L. S. STARRETT.

Try-Square.

No. 215,024. Patented May 6, 1879.

Fig. 1.

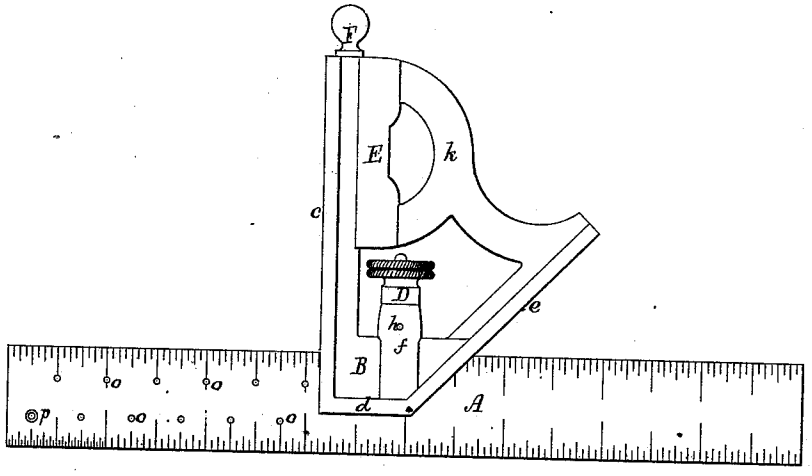


Fig 2.

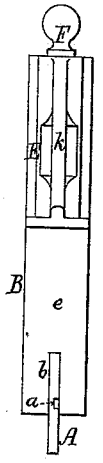


Fig. 4.

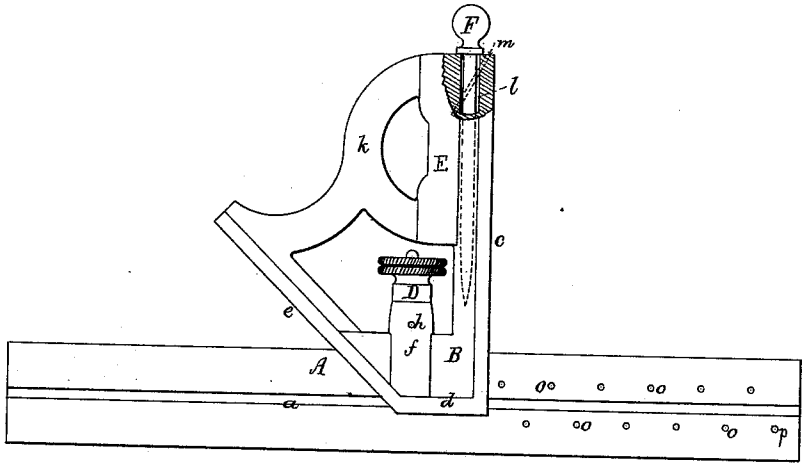
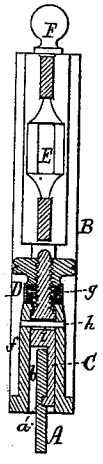


Fig. 3



Witnesses.
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UNITED STATES PATENT OFFICE.

LAROY S. STARRETT, OF ATHOL, MASSACHUSETTS.

IMPROVEMENT IN TRY-SQUARES.

Specification forming part of Letters Patent No. **215,024**, dated May 6, 1879; application filed February 26, 1879.

To all whom it may concern:

Be it known that I, LAROY S. STARRETT, of Athol, of the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Try-Squares; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a side elevation, Fig. 2 an end view, and Fig. 3 a transverse section, of a try-square of my improved kind; and Fig. 4 is a rear elevation of it.

The nature of my invention is duly set forth in the claim or claims hereinafter presented.

In the drawings, A denotes a graduated steel rule or bar, having extended through it lengthwise in one side of it a long groove, *a*, which is rectangular in its transverse section. This bar enters and slides in a recess, *b*, formed in the foot or lower part of a stock, B, one edge, *c*, of which is at a right angle to its lower edge, *d*, while the other, *e*, is at an angle of forty-five degrees with such lower edge.

Within a socket opening into the recess, and made in a boss, *f*, arranged in the stock, as represented, there is a clamp-hook, C, formed to engage with the groove of the bar A, and provided with a nut, D, that is screwed on the shank of the clamp and is counterbored, and has within it a helical spring, *g*, to bear on the top of the boss, and to serve when the nut is loosened to draw the clamp upward, so as not only to prevent the bar from falling out of place in the stock, but dirt or extraneous matters from working between the bar and the top of the recess in which such bar is placed, and thereby throw the bar out of its right-angular position to the edge *c* of the stock.

A pin, *h*, inserted in the boss, and passing into a groove or loosely through a hole, *i*, in the shank of the clamp, prevents the clamp from revolving in the boss. The foot of the clamp extends into the recess *b* and the groove of the bar A.

Furthermore, there is within the stock, and parallel to its edge *c*, a spirit-level, E, which is protected by an arch, *k*, extending lengthwise over it, as shown. The stock is also provided with a socket, *l*, to receive a stylus or scratch-pin, F, which, by a friction-spring, *m*, is prevented from accidentally dropping out of the socket.

The rule or bar, besides having at its opposite edges divisions or lines indicating inches and equal parts thereof, has made through it several holes, *o*, a half an inch or other suitable distances apart from each other from center to center, such being of proper diameter to allow the point of the awl or scratch-pin to be extended into and through it far enough to make gage-marks when it may be desirable to use the instrument for laying out work or mortises or tenons.

One or more holes, *p*, near the end of the bar may be countersunk to admit of the point of a lead-pencil being introduced through either, and used instead of the scratch-pin for making gage-marks.

The working edges *ce* of the stock are placed far enough apart for the bottom upper edge of the bar-recess to be long enough to afford a suitable bearing for the bar, and also to admit of the boss being made between them, whereby the clamp is not only covered and protected on all sides and shielded from dust or extraneous matters, but is prevented from accidentally slipping sidewise out of the groove in the bar.

The instrument made as shown can be used to excellent advantage by draftsmen or joiners in line-drawing or laying out lines at right angles, or at angles of forty-five degrees to each other, all of which will be readily comprehended by persons skilled in the use of similar instruments.

I do not claim, broadly, a slide-bar and a stock therefor having edges arranged at an angle of forty-five degrees to each other, one of them being at a right angle to the bar; but

What I claim as my invention is as follows:

1. The stock provided with the bar-receiving recess and boss, as described, and with the clamp arranged in such recess and boss, substantially as set forth.

2. The combination, with the hooked clamp, provided with a screw on its shank and arranged with the bar and stock, as described, of the counterbored nut and the helical spring placed therein, and to act against the top of the boss, as and for the purpose set forth.

3. The stock provided with the spirit-level and its guard-arch and the scratch-pin sheath arranged in such stock, as set forth, in combination with the slide-bar and its clamping devices applied to the stock, as represented.

Witnesses: LAROY S. STARRETT.

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