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(54) **ADJUSTABLE WINDOW SUPPORT**

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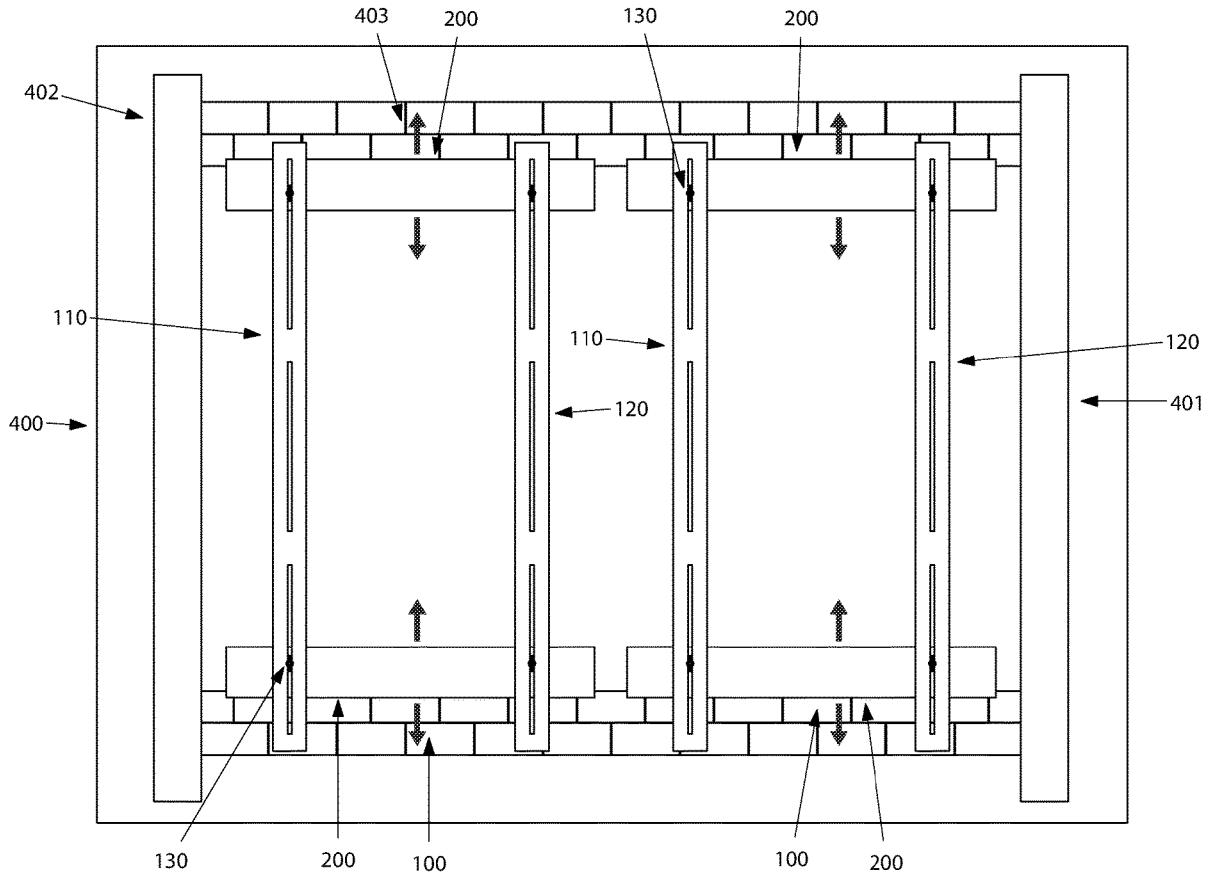
(57) **ABSTRACT**

An illustrated view of an exemplary adjustable window support for supporting tile around a window opening is presented. The adjustable window support is useful for preventing the laid tile from moving and thus causing the window opening from being level. Further, the adjustable window support is useful for applying pressure to the laid tile and thus providing a more secure coupling with a wall.



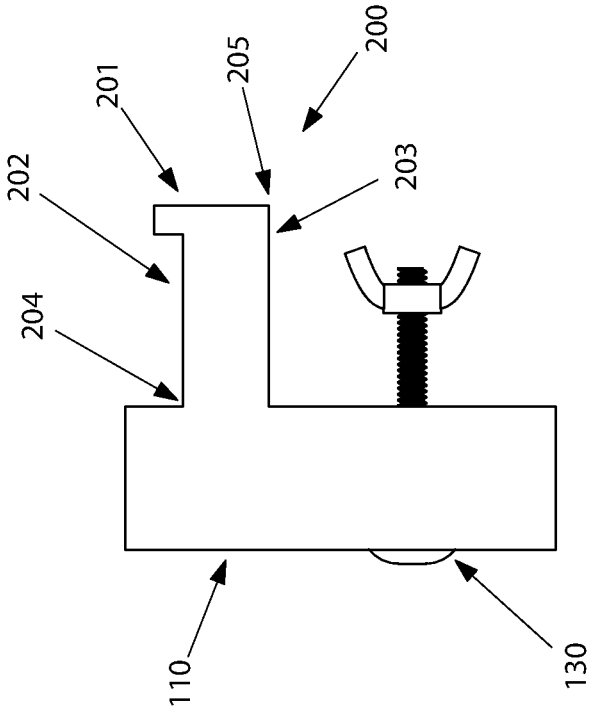

200
205
201
203
202
204
110
130

FIG. 1B

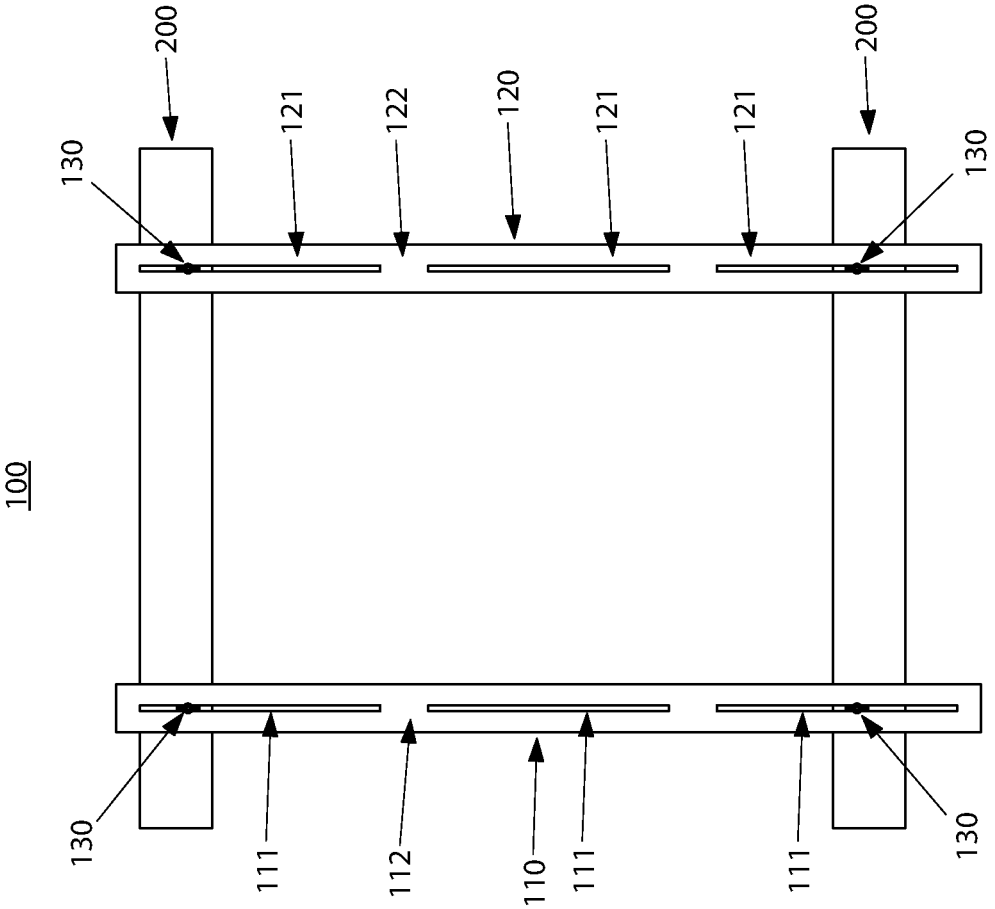

100
200
121
122
120
121
121
200
130
130
130
111
112
110
111
111
130

FIG. 1A

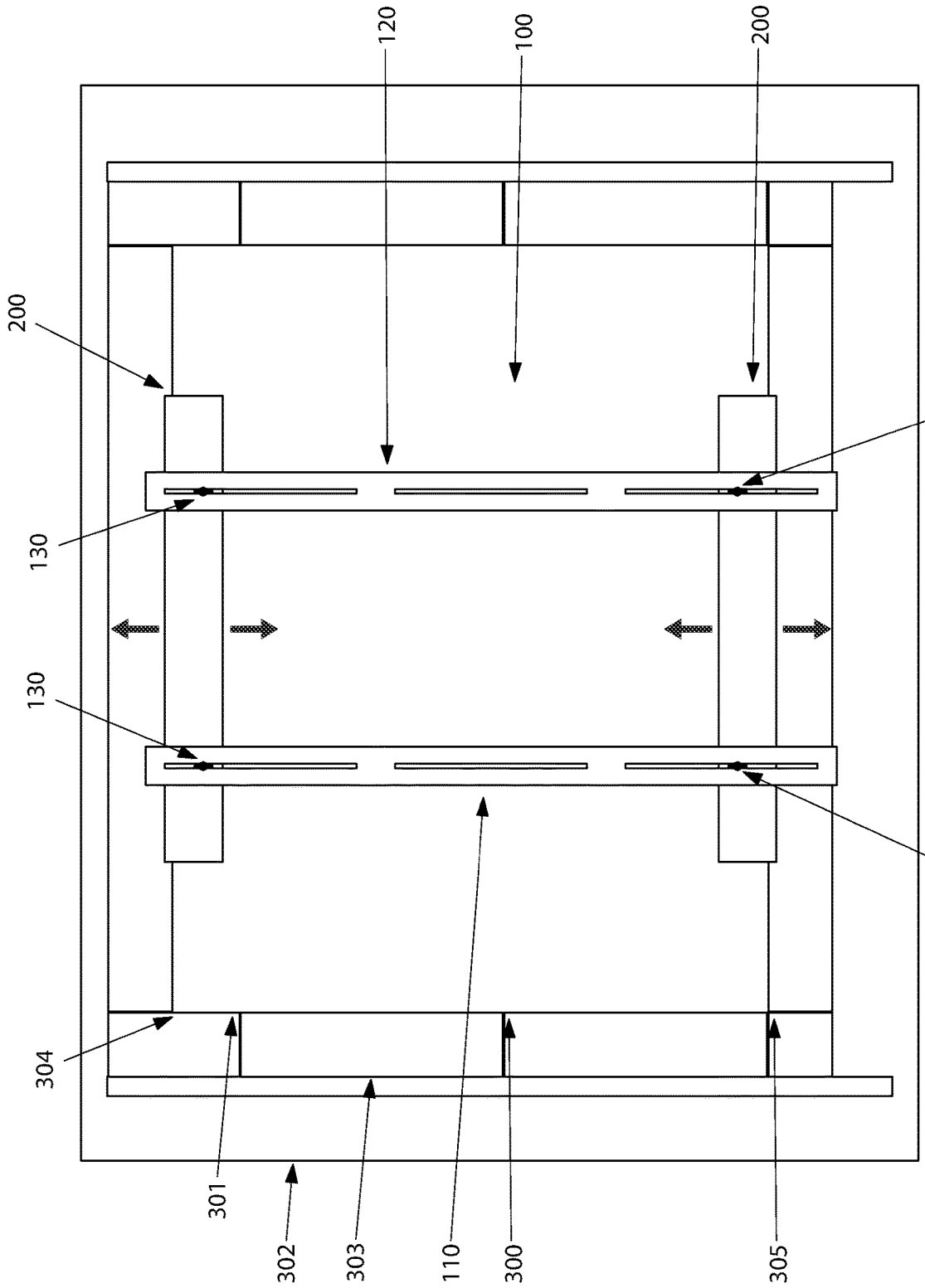


FIG. 2

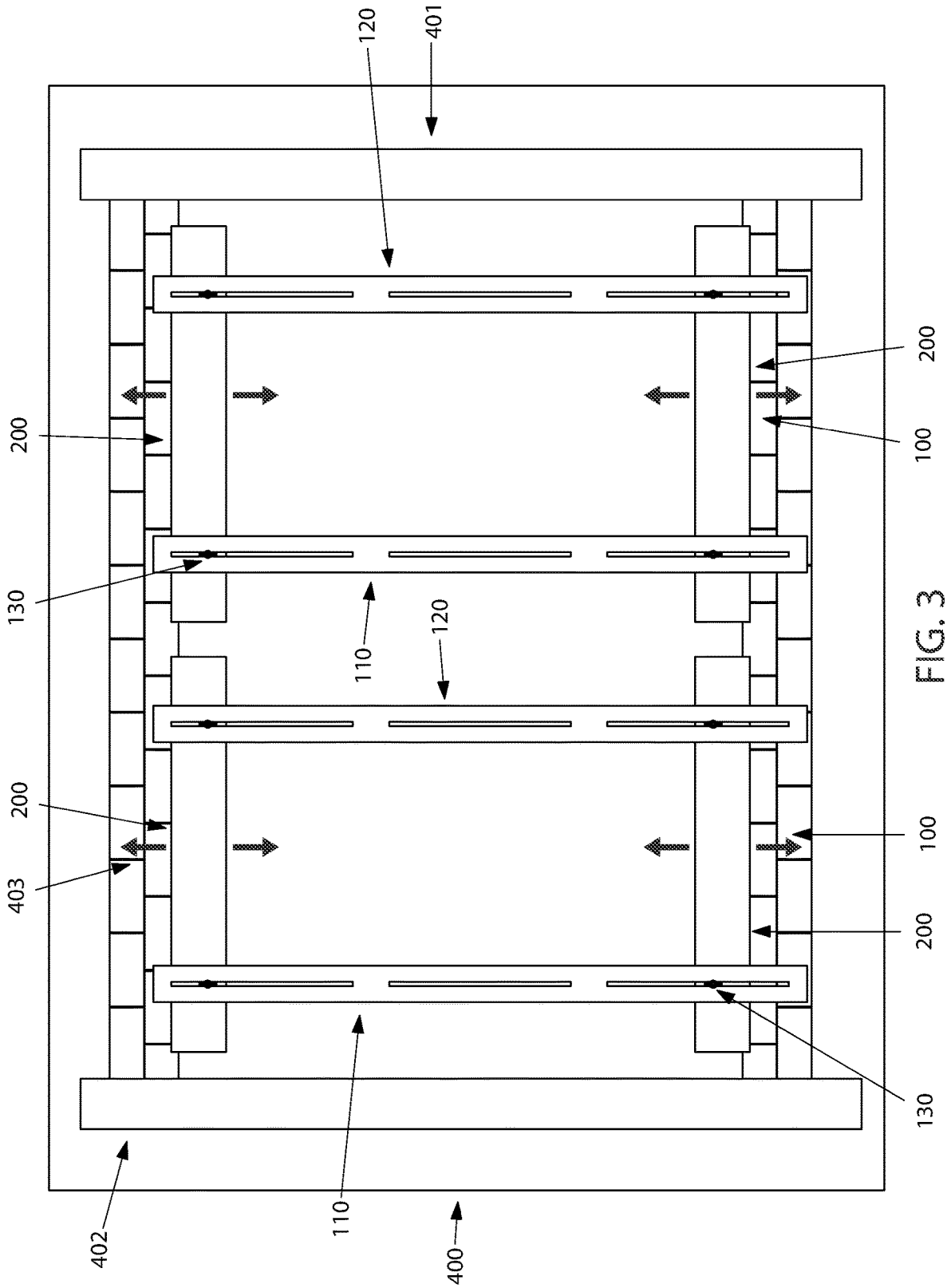


FIG. 3

ADJUSTABLE WINDOW SUPPORT

FIELD OF THE INVENTION

[0001] This invention relates to windows. More particularly, it relates to a support for adjusting windows.

BACKGROUND

[0002] The use of facing materials, such as, ceramic tiles are well known to provide an aesthetically pleasing appearance as well as durability and wear resistance. The following description will be directed to ceramic tiles for convenience although it should be appreciated by those skilled in the art that other facing materials such as stone flooring, granite, slate, plastics, and the like, may be employed with the support plate of the invention.

[0003] In general, ceramic tile is installed over a substrate such as a wooden floor using a mortar to set the tile. Unfortunately, because of the differences in properties between the substrate, mortar, and ceramic tile, stresses formed during such installation often result in damage in the form of cracks or delamination. Previously, most ceramic tile installations utilized mud setting beds, wherein a mixture of sand and cement was applied over the floor or other substrate and the ceramic tile set in the mud. The mud beds were generally in the range of about 1 and ½-inch-thick.

[0004] Modern ceramic tile installations now often use thin layer processes, which require use of thin-set mortar systems wherein the thickness of the thin-set mortar is about ½ inch thick. Flooring systems of this type are generally less costly, lighter, and more easily coordinated with installations of ceramic tile and stone.

[0005] Because of the thinness of the installation however, stresses at the interface between the mortar, substrate, and ceramic tile are much greater than in the case of a thin bed installation and it has been found that these stresses cause cracking of the tile and/or delamination of the tile of the floor. In an effort to decrease the stress differences and the problems of tile cracking and delamination, support plates or otherwise known as decoupling or uncoupling plates/mats have been developed. Currently available support plates are used between the substrate and the ceramic or stone tile to provide a base for the tile, as well as to decrease or eliminate the stresses in the installation.

[0006] While supports brackets for supporting tiles is currently available in the marketplace, the current support brackets leave a lot to be desired. These support brackets are one size which depending on an opening of a window is not desirable as they may be too tall, too small, or not of a sufficient width to properly support tiles being installed or that have been installed.

[0007] Accordingly, in light of the foregoing, there exists a need for a device which can be adjustable and reusable when applying tile or other material around an opening of a window. The device further needs to be able to place pressure against the tiles to prevent the window opening from becoming unlevel.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] FIG. **1**A is an illustrated view of an exemplary adjustable window support.

[0009] FIG. **1**B is an illustrated view of a support bracket of the adjustable window support shown in FIG. **1**A.

[0010] FIG. **2** is an illustrated view of a first window opening of the adjustable window support shown in FIG. **1**A.

[0011] FIG. **3** is an illustrated view of a second window opening of two of the adjustable window supports shown in FIG. **1**A

DETAILED DESCRIPTION

[0012] The phrases "in one embodiment," "in various embodiments," "in some embodiments," and the like are used repeatedly. Such phrases do not necessarily refer to the same embodiment. The terms "comprising," "having," and "including" are synonymous, unless the context dictates otherwise. Such terms do not generally signify a closed list.

[0013] "Above," "adhesive," "affixing," "any," "around," "both," "bottom," "by," "comprising," "consistent," "customized," "enclosing," "friction," "in," "labeled," "lower," "magnetic," "marked," "new," "nominal," "not," "of," "other," "outside," "outwardly," "particular," "permanently," "preventing," "raised," "respectively," "reversibly," "round," "square," "substantial," "supporting," "surrounded," "surrounding," "threaded," "to," "top," "using," "wherein," "with," or other such descriptors herein are used in their normal yes-or-no sense, not as terms of degree, unless context dictates otherwise.

[0014] Reference is now made in detail to the description of the embodiments as illustrated in the drawings. While embodiments are described in connection with the drawings and related descriptions, there is no intent to limit the scope to the embodiments disclosed herein. On the contrary, the intent is to cover all alternatives, modifications and equivalents. In alternate embodiments, additional devices, or combinations of illustrated devices, may be added to, or combined, without limiting the scope to the embodiments disclosed herein.

[0015] Referring to FIG. **1**A and FIG. **1**B, is an illustrated view of an exemplary adjustable window support **100** for supporting tile around a window opening is presented. The adjustable window support **100** is useful for preventing the laid tile from moving and thus causing the window opening from being unlevel. Further, the adjustable window support **100** is useful for applying pressure to the laid tile and thus providing a more secure coupling with a wall.

[0016] The adjustable window support **100** may be used in a singular adjustable window support or multiple adjustable window supports **100** may be used simultaneously dependent on the size of a window opening (as shown in FIG. **2** and FIG. **3**).

[0017] The adjustable window support **100** has a first spline **110**, a second spline **120**, one or more support brackets **200** and a plurality of fasteners **130**.

[0018] The first spline **110** is preferably made of a wood material, however other types of materials are hereby contemplated, including, but not limited to, steel, aluminum, plastic, etc. The first spline **110** is preferably three (3) feet in length, however other lengths are hereby contemplated, including, but not limited to, two (2) feet, four (4) feet, etc. The fasteners **130** are preferably a screw, however other types of fasteners are hereby contemplated, including, but not limited to, hook and loop fasteners, such as Velcro® type fasteners, two-sided tape, etc.

[0019] The first spline **110** has one or more first slot channels **111**. The one or more first slot channels **111** of the first spline **110** are preferably in a middle portion **112** of the

first spline **110**. One or more of the fasteners **130** are placed through each of the first slot channels **111** such that the one spline **110** is securely coupled to one or more of the support brackets **200**. The first slot channels **111** allow for the first spline **110** to be move in an upward and downward position to fit the size of a window opening.

[0020] The second spline **120** is preferably made of a wood material, however other types of materials are hereby contemplated, including, but not limited to, steel, aluminum, plastic, etc. The second spline **120** is preferably three (3) feet in length, however other lengths are hereby contemplated, including, but not limited to, two (2) feet, four (4) feet, etc. The second spline **120** is preferably made of the same material as the first spline **110**, however it is hereby contemplated that the second spline **120** is made of a different material than the first spline **110**.

[0021] The second spline **120** has one or more second slot channels **121**. The one or more second slot channels **121** of the second spline **120** are preferably in a middle portion **122** of the second spline **120**. One or more of the fasteners **130** are placed through each of the second slot channels **121** such that the second spline **120** is securely coupled to one or more of the support brackets **200**. The second slot channels **121** allow for the second spline **120** to be move in an upward and downward position to fit the size of a window opening.

[0022] The support brackets **200** are preferably two (2) in number, however other number of support brackets **200** are hereby contemplated, including, one (1), three (3), etc. As shown in FIG. **1**B, each of the support brackets **200** have a lower portion **201** and a raised portion **202**.

[0023] The first spline **110** and the second spline **120** are coupled to the support brackets **200** such that the support brackets **200** are securely against the window opening.

[0024] The lower portion **201** is configured to couple securely against a bottom of one or more tiles (shown in FIG. **2** and FIG. **3**) to prevent the tiles from sliding such that the window opening's levelness is not compromised.

[0025] The raised portion **202** is configured to couple to a back portion of the tiles such that the support brackets **100** maintain a desired and predetermined position. A bottom **205** of the raised portion **202** is coupled to a first end **203** of the lower portion **201**. A second end **204** receives at least one of the fasteners **130** secured through the first spline **110** or the second spline **120**. Therefore, the tiles can't move when the fasteners **130** are tightened. Prior to the fasteners **130** being tightened, the support brackets **200** can be moved upward or downward, and/or right and left to allow the support brackets **200** to be coupled securely to the tiles.

[0026] Moving now to FIG. **2**, an illustrated view of a first window opening **300** with the adjustable window support **100** shown in FIG. **1**A is presented.

[0027] The window opening **300** has a frame **301**, a wall **302** and a plurality of tiles **303**. The tiles **303** are coupled to the wall **302** by a fastening agent such as glue, mortar, etc. The wall **302** surrounds the frame **301** of the window opening **300**. The window opening **300** may be any size.

[0028] The adjustable window support **100** is coupled to the window opening **300** by the first spline **110** being securely coupled to a first of the support brackets **200** and a second of the support brackets **200** by fasteners **130**. The second spline **120** being securely coupled to a first of the support brackets **200** and a second of the support brackets **200** by fasteners **130**.

[0029] The first of the support brackets **200** is moved in an upward direction and once the first of the support brackets is securely embracing the tile **303** of the wall **302** at a top **304** of the frame **301**, the fasteners **130** are tightened to prevent slippage of the first of the support brackets **200**.

[0030] Next, the second of the support brackets **200** is moved in a downward direction and once the second of the support brackets is securely embracing the tile **303** of the wall **302** at a bottom **305** of the frame **301**, the fasteners **130** are tightened to prevent slippage of the second of the support brackets **200**.

[0031] Referring now to FIG. **3**, an illustrated view of a second window opening **400** with two of the adjustable window supports **100**, **100'** shown in FIG. **1**A is presented.

[0032] The window opening **400** has a frame **401**, a wall **402** and a plurality of tiles **403**. The tiles **403** are coupled to the wall **402** by a fastening agent such as glue, mortar, etc. The wall **402** surrounds the frame **401** of the window opening **400**. The window opening **400** may be any size.

[0033] The adjustable window supports **100**, **100'** is coupled to the window opening **400** by the first spline **110**, **110'** being securely coupled to a first of the support brackets **200**, **200'** and a second of the support brackets **200**, **200'** by fasteners **130**. The second spline **120**, **120'** being securely coupled to a first of the support brackets **200**, **200'** and a second of the support brackets **200**, **200'** by fasteners **130**.

[0034] The first of the support brackets **200**, **200'** is moved in an upward direction and once the first of the support brackets **200**, **200'** are securely embracing the tile **403** of the wall **402** at a top **404** of the frame **401**, the fasteners **130** are tightened to prevent slippage of the first of the support brackets **200**, **200'**.

[0035] Next, the second of the support brackets **200**, **200'** is moved in a downward direction and once the second of the support brackets **200**, **200'** are securely embracing the tile **403** of the wall **402** at a bottom **405** of the frame **401**, the fasteners **130** are tightened to prevent slippage of the second of the support brackets **200**, **200'**.

[0036] In the numbered clauses below, specific combinations of aspects and embodiments are articulated in a shorthand form such that (1) according to respective embodiments, for each instance in which a "component" or other such identifiers appear to be introduced (with "a" or "an," e.g.) more than once in a given chain of clauses, such designations may either identify the same entity or distinct entities; and (2) what might be called "dependent" clauses below may or may not incorporate, in respective embodiments, the features of "independent" clauses to which they refer or other features described above.

[0037] Those skilled in the art will appreciate that the foregoing specific exemplary processes and/or devices and/or technologies are representative of more general processes and/or devices and/or technologies taught elsewhere herein, such as in the claims filed herewith and/or elsewhere in the present application.

[0038] The features described with respect to one embodiment may be applied to other embodiments or combined with or interchanged with the features of other embodiments, as appropriate, without departing from the scope of the present invention.

[0039] Other embodiments of the invention will be apparent to those skilled in the art from consideration of the specification and practice of the invention disclosed herein. It is intended that the specification and examples be con-

sidered as exemplary only, with a true scope and spirit of the invention being indicated by the following claims.

1. An adjustable window support device for supporting tile around a window opening, the device consisting of:

a plurality of support brackets, each of the support brackets having a lower portion and a raised portion, wherein the lower portion being coupled to a bottom of the raised portion;

a first spline, the first spline having a plurality of first slot channels;

a second spline, the second spline having a plurality of second slot channels;

the first spline coupled to a first of the support brackets by a fastener being insert through a first of the first slot channels, and wherein the first spline coupled to a second of the support brackets by a fastener being insert through a second of the first slot channels;

the second spline coupled to the first of the support brackets by a fastener being insert through a first of the second slot channels, and wherein the second spline coupled to the second of the support brackets by a fastener being insert through a second of the second slot channels, and

wherein the lower portion of the brackets is configured to couple securely against a bottom of one or more tiles coupled to a wall.

2. The device of claim **1**, wherein the first spline having a length of three (3) feet.

3. The device of claim **1**, wherein the second spline having a length of three (3) feet.

4. The device of claim **1**, wherein the first spline being made of a wood material.

5. The device of claim **1**, wherein the second spline being made of a wood material.

6. The device of claim **1**, wherein the first spline being made of a different material than the second spline.

7. The device of claim **1**, wherein the support brackets being two (2) in number.

8. The device of claim **1**, wherein the fastener being a screw.

9. (canceled)

10. (canceled)

11. An adjustable window support device for supporting tile around a window opening, the device consisting of:

a plurality of support brackets, each of the support brackets having a lower portion and a raised portion, wherein the lower portion being coupled to a bottom of the raised portion;

a first spline, the first spline having a plurality of first slot channels, wherein the first spline having a length of three (3) feet, wherein the first spline being made of a wood material;

a second spline, the second spline having a plurality of second slot channels, wherein the second spline having a length of three (3) feet, wherein the second spline being made of a wood material;

the first spline coupled to a first of the support brackets by a fastener being insert through a first of the first slot channels, and wherein the first spline coupled to a second of the support brackets by a fastener being insert through a second of the first slot channels;

the second spline coupled to the first of the support brackets by a fastener being insert through a first of the second slot channels, and wherein the second spline coupled to the second of the support brackets by a fastener being insert through a second of the second slot channels, and

wherein the lower portion of the brackets is configured to couple securely against a bottom of one or more tiles coupled to a wall.

* * * * *