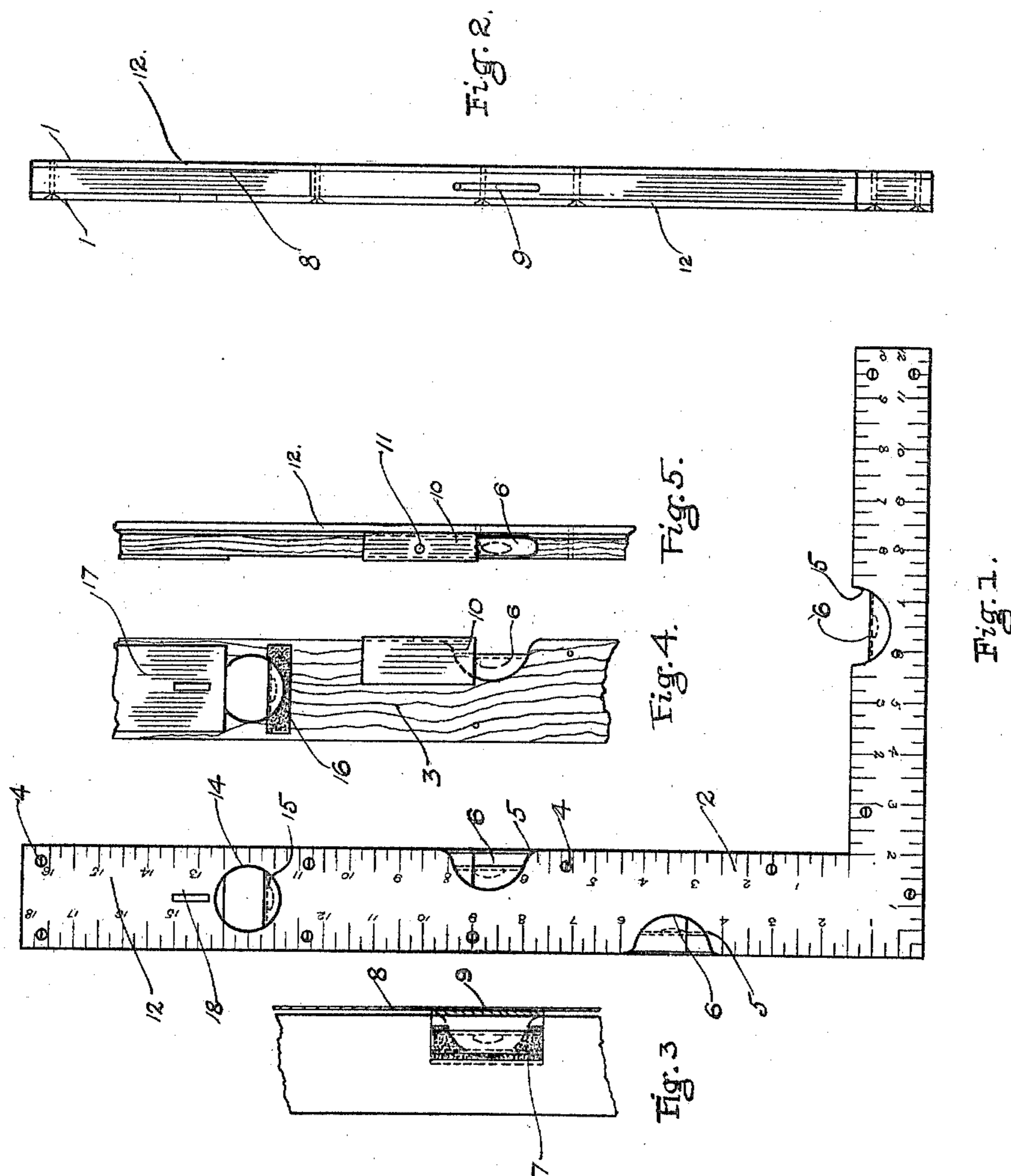


No. 817,515.

PATENTED APR. 10, 1906.

D. POLIMENI.
CARPENTER'S SQUARE.
APPLICATION FILED DEC. 28, 1905.



WITNESSES.
William V. McKnight.

W. H. Butler

INVENTOR.
DOMINICK POLIMENI.

By *A. C. Everett & Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

DOMENICK POLIMENI, OF WINDBER, PENNSYLVANIA.

CARPENTER'S SQUARE.

No. 817,515.

Specification of Letters Patent.

Patented April 10, 1906.

Application filed December 28, 1905. Serial No. 293,648.

To all whom it may concern:

Be it known that I, DOMENICK POLIMENI, a citizen of the United States of America, residing at Windber, in the county of Somerset and State of Pennsylvania, have invented certain new and useful Improvements in Carpenters' Squares, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in carpenters' squares; and the primary object of the invention is to provide a carpenter's square with a plurality of level-glasses, thereby increasing the general usefulness of the square and combining
15 the square and level into an inexpensive article which can be easily manipulated as a square or as a level. To this end I use two ordinary carpenters' squares and mount
20 them together, whereby they coincide with one another. Between the squares I arrange a plurality of level-glasses for determining vertical planes and horizontal planes. In connection with the square I have devised
25 novel means, such as slidable casings, for protecting the level-glasses, while the square is used in the ordinary manner; but should it be desired to use one of the levels it is only
30 glass in order to render the same visible.

The detail construction of my improved combined level and square will be hereinafter more fully described and claimed, and, referring to the drawings accompanying this application, like numerals of reference designate corresponding parts throughout the several views, in which—

Figure 1 is a side elevation of a square constructed in accordance with my invention.
40 Fig. 2 is an edge view of the same. Fig. 3 is a detail sectional view of a portion of the square. Fig. 4 is a side elevation of a portion of the square, one of the side plates being removed. Fig. 5 is an edge view of the
45 same.

To put my invention into practice, I construct my improved instrument or article of two side plates 1 1, these plates conforming substantially to the ordinary carpenter's
50 square, having graduations 2. Strips of wood 3 are mounted between the side plates 1 1, and the strips of wood, together with the side plates, are secured together by a plurality of screws or rivets 4, whereby a carpenter's
55 square will be provided of a greater thickness than the ordinary type of square used.

The edges of the side plates 1 1 are cut away, as at 5, also the wooden strips 3 adjacent to the cut-away portions of the side plates. In the cut-away portions of the
60 strips 3 I mount level-glasses 6, these glasses being of a conventional form and are preferably held in the cut-away portions of the wooden strips by cement or the like adhesive
65 material 7. The level-glasses 6 are mounted in the square in parallel alinement with the adjacent edges of said square and are employed for determining horizontal planes.

The wooden strips 3, interposed between the side plates 1 1, have their edges bound by
70 metallic strips 8, which are interposed between the edges of the side plates 1 1. The strips 8, adjacent to each level-glass, are slotted, as at 9, and slidably mounted beneath said strips is a casing 10, carrying a
75 button 11. The casings are adapted to slide back and forth over the level-glasses, and the button of each casing is adapted to protrude into slots 9, whereby the casing can be easily
80 and quickly manipulated to expose or inclose the level-glass. The casings 10 are adapted to slide back and forth upon the strip of wood adjacent to each level-glass, as clearly illustrated in Figs. 4 and 5 of the drawings, and
85 these casings are adapted to protect the level-glasses when the instrument is being used simply as a square.

To determine a vertical plane, I provide the longer arm 12 of the square with two diametrically-opposed openings 14 14, and
90 transversely of said openings between the side plates 1 1 is mounted a level-glass 15, the wooden strips 3 being cut away to accommodate the level-glass, which is secured in position by cement 16, similar to the glasses 6,
95 heretofore described. A casing 17 is also used in connection with the level-glass 15 to protect the same, said casing sliding between the side plates 1 1 of the square and being manipulated through slots 18 18, formed in
100 the side plates 1 1.

I do not care to confine myself specifically to the use of wooden strips between the side plates 1 1, as other material may be readily
105 used to serve the same purpose, and in mounting the level-glasses between the side plates plaster-of-paris or the like material, which is not affected by atmospheric conditions, may be used, it being preferable to use
110 a material around the level-glasses which will not expand or contract. In this manner the accuracy of my improved combined level and

square will be assured and a strong and durable construction provided, which will withstand the rough usage to which instruments of this character are generally subjected.

5 From the foregoing it will be observed that I have devised a novel combined square, level, and plumb which can be used by carpenters, stone-masons, and stone-cutters.

Such changes in the minor details of construction and size and proportion as are permissible by the appended claims may be resorted to without departing from the spirit and scope of the invention.

What I claim, and desire to secure by Letters Patent, is—

1. An instrument of the type described embodying two parallel plates conforming to carpenters' squares, said plates having their edges cut away, level-glasses mounted between said plates adjacent to the cut-away portions thereof, casings slidably mounted between said plates and adapted to inclose said level-glasses, means to secure said plates together, and means to retain said level-glasses between said plates, substantially as described.

2. An instrument of the type described embodying two carpenters' squares secured together side by side, said squares being cut

away, level-glasses mounted between said squares adjacent to the cut-away portions of said squares, casings mounted between said squares and adapted to slide over said level-glasses, means to move said casings, means to support said glasses between said squares, substantially as described.

3. An instrument of the type described embodying two parallel metallic carpenters' squares, wooden strips arranged between said squares, level-glasses mounted between said squares, means to support said glasses in said strips, means to secure said squares and said strips together, and means carried by said strips to shield said glasses, substantially as described.

4. An instrument of the type described embodying two carpenters' squares secured together side by side, glasses mounted between said squares, and movable means carried by the instrument to shield said glasses, substantially as described.

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

DOMENICK POLIMENI.

Witnesses:

J. T. STRINGER,
WM. F. JONES.