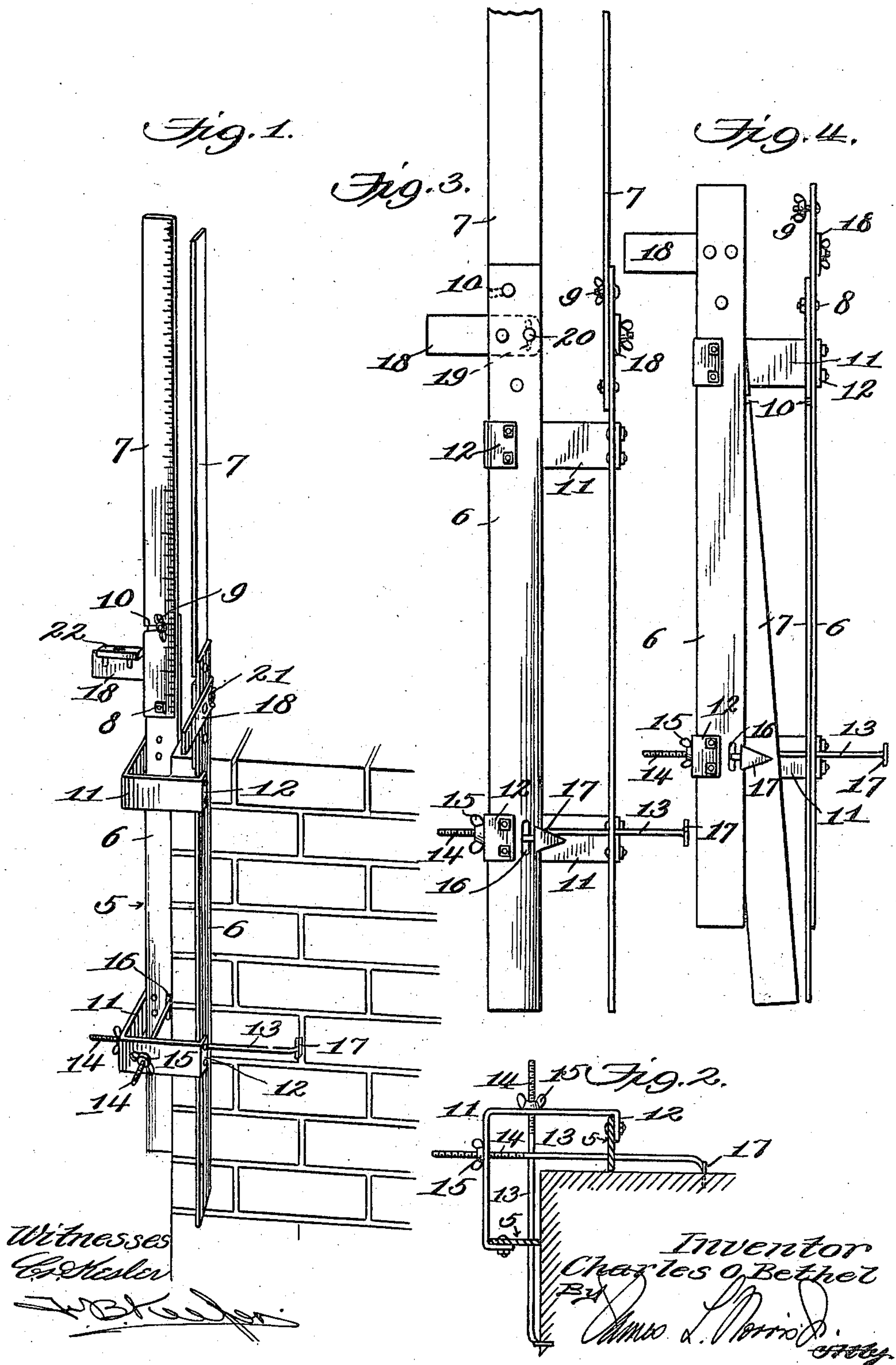


C. O. BETHEL.  
 PLUMB FOR CORNERS, PILASTERS, AND THE LIKE.  
 APPLICATION FILED APR. 13, 1910.

987,424.

Patented Mar. 21, 1911.





# UNITED STATES PATENT OFFICE.

CHARLES O. BETHEL, OF FREDERICK, OKLAHOMA.

PLUMB FOR CORNERS, PILASTERS, AND THE LIKE.

987,424.

Specification of Letters Patent.

Patented Mar. 21, 1911.

Application filed April 13, 1910. Serial No. 555,168.

*To all whom it may concern:*

Be it known that I, CHARLES O. BETHEL, a citizen of the United States, residing at Frederick, in the county of Tillman and State of Oklahoma, have invented new and useful Improvements in Plumbs for Corners, Pilasters, and the Like, of which the following is a specification.

This invention relates to corner and pilaster plumbs, and the primary object of the same is to provide a convenient and accurate instrument for the use of bricklayers, stone masons, and builders generally, to preserve a true corner joint and consequently the laying of bricks or stone or other blocks in level courses and of such construction that it may be handled with facility and expedition and reduced to compact form for carrying it from one place to another or for storage in a comparatively small space.

With this and other objects and advantages in view, the invention consists in the preferred construction and arrangement of the several parts which will be more fully hereinafter specified.

In the drawing: Figure 1 is a perspective view of a portion of a corner structure showing a plumb applied thereto in operative position and embodying the features of the invention. Fig. 2 is a horizontal section taken through the lower extremity of the instrument, as shown by Fig. 1. Fig. 3 is an elevation of the instrument partially broken away. Fig. 4 is an elevation of the instrument shown in collapsed or reduced condition.

The instrument essentially embodies two uprights or bars 5 disposed in planes at right angles to each other and each composed of bar sections 6 and 7 jointed as at 8. The joint between the sections 6 and 7 of each upright or plumb bar 5 is formed by overlapping the ends of the two sections and connecting them by a suitable pivot bolt, and to secure the bar sections in true longitudinal alinement or in open condition the section 6 has a screw-stud or bolt and winged or thumb-nut as at 9 to cooperate with a slot 10 in the section 7, said slot opening out through one edge of the latter section. By means of this particular joint formation the sections 6 and 7 may be readily disposed in operative relation and positively secured or collapsed to reduce the instrument to compact form, as shown by Fig. 4. The uprights or plumb bars 5 are associated by

right-angular connectors or brackets 11 having right-angular terminal flanges 12 against which the uprights or bars 5 are secured, as particularly shown by Fig. 2. A greater portion of the uprights or plumb bars 5 projects inwardly from the extremities of the connectors or brackets 11 and the inner edges of said uprights or bars are clear or free for engagement with the intersecting right-angular surfaces of a corner of a wall, pilaster or other structure. Extending through the members of the lower connector or bracket 11 are clamping rods 13 which are screw-threaded as at 14 where they pass through the connector members and are engaged by thumb-nuts or analogous devices 15 which bear against the outer faces of the connector members, and by this means the rods may be adjusted. The rods 13 also pass through vertically disposed slots 16 in the sections 6 of the uprights or plumb bars 5 and at their inner ends said rods are provided with right-angular flattened arrow shaped heads 17 to extend into head joints in the wall, as shown by Fig. 2, the rods being given a slight play in the slots 16 to permit movement of the heads 17 to dispose the latter either above or below the bed joints of the walls.

On the upper extremities of the sections 6, arms 18 are adjustably fulcrumed, one on each section, said arms projecting outwardly from the sections and each having an arcuate slot 19 at its inner extremity through which projects a stud 20 fixed to the section carrying the arm. Each stud 20 is engaged by a clamping nut 21, preferably of the winged or thumb type, so that each arm may be adjusted in a true horizontal position or at an angle relatively to a horizontal plane. The arms 18 are adapted to receive suitable spirit levels, as 22, and by adjusting the said arms with the levels thereon for the purpose of guides in laying brick or stone blocks as well as to adjust the latter as they are laid, a very convenient means is provided in connection with the plumb for accurately disposing the courses of brick or stone blocks.

The several parts of the plumb or instrument are constructed of metal, preferably thin sheet steel, with the exception, of course, of the rods 13 which may be of steel, and the nuts and bolts by which the parts are associated and rendered operative. The essential elements consisting of the uprights



or plumb bars 5, are readily arranged in operative relation by the connectors or brackets 11, and the latter also serve as a bracing means for the uprights.

5 In applying the plumb or instrument to a corner of a wall or pilaster it is only necessary to secure the clamping rods 13 to the adjacent sides of the wall or pilaster as shown, and to project portions of the up-  
10 rights above the upper surfaces of the last course of bricks or stone blocks that have been laid and then follow the adjacent edges of the uprights in continuing the construction of the corner, the plumb or instrument  
15 being from time to time released from one position and elevated as the erection of the corner of the wall or pilaster may require. In applying the improved plumb or instrument to a wall the courses of brick or stone  
20 are not subjected to a pressure that would squeeze out the mortar or cement and as a consequence the surface of the wall presents a smooth or finished appearance. It will also be understood that the dimensions  
25 of the several parts of the plumb or instrument may be varied at will, or the uprights may be comparatively long or short as may be desired.

30 The levels 22 which are used on the arms 18 may be either permanently secured to the arms or removably applied thereto.

In collapsing the parts of the instrument the sections 7 when released are turned inwardly over the sections 6, the arms 18

being also loosened and turned down or inwardly against the upper extremities of the said sections 6, and by this means the normal length or extent of the instrument is materially reduced.

What is claimed as new is:

40 In a plumb for corners, pilasters and the like, the combination of a pair of upright bars composed of foldable sections, the lower extremities of the bars adjacent to the inner  
45 edges of the latter having vertical slots formed therein, angular connectors attached to the outer portions of the bars and holding the latter in planes at right angles to each  
50 other and fully open at their inner portions, the connectors being spaced apart, and attaching means consisting of rods passed through the members of the angular con-  
55 nectors and crossing each other and also loosely passing through the vertical slots at the lower extremities of the bars, the rods  
60 having their outer extremities screw-threaded and engaged by adjustable fastening means bearing against the members of the angular connector and having their inner terminals provided with means to engage the wall or  
part to which the plumb is applied.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES O. BETHEL.

Witnesses:

EDWIN A. BELLEVILLE,  
ARTHUR W. PARIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."