

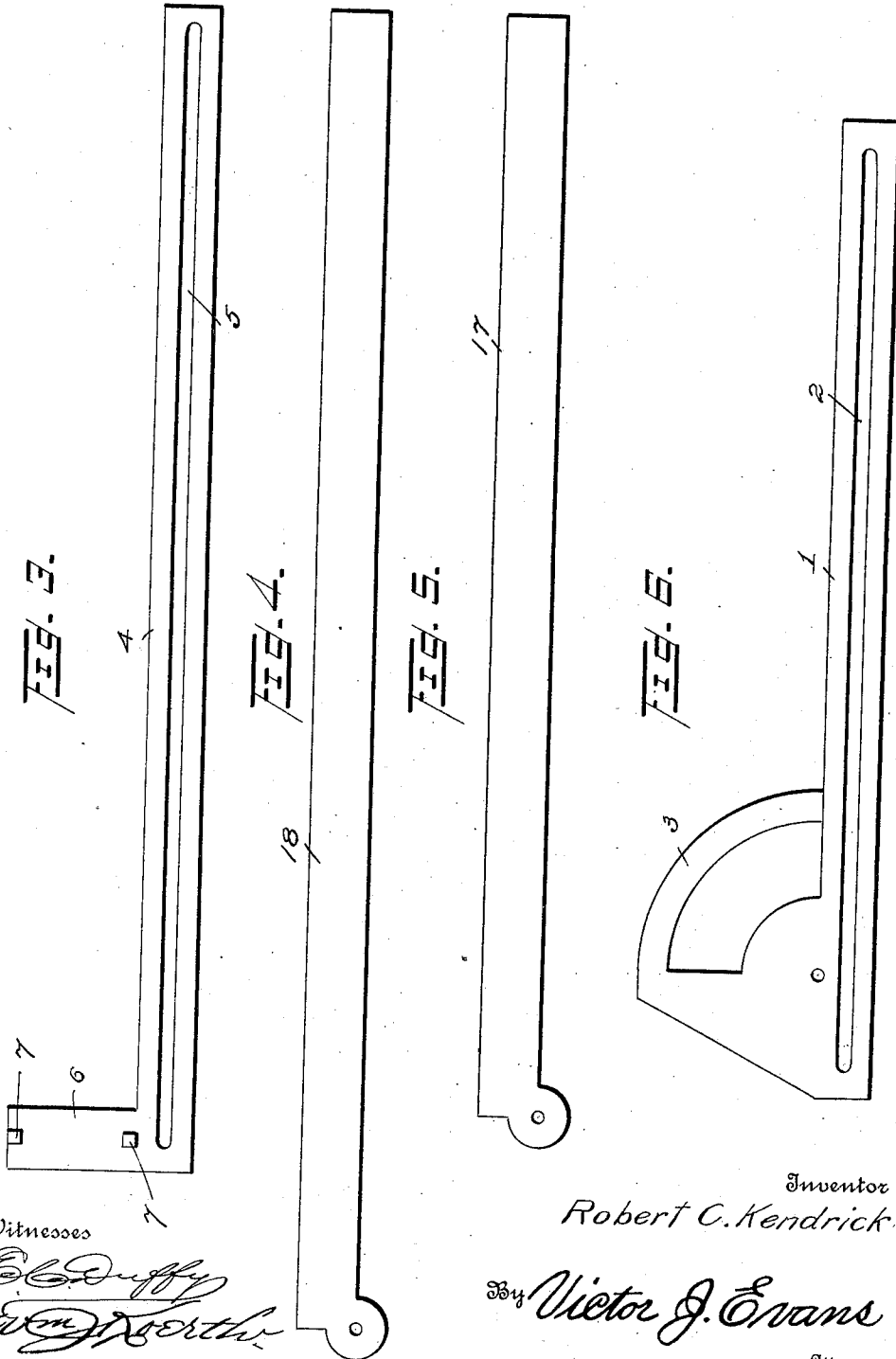
R. C. KENDRICK.
FRAMING TOOL.

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1,043,605.

Patented Nov. 5, 1912.

2 SHEETS-SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

ROBERT C. KENDRICK, OF TUPELO, MISSISSIPPI.

FRAMING-TOOL.

1,043,605.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ROBERT C. KENDRICK, a citizen of the United States, residing at Tupelo, in the county of Lee and State of Mississippi, have invented new and useful Improvements in Framing-Tools, of which the following is a specification.

This invention relates to improvements in combination tools or instruments of precision, and has particular reference to that class employed for ascertaining the pitch of rafters and for other uses.

The primary object of the invention is to provide a device of this character which, if desired, may be employed as an ordinary T-square and which also contemplates means whereby pitches or angles of common rafters as well as hip or valley rafters may be readily ascertained without necessitating a plurality of instruments, or mental exertion.

With the above objects in view, and others which will appear as the nature of the improvement progresses, the invention resides in the novel construction and combination of parts hereinafter fully described and claimed.

In the drawings, accompanying this specification, there has been illustrated a simple and preferred embodiment of the improvement, and in which drawings,—

Figure 1 is a base view of an instrument constructed in accordance with the present invention. Fig. 2 is a similar view illustrating the instrument when employed as a square. Fig. 3 is an elevation of one of the arms of the instrument. Fig. 4 is an elevation of a second arm of the instrument. Figs. 5 and 6 are elevations of the remaining arms of the instrument.

Like numerals of reference designate corresponding parts throughout.

The improvement contemplates the employment of a plurality of members which are hingedly and adjustably connected together, and in the drawings, the numeral 1 designates the leg member of the device. This leg member 1 preferably comprises a strip of steel of any desired size and thickness, the said strip or leg forming what may be termed the vertical member of the device. The member 1 has a centrally arranged longitudinally extending slot, the same terminating adjacent the opposite edges of said leg. The portions of the leg adjacent the said bifurcation 2 are graduated to provide a scale of inches and divisions thereof. One end and what may be

termed the upper extremity of the leg 1 is provided with a quadrant 3, the same being graduated to represent degrees and subdegrees as illustrated in the figures of the drawing, the said quadrant providing a protractor for the device.

The numeral 4 designates the lower or longitudinally extending leg member of the device. This leg member is centrally provided with a longitudinally extending centrally arranged cut away portion forming a slot 5, and the portions of the said member 4 opposite the said slot are graduated to provide inches and divisions of inches. The member 4 has one of its ends off-set at a right angle to the body of the said member as designated by the numeral 6. This off-set member is provided with a pair of oppositely arranged studs or projections 7, the latter adapted to engage between the walls formed by the recess 2 of the member 1. The member 4 is sustained upon the member 1 through the medium of a suitable screw 8 having a milled head 9 and whereby the said member 4 may be adjusted vertically of the leg member 1. The slot 5 of the member 1 is adapted to receive a pair of headed screw members 10 and 11, each of which being provided with a milled head 13 and 14, and whereby the said screws may be adjusted in relation to the graduations upon the member 4. Pivotally connected as at 15 to the leg member 1 adjacent the top thereof and sustained in said pivoted relation with the said member 1 through the medium of a milled nut 16 are a pair of arms 17 and 18. The arm 18 is of a greater length than the arm 17 and each of the said arms are graduated upon what may be termed their lower faces, with marks indicating inches and divisions of inches.

In Fig. 2 of the drawings the arms 17 and 18 are detached from the leg member 1 and the member 4, so that in this instance the device may be successfully employed as a try square. In Fig. 1, however, the device is illustrated as complete and as in a position to ascertain the pitch of the valley rafters and common rafters of an ordinary roof. The arm 18 is employed to ascertain the pitch of the valley rafters, while the arm 17 is provided to ascertain the pitch of the common rafters. The desired pitches are obtained in the following manner: We will suppose that the leg 1 and the member 4 are arranged at a right angle to each

other, this being the proper relation of the said members. We will place the member 4 at the 12 inch mark of the leg 1 and secure the same thereto through the medium 5 of the milled member 9. We will then move the threaded element 10 so as to support the arm 17 and retain the same at the 12 inch mark of the member 4, and as will be noted, we will have 17 as a result in the 10 frame. The hip of the roof is the diagonal of a square added to the rise of the roof. Therefore take the member 18 and place it at the 17 inch mark on the inner edge of the member 4 and we have 20-81/100 indicated 15 upon the member 18, the length of the hip rafter. The members 17 and 18 are to be effectively connected with the member 4 through the medium of the milled nuts 13 and 14 and the device is now in a position 20 to be applied either to the timber to be cut or upon the drawings to be made, the leg 1 giving the plumb cut. These dimensions illustrate how the tool is employed when used for a 45° pitch upon the 24 ft. span. 25 If the tool is to be used in the construction of a building of say 18 ft. span, of the same pitch, (45°) it is merely necessary to move the member 4 upon the member 1 until the arm 17 intersects the member 4 at the 9 30 inch mark on the inner edge, and we have our length as before. The device is to be applied in a similar manner to ascertain the different pitches.

When the device is employed for obtaining 35 the pitch for the octagon hips or spans, the member 4 is set at the 12 inch mark upon the inner face of the leg member 1 having 24 ft. span of 45°. The arm 17 is placed at the 12 inch mark on the inner edge of the 40 member 4, and the central edge of the member 4 opposite the 12 inch mark would be around the 13 inch mark. Now place the arm 18 at the 13 inch mark on the inner edge of the member 4 and on the outer edge of 45 the said member 4 opposite the 12 inch mark will be found the 13 inch mark. Now place

the member 18 at the 13 inch mark on the inner edge of the member 4 and we have the length of the octagon head of the member 18.

Having thus fully described the said invention, what I claim is:—

1. A framing tool including a pair of leg members, means for adjustably sustaining one of the said leg members at a right angle 55 to the second leg member, one of said leg members having a quadrant integrally formed thereon, the said quadrant being graduated to provide protector arms having indicating marks pivotally connected 60 to the segment and arranged upon the opposite faces thereof, and means for securing the said arms to the opposite faces of the second or angular leg member.

2. A framing tool embodying a slotted 65 leg member and having a segment providing a protractor adjacent one of the edges thereof, said leg member as well as the protractor being provided with indicating marks, a second leg member, said member 70 being also slotted and having its faces provided with indicating marks, the said second leg member being formed with a right angular offset extension which is provided 75 with lugs, the said lugs adapted to be engaged within the slot provided in the first named leg member, means for adjustably securing the second leg member upon the first named member, a pair of arms of unequal lengths pivotally connected with the 80 segments of the first named leg member and arranged upon the opposite faces thereof and means passing through the slot of the second named leg member for securing the 85 arms in an adjusted position upon the second leg member.

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

ROBERT C. KENDRICK.

Witnesses:

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