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(54) **SELF LEVELING MOUNT**

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(57) **ABSTRACT**

A mounting member which affords an apparatus to be leveled on a vertical support surface regardless of levelness of the fastening means. The mounting member also allows for a versatile means of attachment and fastening the apparatus to a vertical support surface. The mounting member is particularly suited for dispensing equipment and other apparatus' that contain liquid compositions or which function best when at a level position on a vertical support surface.

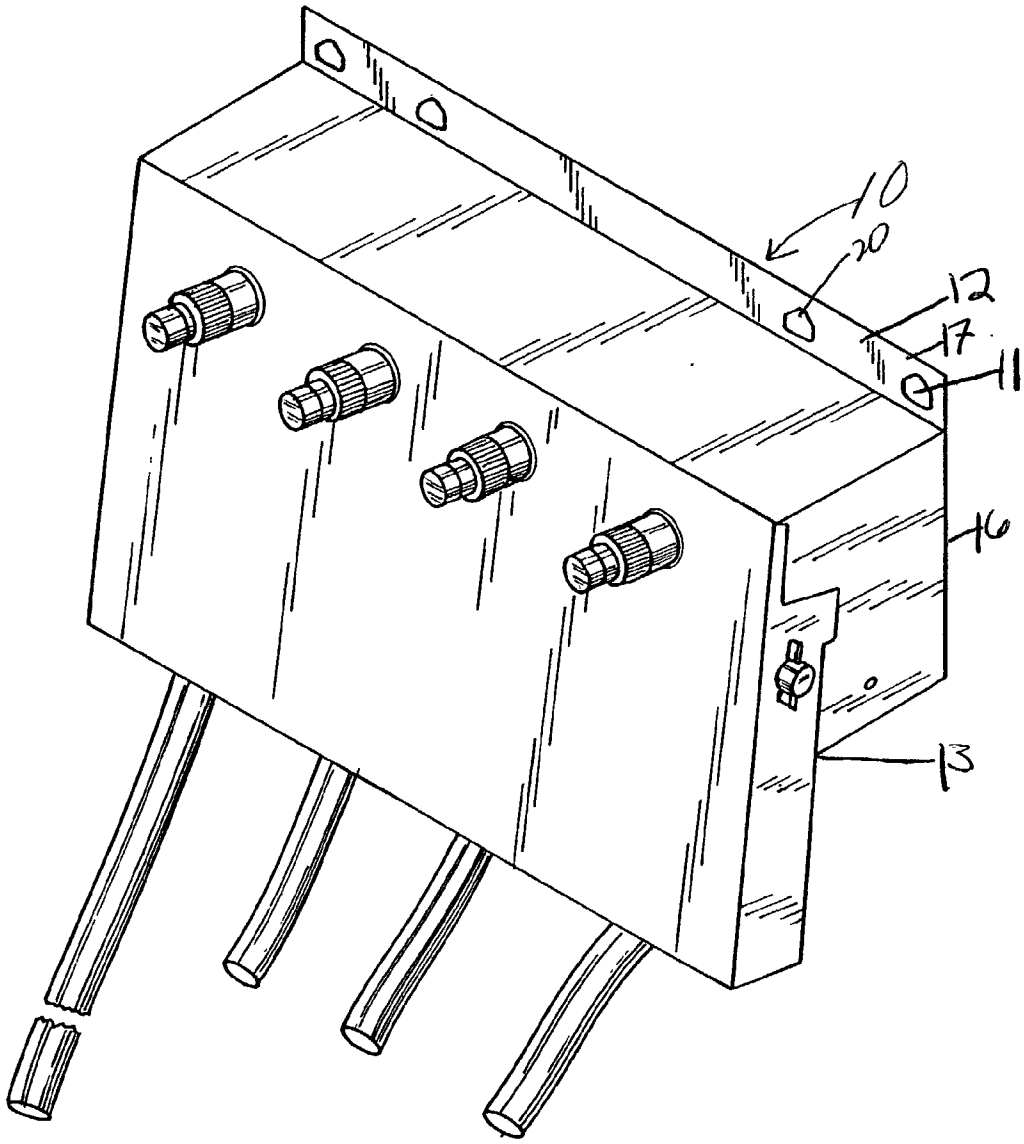

FIG. 1

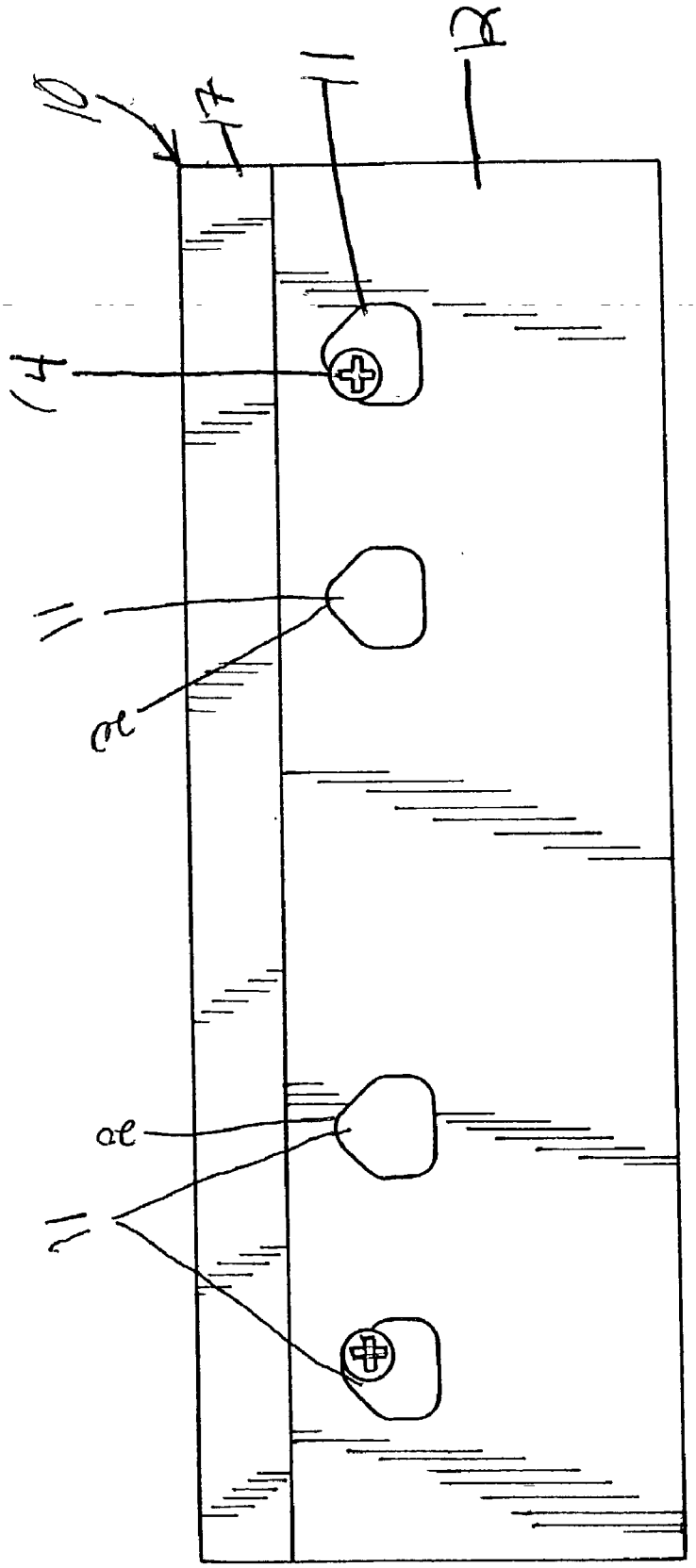

FIG. 2

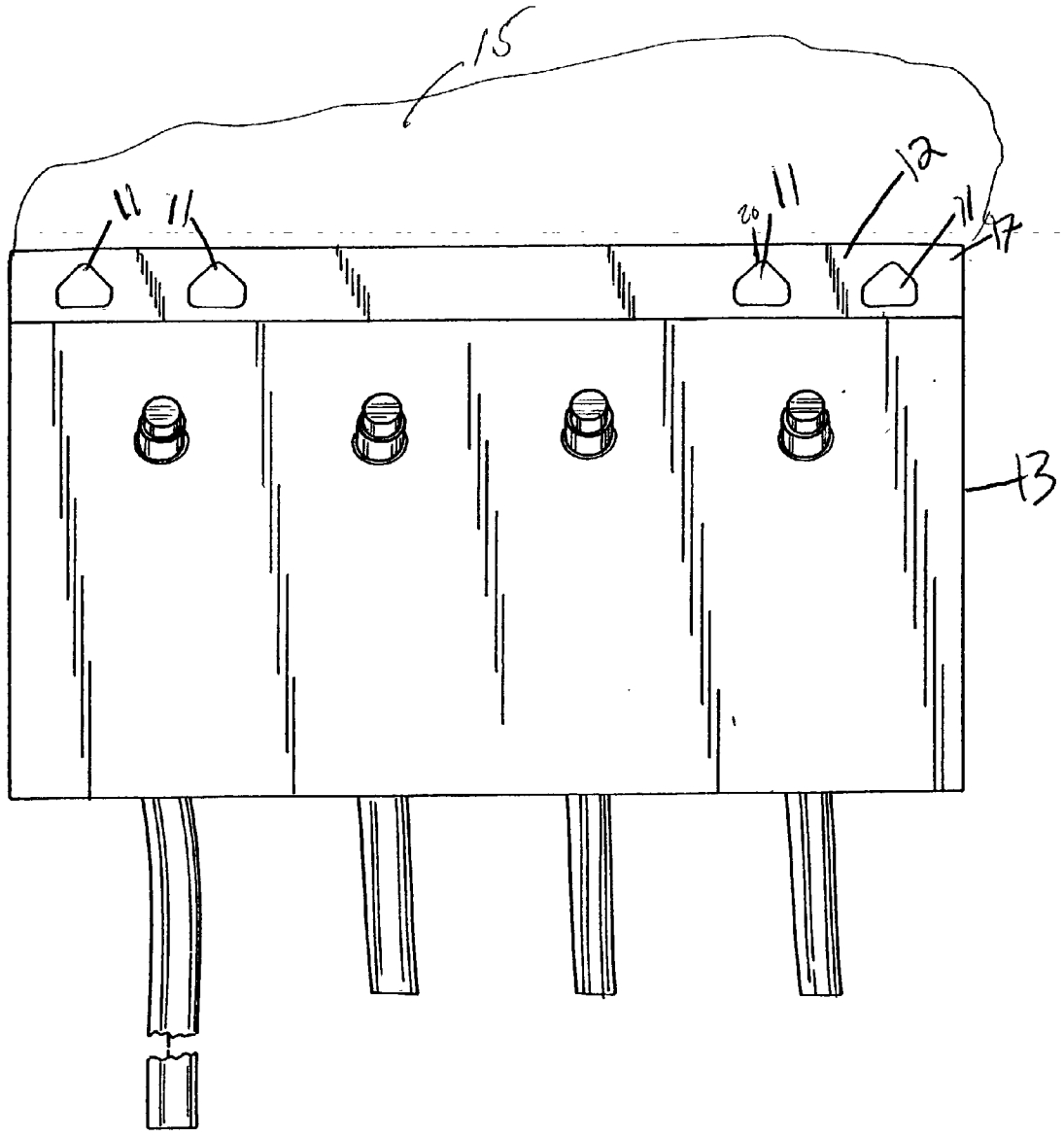

FIG. 3

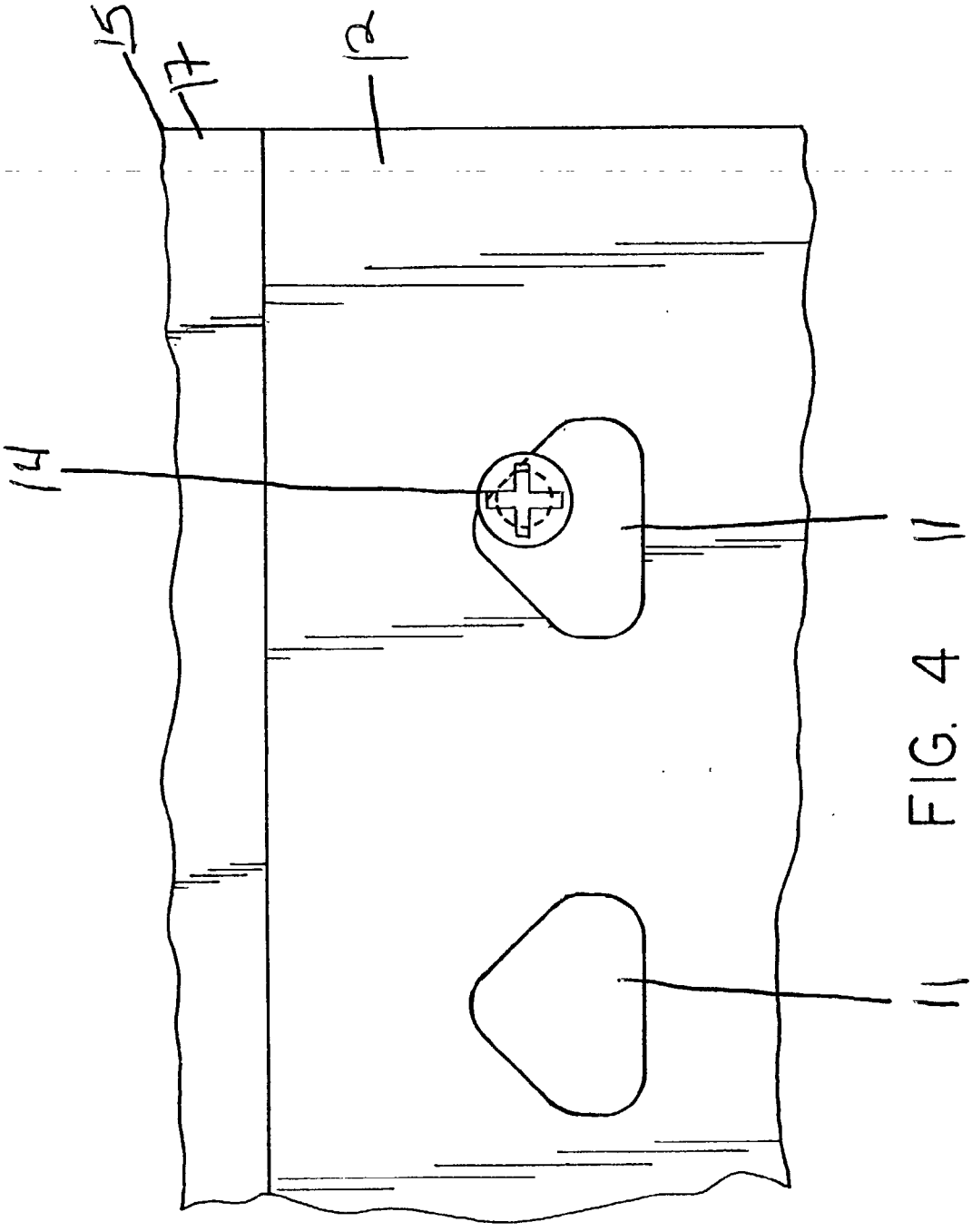

FIG. 4

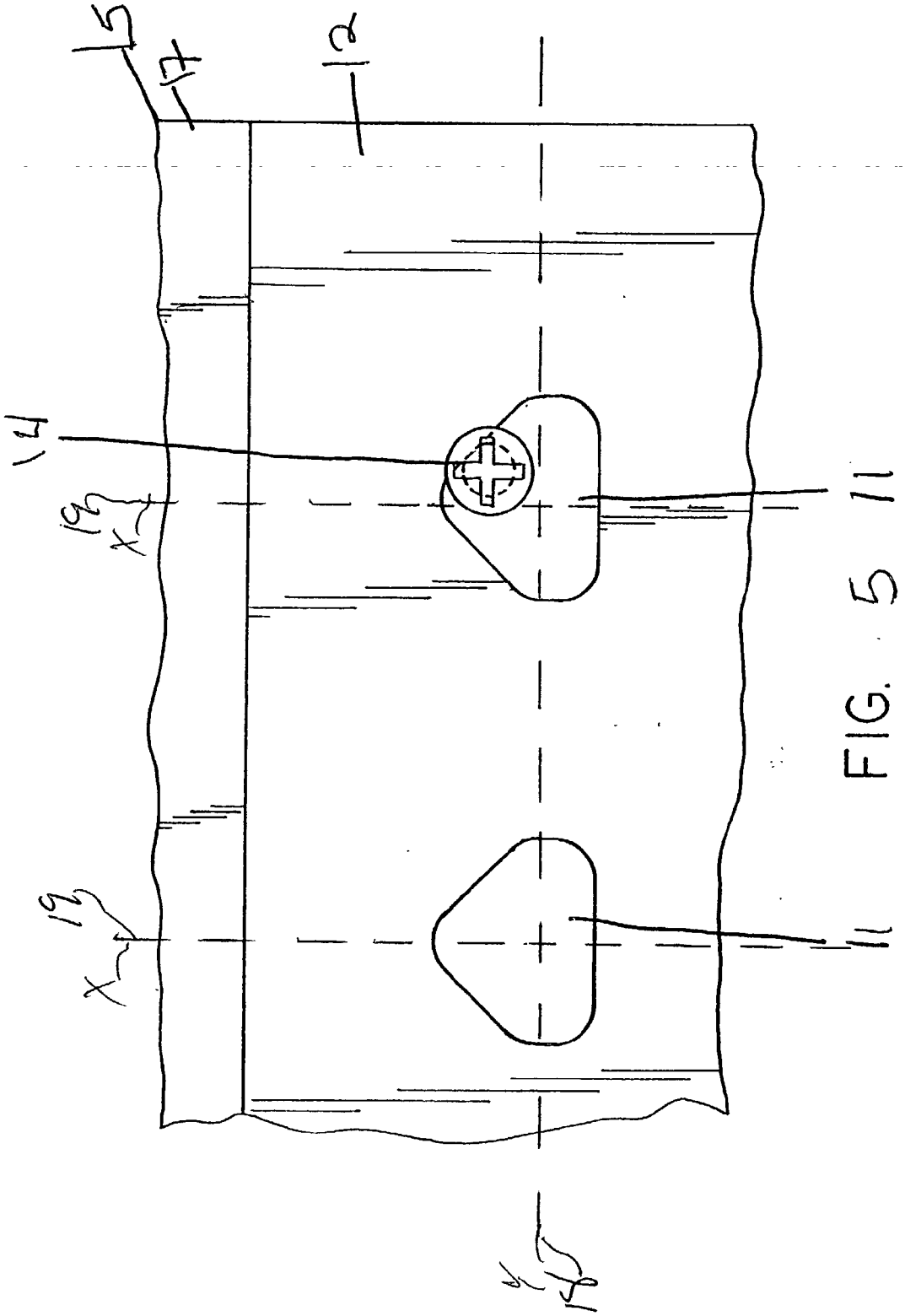

FIG. 5

SELF LEVELING MOUNT

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] None

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] None

BACKGROUND OF THE INVENTION

TECHNICAL FIELD

[0003] This invention relates to a mounting member. More particularly, it relates to a self leveling mounting member having a shape which allows for the level installation of an apparatus when the fastening members may not be level.

[0004] A mounting member that allows an apparatus to be leveled after the fastening members have already been secured to a support surface can lower installation time and increase the accuracy of the leveling process. Also the mounting member itself as placed on the apparatus may not be exactly level so even if the fastening members are perfectly level the flaw may be in the mounting member itself thus increasing the difficulty in leveling the apparatus. The mounting members in use currently may allow for some adjustment prior to the fastening member being completely engaged, but once the fastening member is completely engaged the mounting member shifts back to its original position or the apparatus is not secured to a surface adequately.

[0005] When installing a dispensing apparatus, the system must be level to prevent the leaking of chemicals, inaccurate dilution or the incomplete usage of the chemicals. In order to align the fastening members so that the dispensing apparatus can be level may be time consuming and difficult for the aforementioned reasons. This innovation allows for the correction of inaccuracies without the need to move the fastening members.

[0006] Thus, it can be seen that there is a need for an improved mounting member which affords easy installation of an apparatus as well as accurate leveling.

[0007] The objects of the invention therefore are:

[0008] Providing an improved of apparatus' mounting member.

[0009] Providing a mounting member, which affords quicker leveling of an apparatus being mounted to a vertical surface.

[0010] Providing a mounting member, which affords the ability to correct inconsistencies in an apparatus allowing for a level installation.

[0011] Providing a mounting member of the foregoing type, which allows for secure installation while allowing the adjustment of the apparatus after the fastening member has already been engaged with a support surface.

SUMMARY OF THE INVENTION

[0012] The foregoing objects are accomplished and the shortcomings of the prior art are overcome by the self-leveling mounting member of this invention which includes in one embodiment a mounting member for attachment to an essentially vertical support surface. The mounting member includes a plate member for mounting on the support surface in a vertical manner. The plate member incorporates at least two openings spaced from each other in a parallel manner along a vertical axis and the openings intersected by a horizontal axis, the openings defined by two adjacent angular edge surfaces, the edge surfaces meeting at an angle. A fastening member is secured to the support surface and positioned in the openings and against a surface of the plate member, the opening constructed and arranged with the plate member to provide automatic leveling of the mounting member.

[0013] In another embodiment the openings and the mounting member are defined by a pentagonal shape and the plate member comprises a portion of a liquid dispensing apparatus. The angle of the edge surface may be between 70 and 170 degrees but preferable would be approximately 90 degrees and the fastening member has a head.

[0014] A method of attaching an apparatus to an essentially vertical support surface is also presented wherein, at least two fastening members are partially engaged with the vertical support surface and placed in at least two openings in a mounting member, the mounting member is and openings are adjusted around the fastening member until the apparatus is essentially level and then the fastening member is fully engaged with the apparatus securing the apparatus in said level position.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] **FIG. 1** is a perspective view of the dispensing apparatus showing the mounting member of the invention;

[0016] **FIG. 2** is a front view of the mounting member with completely engaged fastening members;

[0017] **FIG. 3** is a front view of the dispensing apparatus showing the mounting member of this invention; and

[0018] **FIG. 4** is a front partial view of the mounting member with a completely engaged fastening member;

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0019] As shown in **FIGS. 1 and 3**, there is a dispensing apparatus **13** in connection with the mounting member generally **10** which includes a plate member **12** and openings **11**. The openings **11** have the pentagonal shape which allows for the self-leveling feature of the invention. The plate member **12** is attached to the back portion **16** of the apparatus **13** with the upper portion **17** positioned on top for installation of the apparatus **13** to a vertical support surface such as a wall **15**.

[0020] As seen in **FIGS. 2 and 4**, the mounting member **10** includes a plate member **12**, fastening members **14** and openings **11**. The pentagonal shape of the openings **11** are arranged so the top angle is pointing in the direction of the upper portion **17**. The pentagonal shape of the openings **11** allow for the mounting member **10** to be leveled after the fastening member **14** is initially engaged with the vertical surface. Then once the fastening member **14** is fully engaged

with the vertical surface the mounting member **10** is level even though the fastening member **14** or the openings **11** may not be level.

[**0021**] In **FIGS. 4 and 5** illustrated a partial view of the mounting member **10** with one opening **11** fully engaged with the fastening member **14** and one opening **11** is without the fastening member **14**. **FIG. 5** shows the openings **11** parallel to each other along the y or vertical axes **19** and that the openings **11** are intersected by the x or horizontal axis **18**. The edge surface **20** of the openings is between 70 and 170 degrees allowing for the full mobility of the openings **11** and fastening members **14** to level the dispensing apparatus **13**. The edged surface **20** preferred embodiment would have the angle at 90 degrees allowing for optimum mobility and leveling aspects of the invention.

[**0022**] The FIGS further show a method of attaching a dispensing apparatus **13** to a support surface **15** using a mounting member **10**. At least two fastening members **14** are partially engaged with the support surface and engaged with the mounting member **10** having at least two openings **11**. The openings **11** and mounting members **10** are adjusted around the fastening members **14** until the apparatus **13** is essentially level and then the fastening member **14** is fully engaged with the mounting member **10** and the support surface in the level position.

[**0023**] The foregoing description was primarily directed to a preferred embodiment of the invention. Although some attention was given to one particular dispensing apparatus within the scope of the invention, it is anticipated that one skilled in the art will likely realize additional alternatives that are now apparent from disclosure of embodiments of the invention. For example, although the present invention has been described in the context of a dispensing apparatus **13**, which allows for the leveling of the dispensing apparatus **13**, which in turn allows for the even and complete dispensing of products. The invention can be applied to all objects that need to be attached to any surface. Accordingly, the scope of the invention should be determined from the following claims and not limited by the above disclosure.

1. A mounting member for attachment to an essentially vertical support surface comprising:

a plate member for mounting on the surface in a vertical manner;

at least two openings in the plate member, the openings spaced from each other in a parallel manner along a vertical axis and the openings intersected by a horizontal axis, the openings defined by two adjacent angular edge surfaces, the edge surfaces meeting at an angle; and

a fastening member secured to the support surface and positioned in the openings and against a surface of the plate member, the opening constructed and arranged with the plate member to provide automatic leveling of the mounting member.

2. The mounting member of claim 1, wherein the openings are defined by a pentagonal shape.

3. The mounting member of claim 1, wherein the plate member comprises a portion of a liquid dispensing apparatus.

4. The mounting member of claim 1, wherein the upward angle is in a range from 70 degrees to 170 degrees.

5. The mounting member of claim 1, where in the upward angle is about 90 degrees.

6. The mounting member of claim 1, wherein the fastening member has a head.

7. A mounting member for attachment to an essentially vertical support surface comprising:

a plate member for mounting on the surface in a vertical manner;

at least two openings in the plate member, the openings spaced from each other in a parallel manner along vertical axes and the openings are intersected by a horizontal axis, the openings defined by two adjacent angular edge surfaces, the edge surfaces meeting at an angle.

8. A method of attaching an apparatus to a support surface using a mounting member wherein, at least two fastening members are partially engaged with the support surface and engaged with the mounting member with having at least two openings, the openings and mounting member are adjusted around the fastening member until the apparatus is essentially level and then the fastening member is fully engaged with the mounting member and the support surface securing the apparatus in said level position.

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