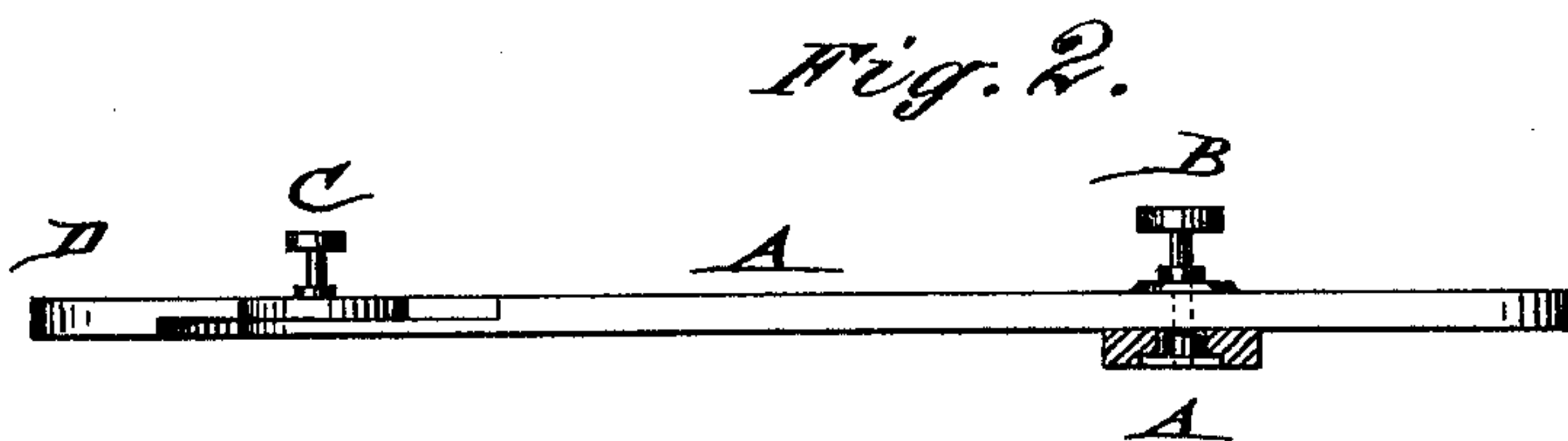
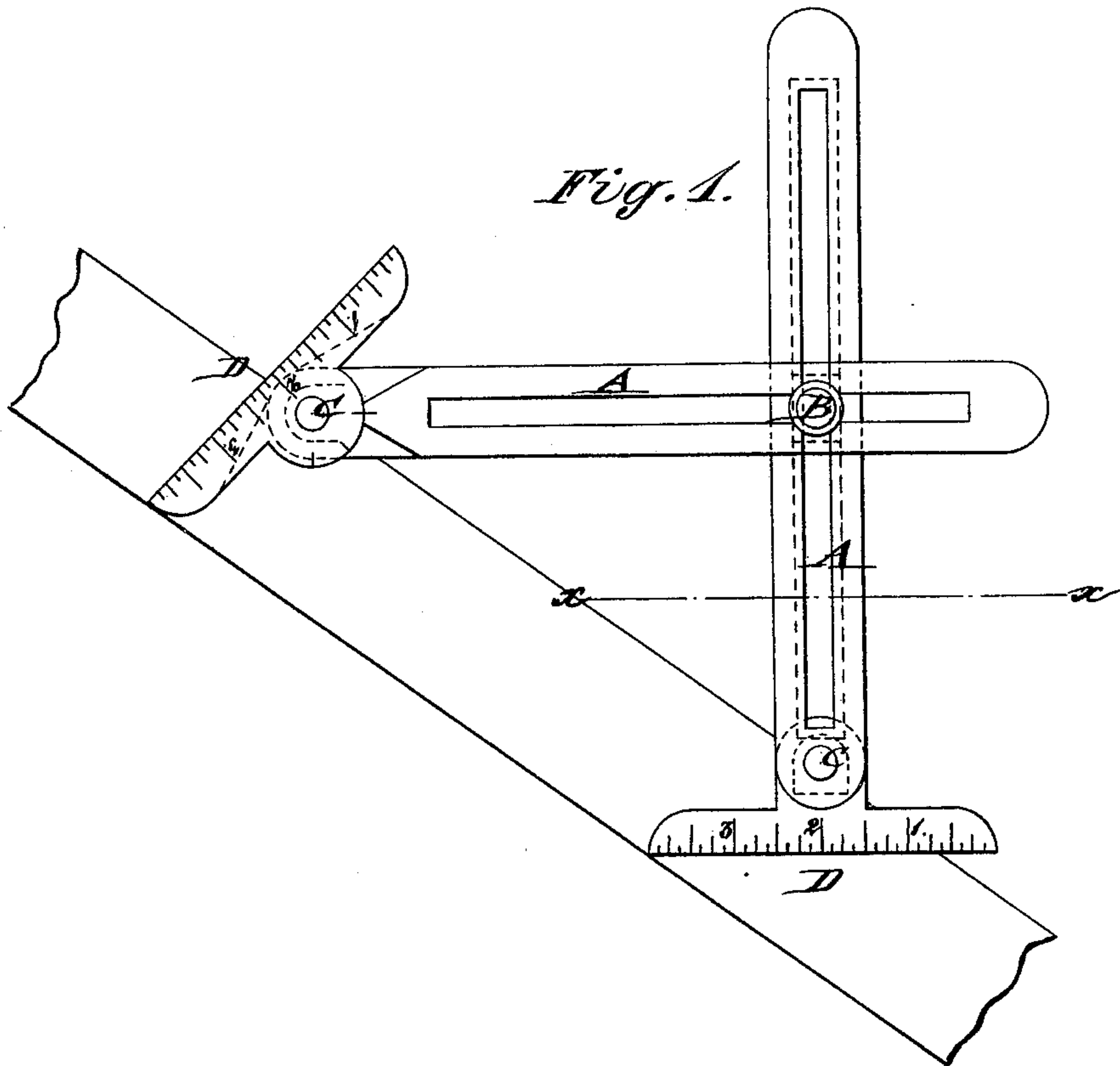


A. DEVOE.

BEVELS.

No. 185,504.

Patented Dec. 19, 1876.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ALBERT DEVOE, OF ONEONTA, NEW YORK.

IMPROVEMENT IN BEVELS.

Specification forming part of Letters Patent No. **185,504**, dated December 19, 1876; application filed November 4, 1876.

To all whom it may concern:

Be it known that I, ALBERT DEVOE, of Oneonta, in the county of Otsego and State of New York, have invented a new and Improved Extension Brace-Rule, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view of my improved extension brace-rule, shown in position to mark off the bevels at both ends of a brace; and Fig. 2 is a side view, partly in section on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of the invention is to furnish for mechanics in iron and wood an improved extension brace-rule, by which the bevels at both ends of a brace, and the mortises for a brace, may be readily laid out at any angle of the same, the brace-rule being also conveniently used as a mitering and try square.

The invention consists of an extension brace-rule, composed of sliding and slotted main pieces, that are connected by a guide and clamp-screw, and provided with graduated end rules, which are adjusted on the main pieces by additional clamp-screws.

In the accompanying drawing, A A are the two slotted main pieces or arms of my improved extension brace-rule, which are slotted longitudinally and connected by a clamp-screw, B, along which the pieces A A slide, so that they may be extended to greater or less length, as required.

The brace-rule may be made of different sizes, the largest convenient size enabling one to get the bevel of a brace of six feet in length. At one end of each of the adjustable main

pieces A is pivoted and connected, by a clamp-screw, C, the swinging graduated rule D, which may be set at any angle to the main piece, and secured rigidly thereto by the clamp-screw C. The swinging rules D are placed on the legs or pieces of the frame that is to be connected by the brace at the points where the same is to be attached, and then clamped fast to the main pieces. The brace-rule is then transferred to the brace, the rules placed across the same, and the bevel marked off at both ends. In similar manner the mortises are speedily marked off in the frame by the use of the brace-rule.

The device is of special service in getting the bevel of braces on locomotives, which are so situated as to be almost inaccessible, and obtained with difficulty by ordinary means. It may also be applied with great facility in the trades, and used, by graduating the semi-circle on which one of the rules swings, as a mitering and try square, admitting, in connection with a rule, the laying off of any angle.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

An extension brace-rule, consisting of sliding and slotted main pieces A, connected and guided by clamp-screw B, and provided with adjustable graduated rules D, secured by clamping-screws C at the ends, substantially as and for the purpose set forth.

ALBERT DEVOE.

Witnesses:

IRVING D. BULLOCK,
HARRY C. STRATFORD.