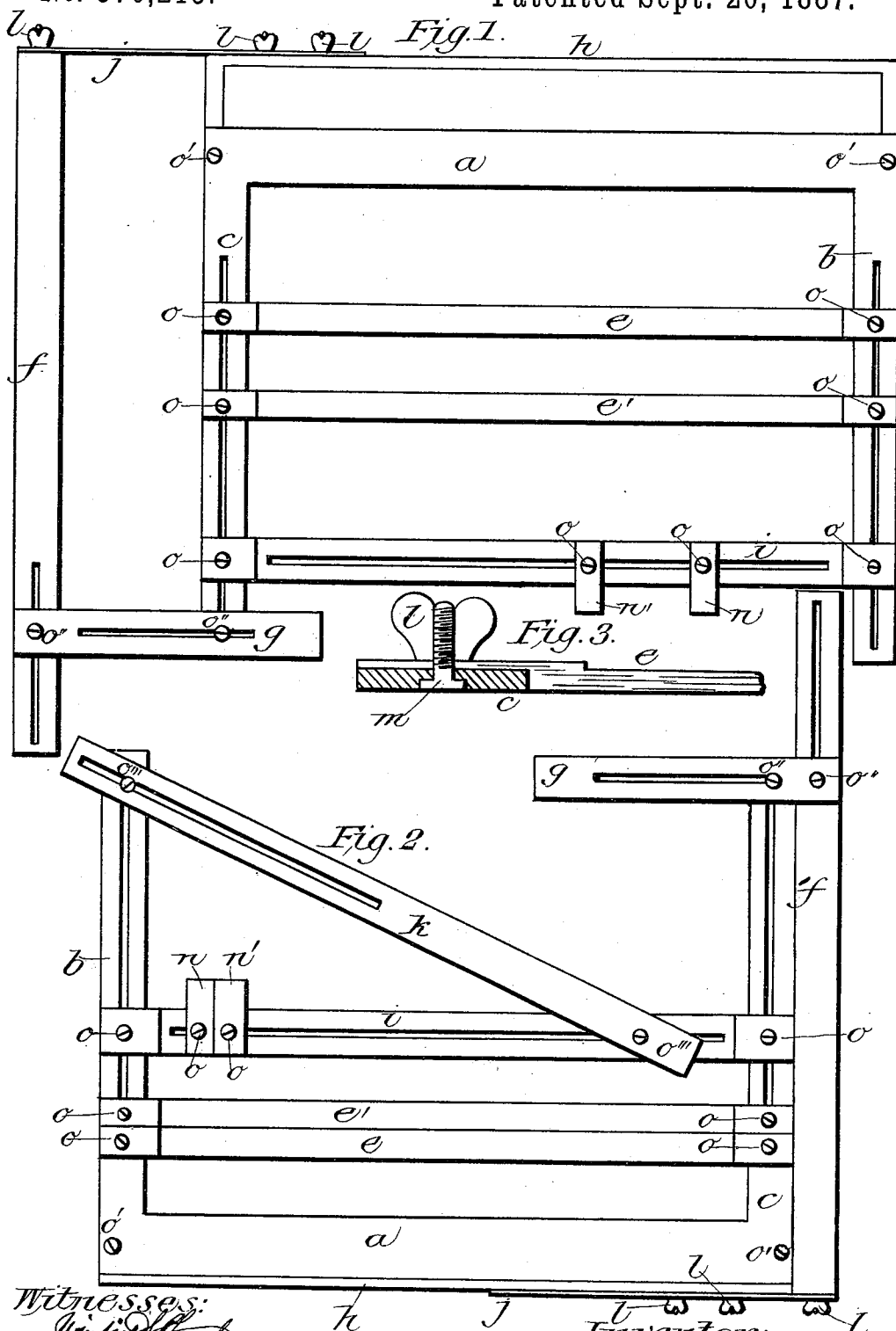


(No Model.)

G. A. STAPLES.
FRAMING SQUARE.

No. 370,215.

Patented Sept. 20, 1887.



Witnesses:
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Inventor:
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UNITED STATES PATENT OFFICE.

GEORGE A. STAPLES, OF AUGUSTA, MAINE.

FRAMING-SQUARE.

SPECIFICATION forming part of Letters Patent No. 370,215, dated September 20, 1887.

Application filed April 2, 1887. Serial No. 233,529. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. STAPLES, of Augusta, in the county of Kennebec and State of Maine, have invented a new and useful Improvement in Framing-Squares, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a view of the square extended; 10 Fig. 2, the same closed, and Fig. 3 a cross-section illustrating the manner of connecting the several parts.

The object of my invention is to construct a tool to be used in framing that can be adjusted 15 so that work may be rapidly and accurately laid out, and capable of adaptation to all classes of buildings where wooden frames are used.

Like letters of reference indicate like parts.

In Figs. 1 and 2, *a* is the body of the square, 20 having two tongues, *b* and *c*, thereon, the tongues being at right angles with the body *a*. To the tongues are attached the bars *e*, *e'*, and *i*. These bars are so secured to the tongues that by loosening the set-screws *o*, &c., they may 25 be placed at any points desired, the bolts sliding in slots cut in the tongues, as indicated in Figs. 1 and 2. The bar *i* has a slot cut therein, as indicated, and secured thereon, as described for the other parts, are the gages *n* 30 and *n'*.

To the body of the tool *a* is secured the gage *h*, capable of adjustment by the screws *o'* *o'*. Parallel to the tongue *c* is the gage *f*, secured by the strips *g* and *j*, and adjustable by means 35 of the screws *l* *l* *l* and *o''* *o''*.

I have indicated in Fig. 3 one method of constructing the fastenings *o* *o*, &c., which is by a thumb-screw; but it is obvious that either this or a screw to be set with a screw-driver 40 may be used, as thought most desirable.

In Fig. 2 I have also represented a bar, *k*, to be used in framing roof-timbers and the like where diagonals are to be cut. This is secured to one of the tongues *c* or *b* and to the 45 bar *i* with the screws *o'''* *o'''*.

Marks of inches and fractions thereof are made upon such parts as are necessary.

It will be impracticable to explain all the

ways in which the tool may be used. A single illustration will show its working.

In laying out mortises and tenons on timber 50 the gage *h* is placed so that the inner edge of *a* will come at the outer edge of the mortise and there secured. The bar *e* is then adjusted so that the space between it and *a* will be the 55 width of the mortise. For single work this will be all for marking the sides of the mortises and tenons. For double work the second mortise is made by the adjustment of the bars *e'* and *i*, so that all similar timbers may be 60 marked without change of the tool or liability to error. To mark the ends of mortises and tenons, *f* is adjusted at the right distance from *c*, the tool moved along on the timber, and by drawing lines on the inside of *f* and outside of 65 *c* the marking is complete.

For framing roof-timbers the bar *k* is adjusted at the desired angle, and by this the head and foot of rafters or braces can be marked without changing the tool, the marks 70 for the pitch of roof being put upon the bar *i* and tongue *b*. The gages *n* and *n'* are especially designed for use in cutting gains for flooring, and being adjusted at the proper places on *i* and secured proper measurements 75 will be given.

The parts *k* and *f* may be detached when not needed, or any parts not used on any particular work may be taken off for convenience.

I claim as my invention— 80

1. A framing-square consisting of the body *a*, having two tongues, *c* *b*, projecting from the ends thereof at right angles thereto and integral therewith, said tongues having bars *e* and *e'* parallel with the body *a*, adjustable thereon, 85 all connected and operating as fully described.

2. A framing-square consisting of the body *a*, having two tongues, *c* *b*, projecting from the ends thereof at right angles thereto, said tongues having bars *e* and *e'* parallel with the 90 body *a*, adjustable thereon, and the gage *h*, parallel with and adjustable on the body *a*, as fully set forth.

3. A framing-square consisting of the body *a*, having two tongues, *c* *b*, projecting from the 95 ends thereof and at right angles thereto, said

tongues having the bars *e* and *e'* parallel with the body *a*, adjustable thereon, the gage *h*, parallel with the body *a*, and the gage *f*, parallel with the tongues *c b*, all combined and operating as
5 fully described, and for the purposes set forth.

4. In a framing-square, the combination of the body *a*, having tongues *b c*, the bar *i*, between said tongues, and the gages *n n'*, adjustable thereon, as and for the purposes set forth.

5. In a framing-square, the combination of 10 the body *a*, having tongues *b c*, the bar *i*, adjustable between said tongues, and the bar *k*, secured to said bar *i* and tongue *b*, as described, and for the purposes set forth.

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Witnesses:

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