a plurality of hollow structural members having an opening on either side, each of said

structural members having a top, front and bottom wall, means interlocking said structural members to one another against relative vertical movement, means formed integral with said top and bottom walls for supporting said hollow structural members on the side of said upright structure, and an end piece for closing off the opening on one side of one of said hollow structural members.

11. A counter as set forth in claim 10 including interlocking means between said end piece, and said one hollow structural member.

12. A counter adapted to be mounted and supported on two intersecting walls, comprising a plurality of structural members arranged adjacent to one another and supported on one of said intersecting walls, means formed integral with said structural members for interlocking said adjacent structural members to one another, a corner structural member supported by each of said intersecting walls and located adjacent to one of said plurality of structural members, means integral with and interlocking said corner structural member with said one of said plurality of structural members, and means integral with and supporting said plurality of structural members at a common height on said wall.

13. A counter as set forth in claim 12 including a plurality of structural members supported on the other of said two intersecting walls, one of the last said plurality of structural members being located adjacent to said corner piece, and means integral with and interlocking said corner piece with the last said one structural member.

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