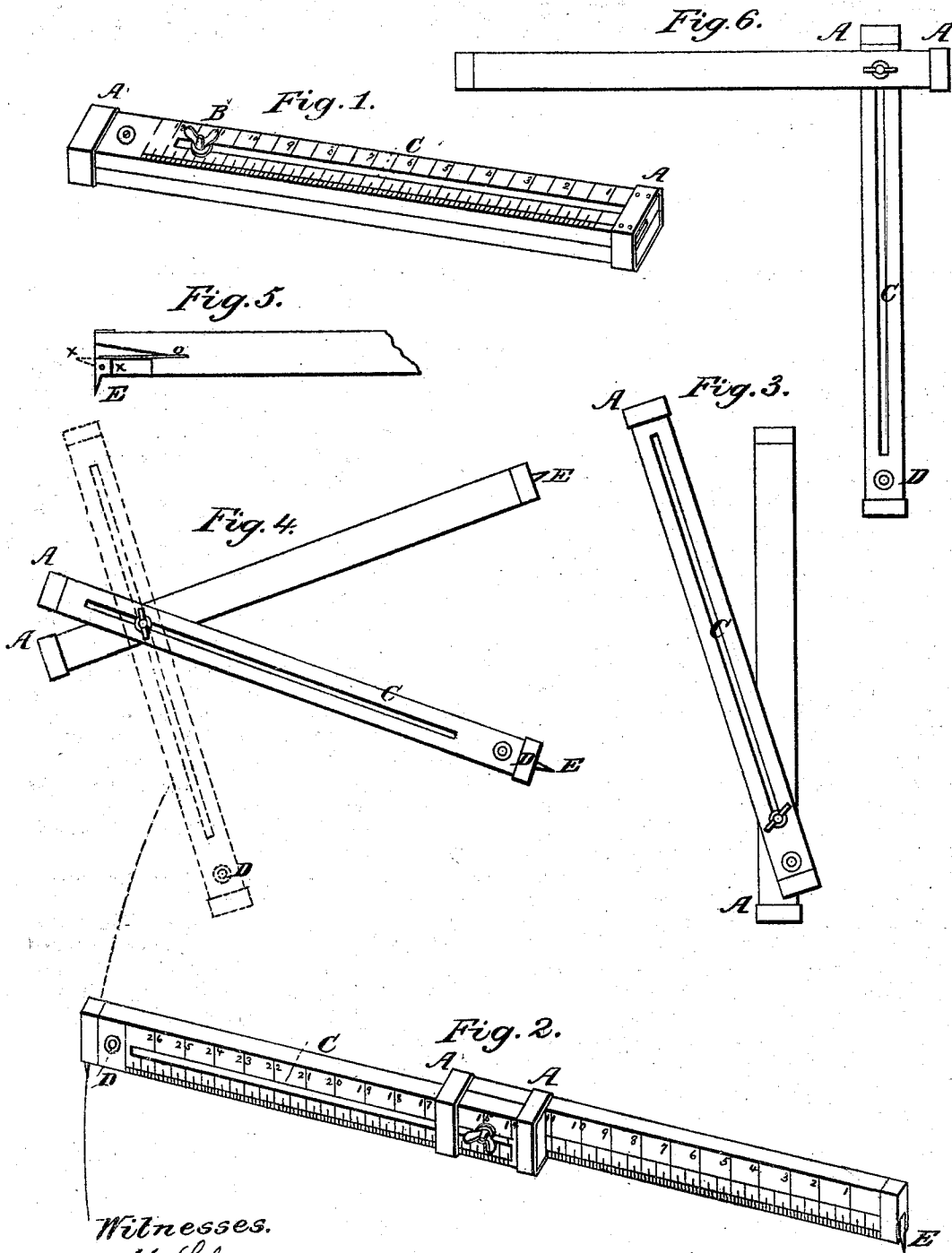


E. D. WATERBURY.
Extension Rules.

No. 144,003.

Patented Oct. 28, 1873.



Witnesses.

A. J. Phelps
Chas. Hunt

Inventor
Emery D. Waterbury

UNITED STATES PATENT OFFICE.

EMERY D. WATERBURY, OF MASON CITY, IOWA.

IMPROVEMENT IN EXTENSION-RULES.

Specification forming part of Letters Patent No. **144,003**, dated October 28, 1873; application filed July 21, 1873.

To all whom it may concern:

Be it known that I, EMERY D. WATERBURY, of Mason City, in the county of Cerro Gordo and State of Iowa, have invented a new and useful improvement on a rule for the use of carpenters, mechanics, and draftsmen, which I designate a Combination Extension-Rule; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, in which—

Figures 1 and 2 are perspective views.

Fig. 1 represents the rule closed. It is composed of two pieces of box-wood, (or any material commonly used in the construction of carpenters' rules.) It is twenty inches in length and five-eighths of an inch in width, and three-sixteenths of an inch in thickness. The parts are held together by a brass clasp at each end, A A. One of the clasps is riveted to the upper piece, the other to the lower piece. The upper piece has a slot, C, through which passes a small post. This post is fastened in the lower piece, and to the upper part of the post a thumb-screw is attached, for the purpose of holding together the parts of the rule when extended to any desired part, as shown in Fig. 2.

Fig. 2 also represents the instrument when used as a beam-compass in drafting circles. In each end of the rule is a spur, E, which is more clearly shown in plan view, Fig. 5; also, in

each end of the rule is a spring, O, driven into the wood, its outer end working in a slot, and operating on the spur as the spring of a knife on the blade, as may be seen from plan view, Fig. 5. The spur revolves between the brass plates at the ends of the rule in all respects as the blade of a knife in the handle. D in Fig. 2 shows a screw set in a concave piece of brass, which, being screwed down below the surface, projects on the lower side a spur, which may be used in gaging boards.

As above stated, Fig. 1 represents the rule closed; Fig. 3, plan view, shows how the rule may be changed from its position in Fig. 1 to any other desired. This is done by drawing both ends from the brass clasps and leaving the two pieces held together only by the thumb-screw B.

From Fig. 3, plan view, the instrument may be readily and easily adjusted for use as a bevel, dividers, T-square, or common square, as shown in Figs. 4 and 5, plan view.

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

The manner of constructing a combination extension-rule with clasps A A and hinged spur E, substantially as described in the foregoing specification and accompanying plate.

EMERY D. WATERBURY.

Witnesses:

JOHN CLEGGITT,
WARREN W. JONES.