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(54) **Device for mounting a panel of metal beside and on a level with a countertop.**

(57) A device for mounting principally a sink unit (1) beside and on a level with a countertop (2) of wood consisting of two sections (3, 4) of which the first (3) is mounted under the sink unit (1) beside an edge abutting against the countertop (2). A second section (4) is mounted on the edge of the countertop (2), whereby a portion (4a) of the aforementioned second section (4) is arranged to be clamped in position in a gap (7) between the aforementioned first section (3) and the underside of the sink unit (1).

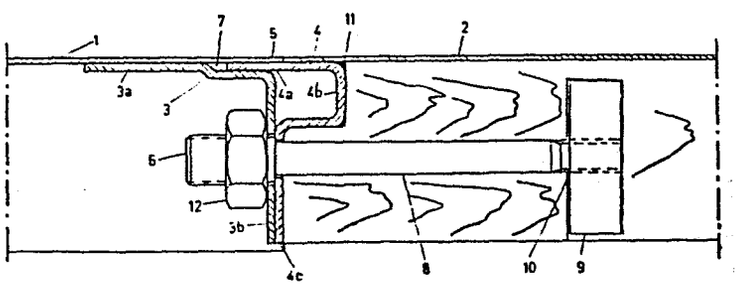

FIG 1

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Device for mounting a panel of metal beside and on a level with a countertop

The present invention relates to a new device for securing a panel of metal, principally a sink unit, to a countertop of wood so that the upper surface of the metal panel is in the same plane as the upper surface of the countertop.

No major engineering problem is inherently involved in mounting a sink unit beside a worktop so that the upper surfaces of both are in the same plane. The difficulty lies in obtaining a joint between the two surfaces which is perfectly tight. This is an absolute condition as spilt water from the sink unit and food remnants from the worktop will otherwise penetrate the joint and might result in the occurrence of a colony of bacteria in the joint. This is naturally highly undesirable and unsuitable for a workplace in a kitchen environment. Spilt water that penetrates the joint will also gradually cause the wood in the worktop to rot.

One way of avoiding spilt water and food remnants from pentrating the aforementioned joint is to position the folded edge of the sink unit on top of the wooden countertop and clamp it in place. One example of such mounting is described in Swedish patent letter 311869. A disadvantage of such mounting, however, is that the work surface will not be continuous as a raised edge between the worktop and the sink unit is obtained. This arrangement also has the drawback that crumbs and the like cannot be wiped off the worktop directly onto the sink unit as the aforementioned raised edge forms an obstacle to this.

Another way of solving the problem of achieving a tight joint is to position the sink unit under the worktop. This arrangement nevertheless also has the disadvantage of a discontinuous work surface.

With the present invention the problem of creating a tight joint between a sink unit and a worktop has been solved at the same time as the upper surfaces of both sink unit and worktop are in the same plane. For this purpose the invention has the characteristics specified in the following patent claims.

The invention will be explained more explicitly in the following detailed description and with the aid of the appended drawing, where Fig. 1 shows a vertical cross-section through a connection point with the mounting element viewed from the side and Fig. 2 shows a cross-section through the sink unit.

The device for mounting a sink unit 1 beside a countertop 2 of wood embraces two interacting sections 3, 4, of which one 3 is designed to be secured to the underside of the sink unit 1 beside the edge 5 abutting against the worktop 2.

Ths section 3 designed to be mounted on the underside of sink unit 1 is mainly in the shape of an L. One leg 3a of this section 3 is horizontally oriented and spot-welded under sink unit 1 in such a position that its other vertical downward directed leg 3b is just inside the edge 5 of the sink unit. A number of holes are provided in the vertical leg 3b for mounting bolts 6. Apart from serving as a connecting element, section 3 also lends rigidity to the sink unit.

One portion of the horizontal leg 3a is arranged to be a slight distance away from the underside of sink unit 1 so that a gap 7 is formed between this portion of the leg and the sink unit. The purpose of this gap 7 will be evident from the following.

The other section 4 forming part of the mounting device is mounted on the edge of the wooden countertop 2. This section 4 consists of a horizontal portion 4a, which on joining the two tops 1, 2 together is designed to be inserted into the gap 7 which is adapted to its thickness. The horizontal portion of section 4 next to wooden countertop 2 changes into a formed U-shaped portion 4b which ends in a vertically oriented leg 4c. Holes for the mounting bolts 6 are provided in the vertical leg 4c.

To accept the formed U-shaped portion 4b of section 4 a recess is milled in the edge of the wooden countertop 2 under the work surface so that a panel-shaped portion of the aforementioned countertop 2 of approximately the same thickness as the sink unit extends over the recess.

Every mounting bolt 6 extends through a drilling 8 in the wooden countertop 2 to a locking dowel 9 which is provided with a threaded hole 10 to receive the bolt 6.

Mounting of the sink unit 1 and countertop 2 to each other is carried out in the following manner.

The U-shaped portion 4b of section 4 is placed in the recess of the wooden countertop 2 and a sealing compound 11 is applied

between the section and the recess. The mounting bolts 6 are fitted in their respective holes in the vertical leg 4c and passed through the respective drilling 8 to the locking dowels 9 and screwed into same. The sink unit 1 with its spot-welded L-shaped section 3 is then offered up to the wooden countertop so that the bolts 6 are introduced into the holes in the vertical leg 3b. Simultaneously, the horizontal portion 4a of section 4 mounted on the wooden countertop is pressed into the gap 7 under the sink unit 1. The aforementioned horizontal portion 4a of the section will accordingly serve as a supporting element for the edges of the two worktops 1, 2. By means of a nut 12 which is tightened on every bolt 6 the sections 3, 4 are then firmly secured and the worktops 1, 2 thus joined tightly to each other.

An alternative method of mounting is to join the worktops 1, 2 together before inserting the bolts 6 into position.

In the above it was mentioned that a nut 12 on every bolt 6 is used for joining the worktops to each other. In order to deliver the worktops 1, 2 with the section portions 3, 4 mounted on the respective worktop, an intermediate thin nut (not shown) can be used to secure section 4 to wooden countertop 2.

Through the mounting device described above the possibility of securing a sink unit to a worktop in a simple manner has been achieved so that the two work surfaces are on a level with each other at the same time as a tight joint is obtained.

Shown in Fig. 2 is a front moulding which is mounted on studs 14 on the front edge of the sink unit 1 and the worktop 2.

Claims

1. A device for mounting a panel of metal, principally a sink unit (1), beside and on a level with a countertop (2) of wood, characterized in that it embraces a first section (3) with a vertical leg (3b) secured to the underside of the sink unit (1) beside an edge (5) abutting against the countertop (2) and a second section (4) designed for mounting on the edge of the countertop (2), which second section is arranged on mounting of the sink unit (1) to the countertop (2) to be clamped in position in a gap (7) between the aforementioned first section (3) and the underside of the sink unit (1).

2. A device as in Claim 1, characterized in that the aforementioned first section (3) is mainly in the shape of an L, one leg (3a) of which is spot-welded with a horizontal orientation to the underside of the sink unit (1) so that its other leg (3b) is oriented vertically downwards beside the edge of the sink unit (1).

3. A device as in Claim 2, characterized in that one portion of the horizontal leg (3a) is arranged to be a slight distance away from the sink unit (1) so that a gap (7) is formed betwee the underside of the sink unit (1) and the aforementioned horizontal leg (3a), whereby the thickness of the aforemention ed gap (7) corresponds to the thickness of a horizontal portio (4a) of the second section (4).

4. A device as in Claim 3, characterized in that the horizontal portion (4a) of the aforementioned second section changes into a formed U-shaped portion (4b) which in its turn changes into a vertical leg (4c).

5. A device as in Claim 4, characterized in that holes for mounting bolts (6) are provided in the vertical legs (3b, 4c) of the sections 3, 4).

6. A device as in Claims 4 or 5, characterized in that the aforementioned U-shaped portion (4b) is arranged to be accepted in a recess in the upper edge of the countertop (2) situated next to the sink unit (1).

7. A device as in Claim 6, characterized in that sealing compound (11) is applied between the recess and the U-shaped portion (4b).

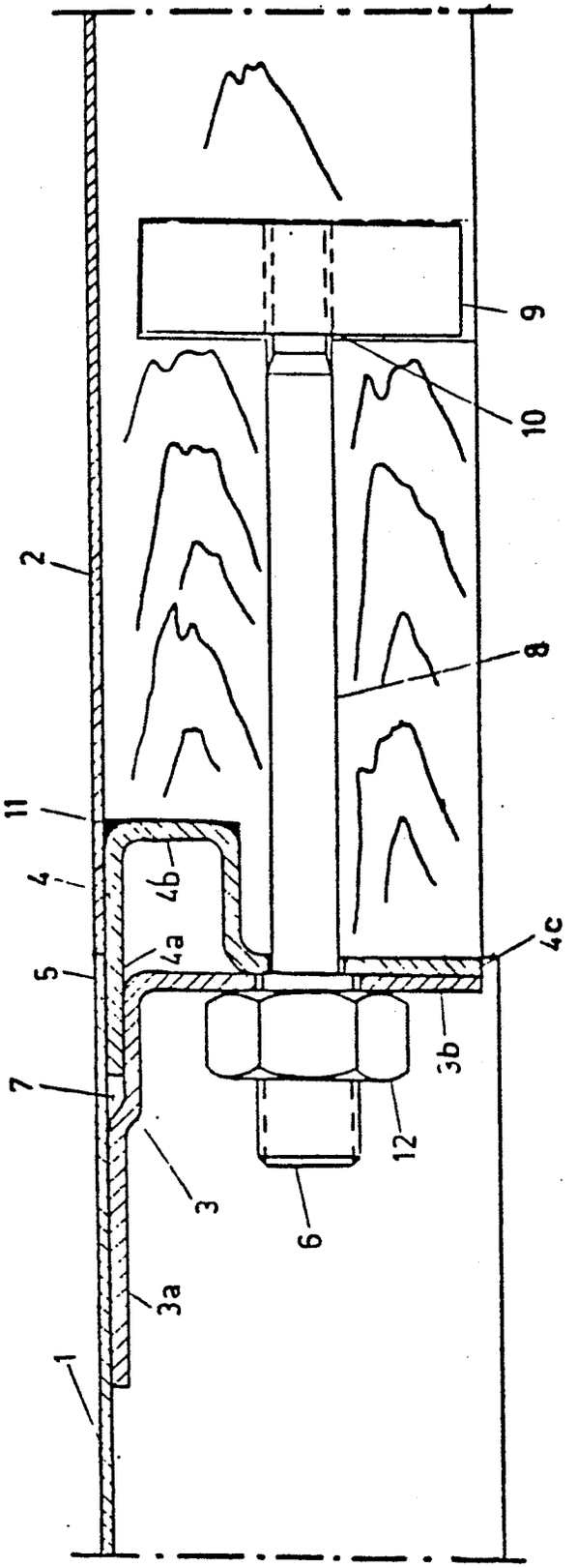

FIG 1

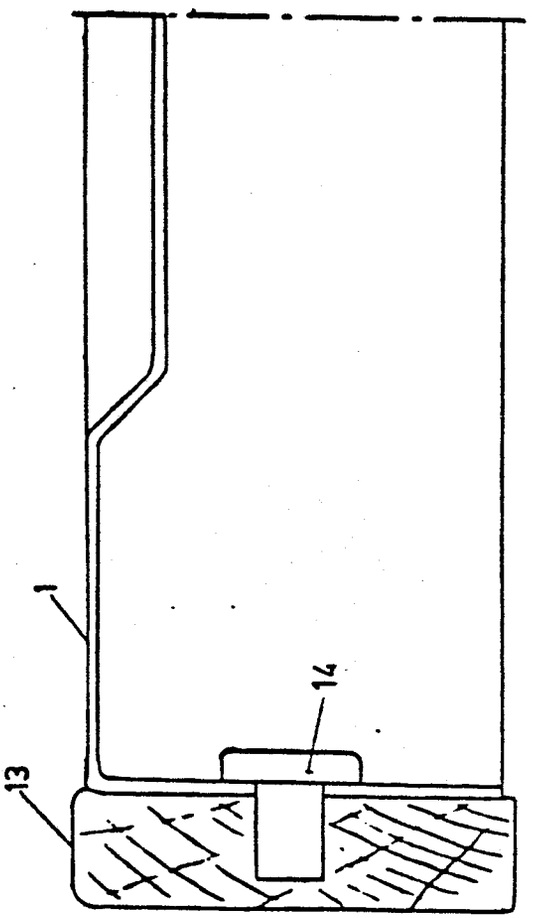

FIG 2

European Patent Office

EUROPEAN SEARCH REPORT

0089323
Application number

EP 83 85 0053

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
A	US-A-2 977 605 (MUSALL) *Column 2, lines 28-73; column 3; column 4, lines 1-26; figures 4-7*	1	E 03 C 1/33
A	BE-A- 534 018 (KRONE) *Figures 3,4*	1	
A	GB-A-2 051 571 (BENE)		
A	DE-A-2 426 720 (MIELE)		

TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
E 03 C A 47 B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	22-06-1983	HANNAART J.P.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
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