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C. A. CHRISTIANSON

STAIR SQUARE

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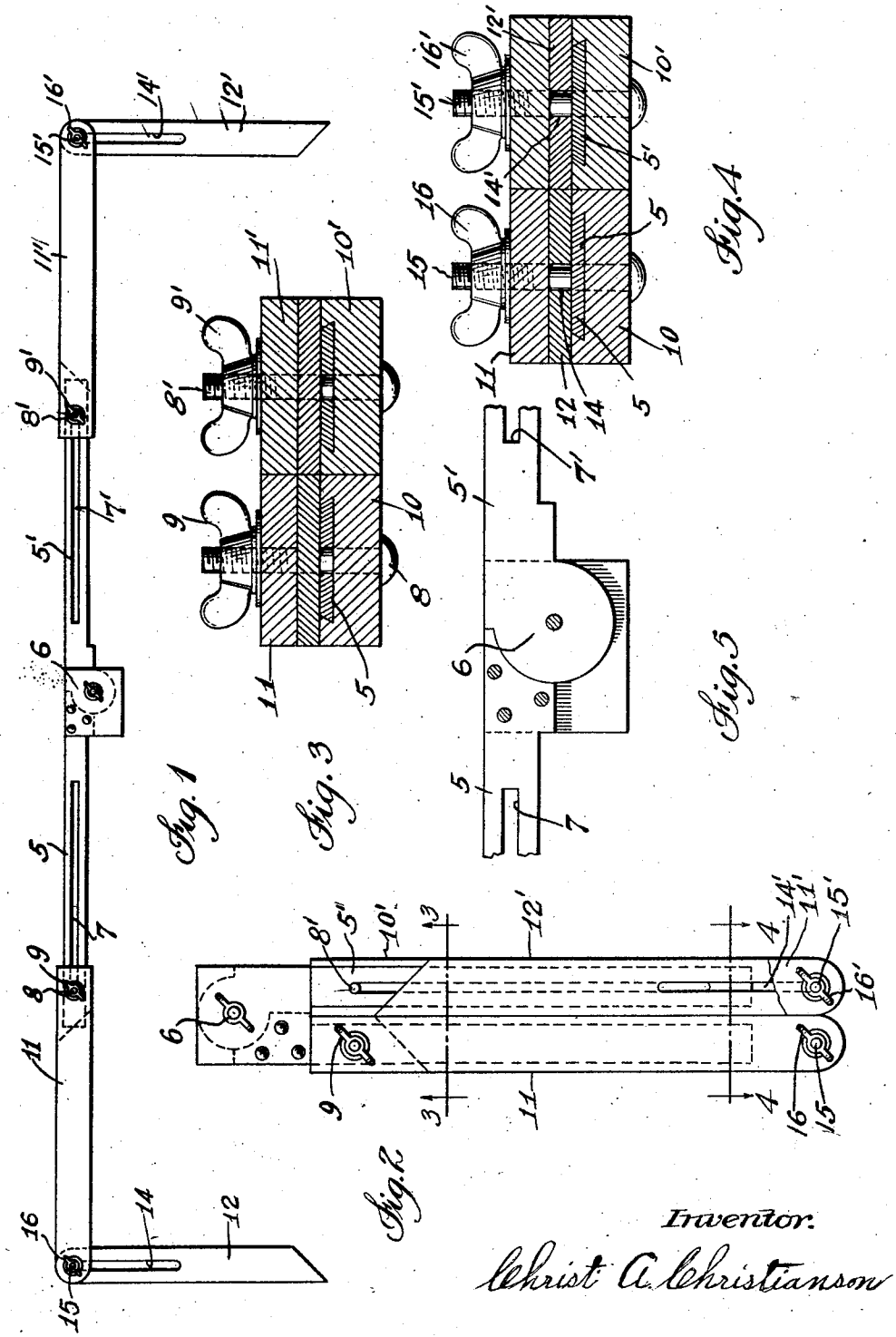

Fig. 1

Fig. 3

Fig. 4

Fig. 5

Fig. 2

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STAIR SQUARE.

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The present invention relates to a stair square which may be used to obtain the length, treads, and rises between the walls and stair stringers, and in building circular stairs, it may be used as a bevel square at both ends. The device is further useful in obtaining the length and miter cut of balusters between the top and bottom rails.

In the drawing,

Figure 1 is an elevation of the device extended,

Figure 2 is an elevation of the device folded,

Figures 3 and 4 are sections taken on the lines 3—3 and 4—4 respectively of Fig. 2,

Fig. 5 is a section through the hinged joint.

Referring to the drawings in detail, it will be seen that the numerals 5 and 5′ denote a pair of bars, hinged together as at 6 so that they may be swung to the positions shown in Figs. 1 and 2. The hinged joint 6 is constructed to limit the swinging of one bar with respect to the other in an arc of 180°. The bars 5 and 5′ have longitudinally extending slots 7 and 7′ respectively for receiving bolts 8 and 8′ on which are threaded thumb nuts 9 and 9′. Bars 10 and 10′ are pierced at one end by the bolts 8 and 8′ respectively and have mortises to slidably receive bars 5 and 5′ respectively. Plates 11 and 11′ are pierced by the bolts 8 and 8′ respectively and extend over the bars 5 and 5′ respectively and bars 10 and 10′ respectively. Blades 12 and 12′ are formed at one end with slots 14 and 14′ respectively. The slotted ends of the blades 12 and 12′ extend between the plates 11 and 11′ respectively and the bars 10 and 10′ respectively and the bolts 15 and 15′ pierce openings in the plates 11 and 11′ respectively, and the bars 10 and 10′ respectively and also the slots 11 and 11′ respectively. Thumb nuts 16 and 16′ are threaded on the bolts 15 and 15′ respectively. The free extremities of the blades are beveled.

Having thus described my invention, what I claim as new is:

A device of the class described including a pair of hinged bars, a second pair of bars slidable on the first pair of bars, means limiting the sliding of the bars in relation to one another and operable to hold the bars in different adjusted positions, plates on the second bars and extending over the first bars, a pair of blades, and adjustable pin and slot connections between the blades and the second bars and the plates.

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