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DEVICE AND TECHNIQUE FOR ASSURING UNIFORM BRICK COURSING

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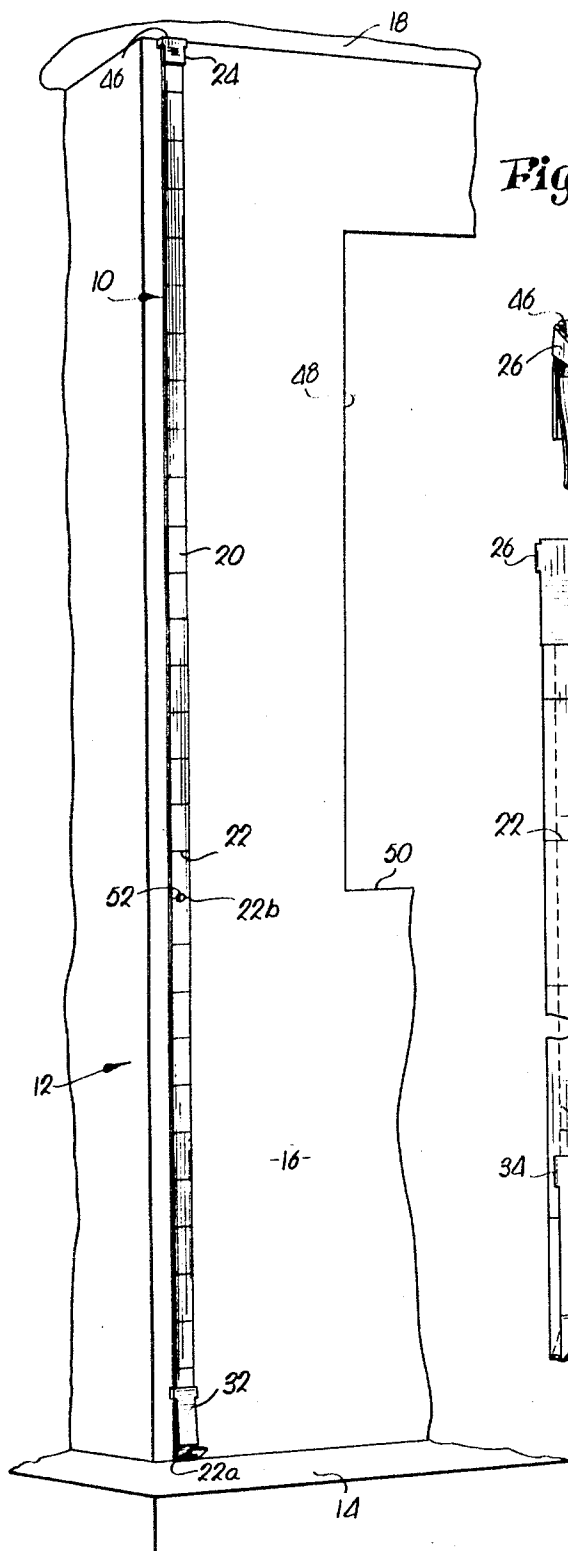


Fig. 1.

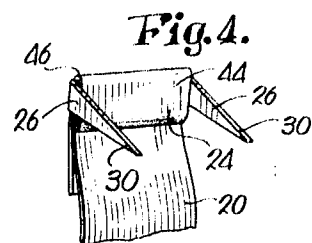


Fig. 4.

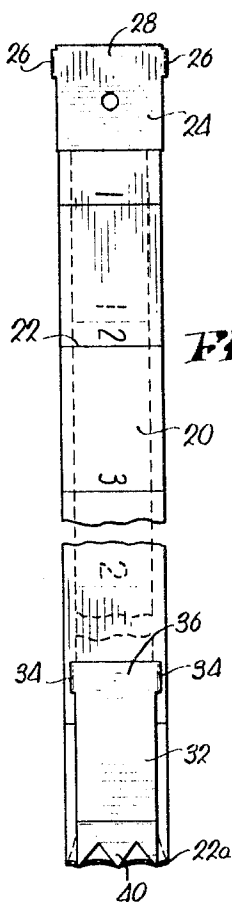


Fig. 3.

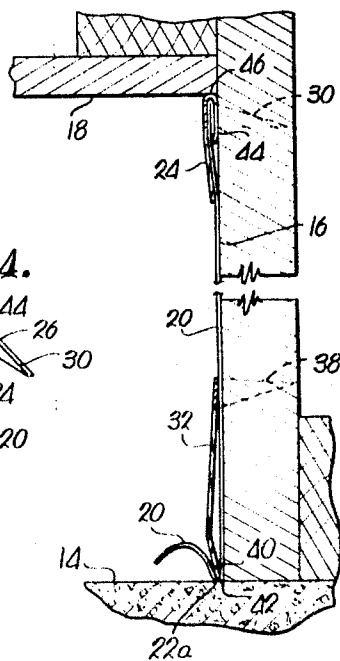


Fig. 2.

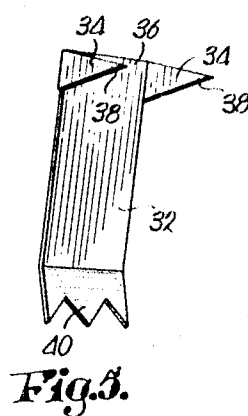


Fig. 5.

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1 Claim

ABSTRACT OF THE DISCLOSURE

A graduated elastic tape for marking brick courses is held at one end by a fastener including a U-shaped clip having a bight and a pair of sharp legs straddling the tape and adapted to staple it to the wall. The bight is extended lengthwise of the tape, and ends in a serrated edge particularly adapted to engage the tape in the corner between a vertical wall and a horizontal surface. Other fasteners hold other end and intermediate tape points to desired course levels in the wall.

This invention relates to a device for automatically assuring uniform brick coursing, and particularly, to an attenuable bricklaying guide for predetermining the vertical spacing between the coursings of a brick wall.

Vertical spaces to be spanned by a brick wall are generally not uniform in vertical height and often it is found that the distance from the top of a foundation to the upper limit of the space (usually defined by an overhang or soffit) at one end thereof is different from the vertical dimension of the space at the other end. It is requisite, however, that the same number of brick courses be utilized to fill the space from end to end. Furthermore, a certain portion of the vertical dimension must be reserved to accommodate the layer of mortar between adjacent courses of brick. Manifestly, the thickness of the mortar layer is variable to permit the courses to be laid uniformly.

The use of brick is desirable not only for structural strength, but also for its aesthetic value. Therefore, it is imperative that a brick wall have a uniform appearance. In the past the mason would lay out the coursing using a rule with fixed coursing marks. Starting at the upper limit of the space, a mark would be placed for each course of brick on the substructure or a vertical rod or pole to provide a check on the progress of the wall. Ideally, every course of brick would be level with a course mark. This is possible, however, only when the vertical space to be filled is exactly the same as that required for a given number of brick courses. If the space allotted for the wall is at variance with brick coursing, the mason must compensate for the variation as the wall is built. This primarily involves guess work and is accomplished by increasing or decreasing the size of the mortar joint between courses. Since a bricklayer is trained to lay bricks "to the mark," it is not unusual for a worker to completely compensate for the above mentioned variations during laying of the first few courses of brick so that the remainder of the wall may be laid to the mark. This results in an uneven appearance because the thickness of the mortar layer at the lower level of the wall will obviously be different than the mortar layers at the upper portion of the wall. The overall appearance of the completed brick wall is very important, and thus the need has arisen for a device and technique to expeditiously compensate for the variances described above and provide a series of vertically aligned, equally spaced markings.

It is, therefore, the primary object of the instant invention to provide a bricklaying guide having a plurality of equally spaced graduations therealong wherein the guide is attenuable to the end that the guide may be stretched

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between the upper and lower limits of the space to be spanned by the wall to thereby provide a series of marks for guiding the brickmason in the positioning of courses of bricks.

Often, a space to be filled by a brick wall will have a horizontal line of interruption (as presented, for example, by a window or the like) between the upper and lower limits of the wall. This line of interruption introduces another variable which must be compensated for by the mason. Thus, it is not unusual for the mason to be required, for example, to "get up" slightly (by increasing the thickness of the mortar layer) during the laying of bricks up to the horizontal line of interruption and then "get down" slightly (by decreasing the thickness of the mortar layer) during the laying of bricks above the horizontal line of interruption.

Thus, it is a very important object of the instant invention to provide a means of marking wherein the uniform spacing of the markings below the line of interruption is slightly different from the uniform spacing of the markings above the line of interruption. In this respect, the attenuable guide may be stretched and affixed at the upper and lower limits of the wall and thereafter, a central graduation on the guide may be adjusted slightly upwardly or downwardly to coincide with the line of interruption, thus causing one portion of the guide to be stretched further, and the other portion of the guide to be relaxed slightly whereby the brickmason lays bricks to the mark as he proceeds up the wall.

Another very important object of the present invention is to provide a pair of clips for attaching the attenuable guide to the wall between opposed upper and lower surfaces wherein the clips have means thereon for maintaining the tape in line contact with the respective surfaces so that particular preselected graduations of the tape are held in contact with respective upper and lower surfaces at the corner between the surface and a vertical wall therebetween with the remainder of the guide stretched flatly against the vertical surface between the clips.

A further important object of the invention is the provision of such a clip having a serrated tape-engaging end adapted to pierce a preselected one of the graduations and hold the same in the corner between the horizontal surface and the vertical surface while the clip is being engaged with the latter to the end that precise positioning of the particular graduation in the corner is permitted.

In the drawing:

FIGURE 1 is a perspective view illustrating a bricklaying guide constructed in accordance with the principles of the instant invention in place in a zone of construction;

FIG. 2 is an enlarged, cross-sectional, side elevational view of the bricklaying guide and the construction zone, certain parts having been broken away for increased clarity;

FIG. 3 is a front elevational view of the bricklaying guide illustrating the relaxed condition thereof in solid lines and the stretched condition thereof in dashed lines;

FIG. 4 is a perspective, detail view showing the construction of the normally uppermost wall-engaging clip; and

FIG. 5 is a perspective, detailed view showing the lowermost wall-engaging clip.

A bricklaying guide embodying the concepts of the instant invention is shown in FIG. 1 and broadly designated by the numeral 10. Guide 10 is installed in a zone of construction 12 having a lower, horizontal supporting structure in the nature of a foundation 14, a vertical surface 16, and an upper horizontal surface 18 presented by a soffit or the like. In this respect, it is to be understood that a brick wall is to be constructed for spanning surface 16 between foundation 14 and surface 18, foundation 14 defining the lower limit of the wall,

while the surface 18 defines the upper limit of the wall. Moreover, construction zone 12 is typical of an installation requiring brick veneering to present an attractively designed residential structure, and surface 18 is the lower surface of an overhang or soffit as can be seen viewing FIG. 2. While guide 10 is particularly suited for use in a zone of construction such as 12, it can be readily seen by those skilled in the art that a guide such as 10 would be usable to facilitate uniform brick coursing wherever bricks are utilized as a construction material.

Guide 10 comprises an elongated, attenuable tape 20 having a plurality of equally spaced graduations 22 thereon. Fastening means in the nature of a staple or U-shaped clip 24 is securely attached to the normally uppermost end of tape 20. Clip 24 has a pair of opposed legs 26 and a bight 28 therebetween. Each leg 26 has a piercing element 30 on the outermost end thereof, while bight 28 is configured to hold tape 20, transversely of the latter, in line contact with upper surface 18 as can be seen viewing FIG. 2.

Guide 10 also includes normally lowermost fastening means in the nature of a U-shaped clip or staple 32. Staple 32 has a pair of legs 34 similar in construction to legs 26 of clip 24 and a bight 36 between legs 34. Each of the legs 34 has a piercing element 38 on the free end thereof, while bight 36 has a tape-engaging end 40 presented by a serrated edge. The serrations of end 40 are configured to pierce a preselected graduation of tape 20 in a manner best illustrated in FIG. 3 for holding the preselected graduation of tape 20, transversely of the latter, in line contact with lower surface 14 in a manner best illustrated in FIG. 2.

Clip 24 has a flap 44 bent over one end of tape 20 in a manner to cause clip 24 to be permanently attached to tape 20 as can be seen viewing FIGS. 2 and 4. When tape 20 is installed at zone 12, the upper edge 46 of clip 24 is held in engagement with surface 18 by the insertion of piercing elements 30 through surface 16. Hence, the tape is suspended from clip 24. After determining the number of courses of brick necessary for spanning surface 16, a certain one 22a of the graduations 22 is selected, it being understood that the number of graduations between graduation 22a and edge 46 correspond to the number of courses of brick to be used for spanning surface 16. End 40 is caused to pierce tape 20 at the preselected graduation 22a thereof prior to the attachment of staple 32 to surface 16. After end 40 has pierced tape 20 the latter is stretched and the protruding portions of end 40 are pushed into the corner 42 between surface 16 and foundation 14, and then piercing elements 38 are forced through surface 16.

The dashed lines in FIG. 3 illustrate the disposition of certain graduations 22 of tape 20 after the latter has been stretched. It is to be appreciated that the distance between graduations when tape 20 is in the stretched condition thereof corresponds to the spacing between courses of brick, this distance being variable, depending upon the amount of compensation required for any particular brick wall construction. Viewing FIG. 1, surface 16 has an opening 48 therein the nature of a window or the like requiring a horizontal line of interruption 50 to be considered during construction of a brick facing for surface 16. The vertical distance between foundation 14 and line 50 may require different brick spacing than the distance between line 50 and surface 18. To adjust the marks or graduations 22 on tape 20 to facilitate the different spacing required for the upper and lower portions of surface 16, the graduation 22b having a vertical height which closely corresponds to the vertical distance between foundation 14 and line 50 is moved slightly in a vertical direction and secured at the height of line 50 by fastening

means 52 in the nature of a nail, staple or the like. Thus, tape 20 is divided into upper and lower portions, one portion being in a further stretched condition, while the other portion is slightly relaxed. It is to be appreciated that the vertically aligned markings or graduations 22 of the further stretched portion will be spaced relatively farther apart than the corresponding vertically aligned markings on the slightly relaxed portion.

Guide 10 is inexpensive to manufacture and, therefore, may be left in place during construction of the brick wall covering surface 16. It is contemplated that a separate guide 10 be installed at each corner of a brick structure undergoing construction. Hence, a brickmason is presented with a series of vertically aligned markings for guiding his placement of successive courses. When using guide 10, the mason will no longer be confronted with the problem of "getting up" or "getting down," and as a result, he will be able to construct a brick wall having uniform brick coursing in a shorter period of time than has heretofore been possible. It may be seen that all of the objects, purposes and aims of the instant invention have been fulfilled to a great extent through the use of the device and techniques disclosed and described hereinabove.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. A brick laying guide comprising:

an elongated tape having graduations thereon, and fastening means for mounting the tape on a vertical surface in a position extending upwardly from a horizontal supporting surface, upon which a brick wall is to be laid, to a second horizontal surface spaced thereabove,

said tape being attenuable for varying the distances between the graduations prior to fastening,

said fastening means including a pair of fasteners adapted for disposition adjacent respective horizontal surfaces,

one of said fasteners and said tape being adjustably positionable relative to each other when the other fastener is holding the tape,

said one fastener having tape-gripping means engageable with said tape for holding the latter in line contact with the respective horizontal surface transversely of the tape at a selected graduation thereof upon relative positioning of said one fastener and said tape to align the selected graduation with said tape-gripping means,

said one fastener including a generally U-shaped clip having a bight and a pair of sharp legs presenting staple means for penetrating said vertical wall, said bight extending beyond said legs and terminating in a serrated, tape-engaging end defining said tape-gripping means for holding the tape in the corner between the adjacent horizontal surface and said vertical surface.

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