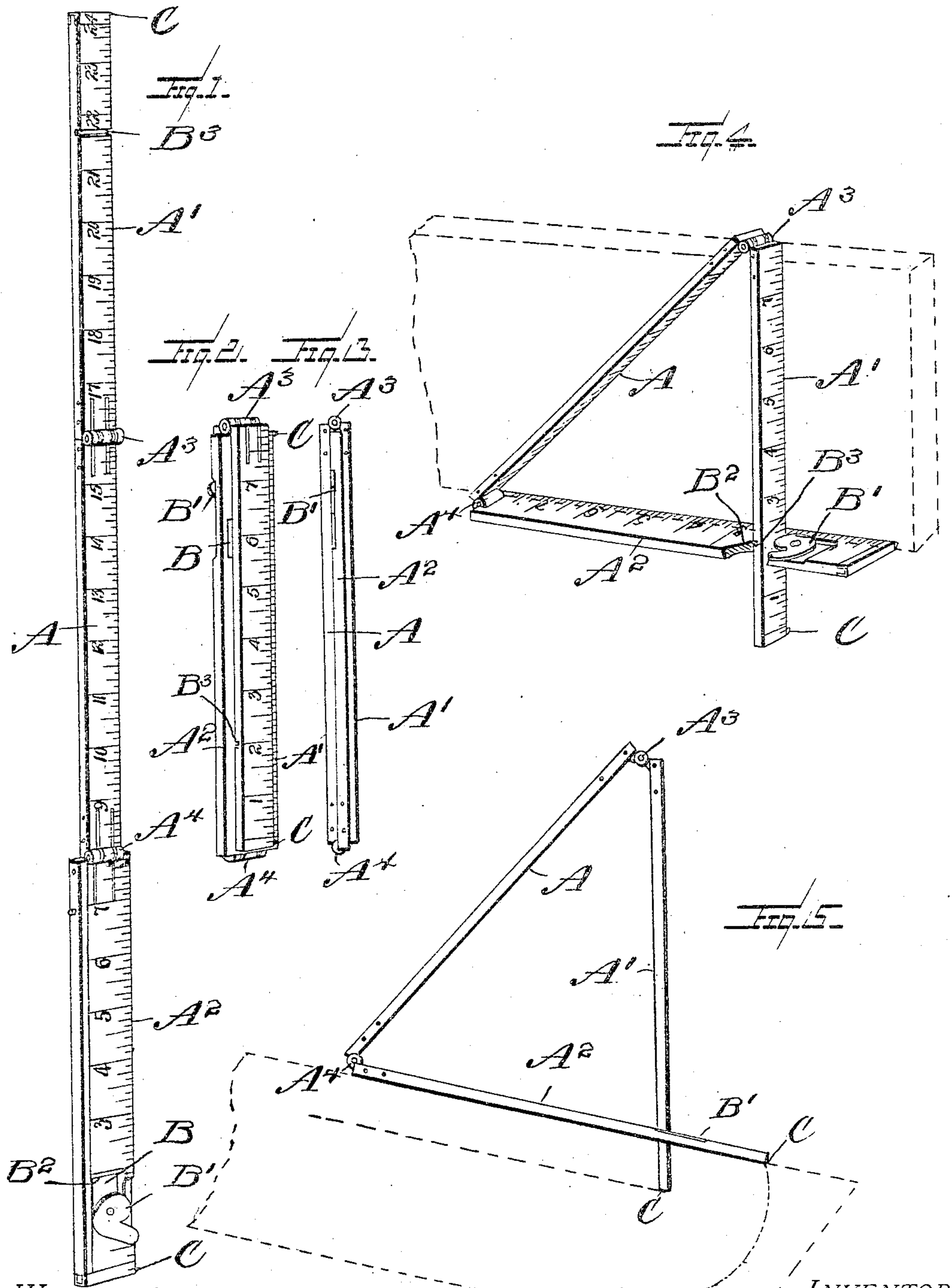


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J. GUTH.
RULE, SQUARE, AND MITER.
APPLICATION FILED JULY 1, 1904.



WITNESSES:

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RULE, SQUARE, AND MITER.

SPECIFICATION forming part of Letters Patent No. 778,659, dated December 27, 1904.

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To all whom it may concern:

Be it known that I, JACOB GUTH, a citizen of the United States, residing at Salem, county of Marion, State of Illinois, have invented certain new and useful Improvements in a Combined Square and Miter; and I do 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 belongs to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The invention relates to a mechanic's rule, and particularly to a structure combining in a single device a rule, square, and miter.

The invention has for an object to provide a construction of rule comprising three sections of equal length pivotally connected together, so as to fold one upon another and be capable of opening into an extended position by a simple movement of the hand, while when adjusted relative to each other various angles may be secured and other functions herein-
after set forth rendered possible.

A further object of the invention is to provide means in one of the free ends of the rule for retaining the opposite free end in order to hold the same in any of its adjusted positions.

A further object of the invention is to provide the free ends of the rule with markers, so as to adapt them for use as a compass, gage, or marker.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claims.

In the drawings, Figure 1 is a perspective of the rule in extended position; Fig. 2, a similar view of the rule folded; Fig. 3, an elevation thereof; Fig. 4, a perspective of the rule set at an angle of forty-five degrees to form a square or miter; and Fig. 5, a similar view showing the adjustment of the rule for forming a gage, compass, or bevel.

Like letters of reference refer to like parts in the several figures of the drawings.

The letter A designates the central section of the rule, which has pivotally secured at its opposite ends sections A' and A², of equal

length, all of which are continuously and successively graduated as usual for measuring purposes. These sections may be of any desired length, but are preferably eight inches each, so as to form a two-foot rule when open. Any desired form of hinge may be used for pivotally securing the sections together; but a desirable form is herein shown, where the section A' is secured to section A by an extended hinge A³, while the section A² is secured to section A by means of a hinge A⁴, which permits the sections to fold directly into contact with each other. This forms a construction wherein the section A² is folded upon the section A and the section A' by its extended hinge folds over and upon the section A², as shown in Fig. 2. The hinge can thus be opened by a quick movement of the hand grasping the section A'.

A further object of the use of the three sections is to permit the formation thereby of various triangular figures or outlines in which the several sections lie at different angles to each other for the purpose of forming a square, a miter, or any desired beveled angles in different classes of work. For this purpose the section A² is provided with an opening B therethrough, adapted to receive the free end of the section A', which may be secured in its adjusted position by any desired means—for instance, a pivoted cam-lever B', mounted upon the section A² at one side of the aperture B, so as to bear against the section A' and clamp the parts in adjusted position. Under some conditions it is desirable to lock these parts, and this may be accomplished by means of a projection or shoulder B² at one side of the aperture B, adapted to cooperate with a recess B³, formed upon the free end of the section A' of the rule, so that the parts may be interlocked by the pressure of the cam. The free ends of the sections A' and A² are provided with a scratch-point or marker C, which is adapted for use when the device is applied as a compass, gage, or marker, and one of these points may form a fulcrum, so that the other rotating about said first point may by adjustment define circles of different diameter, Fig. 5.

As shown in Fig. 4, the sections of the rule

may be adjusted to form a square, miter, or level, and the adjustment thereof may be varied to secure different angles, as shown in Fig. 5. In this figure one of the points C
5 may be used as a gage by contacting the section A² of the rule with the side of the material in order to mark a line thereon at a proper distance from its edge, while if it be desired to use the invention as a compass one
10 of the points C may be held to the material as a fulcrum and the other point swung upon an arc, as indicated by dotted lines in that figure.

It will be obvious that changes may be
15 made in the details of construction and configuration without departing from the spirit of the invention as defined by the appended claims.

Having described my invention and set forth
20 its merits, what I claim, and desire to secure by Letters Patent, is—

1. A rule comprising three sections of equal length pivotally secured to each other and adapted to fold with one of the end sections
25 intermediate of the central section and the opposite end.

2. A rule comprising a central section provided with an extended hinge at one end, an end section secured to said hinge, and an opposite end section pivotally secured to the opposite end of the central section and adapted to fold in contact with one face of the central section and between it and the opposite end section.

3. A rule comprising a plurality of sections pivotally secured together, one free end thereof being provided with an opening to receive the opposite free end of the rule.

4. A rule comprising a plurality of sections
40 pivotally secured together, one free end thereof being provided with an opening to receive the opposite free end of the rule, and means to clamp the free ends of said rule in contact with each other.

45 5. A rule comprising three sections of equal length pivotally secured to each other, one of

said sections being provided with an aperture to receive the opposite free end of the rule.

6. A rule comprising three sections of equal length pivotally secured to each other, one of
50 said sections being provided with an aperture to receive the opposite free end of the rule, and a pressure device mounted adjacent to said aperture to contact with the free end passing therethrough.

7. A rule comprising three sections of equal length pivotally secured to each other, one of
55 said sections being provided with an aperture to receive the opposite free end of the rule, a pressure device mounted adjacent to said aperture to contact with the free end passing therethrough, and an interlocking connection between said free end and a wall of the aperture.

8. A rule comprising three sections of equal
65 length pivotally secured to each other, one of said sections being provided with an aperture to receive the opposite free end of the rule, a pressure device mounted adjacent to said aperture to contact with the free end passing
70 therethrough, an interlocking connection between said free end and a wall of the aperture, and projecting markers carried by the free end of the rule.

9. A rule comprising a plurality of sections
75 pivotally secured together, the free end of one section being adjustably extended through the free end of the opposite section, and laterally-projecting points carried by each of the free
80 ends.

10. A rule comprising three sections of equal length, one of the end sections thereof being connected to the central section by an extended hinge to fold upon an opposite apertured end section of greater width, and means for
85 retaining said sections in an adjusted position.

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

JACOB GUTH.

Witnesses:

J. C. MARTIN,
J. L. HALEY.