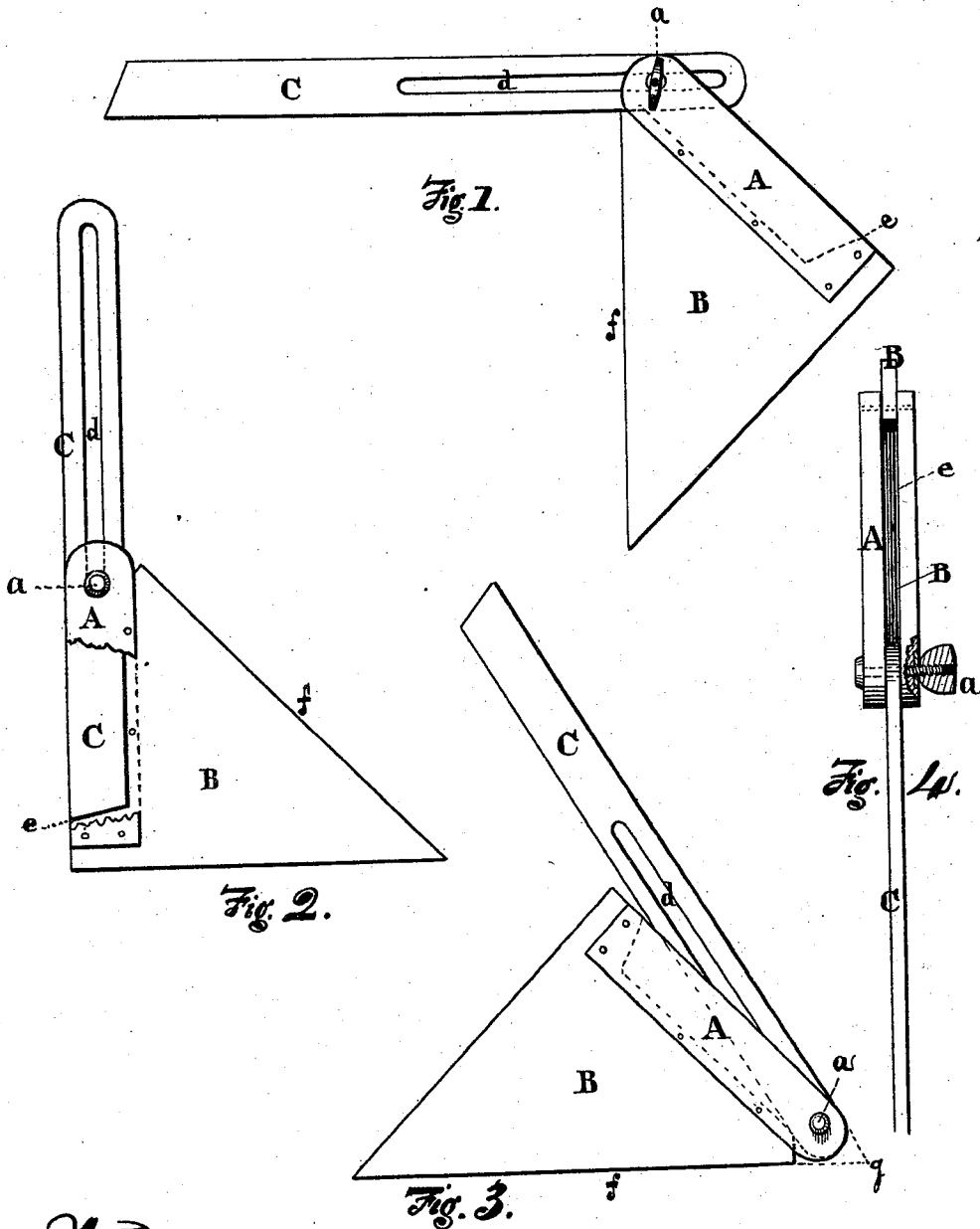


E. SIMONIN.

CARPENTERS' SQUARE AND BEVEL.

No. 172,938.

Patented Feb. 1, 1876.



Witnesses
F. H. Nichols
John Q. Dean

Emile Simonin.

UNITED STATES PATENT OFFICE.

EMILE SIMONIN, OF PEORIA, ILLINOIS.

IMPROVEMENT IN CARPENTERS' SQUARES AND BEVELS.

Specification forming part of Letters Patent No. **172,938**, dated February 1, 1876; application filed January 5, 1876.

To all whom it may concern:

Be it known that I, EMILE SIMONIN, of the city of Peoria, in the county of Peoria and in State of Illinois, have invented a Convertible Carpenter's Square, Bevel, and Miter; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents the instrument as a square for trying the angles of solids. Fig. 2 shows the instrument as a common square for getting perpendicular lines. Fig. 3 represents the instrument as an angulator, or for striking oblique angles; Fig. 4, an edge view, showing the slot or socket of the bar C between the ribs or back A.

This invention consists in a sliding slotted bar, provided with a set-screw, which pivots it to the corner of a triangular body, B, or square, so as to be set at any angle with the adjoining edges of said square, being designed to fill the place of three separate instruments, viz., square, bevel, and miter, and also to ascertain the angle between meeting lines or surfaces or transfer them. It consists in pivoting said bar through a slot, *d*, extending half its length, by means of a set-screw, *a*, to the upper end of the back A of a square, B, having an oblique side, *f*, in such a manner that said bar can be used with reference to angles formed between the latter and either

adjacent side of the square B. The bar C can be inclosed at one end in the socket or recess *e* between the back pieces A, which form the stay of the square B, as seen in Fig. 2, which represents the instrument as a common square, the set-screw *a* holding the bar firmly in said socket. Fig. 4 shows said socket or recess *e*. Fig. 1 shows the instrument as a gaging, trying, or hollow square; Fig. 3, one of its positions when used to obtain the angle between converging lines or surfaces, *g* being the imaginary point of convergence.

The advantages of this instrument are its convertibility into a square or bevel or angulator with facility, its compactness, and simplicity of construction.

What I claim as my invention is—

1. The rectangular triangle B, having a recessed back piece, A, recess *e*, and a sliding bar, C, provided with slot *d* and set-screw *a*, substantially as and for the purposes described.

2. The combination with the square B, provided with the recess *e* and set-screw *a*, of the slotted bar C, having a slot, *d*, extending for one half its length, substantially as and for the purposes described.

In testimony that I claim the foregoing square and bevel I have hereunto set my hand this 28th day of December, 1875.

EMILE SIMONIN.

Witnesses:

HENRY W. WELLS,
F. A. NITSCHHELM.