H. H. LAMBERT.

COMBINATION RULE.

APPLICATION FILED SEPT. 5, 1917.

1,264,531.

Patented Apr. 30, 1918.

2 SHEETS—SHEET 1.

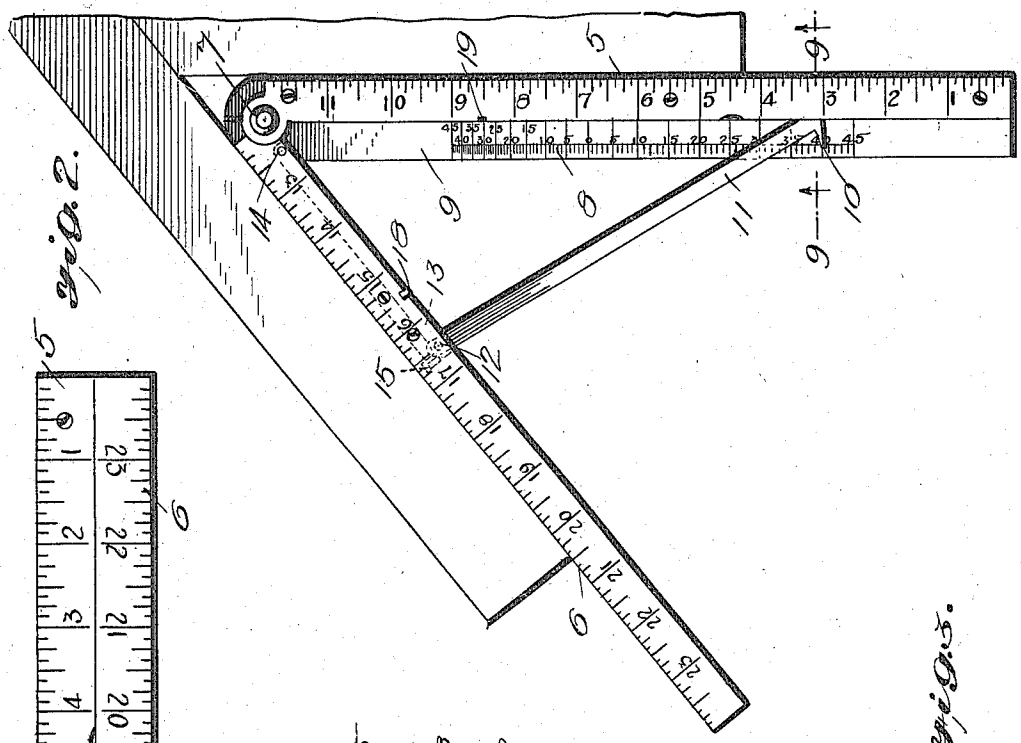

Fig. 2.

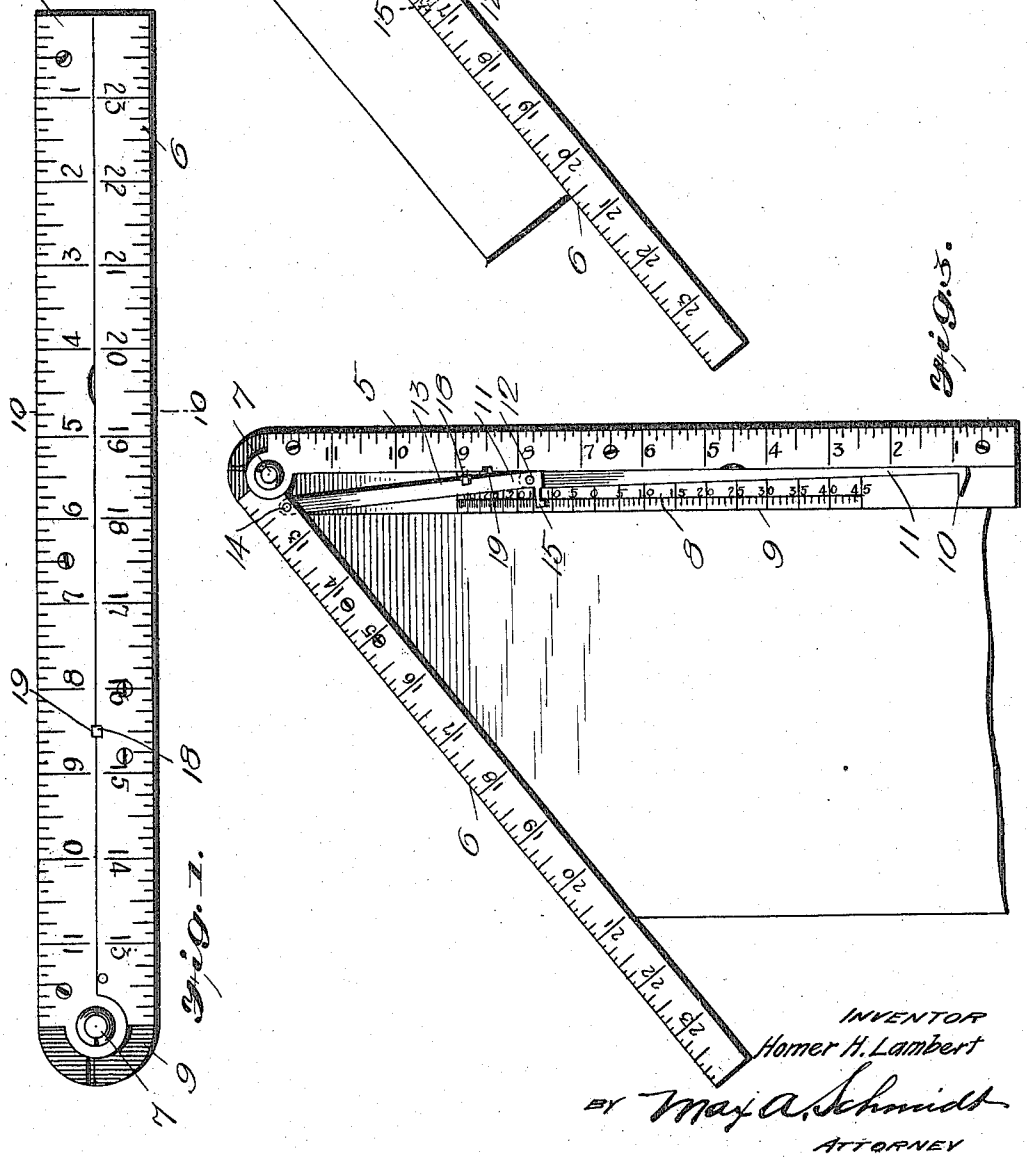

Fig. 3.

Fig. 1.

INVENTOR
Homer H. Lambert
BY Max A. Schmidt
ATTORNEY

SACKETT & WILHELMS CORP. N.Y.

H. H. LAMBERT.

COMBINATION RULE.

APPLICATION FILED SEPT. 5, 1917.

1,264,531.

Patented Apr. 30, 1918.

2 SHEETS—SHEET 2.

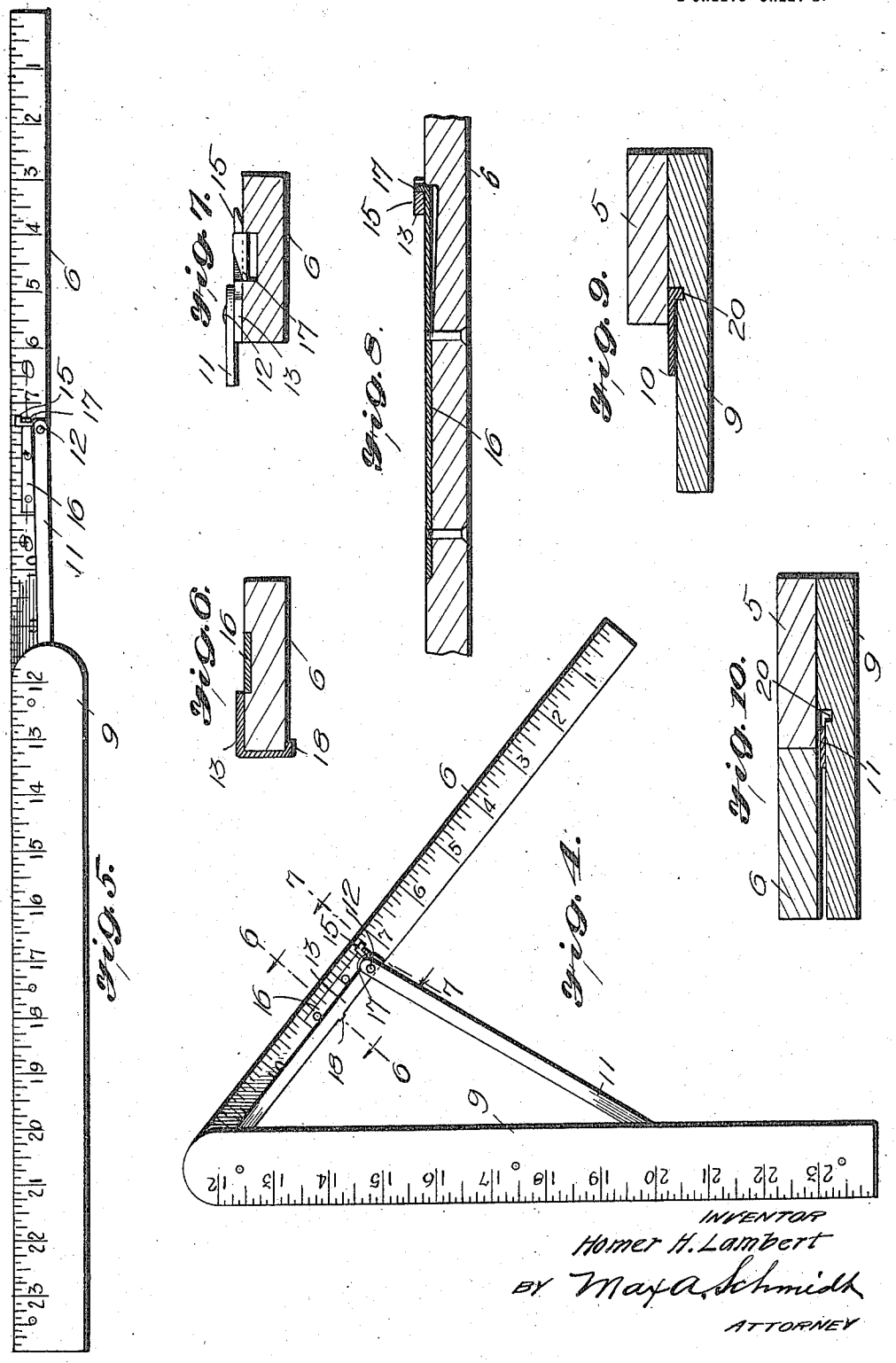

Fig. 5.

Fig. 7.

Fig. 8.

Fig. 9.

Fig. 6.

Fig. 4.

Fig. 10.

INVENTOR

Homer H. Lambert

BY Max A. Schmidt

ATTORNEY

UNITED STATES PATENT OFFICE.

HOMER H. LAMBERT, OF PORTLAND, OREGON.

COMBINATION-RULE.

1,264,531. Specification of Letters Patent. Patented Apr. 30, 1918.

Application filed September 5, 1917. Serial No. 189,728.

To all whom it may concern:

Be it known that I, HOMER H. LAMBERT, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Combination-Rules, of which the following is a specification.

This invention relates to rules used by carpenters and other artisans, and more particularly a rule which consists of two pivotally connected sections for enabling the device to be folded.

The invention has for its object to provide a rule of the type stated, having novel and improved means whereby it may be used as a bevel square, as well as a protractor for measuring and laying off angles.

The object stated is attained by means of a combination and arrangement of parts to be hereinafter described and claimed, and in order that the invention may be better understood, reference is had to the accompanying drawings forming a part of this specification.

In the drawings—

Figure 1 is a plan view of the rule folded;

Figs. 2 and 3 are plan views illustrating the manner in which the rule is used for measuring and laying off angles;

Fig. 4 is an inverted plan view of the rule positioned as shown in Fig. 2;

Fig. 5 is a plan view of the rule completely unfolded;

Figs. 6 and 7 are sections on the line 6—6 and 7—7, respectively, of Fig. 4;

Fig. 8 is a section on the line 8—8 of Fig. 5;

Fig. 9 is a section on the line 9—9 of Fig. 2, and Fig. 10 is a section on the line 10—10 of Fig. 1.

Referring specifically to the drawing, 5 and 6 denote the two blades of a rule, the same being pivotally connected as shown at 7 in the ordinary manner so that they may be folded together. The blades are graduated as usual.

With the blade 5 is associated a degree scale 8 which is inscribed on a base plate 9 on which said blade is mounted in fixed position; or the blade and the plate may be formed integral. The plate 9 is somewhat wider than the blade 5 so as to leave a sufficient width of its surface exposed on one side to display the scale 8. This exposed surface corresponds to the width of the blade 6, so that when said blade is folded alongside the blade 5, it seats on said surface and covers the same. The back of the plate 9 is graduated, said graduations being continuations of the graduations on the back of the blade 6.

The blade 6 carries an indicator or pointer 10 for the scale 8. This pointer is at the outer end of an arm 11 having its inner end pivotally connected, as shown at 12, to one end of an arm 13, which latter is pivoted at its other end, as shown at 14, to the blade 6 adjacent to the pivot or hinge joint 7, the connection being made at the back of the blade.

The end of the arm 13 which is hinged to the arm 11 has a laterally extending latch hook 15 adapted to engage a keeper on the back of the blade 6. This keeper is a spring strip 16 seating in a recess in the blade 6 and having a lug 17 to snap over the hook 15. When the latch hook is engaged with its keeper, the arm 11 is locked to the blade 6, upon disengaging the latch hook, the arm 11 may be swung over on the plate 9. The purpose of this will be presently made clear. The arm 13 also has a retaining hook 18 extending from one of its edges and adapted to be slipped over the inner edge of the blade 6 when the latch hook is engaged with its keeper. The inner edge of the blade 5 has a notch 19 in which the hook 18 seats when the rule is folded.

The end of the arm 11 carrying the pointer 10 seats slidably in a guide groove 20 at the inner edge of the blade 5, this groove being formed by rabbeting the plate 9 on top and having the blade 5 overhanging the rabbet. This construction also spaces the blade 5 from the graduated face of the plate 9 a sufficient distance to accommodate the pointer arms 11 and 13 when the rule is folded.

When the device is used for measuring angles, the arm 13 is locked to the blade 6 and the rule is opened up until its blades 5 and 6 fit in the angle to be measured as shown in Fig. 2. It will be noted that the outer edges of the blades are placed against the work. For laying off the angle to which the work is to be sawed or cut, the inner edges of the blade 6 and plate 9 are used. The blade 6 is first set to the required angle, it being swung outward from the blade 5 until the pointer 10 indicates the corresponding angle on the scale 8. The arm 13 is now disconnected from the blade 6 and

said arm, with the arm 11, is folded over on the plate 9. This leaves the interior angle of the device devoid of obstructions, and the inner edge of the plate 9 may be placed against one edge of the work, leaving the blade 6 projecting across the work at the angle the latter is to be sawed or cut. The edge of the plate 9 can be placed against the work for the reason that it is offset downwardly from the plane of the blade 6, and as the inner edge of the blade 6, adjacent to the pivot 7, crosses the plate 9, the edges of the blade 6 and the plate 9 make a sharp corner where they cross. It will be understood, of course, that the outer edge of the plate 9 is parallel to the edge of the blade 5, and that the inner edge of the blade 6, if extended, would pass through the center of the hinge connection 7.

The device is quite simple, it has a wide range of usefulness, and there is nothing to interfere with its use as an ordinary rule.

I claim:

1. A rule comprising a pair of pivotally connected foldable blades, a degree-scale plate on one of the blades, said plate extending in the direction of the length of and being parallel with and projecting from that edge of the blade against which the other blade folds, and said last mentioned blade being foldable on top of the projecting portion of the plate, and an indicator for the scale plate pivoted to the second mentioned blade.

2. A rule comprising a pair of pivotally connected foldable blades, a degree-scale plate on one of the blades, said plate being parallel with and projecting from that edge of the blade against which the other blade folds, and said last mentioned blade being foldable on top of the projecting portion of the plate, and an indicator for the scale plate pivoted to the second mentioned blade, and fitting between said blade and the plate when the rule is folded.

3. A rule comprising a pair of pivotally connected foldable blades, a degree-scale plate on one of the blades, said plate being parallel with and projecting from that edge of the blade against which the other blade folds, the inner edge of the second mentioned blade and the corresponding edge of the plate intersecting when the rule is unfolded, and an indicator for the scale plate pivoted to the second mentioned blade, said indicator being foldable out of the space between the blade and the plate to leave said space unobstructed.

4. A rule comprising a pair of pivotally connected foldable blades, a degree-scale plate on one of the blades, said plate being parallel with and projecting from that edge of the blade against which the other blade folds, the inner edge of the second mentioned blade and the corresponding edge of the plate intersecting when the rule is unfolded, a pair of pivotally connected arms one of which is pivoted to the second mentioned blade and the other one of which has a pointer indicating on the scale plate, and means for locking the first mentioned arm in fixed relation with respect to the second mentioned blade.

5. A rule comprising a pair of pivotally connected foldable blades, a degree-scale plate on one of the blades, said plate being parallel with and projecting from that edge of the blade against which the other blade folds, the inner edge of the second mentioned blade and the corresponding edge of the plate intersecting when the rule is unfolded, a pair of pivotally connected arms one of which is pivoted to the second mentioned blade and the other one of which has a pointer indicating on the scale plate, and means for locking the first mentioned arm in fixed relation with respect to the second mentioned blade, said arm being releasable from the blade for permitting both arms to be folded out of the space between the blade and the plate to leave said space unobstructed.

In testimony whereof I affix my signature.

HOMER H. LAMBERT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."