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W. WINTER

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CORNER GUIDE FOR BRICKLAYING

Filed May 12, 1926

2 Sheets-Sheet 1

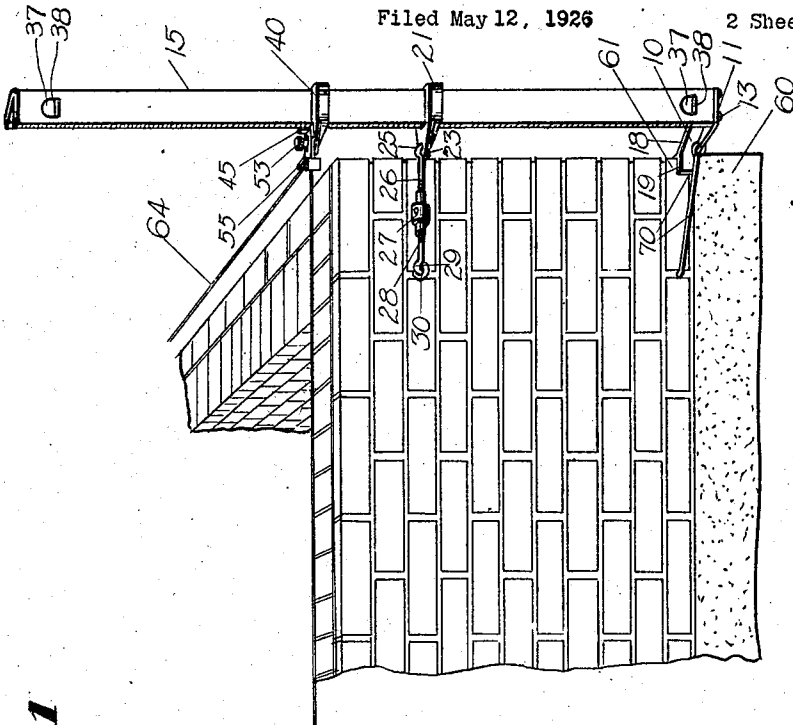
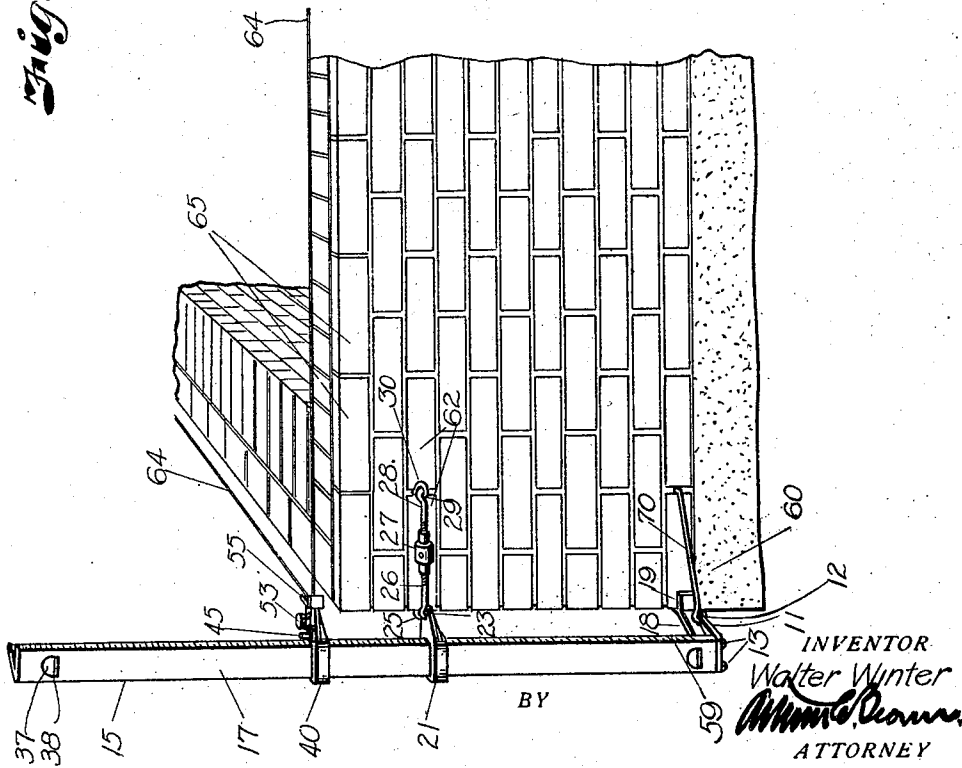


Fig. 1



BY

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Oct. 4, 1927.

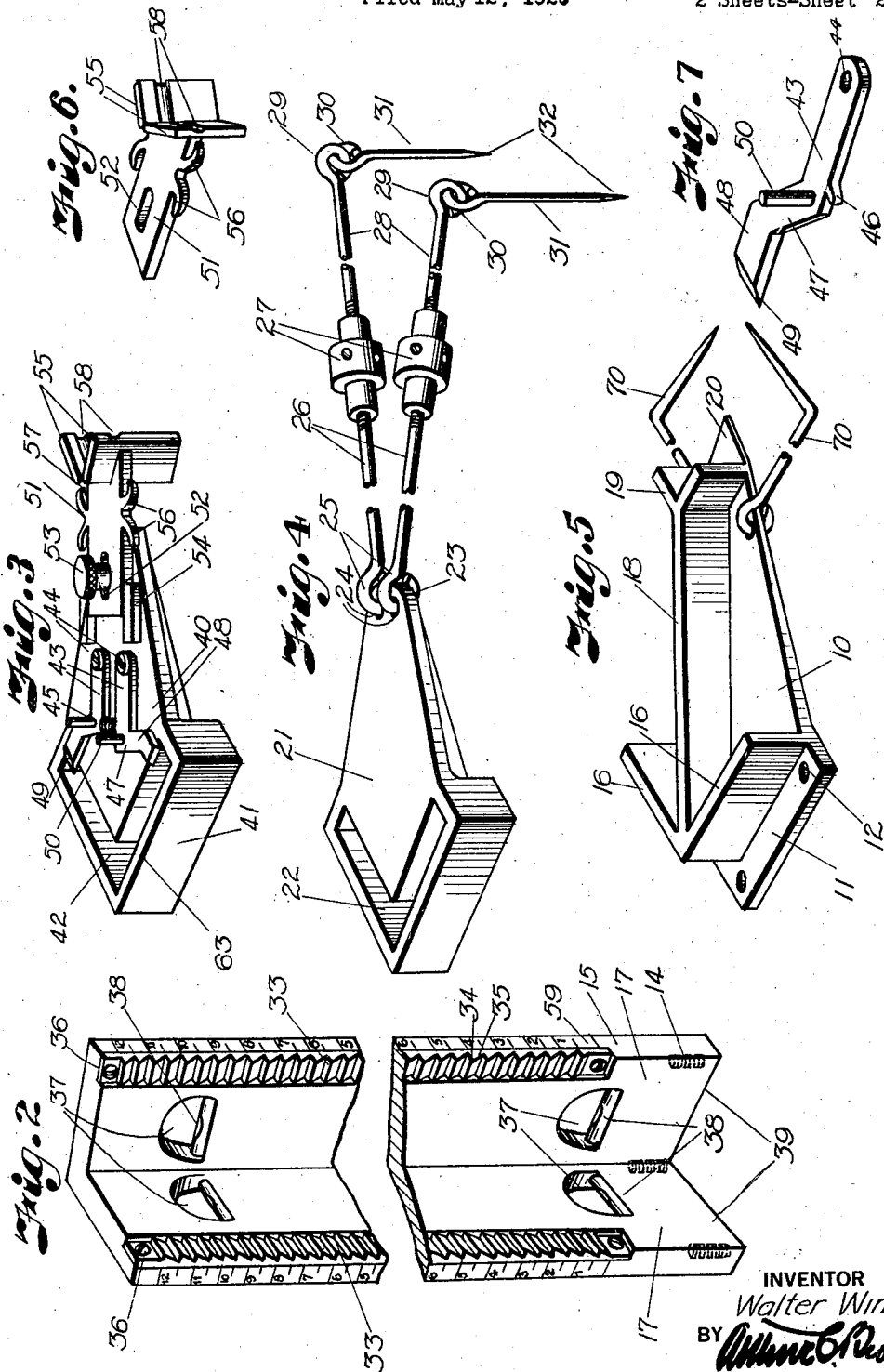
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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE.

WALTER WINTER, OF TULSA, OKLAHOMA.

CORNER GUIDE FOR BRICKLAYING.

Application filed May 12, 1926. Serial No. 103,525.

My invention relates to brick laying gauges and more particularly to a gauge comprising a guide for squaring up the corners in laying brick walls and for properly aligning the bricks beyond the corners.

It is a purpose of my invention to provide a gauge for the corners of brick walls that is so constructed that the main body portion thereof is spaced from the wall so that the same will not interfere with the brick layer in laying the brick at the corner, and will act as a guide or a gauge that engages directly with one of the corner bricks as the same is laid to properly position the same relative to the other bricks previously laid at the corner.

My improved guide or gauge member comprises a standard or vertically extending member having a bracket member at the bottom thereof that is adapted to be engaged with the wall at a corner and which has a bracket member having means thereon adapted to be engaged with the wall at a point spaced from the bottom of said standard and which is movable along the standard to any desired position, the last mentioned member being provided with means for adjusting the distance between the standard engaging portion thereof and the wall engaging portion thereof to plumb the standard. Said standard is further preferably provided with a gauge member or guiding member that is movable along said standard and adapted to be secured in adjusted position at any point along the same by means of which the bricks at the corners as they are laid are properly guided to position.

It is a further purpose of the invention to provide means for adjusting the brick engaging portions of the gauging member relative to the standard engaging portions so that the same may be aligned properly with the faces of the brick with which the base member engages.

It is furthermore a purpose of the invention to provide the base member with a thinned lip that is adapted to be engaged with the under surface of the brick that the guiding portion of said base member engages.

One of the important advantages of my invention is that with the improved gauge or guiding means any brick layer who can lay brick by line can build corners. Ordinarily only highly skilled brick layers are able to lay the corners which have to be laid

prior to the laying of the intermediate wall portion which is filled in by the brick layers having less skill.

Another advantage of the invention is that much time is saved in wall construction because it is not necessary to wait for the laying up of the corners to fill in the intermediate wall portions, as the corners can be laid as fast as the intermediate wall portions instead of requiring the extreme care that now has to be exercised in laying the corners.

While the members that are to be laid in the wall are referred to in the specification as bricks, it is not intended to limit the invention to the burnt clay bricks commonly used for building construction, but is intended to cover brick or block-like members having a rectangular form, such as tile, cement blocks, cinder blocks, etc.

Other objects and advantages of the invention will appear as the description of the accompanying drawings proceeds. However, I desire to have it distinctly understood that I do not intend to limit myself to the exact details shown or described, but that I intend to include as part of my invention all such obvious changes and modifications of parts as would occur to a person skilled in the art and as would fall within the scope of the claims.

In the drawings:

Fig. 1 is a perspective view, partly broken away, of a wall, showing my improved gauging means associated therewith.

Fig. 2 is a perspective view of the vertically extending member or standard of my gauge, the central portion thereof being broken away.

Fig. 3 is a perspective view of the lower gauging member.

Fig. 4 is a similar view of the upper gauging member.

Fig. 5 is a similar view of the lower supporting member or base member.

Fig. 6 is a perspective view of the jaw member of the gauging portion of the gauging member, looking into the end thereof at an oblique angle, and

Fig. 7 is a perspective view of one of the pawls or dogs used for holding the gauging member in adjusted position on the standard.

Referring in detail to the drawings:

My improved gauging means comprises a base member or bottom bracket 10 which is provided with a flange 11 having openings

12 therein for receiving securing members 13 that extend into the threaded openings 14 in the lower edge of the vertically extending member or standard 15. The base member 10 is further provided with a pair of flanges 16 extending substantially at right angles to each other, that are adapted to be engaged by the right-angularly extending wall portions 17 of the standard 15. The base member 10 is further provided with a rib 18 substantially bisecting the angle between the flanges 16 and having flanges 19 at the end thereof that extend substantially at right angles to each other and substantially parallel with the flanges 16. The bottom portion of the base member 10 terminates in a thinned lip or flange 20 extending beyond the flanges 19 and tapering gradually into the body portion of the member 10, and may be provided with hooks 70 to anchor the same in the wall.

Slidably mounted on the standard 15 is a bracket member 21 which is provided with an angular, substantially L-shaped opening or slot 22 through which the walls 17 of the member 15 extend. The member 21 tapers toward the end 23 thereof and is provided with a pair of openings 24 in the reduced end 23 that receive the eyes 25 in the threaded rod-like member 26 that forms one of the members of a turnbuckle having an adjusting member 27 and each having another screw threaded, rod-like member 28 associated therewith, terminating in the eyes 29 with which the eyes 30 of the pins 31 having the tapered ends 32 engage.

The standards 15 are further provided with suitable racks 33 having teeth thereon that have faces 34 that extend substantially at right angles to the inner faces of the wall portion 17 and obliquely extending faces 35, thus forming ratchet teeth that will permit pawls to travel upwardly on the same but will hold the same from downward movement. The racks 33 may be detachably secured to the members 17 in any desired manner, as by means of the securing devices 36. The wall portions 17 are further provided with the openings 37 in which the spirit levels 38 are mounted, said spirit levels being mounted parallel with the bottom edges 39 of the wall portions 17, it being obvious that said spirit levels may be mounted on the wall portions 17 in any other manner than in the openings 27, as long as the same are mounted parallel to the edges 39 and perpendicular to the walls 17, so that the same can be utilized for plumbing the members 15.

Adjustably mounted on the standards 15 are the gauging members 40 which are each provided with the thickened portion 41 having the angular slot 42 therein which is preferably L-shaped, but must be shaped so as to correspond with the shape of body

portion of the member 15. Mounted on the member 40 are the dogs or pawls 43, the same being preferably pivoted on the members 44 at one end thereof and having the spring 45 mounted between the same so as to tend to hold the said members apart, the springs being mounted on the lugs 46 projecting toward each other from the inner edges thereof. The pawls 43 have the diverging portions 47 and the inclined portions 48 terminating in bevelled teeth 49 provided thereon, said bevelled teeth 49 engaging with the ratchet teeth provided on the racks 33. The members 43 are further provided with the up-standing portions or finger pieces 50 by means of which the same can be engaged to press the jaws or members 43 against the compression of the spring 45 to disengage the teeth 49 from the teeth on the racks 33, whereupon the member 40 may be moved downwardly on the member 15. The member 40 can, of course, be moved upwardly on the standard 15 due to the fact that the teeth 49 will slide along the oblique faces 35 of the teeth, thus moving the jaws 43 toward each other against the action of the springs 45 in a well known manner.

The member 40 is provided with a gauging portion or jaw portion 51, provided with a slot 52 through which a suitable clamping member on the body portion of the member 40 extends that is provided with a nut having a knurled head 53 for firmly clamping the member 51 in position on the member 40. The member 51 is held in alignment with the member 50 by any suitable means, such as the guide ribs or flanges 54 on the member 40 engaging the sides of the member 51. The gauging member 51 is further provided with a pair of flanges 55 projecting from the end thereof at substantially right angles to each other, substantially parallel with the walls of the slot 42, the flanges 55 serving as gauges or guiding members for the bricks in laying the same. The side edges of the member 51 are further provided with oppositely directed, curved ears 56 forming cleats around which a line may be wound to secure the same in place, the flanges 55 being slightly spaced to provide a slot at 57 through which the lines are adapted to pass, and the jaws 55 being provided with grooves 58 in which the lines are adapted to lie after the same have been passed through the slot 57 so as to exactly align the same on the inner side thereof with the inner faces of the flanges 55. The members 17 are provided with suitable scales 59 which are preferably provided with markings indicating inches, with numbers thereon running from 1 to 12 and repeated the required number of times for the length of the member 17.

In operation, a pair of the standards 15 is arranged in the manner shown in Fig. 1,

the said figure showing a wall made up of bricks or blocks that are rectangular in shape, that is laid upon a foundation 60. The reduced lip portions 20 of the members 5 10 are inserted under the bottom faces of the lowermost bricks 61 of the opposite corners of the wall, and the hooks 70 inserted between the ends of bricks in the lower tier to hold the gauge in place. The tiers of 10 bricks are laid up in the usual manner to any desired height sufficient so that the anchoring members or pins 31 of the bracket member 21 can be held in position between two adjoining bricks or blocks 62 at a point 15 vertically spaced from the bricks 61 at the proper distance from the member 10 to support the standard 15 securely in a vertical position. The pins 31 are placed in position, preferably between the adjoining vertical 20 faces of two bricks 62 adjoining the corners of the walls in which the brick 61 is located, with which the lip 20 is engaged, the one member 31 being, of course, engaged between a pair of bricks 62 on one face of 25 the wall, and the other member 31 being engaged between a pair of bricks 62 on the other face of the wall, and the corresponding members 31 of the other member 15 of the pair being similarly anchored. In order 30 to adjust the members 15 to a truly vertical or plumb position, the members 27 of the turnbuckles are rotated until the turnbuckles are adjusted to the proper length to place the members 15 in a truly vertical 35 position, this being indicated by the spirit levels 38 in a well known manner. This being done, the members 40 are adjusted along the members 15 to a position such that the upper edges 63 thereof that align with the lower edges of the grooves 58, will be in the 40 proper position to align with the upper faces of the next course of brick that is to be laid. This is determined by means of the scales 59, the number of courses of bricks to be 45 provided within a certain height being first calculated, whereby the number of courses to the foot is determined, making it possible to align the edges 63 with the proper markings on the scales 59 to absolutely, accurately 50 position the lines 64 secured to the cleats 56 and extending through the slots 58 in a horizontal direction and with the next lower course already laid, the last laid course being indicated by the numeral 65.

It is, of course, to be understood that the members 15 can be placed at all the corners and angles of the building to provide the lines 64 for all of the walls, so that all of the walls can be laid at the same time. 60 After the course of bricks determined in this manner has been laid, the members 40 are moved up the proper distance on each of the standards 15 to place the lines 64 in proper position for the next course. This 65 is continued until the upper ends of the

members 15 are reached when the members 15 are released from the wall and the lips 20 are inserted at a proper distance from the top of the wall underneath a brick corresponding to the brick 61, so that the anchoring member 31 on the turnbuckles can also be secured in the wall near the top thereof. The operation is then repeated of plumbing the members 15 and placing the 70 lines 64 in the proper position.

It is sometimes difficult to get the flanges 19 into exact engagement with the corner bricks 61 and in order that the flanges 55 will be aligned therewith so as to align the bricks being laid at the top of the wall with 80 the bricks 61, the jaw portion 51 can be adjusted relative to the portion 41 by means of the slot 52 in a well known manner. After the member 51 on each of the gauging members 40 is adjusted to its proper position 85 for one set-up of the standards 15, no further adjustment is necessary until the next set-up of the members 15. The members 15 are preferably made of such a length that the re-adjustment of the parts is only 90 necessary for each height of a wall corresponding to the height of the ordinary scaffold used in work of this character.

What I claim and desire to secure by Letters Patent is:

1. In a device of the character described, a standard, standard supporting and spacing brackets having wall engaging portions spaced from said standard, one of said 100 brackets comprising means for plumbing said standard and a gauging member vertically adjustable on said standard, said gauging member having a body portion engaging said standard and a gauging portion spaced from said standard and adjustable 105 relative to said body portion.

2. In a device of the character described, a vertically extending member, a supporting member therefor adapted to engage a wall and hold said vertically extending 110 member spaced from said wall, an angular gauging member vertically movable on said vertically extending member, and means for holding said gauging member in any adjusted position on said vertically extending 115 member, said means comprising ratchet teeth on said vertically extending member and spring-pressed members on said gauging member engaging said ratchet teeth.

3. In a device of the character described, a vertically extending standard, a supporting member at the bottom thereof having a lip adapted to be inserted under a brick in a wall and having an angular wall engaging portion spaced from said standard, a 125 member vertically spaced therefrom comprising a portion engaging said standard and adjustable along said standard, wall engaging means spaced therefrom and adjustable means connecting the standard engag- 130

ing portion and said wall engaging means, and a gauging member vertically adjustable on said standard.

4. In a device of the character described, a vertically extending standard, angular in cross section, a supporting member at the bottom thereof having a lip adapted to be inserted under a brick in a wall and having an angular wall engaging portion spaced from said standard, a member vertically spaced therefrom having an angular slot receiving said standard and adjustable along said standard and a gauging member vertically adjustable on said standard.
5. In a device of the character described, a vertically extending standard, angular in cross section, a supporting member at the bottom thereof having a lip adapted to be inserted under a brick in a wall and having an angular wall engaging portion spaced from said standard, a member vertically spaced therefrom having an angular slot receiving said standard and adjustable along said standard and a gauging member vertically adjustable on said standard, said gauging member having a body portion having an angular slot receiving said standard and an angular gauging portion spaced therefrom.
6. In a device of the character described, a vertically extending standard, a supporting member at the bottom thereof having a

lip adapted to be inserted under a brick in a wall and having an angular wall engaging portion spaced from said standard, a member vertically spaced therefrom, levels on said standard for plumbing the same, said last mentioned member comprising a standard engaging portion, wall engaging means and means for adjusting said standard engaging portion relative to said wall engaging means, said member being adjustable along said standard and a gauging member vertically adjustable on said standard.

7. A corner guide for brick or like walls comprising a base adapted for support by the wall, a standard supported on said base, and a bracket connected with said standard, comprising hooks adapted for anchorage in joints of the wall and turnbuckles for adjusting the bracket to plumb the standard.

8. In a corner guide for brick or like walls, a base comprising means for anchorage to the wall and a seat for embracing the corner of the wall, a standard having guided support on the base, a gauge bracket comprising a plate vertically adjustable on the standard, links pivotally connected with the plate, pins on said links adapted for projection into joints of the wall, turnbuckles in said links, and means on the standard for carrying gauge lines.

In testimony whereof I affix my signature.

WALTER WINTER.