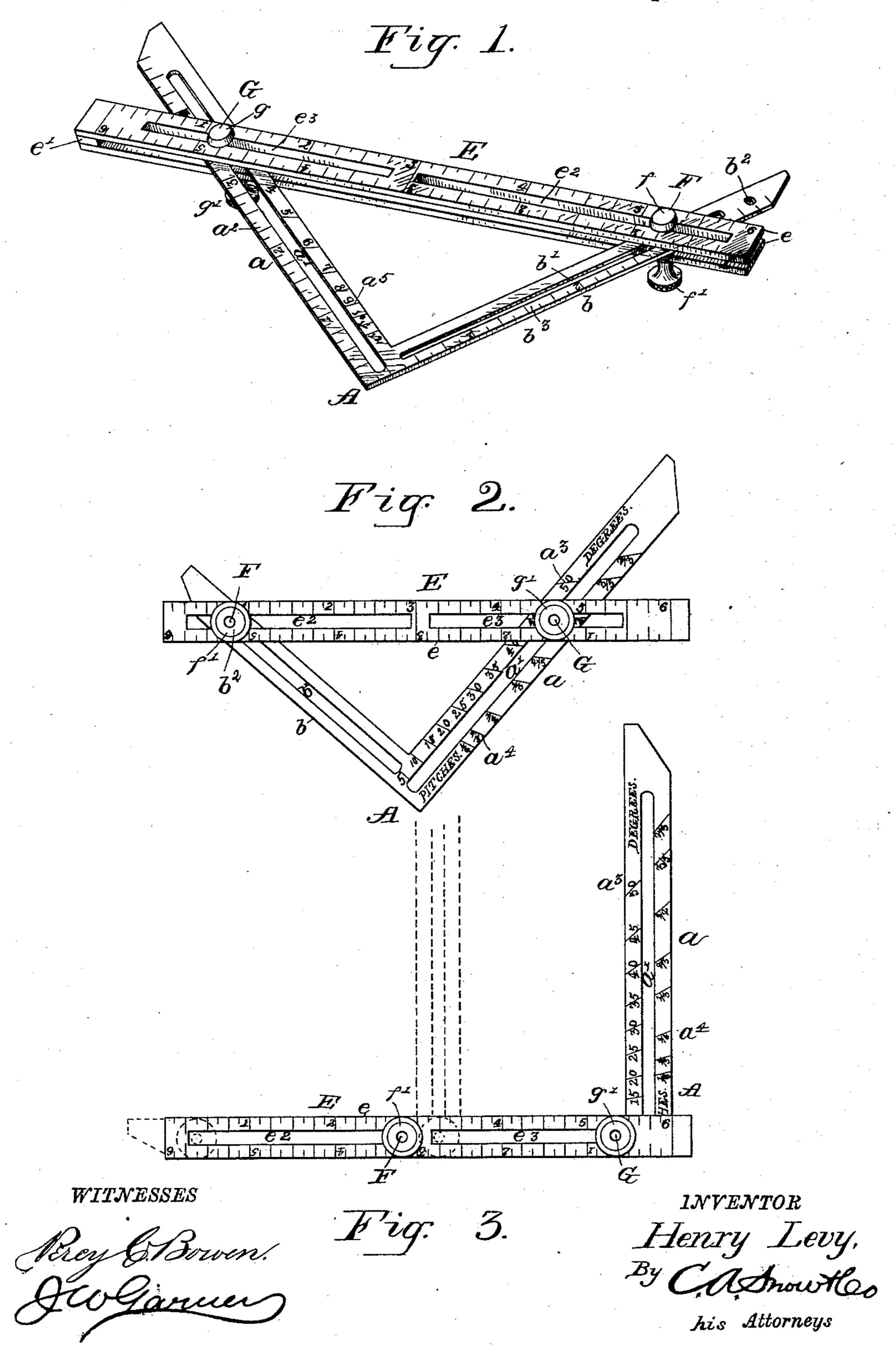
H. LEVY.

ADJUSTABLE PITCH BOARD FOR SQUARES.

No. 327,283.

Patented Sept. 29, 1885.



United States Patent Office.

HENRY LEVY, OF CLINTON, MISSOURI.

ADJUSTABLE PITCH-BOARD FOR SQUARES.

SPECIFICATION forming part of Letters Patent No. 327,283, dated September 29, 1885.

Application filed July 11, 1885. (No model.)

To all whom it may concern:

Be it known that I, Henry Levy, a citizen of the United States, residing at Clinton, in the county of Henry and State of Missouri, 5 have invented a new and useful Improvement in Squares, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in squares; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and par-

ticularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of a square embodying my invention when adapted for use for work on stairs, &c. Fig. 2 is a plan view of the square, taken from the opposite side thereof, the square being adapted for use in marking raft-20 ers, braces, special miters, or getting angles and bevels on any desired degree. Fig. 3 is a plan view of the same, showing the implement adapted for use as a try or T square.

A represents a square, which may be of any 25 size desired. The long arm a of this square is slotted throughout nearly its entire length, as at a', and the short arm b of which has a slot, b'. Near the outer end of the arm b, in a line with the slot b', is an opening, b^2 . One face 30 of the square has a scale, a^2 , on its long arm and a similar scale, b^3 , on its short arm. On the opposite face of the square, on the inner side of the long arm, is a scale of degrees, a^3 , numbered and marked from 5 to 50, and 35 drawn on a radius of which the center of the opening b^2 forms the center. On the opposite side of the long arm is a scale, a^4 , drawn from the center of the opening b^2 , and indicating "pitches" from \{\frac{1}{6}\] to \{\frac{2}{3}\].

E represents a ruler formed of two plates, e, connected at one end by an intermediate block, e'. Slots e^2 e^3 are cut in each of these plates in a line with each other, and extending from about the center of the ruler to near the ends thereof. The square is placed in the space between the plates e of the ruler, and is secured thereto by a set-screw, F, which passes through the slots e^2 , and either through the slot b' or the opening b^2 of the short arm,

and by a set-screw, G, which passes through 50 the slots e^3 and the slot a'. The screw F has a head, f, and a thumb-nut, f', and the screw G has a head, g, and a thumb-nut, g'.

In Fig. 1 the screw F is shown in the slot b' of the short arm, and the instrument is adapted for use in getting any odd pitch—as for a roof, or in stair-building—both ends of the ruler being free to work in the slots of the arms of the square, and can be secured at any desired adjustment by tightening the thumb- 60 screws, and thereby clamping the ruler and square together.

In Fig. 2 the screw F is shown in the opening b^2 of the short arm. This screw, when thus placed, forms the pivotal point for the 65 ruler, the outer end of which can be moved so as to set the ruler at any desired angle indicated on the scale a^3 , or at any desired pitch indicated on the scale a^4 .

On the inner side of the long arm, on the 70 face opposite to that on which the scales a^3 and a^4 are inscribed, is a scale, a^5 , drawn from the center of the opening b^2 , and marked and numbered from 4 to 12. This scale is to be used for marking regular figures from a square 75 to a figure having twelve sides.

By moving the free end of the ruler to a line with the short arm, said ruler is adapted to form a head, and the instrument becomes a try-square, as shown at Fig. 3 in solid lines. By 8c moving the ruler endwise until the screw G is in the inner end of the slots e^3 the ruler forms the head of a \mathbf{T} -square, into which the instrument is converted, as shown in dotted lines in Fig. 3.

An instrument thus constructed is adapted for use for a great variety of purposes, and will be found of great practical utility by carpenters, stair builders, draftsmen, and others, enabling accurate work to be done with 90 ease and rapidity.

Having thus described my invention, I claim—

The combination of the square having the slot a' in its long arm, the slot b' in its short 95 arm, the opening b^2 at the outer end of the short arm, the square having measuring-scales a^2 and b^3 on one face, and the scale a^5 drawn

•

from the center of the opening b^2 , and on its opposite face the scale of degrees a^3 on its inner side, and the pitch-scale a^4 on its outer side on opposite sides of the slot a', said scales a^3 and a^4 being drawn from the center of the opening b^2 , with the ruler having the slots, and the set-screws for securing the ruler to the square, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 10 presence of two witnesses.

HENRY LEVY.

Witnesses:

CLINTON CLENNY, S. E. CHEEK.