April 13, 1937. R. GALBRAITH 2,076,534

BRICKLAYER'S APPARATUS

Filed May 18, 1936

Fig. 1.

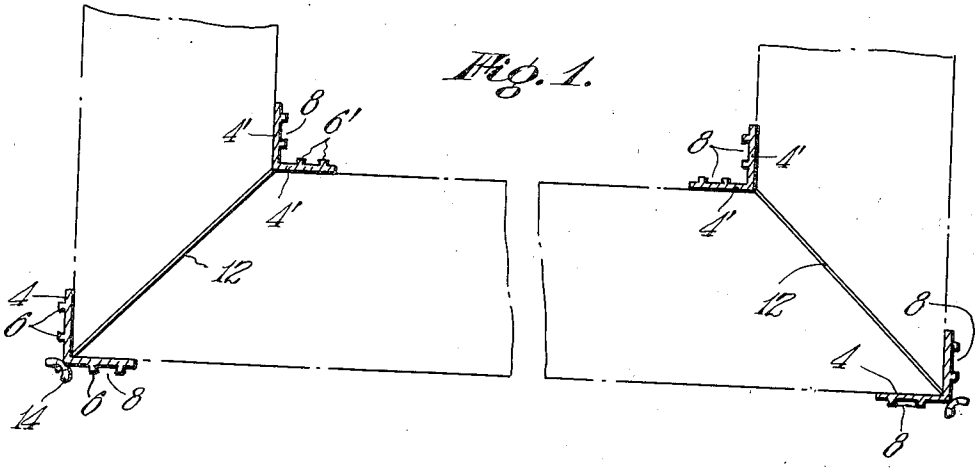



Fig. 2.

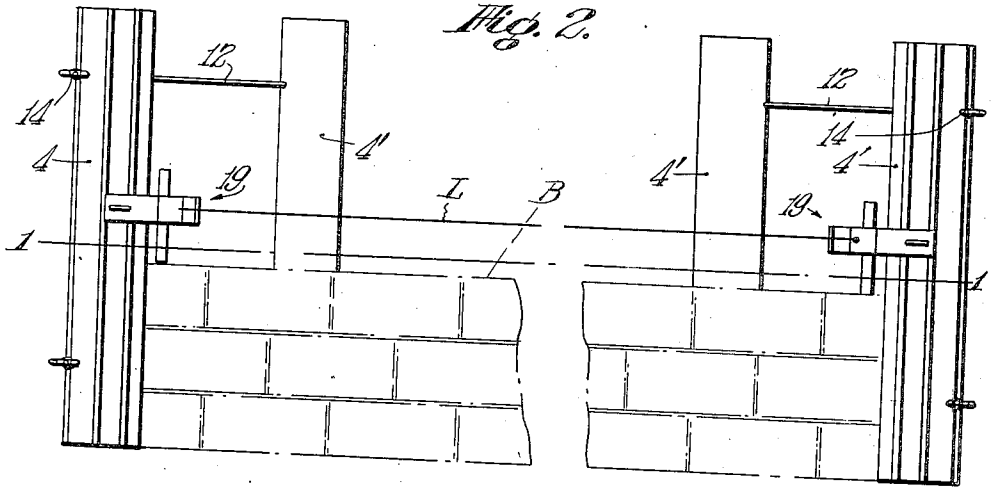



Fig. 5.

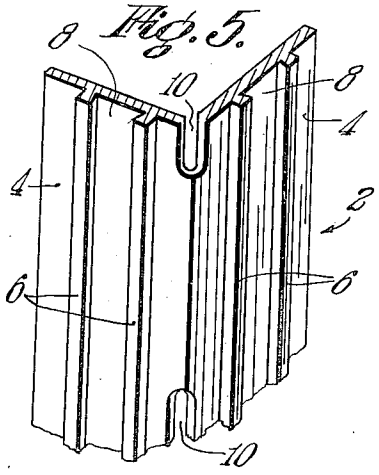



Fig. 3.

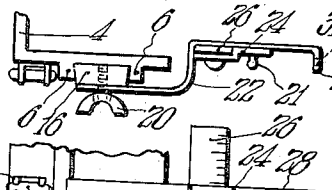
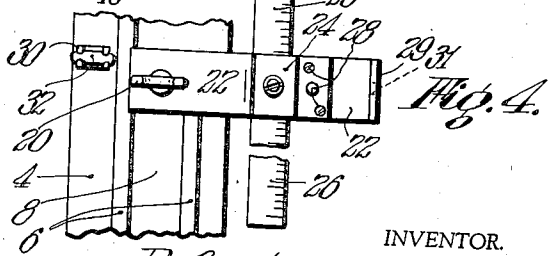



Fig. 4.




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Patented Apr. 13, 1937 2,076,534

# UNITED STATES PATENT OFFICE

2,076,534

## BRICKLAYER'S APPARATUS

Robert Galbraith, Springfield, Mass.

Application May 18, 1936, Serial No. 80,283

6 Claims. (Cl. 33—85)

This invention relates to improvements in bricklayers' apparatus and is directed more particularly to the provision of novel means whereby the bricklayer may obtain a perfect plumb corner and angle as when building a wall or the like and can accurately space the brick courses.

It is one of the principal objects of the invention to provide an apparatus whereby the bricklayer may get a perfect plumb not only from corner to corner of a wall but also assure that the inner angle of a corner is the same as the outer angle. That is to say, by means of this invention the mason, when building a wall of brick, for example, may not only assure himself that the inner angle of a corner of the wall is in proper relation with respect to the outer angle of that corner but he may also make sure that the wall is perfectly level and straight, inside and out, between adjacent corners.

It is another object of the invention to provide an apparatus of the class described which is not costly to manufacture and which is easy to use so that the bricklayer may readily and efficiently operate the same. The use of this apparatus not only reduces the cost of construction on an ordinary building but it obviates the use of the usual spacing poles which require time in making and handling and are not as accurate and efficient as my apparatus.

It is another object of the invention to provide an apparatus whereby an even bed of mortar in every course of brick laid is readily obtained. Furthermore, this apparatus may be used in both a veneer construction and a solid construction.

Various other novel features and advantages of the invention will become more apparent after a reading of the following description, reference being had to the accompanying drawing wherein:

Fig. 1 is a sectional view on the line 1—1 of Fig. 2;

Fig. 2 is a side elevational view showing the apparatus of the invention in set-up position in association with a plurality of courses of brick to explain how the apparatus is used;

Fig. 3 is a top elevational view of parts of the apparatus to explain certain features of construction;

Fig. 4 is a fragmentary side elevational view of the parts shown in Fig. 3; and

Fig. 5 is a partial perspective view to explain other features of the invention.

Referring now to the drawing more in detail the invention will be fully described.

In Fig. 2 there are shown three layers or courses of brick B of ordinary form which have already been laid. It is obvious of course that it is desirable to have the courses in absolute alignment and also to have the opposite corners of a wall or building so arranged that the outer and inner surfaces of the wall are parallel and straight. It is also desirable that the outer and inner angles of the corners be in proper complemental relation.

The apparatus preferably includes at least two pair of what may be called angle irons, each pair including one for use adjacent an inner corner and one for use adjacent an outer corner. The latter, indicated by 2, includes a pair of longitudinally extending leg members 4 connected together at adjacent sides and extending at right angles to one another as shown. The iron for use adjacent an inner corner is somewhat similarly formed and its legs are indicated by 4'.

The outer iron is adapted to have its legs 4 disposed against the outside of a corner and the inner one is to have its legs 4' rest against the inner corner of the wall, all as shown in Fig. 1. The outer iron has on the outer surface of both of its members 4 a pair of spaced apart and longitudinally extending bars 6 which form slots 8 therebetween, while the inner surfaces of the legs 4' of the inner irons are provided with spaced bars 6', similar to ribs 6, and which form slots 8'.

Preferably the adjacent surfaces of each pair of ribs 6 and 6' are diverging as shown. In this way, blocks 16, having similarly diverging sides and which will later be described, are slidable up and down in the slots 8 and 8'.

Extending through the corners of the irons of a pair in suitable and similarly spaced relation are apertures or slots 10. These are adapted to receive a connecting rod 12 which extends therebetween and a wing nut such as 14 may be threaded on one end of the rod to both hold the irons of a pair in the spaced relation desired and also to permit removal of the rod. That is, the arrangement is such that when a certain number of courses of brick have been laid it is desirable, of course, to move the rods upwardly and out of the way of the rising layers of brick.

As stated blocks 16 are provided to be slidable up and down in the slots formed by the spaced bars. A screw such as 20 may extend through the blocks as shown in Fig. 3 and this will be arranged to be rotatable so as to bring its inner end into bearing engagement with the surface of that leg on which it is slidable so as to hold the block in various positions of adjustment.

Associated with the blocks 16 is a device indicated generally by 19 and this will now be described.

Extending outwardly from and secured to the block 16, so as to be movable therewith, is a supporting member 22. A member 24 may be secured to the member 22 by means of screws or the like 28 and it has a part spaced from the member 22, such as shown, to form a slot in which a rule 26 of ordinary form is slidable. Means may be provided to hold the rule 26 in various positions of adjustment between the holder parts 24 and 22 as shown.

Also associated with the supporting member 22 is a knob part 21 and on the outer end of the member 22 there is provided a flange part 29 through which there is an opening 31.

Similar devices 19 are associated with each of the outer irons, at least, of the pairs associated with opposite corners as shown. Then connected to and extending between the knob members 21 of adjacent devices 19 is a line L. The line may extend through the adjacent apertures 31 and be guided thereby.

The line L is usually of some flexible material, such as a string, but may take various forms. Thus it will be seen, in operation the bricklayer may adjust the apparatus so that the lower end of the rule 26 is adjacent the uppermost surface of the top layer of brick which has already been laid. In this way, the line L assures a perfectly plumb and horizontal line as well as an absolutely straight front surface to the wall.

If desired, a plumb vial 32, may be provided on one or both of the irons of a pair. This may take various forms but preferably is removably attached as by means of a spring-clip 30 such as shown.

It will be seen that the permanent right angle of the irons co-operates with all of the above features to assure perfect right-angle corners and, as pointed out, the co-operation between the irons of a pair assure complemental inner and outer angles. Furthermore, with the arrangement shown, the outer irons are in a position to assure perfect alignment of the bricks of a course and of the courses.

While I have described the invention in great detail and with respect to a preferred form thereof, it is not desired to be limited thereto since many changes and modifications may be made therein without departing from the spirit and scope of the invention. What it is desired to claim and secure by Letters Patent of the United States is:

1. Bricklayers' apparatus of the class described, a pair of right-angle-irons spaced apart in vertical position with like sides in substantial parallelism, adjustable means connecting said irons for holding them in position, and a measuring device movable up and down relative to one of said angle-irons.

2. Bricklayers' apparatus of the class described, a pair of right-angle-irons spaced apart in vertical position with like sides in substantial parallelism, adjustable means connecting said irons for holding them in position, and a measuring device movable up and down relative to one of said angle-irons, one of said irons being adapted to be disposed adjacent the outside of a corner of a wall and the other being adapted to be disposed adjacent the inside of the same corner.

3. Bricklayers' apparatus of the class described, a pair of right-angle-irons spaced apart in vertical position with adjacent sides in substantially the same plane with one another and other sides in substantial parallelism, and plumb means movably associated with said adjacent sides of the said angle-irons and provided with means whereby a measuring line may extend therebetween.

4. Bricklayers' apparatus of the class described, a pair of right-angle-irons spaced apart in vertical position with like sides in substantial parallelism, adjustable means connecting said irons for holding them in position, and a measuring device movable up and down relative to one of said angle-irons, one of said irons being adapted to be disposed adjacent the outside of a corner of a wall and the other being adapted to be disposed adjacent the inside of the same corner, said measuring device including an adjustable rule.

5. Bricklayers' apparatus of the class described, a pair of right-angle-irons spaced apart in vertical position with adjacent sides in substantially the same plane with one another and other sides in substantial parallelism, said adjacent sides of the said angle-irons being provided with spaced ribs forming slots therebetween, block members slidable up and down between said ribs, means for fastening said block members in various positions relative to the irons, and means associated with said block members whereby a plumb line may extend therebetween.

6. Bricklayers' apparatus of the class described comprising in combination, pairs of right-angle-irons, one of the irons of each pair adapted to be disposed in vertical position outside adjacent corners of a wall and the other iron of each pair adapted to be disposed vertically inside of said corners, adjusting means connecting the irons of each pair thereof for holding them in position relative to said corners, and plumb means movable on corresponding sides of an iron of each pair of irons for a line extending therebetween.

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