No. 814,926. PATENTED MAR. 13, 1906.

E. WEISS.

BRICKLAYER'S TOOL.

APPLICATION FILED MAR. 22, 1905.

2 SHEETS—SHEET 1.

Fig. 1

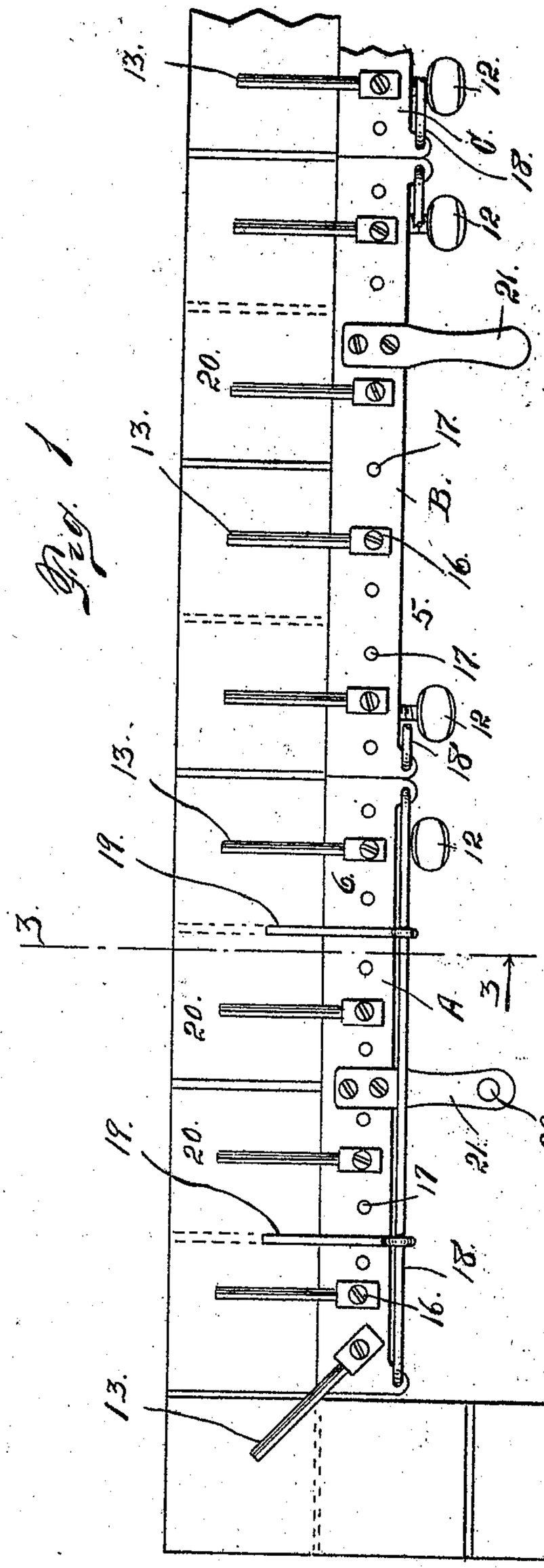
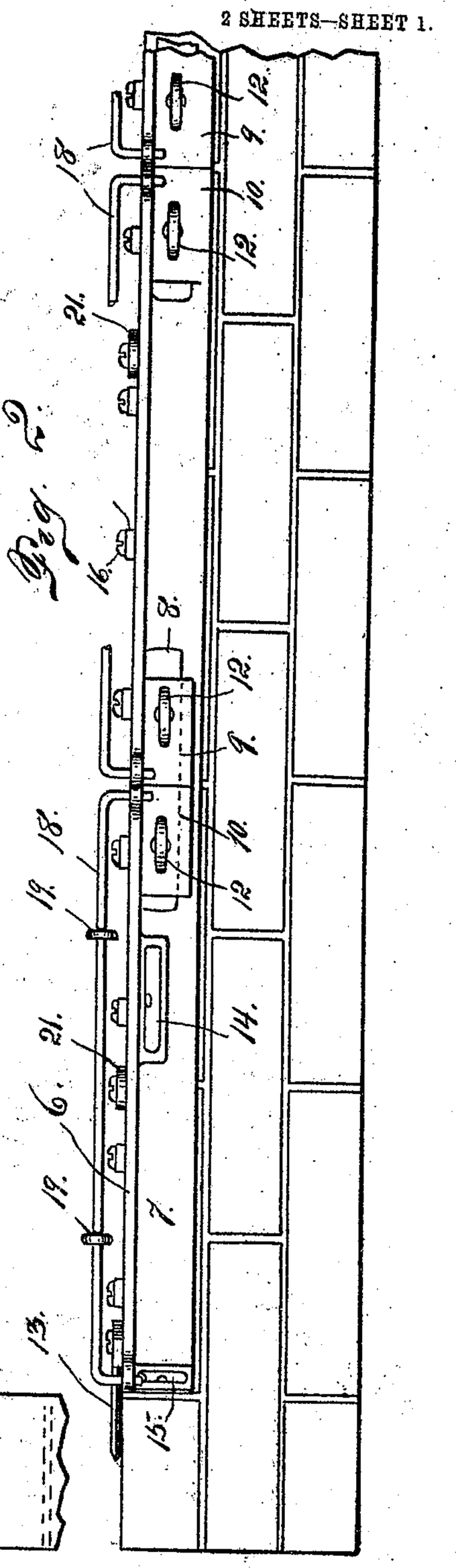


Fig. 2.



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2 SHEETS—SHEET 2.

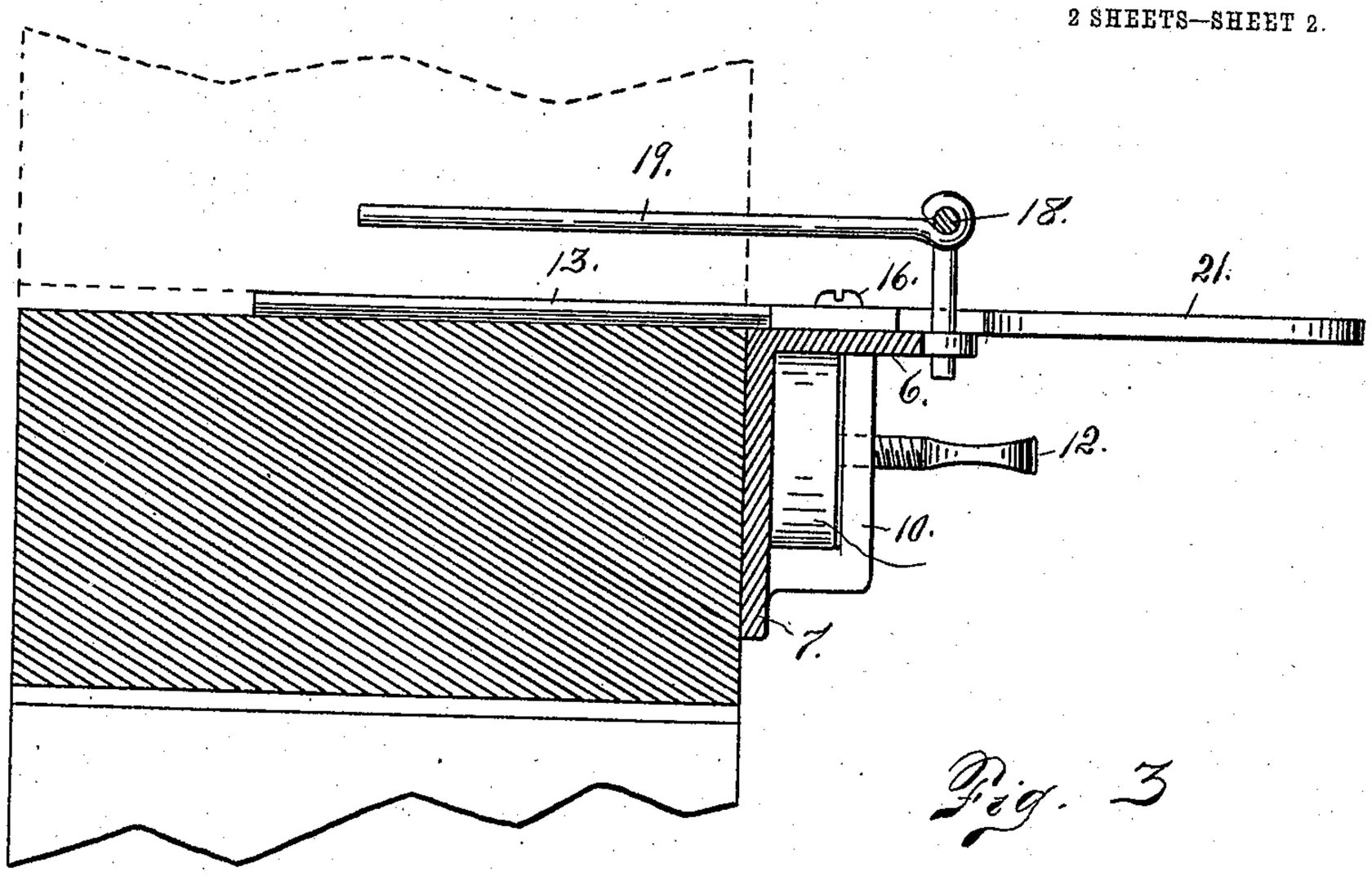

Fig. 3

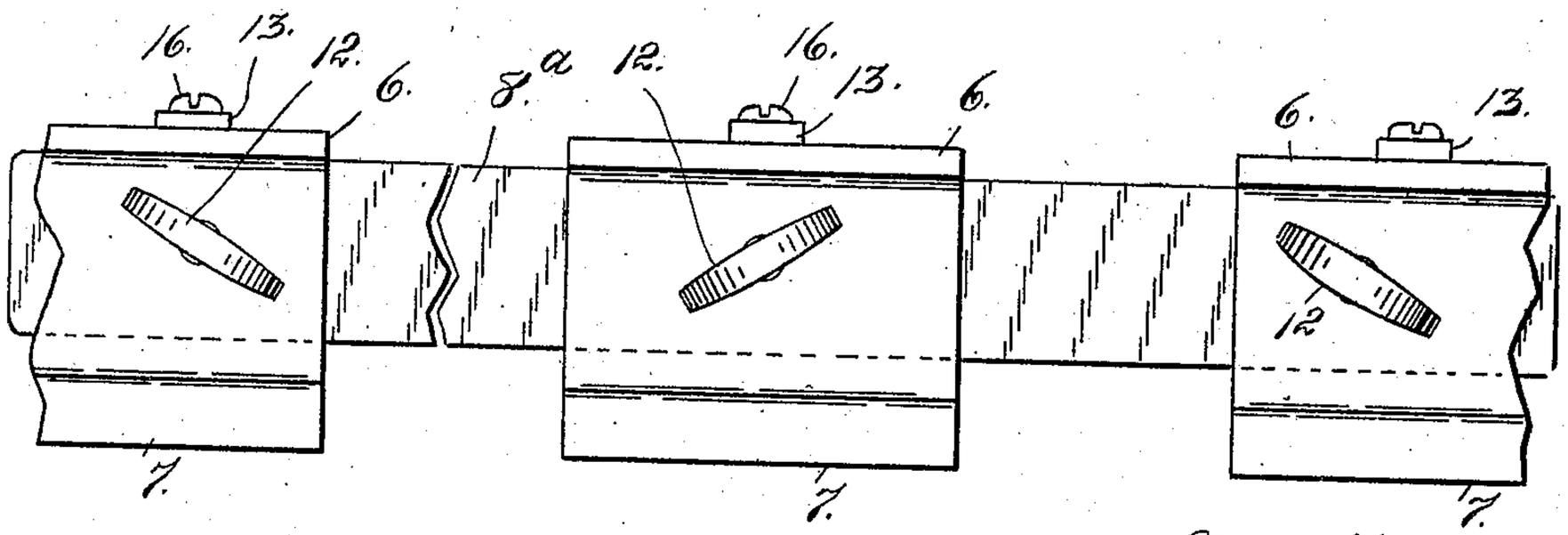

Fig. 4.

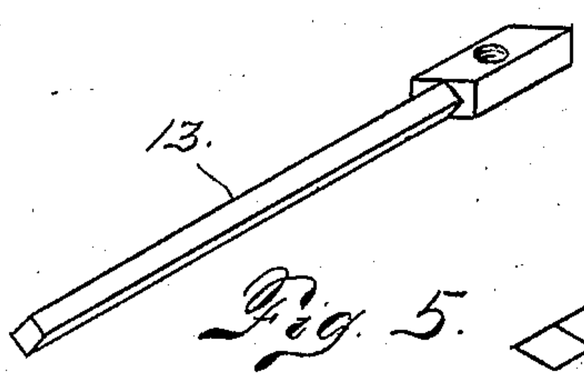

Fig. 5.

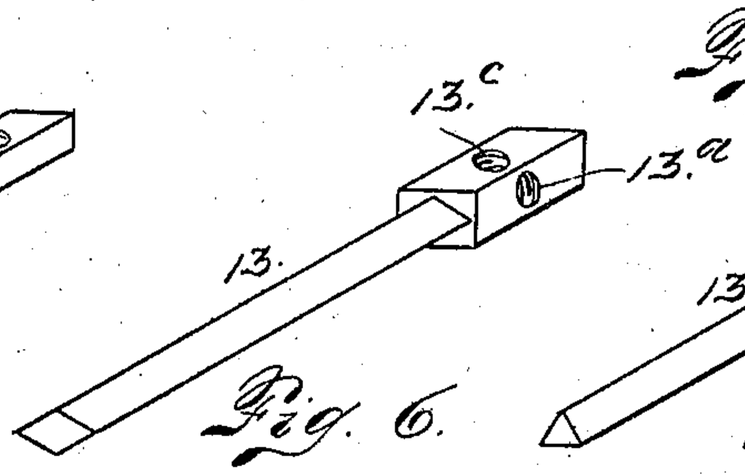

Fig. 6.

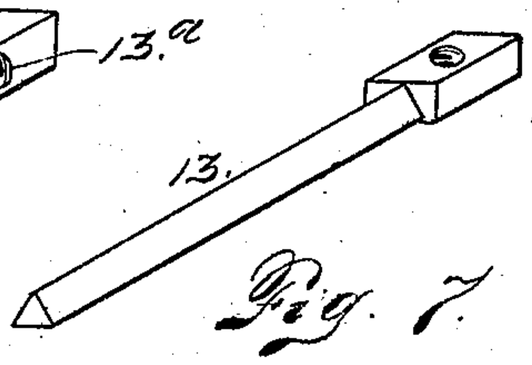

Fig. 7.

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BRICKLAYER'S TOOL.

No. 814,926. Specification of Letters Patent. Patented March 13, 1906.

Application filed March 22, 1905. Serial No. 251,356.

To all whom it may concern:

Be it known that I, EDWARD WEISS, a citizen of the United States, residing in the city and county of Denver and State of Colorado, have invented certain new and useful Improvements in Bricklayers' Tools; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in bricklayers' tools, my object being to provide a device adapted when a wall is once started to make it comparatively easy to continue the wall in a horizontal plane.

Under ordinary circumstances it is quite difficult for the workman to keep the wall level, and in order to do so it is necessary for him to frequently employ a spirit-level. He is also called upon to exercise considerable care with reference to the amount of mortar used. This, together with other difficulties well known to bricklayers, makes it quite difficult to keep a wall level or so that its upper surface shall be in a horizontal plane.

The object of my improved device, as before stated, is to overcome this difficulty, and my construction will be hereinafter explained in detail, reference being made to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a top plan view of a wall, showing my improved device in use or in position for use. Fig. 2 is a side elevation of the wall with the device in position. Fig. 3 is an enlarged section taken on the line 3 3, Fig. 1, viewed in the direction of the arrow. Fig. 4 is a side view of a slightly-modified form of my improved device. Figs. 5, 6, and 7 are detail views in perspective illustrating different forms of fingers employed in connection with the device.

The same reference characters indicate the same parts in all the views.

Let the numeral 5 designate a bar preferably angular in cross-section, the two parts 6 and 7 thereof occupying positions at right angles to each other. This bar may consist of one or more members. In the drawings it is illustrated as composed of a number of members whereby it becomes longitudinally extensible. The different members of the bar 5 may be designated A, B, and C, respectively. They are substantially the same in construction, but are given different reference characters for convenience of description. Any two adjacent members are connected by an auxiliary bar 8, which passes through openings formed in lugs 9 and 10 with which the respective members are provided. The bar 8 may be locked to either member by set-screws 12. By loosening one of these screws the two members of the bar may be separated, thus making the bar extensible to any desired degree. If desired, the construction shown in Fig. 4 may be employed, in which the bar 5 is composed of a plurality of distinct members slidable upon a bar 8^a and locked in any desired position of adjustment by set-screws 12.

To the upper or horizontal part 6 of the bar 5 is attached a number of fingers 13, which, as shown in the drawings, occupy a position parallel to the member 6 of the bar and project beyond the member 7, so that these fingers when the device is in use are adapted to occupy a position above and in contact with the top layer of brick, while the layer of brick immediately above is placed in position. As these fingers are of precisely the same thickness, it is evident that if the wall is once properly started—that is to say, if the first layer of brick has its upper surface in a horizontal plane—by the use of my improved device the wall may be subsequently built to any desired height with each laver of brick in a horizontal plane.

Upon the bar of my improved device are mounted two leveling-tubes, (designated 14 and 15, respectively.) The tube 14 is mounted on the bar in position to determine horizontal surfaces, while the tube 15 is mounted on one end of the bar or in position to determine plumb or vertical surfaces.

The fingers 13, as shown in the drawings, are connected with the bar 5 by means of screws 16, whereby they are readily attachable and detachable. The bar is provided with a considerable number of extra threaded openings 17, whereby the position of the fingers 13 may be changed on the bar at will in order to maintain the fingers in the same relative position with bricks of varying length. Hence by virtue of this construction the device is adapted for use in laying bricks of different sizes or lengths. It is well known that different brick manufacturers make bricks of different sizes. Hence it is

evident that the adjustment of the fingers for laying bricks of one length might not be suitable for laying bricks of different length. Hence the necessity for a construction whereby the position of the fingers may be regulated at will.

The finger 13 at the corner extremity of the device should be movable on its screws, so that it may be thrown outwardly, as shown at the left in Figs. 1 and 2, in order to bring it in position to properly separate the corner bricks of the wall.

My improved device may also be provided with means for separating the adjacent vertical extremities of the different bricks in the same layer, thus determining the space between these extremities. As shown in the drawings, a rod 18 may be mounted upon each member of the bar 5. As shown in the drawings, the extremities of this rod are bent downwardly and inserted in openings formed in the extremities of the horizontal part 6 of the bar member. Fingers 19 are slidably mounted on the rod 18, which forms a holder therefor. These fingers 19 are provided with eyes through which the rod 18 passes. Hence the fingers are allowed to slide freely on the rod and may be used or not, as desired. If it is not desired to employ them, they may be thrown out of position so that they will not come in contact with the layers of brick. These fingers 19 are not shown in the correct position for use in Fig. 1, since they should be in alinement with the space separating the extremities of the bricks 20. The fingers are purposely shown out of their normal position in order to facilitate the proper illustration of other features. Their use, however, will be readily understood from the foregoing explanation.

The fingers 13 should be so shaped that their uppermost surface or surfaces are inclined so that they will readily pass through the mortar, allowing the corners of the fingers to engage the bricks both above and below. The form of these angular fingers is well illustrated in Figs. 5, 6, and 7 of the drawings. The exact cross-sectional area is not important so long as the upper and lower surfaces are inclined. In Fig. 7 the triangular shape is used. In this event the finger has inclined upper surfaces exposed, while the lower surface occupies a horizontal position. It is believed preferable, however, to use either the form shown in Fig. 5 or Fig. 6, since in this case both upper and lower surfaces are inclined to the horizontal, thus allowing the upper and lower corners of the fingers to pass readily through the mortar and engage the upper and lower brick surfaces.

From the foregoing description the use and operation of my improved device will be readily understood. Assuming that the wall has been started, as shown in Figs. 1 and 2, my improved instrument is placed thereon in the position shown in the said views. In this event the leveling-tube 12 will quickly indicate whether the upper surface of the wall is in a horizontal position at the time when my improved device is first used. Assuming that this surface is horizontal, the fingers will project outwardly over the layer of bricks 20 and engage the upper surface of the said bricks. As the upper layer of bricks is placed in position mortar is applied to their lower surface and the bricks are pressed down until their lower surfaces come in contact with the upper corners of the fingers 13. In other words, the pins are caused to pass through the mortar applied to the under surfaces of the upper bricks. In this way the thickness of the pins determines the space between the bricks or the space to be filled with mortar. It will be readily understood that by the use of this device the upper surface of the wall may be easily kept level or in a horizontal plane. When the device is placed in position, the part 7 of the horizontal bar engages the inner surface of the brick wall, while the pins project outwardly over the top thereof. This arrangement is best illustrated in Fig. 3. The dotted lines in Fig. 1 indicate the end joints of the layer of bricks immediately below the top layer. Hence the fingers 19 are shown in the position they would be in if employed to separate the ends of the bricks of the layer next below.

The bar 5 is preferably provided with two projections 21, forming handles to facilitate the manipulation of the device. One of these handles is provided with an orifice 22, whereby the device may be hung up on a hook or nail when not in use.

In the form of construction shown in Fig. 6 the finger 13 is wider in one direction than the other, and it is provided with two openings 13^a and 13^c, extending at right angles to each other. Hence this finger may be fastened to the bar by placing it in position to have the fastening-screw passed through either opening, thus adapting it for use with layers of brick separated by different thicknesses of mortar, thus making the single set of pins answer in both cases.

Having thus described my invention, what I claim is—

1. A bricklayer's tool, comprising a bar provided with fingers angular in cross-section, the faces of the fingers being inclined to the horizontal so that when in use the corners of the fingers or apices of their angles engage the walls.

2. A bricklayer's tool comprising a bar provided with fingers angular in cross-section and wider in one direction than the other, the said fingers being removably connected with the bar and reversible to allow them to be applied to the bar to utilize their width in either of two directions extending at right angles to each other.

3. A bricklayer's tool comprising a bar provided with fingers angular in cross-section and wider in one direction than the other, the faces of the fingers being inclined to the horizontal so that when in use the corners of the fingers or apices of their angles engage the wall or surface where the instrument is used.

4. A bricklayer's tool comprising a bar provided with fingers angular in cross-section and wider in one direction than the other, the faces of the fingers being inclined to the horizontal so that when in use the corners of the fingers or apices of their angles engage the wall or surface where the instrument is used, the fingers being removably connected with the bar and reversible to allow them to be applied to the bar to utilize their width in either direction, and suitable means for holding the fingers in place upon the bar.

5. A bricklayer's tool comprising a bar provided with fingers angular in cross-section, the fingers being connected with the bar so that their faces shall be inclined to the horizontal so that when the fingers are applied to a horizontal surface, their corners or the apices of their angles shall engage said surface, the portions of the fingers which engage the bar being provided with openings extending at right angles to each other, the axes of the openings being respectively parallel with diagonal lines connecting the apices of the opposite angles of the fingers and intersecting at the centers of the latter, and fastening devices adapted to be passed through the said openings for removably securing the fingers in place.

6. In a bricklayer's tool, the combination of a bar provided with fingers fixedly connected therewith and adapted to separate the upper and lower layers of bricks while building a wall, and other fingers movably mounted on the bar and adapted to separate the ends of bricks of the same layer, substantially as described.

7. A bricklayer's tool comprising a bar, fingers connected with the bar for separating the upper and lower adjacent layers of a brick wall, other fingers movably mounted on the bar and adapted to separate the extremities of the bricks of the same layer, and suitable handles connected with the bar for the purpose set forth.

8. In a bricklayer's tool, the combination of a bar provided with fingers for the purpose specified, a leveling device connected with the bar for determining horizontal surfaces, and another leveling device connected with the bar for the purpose of determining vertical or plumb surfaces.

9. In a bricklayer's tool, the combination of a main bar consisting of a number of members provided with apertured lugs, an auxiliary bar passing through the lugs of any two adjacent members and on which the members are slidably mounted, fingers angular in cross-section and removably attached to the members, the said fingers being wider in one direction than the other, and their faces occupying positions inclined to the horizontal when the device is in use.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD WEISS.

Witnesses:
DENA NELSON,
A. J. O'BRIEN.