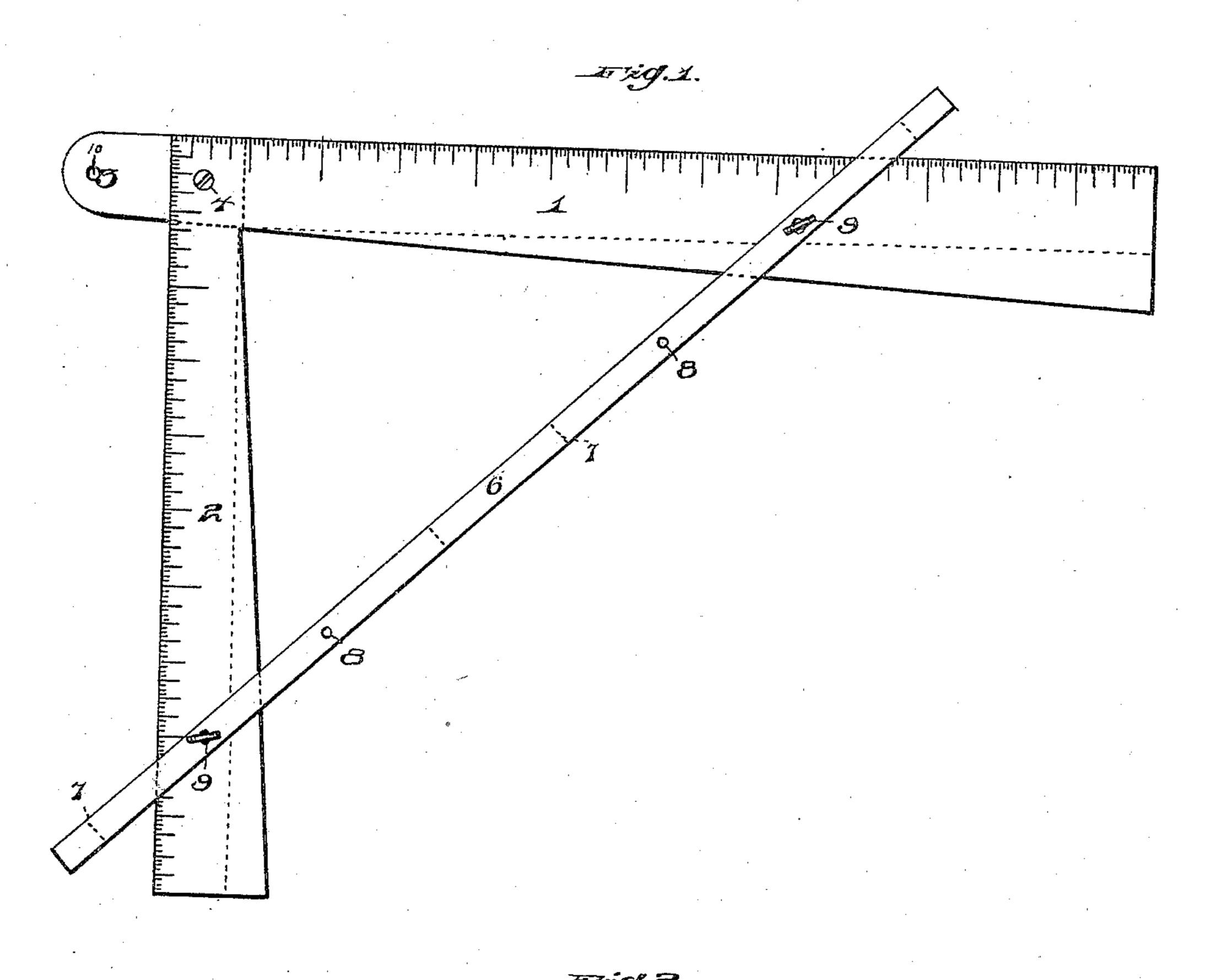
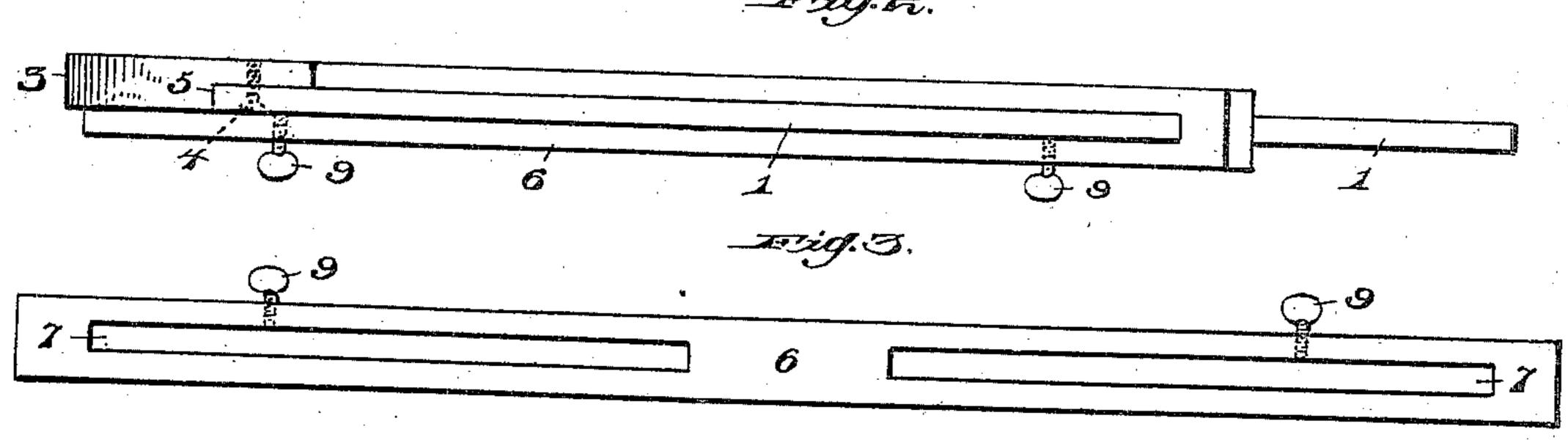
W. T. WIBLE.

STAIR BUILDER'S PITCH BOARD.

(No Model.)

(Application filed Feb. 4, 1901.)





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Witnesses: J. Applement, 6. E. Cotte. 5

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United States Patent Office.

WILLIAM T. WIBLE, OF DERRY STATION, PENNSYLVANIA.

STAIR-BUILDER'S PITCH-BOARD.

SPECIFICATION forming part of Letters Patent No. 684,490, dated October 15, 1901.

Application filed February 4, 1901. Serial No. 45,919. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. WIBLE, a citizen of the United States of America, residing at Derry Station, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Stair-Builders' Pitch-Boards, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in squares, and has for its object to construct a square particularly adapted for use in laying out steps and stairs, the device being of the form of tool frequently termed in the trade a "stair-builder's pitch-board."

The object of my invention is to construct a tool of this character which may be employed as an ordinary try-square and which is readily transferable into a stair-builder's pitch-board, having provision when used as a tool of this nature for providing for the tightening-wedge always employed in connection with stairs or steps for tightening the same.

Briefly described, my invention comprises two arms or blade members of unequal length and which are scaled on both sides to thirty-seconds along the outer edge, which edge is straight, the blades being widest at their outer ends, the difference in width being such that a straight line drawn from their narrowest point parallel with the straight outer edge would form a wedge shape representing the wedge employed for tightening steps and stairs.

In describing the invention in detail reference will be had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference will be employed for designating like parts throughout the several views of the drawings, in which—

Figure 1 is a detail plan view of my improved pitch-board. Fig. 2 is an edge view thereof. Fig. 3 is an edge view of the detachable gage removed from the square. Fig. 4 is a plan view of a part of one of the reverse sides of the blade to that shown in Fig. 1.

50 Fig. 5 is a detail perspective view of the detachable nosing-piece removed from the square.

In the drawings, 1 represents the long arm or blade of the square, and 2 the short arm or blade thereof. In practice I have found 55 a convenient length for these arms to be ten inches for the shorter arm and fourteen for the longer arm, though of course I do not wish to limit to these lengths, merely specifying to show the practical proportionate length. Each 60 arm is provided with a straight outer edge that is, the outer edge of the one arm lies at a direct right angle to the outer edge of the other arm—and the arms are scaled along both faces at the straight edges, the scale being 65 preferably made thirty-seconds in order to employ the instrument for fine work. These blades may be constructed of steel or like material, as in an ordinary try-square, being integral with each other, and the inner edge of 70 these arms is at an angle to the outer edge throughout the length of both arms. This gives the arms a somewhat wedge shape, as a line drawn parallel with the outer edge from a point where the inner edges meet to 75 the outer ends of the arms would give a wedge shape part of the square, which would be the exact shape and size of the wedge employed for wedging up stairs or steps. Where a nosing is to be provided for in the steps or 80 stairs, I have made provision therefor in the laying out of the steps by having a detachable nosing-piece 3, adapted to be secured to the square by means of a screw 4, as shown, and having a shoulder 5 to abut against the 85 straight edge of the square in order that the same may be held stationary when in position. The gage 6 for determining the pitch consists of a bar provided with two oblong slots 7, adapted one to receive the longer arm 90 and the other the shorter arm, the blades or arms being spanned by the gage. This gage is preferably provided with a number of threaded openings 8, so that the set-screws 9, which secure the gage to the arms, may be 95 adjusted from one position to another, as may be required by the position of the gage upon the square.

10 is an aperture formed in the nosingpiece 3, in which is inserted a sharp tool, 100 such as an awl or the like for marking out the lines.

In the drawings I have shown dotted lines on both of the arms of the square drawn from

the point where the inner edges meet the length of the arms parallel with the outer edges. The space between these dotted lines and the inner edges of the arms represents 5 the tightening-wedge. This wedge on both riser and step is calculated to be one-half inch thick at the large end, terminating in a point. When the nosing is in position, as shown in Fig. 1, it will be observed that by to marking around the square and nosing the neat dimensions of the step, including its nosing, will be obtained without other measurements or patterns, and the same may be done with the riser, as by marking around the 15 square the shape of both riser and step to be housed out will be obtained. In the case of laying out open stair strings or horses the nosing may be removed, the gage set to the desired places, the square reversed on the face 20 side of the board, and the strings or horses marked out, as will be readily apparent, since the square end of gage can be reversed to both sides of the strings, thus dispensing with any other tools.

Having fully described my invention, what

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

In a device of the character described, two integral arms of unequal length, extending at right angles to each other, said arms hav- 30 ing straight outer edges at right angles to each other and their inner edges at an incline to said outer edges, scales arranged on both straight edges of said arms, in combination with a gage slotted to receive both of the 35 said arms, said gage having formed therein a series of threaded perforations transverse to the said slots, a thumb-screw operating in said perforations and engaging the said arms to hold the gage in a locked position, and a 40 perforated nosepiece having a cut-away portion forming a shoulder removably connected to said arms, substantially as described.

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

WILLIAM T. WIBLE.

Witnesses:

JOHN NOLAND,

E. E. POTTER.