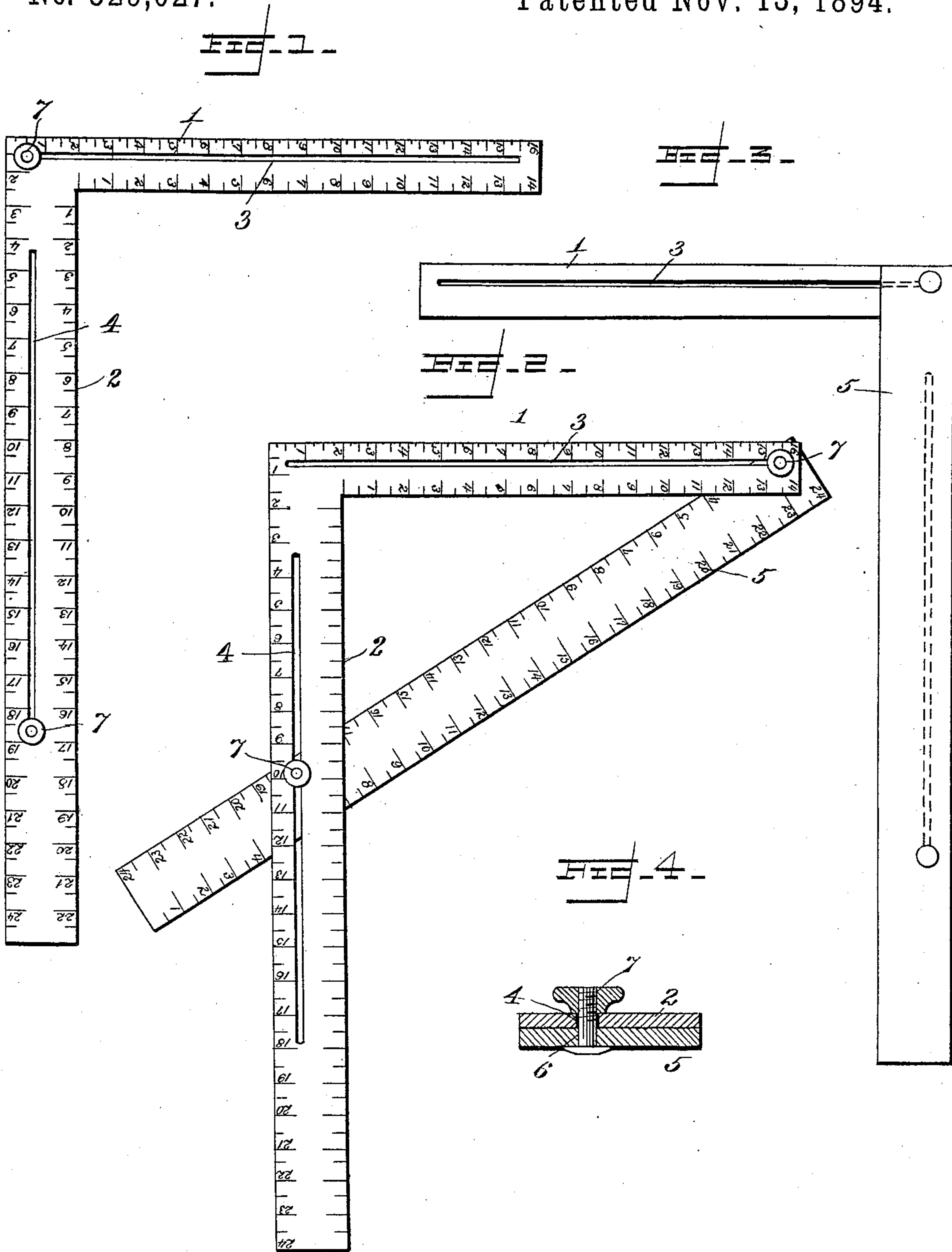


(No Model.)

W. E. FRASIER.
PITCH BOARD.

No. 529,027.

Patented Nov. 13, 1894.



Witnesses
E. S. Duwall Jr.
W. J. S. Duwall.

Inventor:
W. E. Frasier
By W. J. S. Duwall. Attorney

UNITED STATES PATENT OFFICE.

WILLIAM E. FRASIER, OF OSCEOLA, TEXAS.

PITCH-BOARD.

SPECIFICATION forming part of Letters Patent No. 529,027, dated November 13, 1894.

Application filed June 2, 1894. Serial No. 513,311. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. FRASIER, a citizen of the United States, residing at Osceola, in the county of Hill and State of Texas, have invented certain new and useful Improvements in Combination Instruments; and I do hereby 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.

My invention relates to improvements in combination tools or instruments of precision and has particular reference to that class known as squares.

The objects in view are to produce an instrument adapted for use by carpenters and others, the same being so constructed as to serve as a rule, a square, or angle, and adapted to be arranged for indicating accurately any inclination or bevel that may be desired, and finally that is capable of being folded in the manner hereinafter described.

Other objects and advantages of the invention will appear in the following description and the novel features thereof will be particularly pointed out in the claim.

Referring to the drawings:—Figure 1 is an elevation of an instrument embodying my invention, the same being shown as an ordinary square. Fig. 2 is a similar view the same being shown as an angle. Fig. 3 is a reverse view of Fig. 1. Fig. 4 is a transverse sectional view through one of the clamping screws.

Like numerals of reference indicate like parts in all the figures of the drawings.

The square comprises the usual branches 1 and 2, which are disposed relatively to each other so as to produce an exact right angle. These branches 1 and 2 are provided upon either or both faces with suitable scales as shown. The branch 1 is provided with a longitudinal slot 3 formed between its edges and extending from a point near its outer end to a point near its inner end, the latter end extending across a similar slot 4 which is produced or formed in the branch 2, but which terminates short of the ends of said branch.

A movable hypotenuse 5 is arranged across the branches 1 and 2, and like them has its faces, either one or both, provided with a suitable scale. Perforations 6 are formed in the

hypotenuse 5 and through the same and the slots 3 and 4 clamping thumb screws 7 are passed.

By reason of the fact that the distance between the outer end of the branch 1 and that of the slot 3 is less than that between the outer edge of the hypotenuse section and the end perforation therein it will be seen that the outer edge of the hypotenuse may be extended beyond the end of the branch 1 as shown in Fig. 2, and by a proper adjustment of the same which is accomplished by loosening the screws 7 and a retightening of the same, any angle desired may be produced, so that bevels of various kinds may be indicated and subsequently cut.

By loosening the thumb-screws 7 and moving that screw that is in the slot 4 to the outer end thereof and that screw which is in the slot 3 to the inner end thereof, it will be seen that the hypotenuse will be directly in line with the branch 2 of the square, so that the same may be used as a square regardless of the presence of the hypotenuse, and yet the latter will always be in readiness for use and cannot be mislaid. I secure this result by the disposition relative to each other of the slots 3 and 4, and thus produce a combination tool or instrument of great utility to all artisans.

Having described my invention, what I claim is—

The combination with a rectangular square comprising the sections 1 and 2, the same being slotted respectively as at 3 and 4, the former slot terminating opposite the slot 4, of the hypotenuse section 5 agreeing in width with the section 2 and having perforations 6 registering with the slots, the distance between the perforations and the outer edge of the hypotenuse being greater than that between the outer end of the slot 3 and that branch of the square in which it is formed, and the clamping screw 7 passing through the slots and the perforations, substantially as specified.

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

WM. E. FRASIER.

Witnesses:

JNO. R. GRIFFIN,
R. W. COFFIN.