C. B. HOPKINS

SHADES FOR TRY-SQUARES.

No. 189,737. Patented April 17, 1877.

Fig. 1.

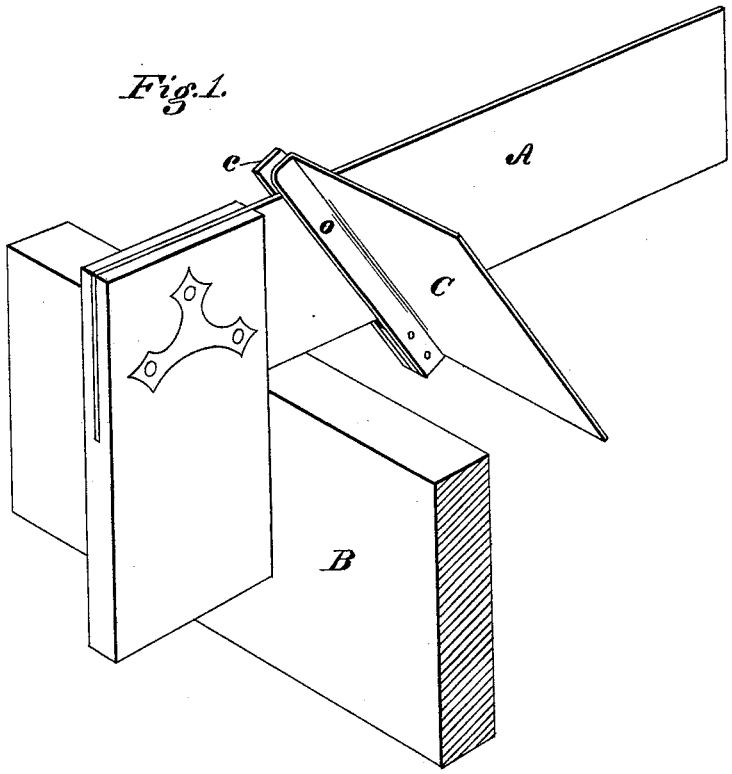
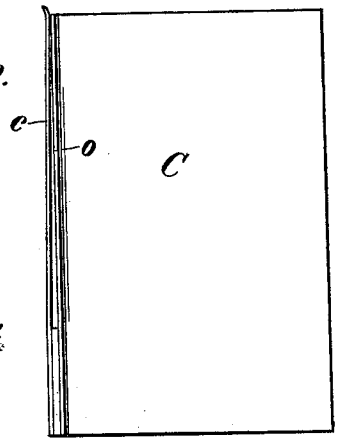


Fig. 2.



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UNITED STATES PATENT OFFICE.

CHARLES B. HOPKINS, OF TOPEKA, KANSAS.

IMPROVEMENT IN SHADES FOR TRY-SQUARES.

Specification forming part of Letters Patent No. **189,737**, dated April 17, 1877; application filed March 13, 1877.

To all whom it may concern:

Be it known that I, CHARLES P. HOPKINS, of Topeka, in the county of Shawnee and State of Kansas, have invented certain Improvements in Shades for Try-Squares, of which the following is a specification:

My invention consists of a shade constructed so as to be attached to the blades of try-squares, for the purpose of rendering them more effective in use, as hereinafter more fully described.

Figure 1 is a perspective view, showing the shade as applied in use; Fig. 2 is a plan view of the shade detached.

As is well known, try-squares are used to ascertain whether the surfaces and angles of boards and similar articles are true, and to show wherein they are defective, in order to know how and where alteration is required to render them true and accurate. For ordinary work the try-square as generally used may suffice; but where it is desired to do very accurate work, and make perfect joints, my invention will be found specially useful.

The ordinary method of using a try-square is to apply it to the stick or article as represented in Fig. 1, and then to sight with the eye along the edge of the piece to which the blade A is applied, and, by observing the point at which the light shines through between the edge of the blade and the surface on which it rests, ascertain which side or edge of said surface is too low, and where it requires to be planed off to render it true. In doing this it is usual to place the article B, if a small one, so that the square will be between the eye of the operator and the light, in order that the latter may more readily shine through the space or crevice between the edge of the blade and of the strip B. If the article be a large or long one, it is not convenient always to do this; and, moreover, it frequently happens that the workman is so located in a shop, that he cannot conveniently do it, even if the article be a small one. Besides this, the surrounding light, striking upon the edge of the article, and the side of the blade toward the eye, tends to destroy the effect of the small amount of light which shines through the exceedingly small space under the edge of the blade, thereby neutralizing its effect, and rendering the operation incomplete.

To counteract this effect, I provide a shade, C, which I attach to the blade as represented in Fig. 1, so as to shade the edge of the strip B, where the blade of the square rests upon it, which has the effect of rendering the rays of light which pass through between the edge of the blade A and of the strip B much more apparent or visible, and thus enable the workman to detect any error in the accuracy of the surfaces or their angles.

As represented in the drawings, this shade C may consist of a piece of sheet metal, having one edge turned up to form a flange, *o*, with a thin flat spring, *c*, secured at one end thereto, the space between the rib and the spring being such as to permit the blade of the square to be shoved therein, as shown in Fig. 1, the spring clasping or pressing against the blade with sufficient force to hold the shade C in place on the blade.

It will thus be seen that the shade can readily be adjusted at any angle, and in any position required. By placing it at an angle of forty or forty-five degrees, as represented in Fig. 1, it will shut off the rays of light falling from above, and also from the right-hand side, thus shading the point of contact between the edge of the blade and of the strip, and thereby greatly increasing the effect of the rays of light passing through between the blade and the strip B.

It is obvious that, if desired, the shade may be varied in form; as, for instance, it may have its top extended and bent over so as to make a cover at the top. So, too, its front edge may be bent inward, if desired, or it may be made concave, these and similar variations in form being mere modifications, to be adopted or not, as may be desired.

It is also obvious that, instead of the spring-clamp, a thumb-screw may be used to fasten the shade to the blade; but I prefer the spring, as being the simplest and easiest to use.

This invention is especially useful in all cases where nice joints are required, as in the better class of cabinet and carpenter work. It is also useful in ordinary carpenter-work,

where the operator is working in the sunlight or out of doors, and may be used to advantage in all cases. It is exceedingly simple and cheap to make, as well as being highly useful.

Having thus described my invention, what I claim is—

1. The combination, with a try-square, of a shade constructed to operate substantially as described.

2. The shade C, provided with the spring-clamp, *c*, or equivalent device, for attaching it to the blade of a try-square, substantially as, and for the purpose set forth.

CHARLES B. HOPKINS.

Witnesses:
CHARLES B. SMITH,
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