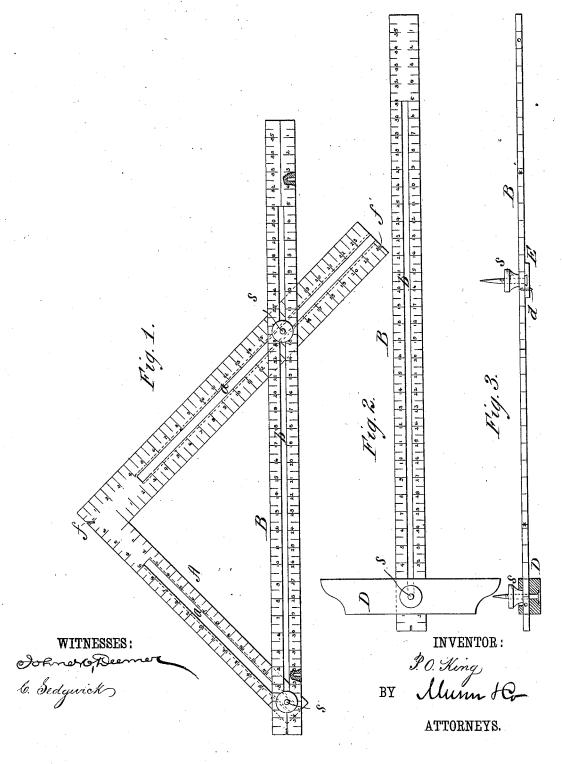
# P. O. KING.

# COMBINATION TOOL FOR CARPENTERS.

No. 303,861.

Patented Aug. 19, 1884.

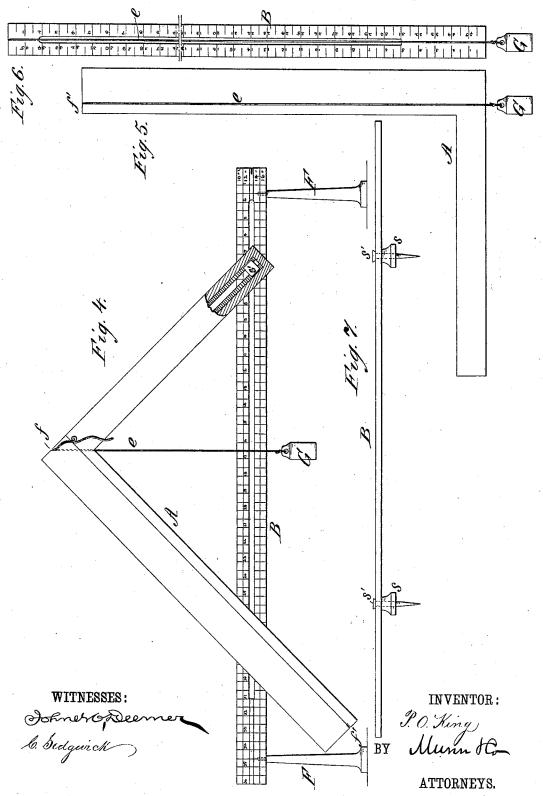


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# UNITED STATES PATENT OFFICE.

PEDER O. KING, OF VALLEY CITY, DAKOTA TERRITORY.

#### COMBINATION-TOOL FOR CARPENTERS.

SPECIFICATION forming part of Letters Patent No. 303,861, dated August 19, 1884.

Application filed March 13, 1881. (Model.)

To all whom it may concern:

Be it known that I, PEDER O. KING, of Valley City, in the county of Barnes and Territory of Dakota, have invented a new and Improved Combination-Tool for Carpenters and others, of which the following is a full, clear, and exact description.

This invention consists in certain combinations of adjustable and interchangeable parts 10 or devices which will produce a combined square and bevel, and, among other uses, will give the angles and lengths of all kinds of braces, may be used as a rule, and otherwise be transformed or adjusted, in a convenient 15 and rapid manner, from one tool to another, and be variously utilized for carpenter's and other like work, all as hereinafter fully described, and pointed out in the claim.

Reference is to be had to the accompanying. 20 drawings, forming part of this specification, in which similar letters of reference indicate cor-

responding parts in all the figures.

Figure 1 represents a face view of a square, and rule or yard measure, as combined and 25 attached by adjustable screw-connections for giving the angle and length of different kinds of rafters and braces, and the members of which may be used as a rule, square, or square and bevel combined. Fig. 2 is a face view of the 30 rule, with a head attachment for utilization as a T-square; and Fig. 3, an edge view of the same when fitted to work as a gage. Fig. 4 represents a face view of the tool for use as a bevel and as a plumb or leveling instrument. Fig. 5 represents a square detached, also for use as a plumb, and Fig. 6 the rule detached, likewise used as a plumb. Fig. 7 is an edge view of the rule, with its screw-connections, for use as a beam-compass.

A indicates an iron or steel square, with longitudinal dovetail grooves a a in the faces of its arms, to receive sliding screws.

B is a thirty-six-inch rule, also made of iron or steel, and having a longitudinal slot, b, 45 through its face for the sliding screws or screwconnections s s to work in or through, said slot extending to within two inches of one end of the rule and to within five inches at the other end thereof. The one side or face of 50 this rule is divided into inches, with sub-divisions into twelfths, and the other side or ber measure a visible center mark, also marks

face is to have lumber-measurements indicating twelve, fourteen, sixteen, and eighteen feet or other lengths. The adjustable or slid ing screw devices as are each constructed with 55 a dovetail head, s', and to form pointers or

D is a head-piece of wood that may be slid onto the one end of the rule B and be secured thereon by one of the set-serew devices s, to 60 make a T-square, as shown in Fig. 2, or said square may also be used as a gage, by likewise fitting the rule with a grooved sliding metal block, E, attached to the long arm of the square or rule by one of the set-screw 65 devices s, and provided with a metal pin, d,

as shown in Fig. 3.

The metal square A is divided on its face as shown in Fig. 1, and when said square, rule B, and set-screw adjustable devices \$ \$ 70 are combined, as shown in said figure, the tool may be used for giving the angle and length of different kinds of rafters and braces, and will be found very valuable for this purpose, as it will indicate exactly the length, and 75 give the angle on both ends, of the lumber to be framed. The piece or rule B can be readily taken off and put on as required, and after once set it will be held firmly by the set-screw devices s s, thereby preventing mistakes being 80 made as to the angles and lengths of the rafters and braces. Such combination will also be found convenient for making stair-stringers, and the same can be set and used very rapidly for the purpose. Any carpenter can 85 adjust the tool for such purposes.

When the tool is to be used for leveling, as shown in Fig. 4, uprights or supports F F, arranged either to screw into the rule B or to pass around it and be fastened with a screw 90 on the top, may be used, or said uprights may

be altogether dispensed with.

To level with the tool as the parts are arranged in Fig. 4, astring, e, having suspended to it a weight, G, is inserted in a slit, f, near 95 where the two limbs of the square A meet. The longer limb of said square has also a slit, f', in its end, for attachment of said string with its weight G, when using the square as a plumb, as shown in Fig. 5.

The rule B has on its side marked for lum-

on its under edge, when arranged as in Fig. 4, to give a line-point for the weighted string. The opposite side of the square A to that shown in Fig. 4—that is, the grooved side 5 thereof—may have angle-marks to set the rulepiece B and bring it horizontal. The yard measure or rule B may also be used as a plumb by attaching the string e, having the weight G, as shown in Fig. 6.

By using the screw devices ss, with their attached scribers, in connection with the rule B, as shown in Fig. 7, then the tool may be used as a beam-compass. The square  ${\bf A}$  and rule B combined also make of the tool a large bevel-15 square, and the rule B may be detached and

used as a yard or other measure.

When the tool is used simply as a square, the rule B will be found very convenient in holding up the one side of the square placed 20 on the edge of the piece to be worked. As a bevel-square it will give long angles on the

When using the tool to mark stair-stringers with, it will be both convenient and rapid, 25 inasmuch as, after it has been set, it will not be necessary to examine the numbers on the

square, as usual with the ordinary steel square, and it may be used to give the angles and lengths for all kinds of framing.

I am aware that a slotted and jointed rule 30 has been secured to the slotted arms of a square by clamp-bolts, and I am also aware that a slotted triangle has been adjustably secured to a slotted rule, and I therefore do not claim such inventions.

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

Patent, is—

As an improved article of manufacture, a carpenter's tool consisting of the longitudinal- 40 ly-slotted rule B, provided with apertures for receiving pins of supporting-standards, and the dovetail-grooved square A, provided with slits, as shown, for the reception of a plumbline, the said rule and square being adjustably 45 secured together by clamping screws s, as set forth.

PEDER O. KING.

Witnesses:

B. O. Lund,

C. E. HEIDEL.