

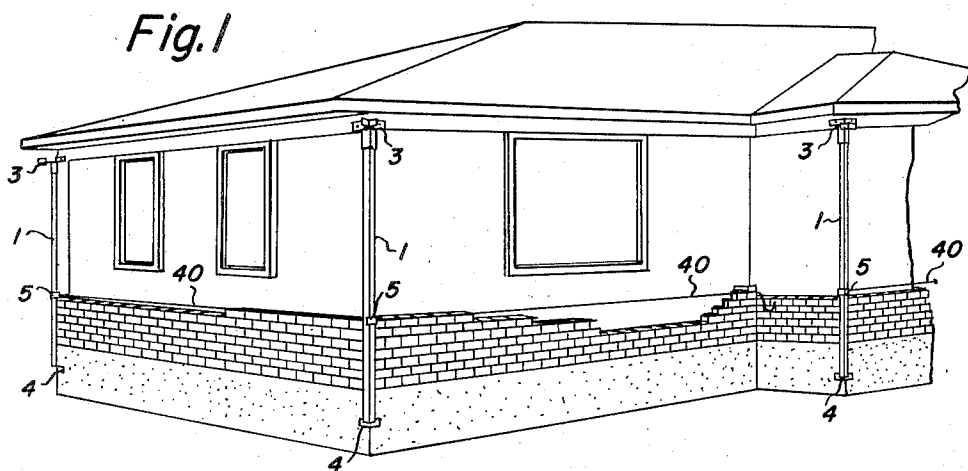
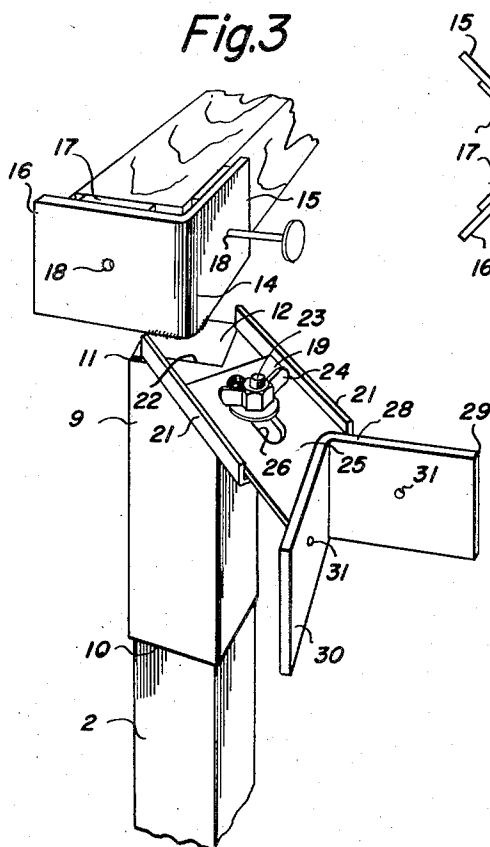
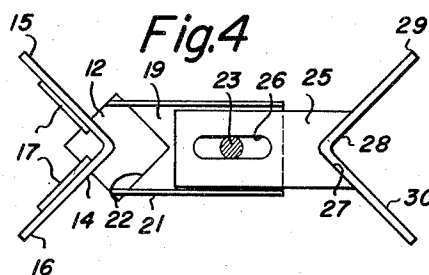
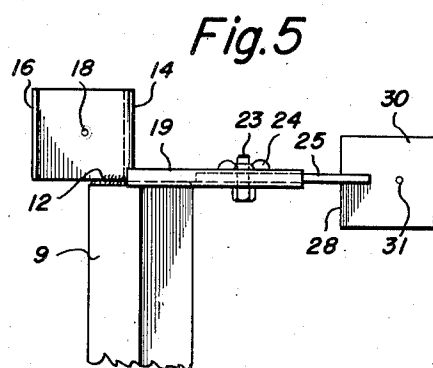
April 29, 1958

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MASONRY GUIDE

2,832,143

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3 Sheets-Sheet 1



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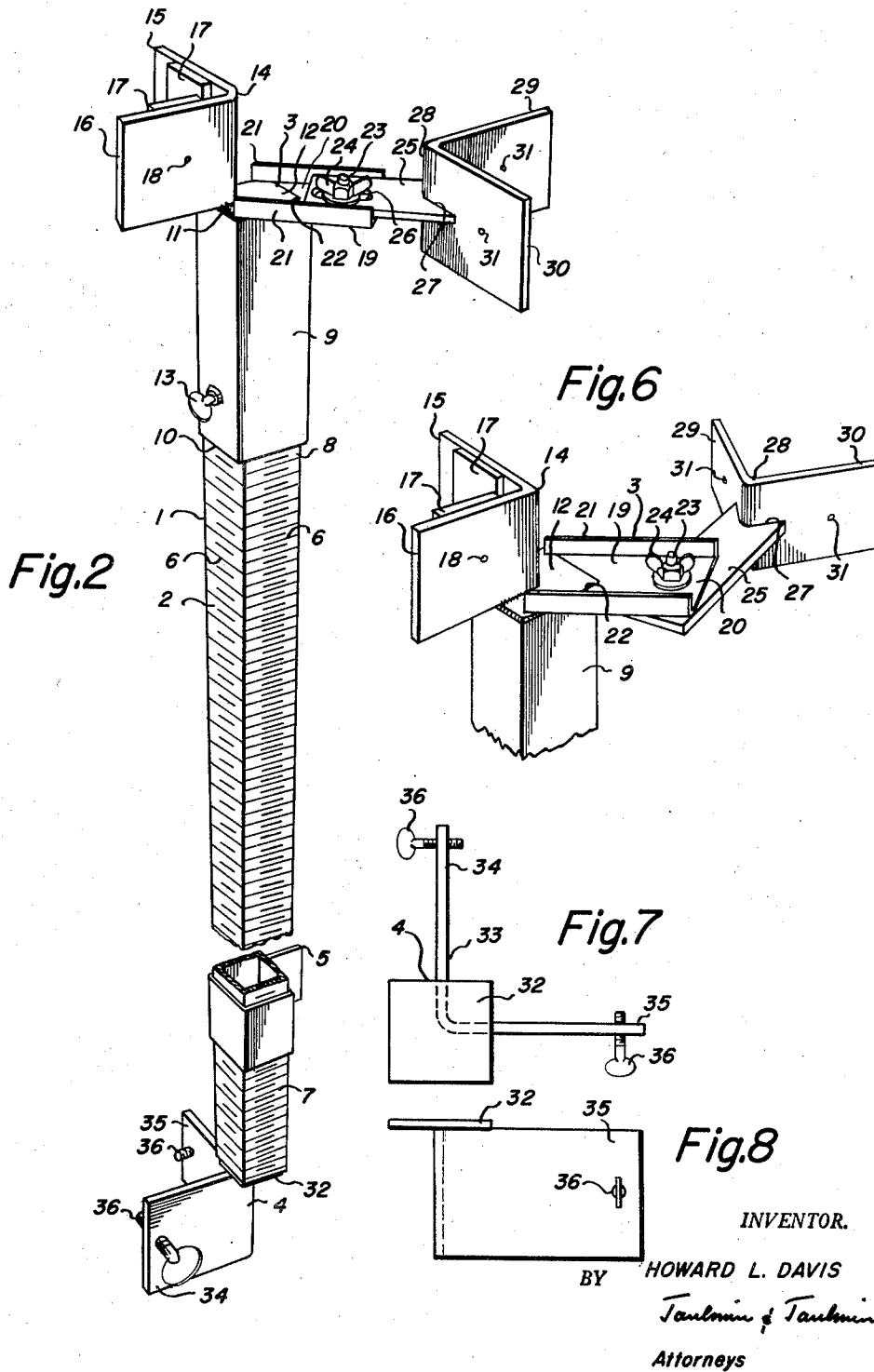
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Fig. 9

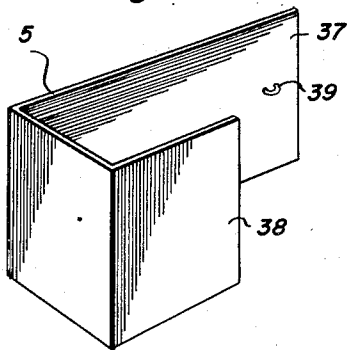


Fig. 10

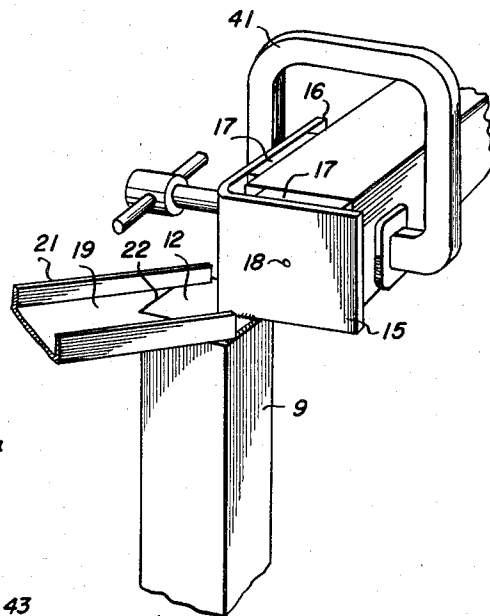
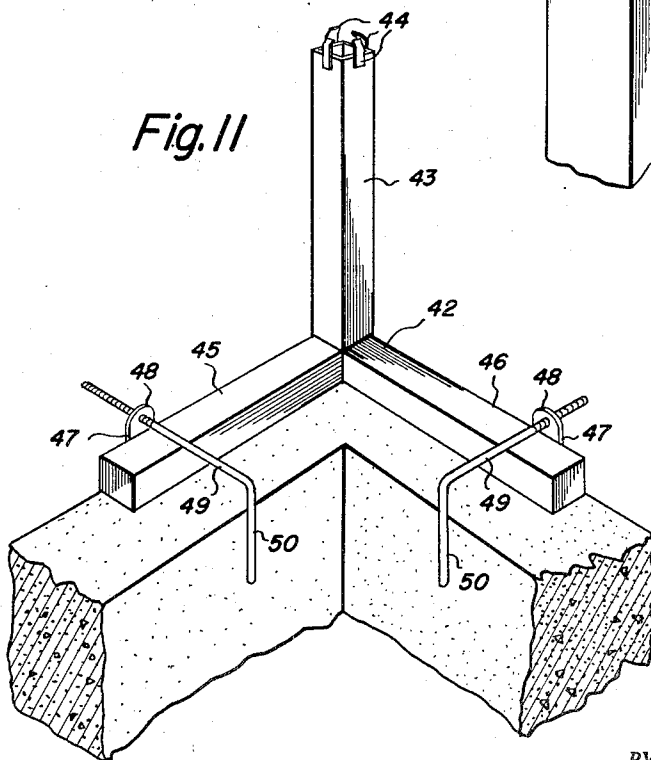


Fig. 11



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2,832,143

MASONRY GUIDE

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16 Claims. (Cl. 33—85)

The present invention relates to a masonry guide for facilitating the laying in courses of brick and other masonry material, more particularly, to the structure for supporting and positioning the masonry guide in its operative position.

It is, therefore, the principal object of this invention to provide an improved and simplified masonry guide.

It is another object of this invention to provide improvements in the structure for supporting and positioning a columnar masonry guide in its operative position.

It is a further object of this invention to provide a simplified and readily fabricated top plate attachment for a masonry guide.

It is an additional object of this invention to provide adjustable top and bottom plate attachments to facilitate positioning of a columnar masonry guide when in operation.

It is still another object of this invention to provide an improved method of guiding the laying of brick and other masonry material.

Other objects and advantages of this invention will become apparent upon reference to the accompanying description when taken in conjunction with the following drawings wherein:

Figure 1 is an overall perspective view of a building being constructed with a brick veneer and showing the manner in which the masonry guide of this invention is utilized to facilitate the laying of brick in courses;

Figure 2 is an overall perspective view of the masonry guide of this invention;

Figure 3 is an overall perspective view of the top plate attachment of the masonry guide showing the attachment secured to the barge board by nails;

Figure 4 is a top plan view of the top plate illustrated in Figure 3;

Figure 5 is a side elevational view of the top plate illustrated in Figures 3 and 4;

Figure 6 is an overall perspective view of the top plate showing the top plate modified for angular positioning;

Figure 7 is a top plan view of the bottom plate attachment illustrated on the lower end of the masonry guide shown in Figure 2;

Figure 8 is a side elevational view of the bottom plate shown in Figure 7;

Figure 9 is an overall perspective view of the guide line clip which is positionable along the masonry guide column;

Figure 10 is a perspective view showing the top plate of the masonry guide attached to the barge boards by C-clamps, and

Figure 11 is an overall perspective view of an adapter base to be used with the masonry guide of this invention when it is desired to secure the masonry guide to solid masonry walls.

Proceeding next to the drawings and more particularly to Figure 1 wherein like reference symbols indicate the same parts throughout the various views, there is illustrated a house which is being finished with a brick fac-

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ing with the masonry guide 1 of this invention supported from the building in its operative position.

The masonry guide 1 is illustrated in larger detail in Figure 2 and comprises a hollow guide column 2 having a square cross section, a top plate attachment 3, a bottom plate attachment 4, and a guide line block or clip 5.

The guide column is formed of No. 14 gage steel and is approximately eight feet in length. There are scales 6 on each of the faces of the guide column and these scales include a scale for standard brick coursing and two modular scales for Roman brick tiles and Engineer's brick.

The guide column has a lower end 7 and an upper end 8 upon which is attached the top plate 3. The top plate 3 comprises a cap 9 having an open end 10 and a closed end 11 formed by a closure member 12. The cap 9 is formed to fit closely and slidably over the upper end of the guide column. There is a thumbscrew 13 in the cap 9 adjacent the open end thereof for vertically positioning the cap upon the guide column.

An angular supporting member 14 is attached to one corner of the closure member 12. The supporting member 14 comprises angularly extending legs 15 and 16 which subtend a right angle. Reinforcing plates 17 are spot-welded to the inner surfaces of each of the angular legs 15 and 16. There are holes 18 through each of the angular arms and their respective reinforcing plates.

A channel member 19 extends outwardly from the corner of the closure member 12 diagonally opposite from the supporting members 14. The channel member comprises a web 20 and flanges 21.

One end of the web 20 has a right angle notch 22 which closely receives the edges of the closure member 12. There is a hole in the web of the channel member 19 through which passes a bolt 23 upon which is threaded a wing nut 24.

An extension arm 25 is slidably received on the upper surface of the channel member 19 between the flanges 21. There is a longitudinally extending slot 26 in the extension arm which receives the bolt 23. The extension arm is free to move longitudinally with respect to the channel member 19 but is restricted in its pivotal movement by the flanges 21 and in its longitudinal movement by the slot 26.

The extension arm has a right-angle notch 27 in the outer end thereof which notch receives a supporting member 28 which comprises annularly extending legs 29 and 30. The legs 29 and 30 subtend a right angle. There is a hole 31 in each of the angular legs 29 and 30.

In Figure 6 there is illustrated a modified arrangement of the top plate attachment 3 wherein the extension arm 25 is pivotally mounted on the channel 19 to enable the extension arm to be angularly adjusted with respect to the channel member. In this modified arrangement, the extension arm 25 is positioned adjacent the lower or outer surface of the channel member web 20 and is pivotally connected thereto by the bolt 23 and wing nut 24. In this arrangement, the pivotal connection enables the extension arm to be angularly adjusted with respect to the channel member and the slot in the extension arm permits the variation of the distance between the guide column and the supporting member 28.

Proceeding next to Figures 7 and 8 there is shown the bottom plate attachment 4 which, as may be seen in Figure 2, is secured to the lower end 7 of the guide column 2. The bottom plate comprises a closure plate 32 which is fastened over the open lower end 7. A supporting member 33 comprising angularly legs 34 and 35 is welded on one corner of the closure plate 32. There is a threaded hole in each of the legs 34 and 35 through which passes a thumbscrew 36 which is operable outwardly of the angularly extending legs.

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The movable clip or guide line block 5, shown in larger scale in Figure 9, is positionable along the length of the guide column 2. The clip 5 is of resilient sheet material and is substantially U-shaped and has a longer leg 37 and a shorter leg 38. There is a loop 39 on the longer leg 37 through which a cord or guide line may be fastened. Alternately, the guide line may be wound around the longer leg 37.

The masonry guide of this invention is disclosed in Figure 1 as being used in veneer work on a building. When used in veneer work, the guide plumbs, levels, and squares the building in one simple operation.

The masonry guide is suspended from the barge boards of the building by nailing the detachable top plate thereto. When the top plate head has been secured in position, the guide column is secured into the cap 9 of the top plate and securely positioned therein by the thumbscrew 13 in the top plate.

When the entire masonry guide has been placed in position, the guide column is adjusted vertically and set to the coursing desired by loosening the thumbscrew in the top plate. The clip on the guide column will then be positioned in the desired position and a cord attached thereto.

The bottom plate 4 with its two thumbscrews is positioned at the bottom end of the guide with respect to the building. The guide column is plumbed and thumbscrews in the bottom plate are adjusted so as to maintain the guide column in the plumb position.

The guide lines are so arranged that the first brick is laid to a line.

The guide lines indicated as 40 in Figure 1 may have one end attached to the clip on the masonry guide and the other end wound around a brick placed at the other end of the course of the masonry wall. In this way, guide lines of the respective masonry guides are independent of each other and can be used one at a time. As an alternative, however, the guide lines may be stretched between two masonry guides so that each end of the guide line is attached to a clip. Thus, it will be necessary to move clips on two adjacent masonry guides in order to position the guide line for each course of brick.

While the top plate 3 has been previously described as being fastened to the barge board of the building by nails, the top plate may also be secured by C-clamps 41 as illustrated in Figure 10. This use increases the adaptability of the masonry guide of this invention since the C-clamp permits the securing of the top plate to steel members and the like into which nails cannot be driven.

In Figure 11 there is illustrated an adapter base 42 to be used to secure the masonry guide of this invention to a solid masonry wall. The base adapter 42 comprises a vertical column 43 which is so dimensioned and shaped as to fit snugly within the hollow guide column 2. A plurality of tension clips 44 are secured on the ends of the vertical column 43 to frictionally grip the inner faces of the guide column 2 so as to securely fasten the two columns together. A pair of base legs 45 and 45 angularly extend from the lower end of the vertical column 43. The base legs comprise square tubing which is substantially the same diameter as the tubing comprising the vertical column. There is a lug 47 secured to a vertical base of the base leg so that a portion 48 of the lug projects above the upper surface thereof. There is a threaded opening in the lug projecting portion 48 and a threaded rod 49 is passed therethrough. The rod 49 has an angular bent end 50.

This adapter is used to support the masonry guide of this invention on the corner of a solid masonry wall. With this adapter, there is no necessity of attaching the upper end of the guide. The adapter is positioned at the corner of the solid wall with the base legs 45 and 46 in contact with the outer faces of the wall. The rods 49 are then screwed tightly into position as shown in Figure 11 with the bent end 50 of the rod fitted over the inner face

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of each of the solid walls. After the space adapter has been secured in position, the guide column 2 of the masonry guide is positioned over the vertical column and securely held in place by the tension clips 44.

Thus it can be seen that the present invention discloses a masonry guide wherein the top and bottom plates for respectively suspending and adjusting the masonry guide are exceedingly simple in structure and may be readily adjusted to a multitude of positions. Furthermore, the masonry guide of this invention may be secured by means of C-clamps so as not to mar the portions of the building from which the masonry guide is suspended. The adjusting means at the bottom of each masonry guide for adjusting the guide to its operative position is of simple structure and is easily manipulated to its adjusted position by manual operation of two thumbscrews.

The adaptability of this masonry guide is further increased by the use of the adapter base which permits the masonry guide to be attached by clamps to solid walls.

It will be understood that this invention is susceptible to modification in order to adapt it to different usages and conditions, and, accordingly, it is desired to comprehend such modifications within this invention as may fall within the scope of the appended claims.

What is claimed is:

1. A top plate for attaching on the upper end of a normally vertical column of a masonry guide and comprising a cap, a first angular member mounted on the closed end of said cap, a channel member extending outwardly from said cap closed end in a direction opposite to said first angular member, and an arm received in said channel member, means securing said arm in said channel member, and a second angular member on the outer end of said arm.

2. A top plate for attaching on the upper end of a normally vertical column of a masonry guide and comprising a cap having a closed end and fitting over the upper end of said column, a first angular member attached to the closed end of said cap, a channel member extending outwardly from said cap closed end in a direction opposite to said first angular member and the flanges thereof directed upwardly, an arm pivotally mounted on the undersurface of said channel member for angular positioning with respect thereto and a second angular member on the outer end of said arm.

3. A top plate for attaching on the upper end of a normally vertical column of a masonry guide and comprising a cap having a closed end and fitting over the upper end of said column, a first angular member mounted on the closed end of said cap, a channel member extending outwardly from said cap closed end in a direction opposite to said first angular member, an arm received in said channel member, means securing said arm in said channel member, means for positioning said arm longitudinally with respect to said channel member, and a second angular member on the end of said arm.

4. In a top plate, as claimed in claim 3, with said positioning means comprising a bolt upstanding from the web of said channel member and there being a slot in said arm receiving said bolt, and means for clamping said bolt to said arm.

5. A top plate for attaching on the upper end of a normally vertical column of a masonry guide and comprising a cap having a closed end and fitting over the upper end of said column, a first pair of angularly extending legs on said cap, said legs subtending substantially a right angle, arm means extending outwardly from said cap, and a second pair of angularly extending legs on the outer end of said arm means, said second pair of angularly extending legs also subtending substantially a right angle.

6. A top plate for attaching on the upper end of a normally vertical column of a masonry guide and comprising a cap having a closed end and fitting over the upper end of said column, a first supporting member

fixed to said cap closed end for securing said top plate to a structure, arm means extending laterally outwardly from the closed end of said cap away from said first supporting member, a second supporting member mounted on the outer end of said arm means for securing said top plate to a structure at a greater distance from the masonry guide than said first mentioned structure, said cap having means for vertically positioning the same on the upper end of said column to adjust the vertical position of said top plate with respect to said column.

7. A top plate attachment for the upper end of a normally vertical column of a masonry guide and comprising a cap having a closed end and fitting over the upper end of said column, a first supporting member attached to said cap closed end for securing said top plate to a structure, arm means extending laterally outwardly from the closed end of said cap away from said first supporting member, and a second supporting member mounted on the outer end of said arm means for securing said top plate to a structure at a greater distance from the masonry guide than said first mentioned structure.

8. A top plate attachment for the upper end of a normally vertical column of a masonry guide and comprising a body portion, a first supporting member on said body portion for securing said top plate to a structure, a second supporting member fastened to said body portion but at a greater lateral distance therefrom than said first supporting member for securing said top plate to a structure at a greater distance from the masonry guide than said first mentioned structure, and means for adjusting the position of said second supporting member in a horizontal plane.

9. A top plate attachment for the upper end of a normally vertical column of a masonry guide and comprising a body portion, a first supporting member fixed to said body portion for securing said top plate to a structure, a second supporting member fixed to said body portion and located a greater distance therefrom than said first member for securing said top plate to a structure at a greater distance from the masonry guide than said first mentioned structure, and means for varying the distance of said second supporting member from said column.

10. A top plate attachment for the upper end of a normally vertical column of a masonry guide, and comprising a body portion, a first supporting member secured to said body portion for securing said top plate to a structure, a second supporting member secured to said body portion for securing said top plate to a structure at a greater distance from the masonry guide than said first mentioned structure, said second supporting member being positioned opposite to said first supporting member with respect to said vertical column.

11. A top plate attachment for the upper end of a normally vertical column of a masonry guide and comprising a body portion, a first supporting member fastened to said body portion for securing said top plate to a structure, and a second supporting member fastened to said body portion but being positioned a greater distance therefrom than said first member for securing said top plate to a structure at a greater distance from the masonry guide than said first mentioned structure.

12. In a masonry guide, a column for use in a vertical position, a cap having a closed end and closely fitting over the upper end of said column, a pair of angularly extending legs attached to the closed end of said cap, a channel member extending outwardly from said cap closed end in a direction opposite to said first pair of angularly extending legs, arm means secured to said channel member, a second pair of angularly extending legs on the outer end of said arm means, a plate affixed to the lower end of said column, a third pair of angularly extending legs secured to said plate, there being thumb-screws passing through threaded holes in said last-mentioned pair of angularly extending legs with each thereof being adjustable from a position outwardly of the angle formed by said arms, and a movable clip positionable along the length of said column.

13. In a masonry guide, a guide column normally used in a vertical position, a bottom plate on the lower end of said column, an adjustable clip intermediate the ends of said column, and a top plate on the upper end of said column, said top plate having a plurality of pairs of angularly extending legs at differing lateral distances from said column for attaching to a surface to support said masonry guide in a vertical position.

14. In a masonry guide, a hollow column normally used in a vertical position, an elongated member received within the lower end of said column, a pair of legs angularly extending from the lower end of said elongated means, a threaded rod extending laterally from each of said legs, each of said threaded rods having a bent portion on the inner end thereof to enable said rods to be clamped over the top of a wall to secure said legs thereagainst.

15. In a masonry guide, a column for use in a vertical position, a plurality of pairs of angularly extending supporting legs on the upper end of said column and positionable in the same horizontal plane, there being means on each of said legs to adapt said legs to be secured to a surface, a pair of angularly extending legs on the lower end of said column, and means on said lower legs for positioning each of said legs with respect to a cooperating surface.

16. In a top plate attachment for the upper end of a normally vertical column of a masonry guide, first arm means extending laterally from said column, a first supporting member on one end of said first arm means for securing said top plate to a structure, a second arm means adjustably connected to said first arm means and extending laterally from said column, and a second supporting member on the free end of said second arm means positionable with respect to said first supporting member for securing said top plate to a structure at a greater distance from the masonry guide than said first mentioned structure.

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