

(No Model.)

R. H. GRAVES.  
STRETCHER KEY.

No. 496,223.

Patented Apr. 25, 1893.

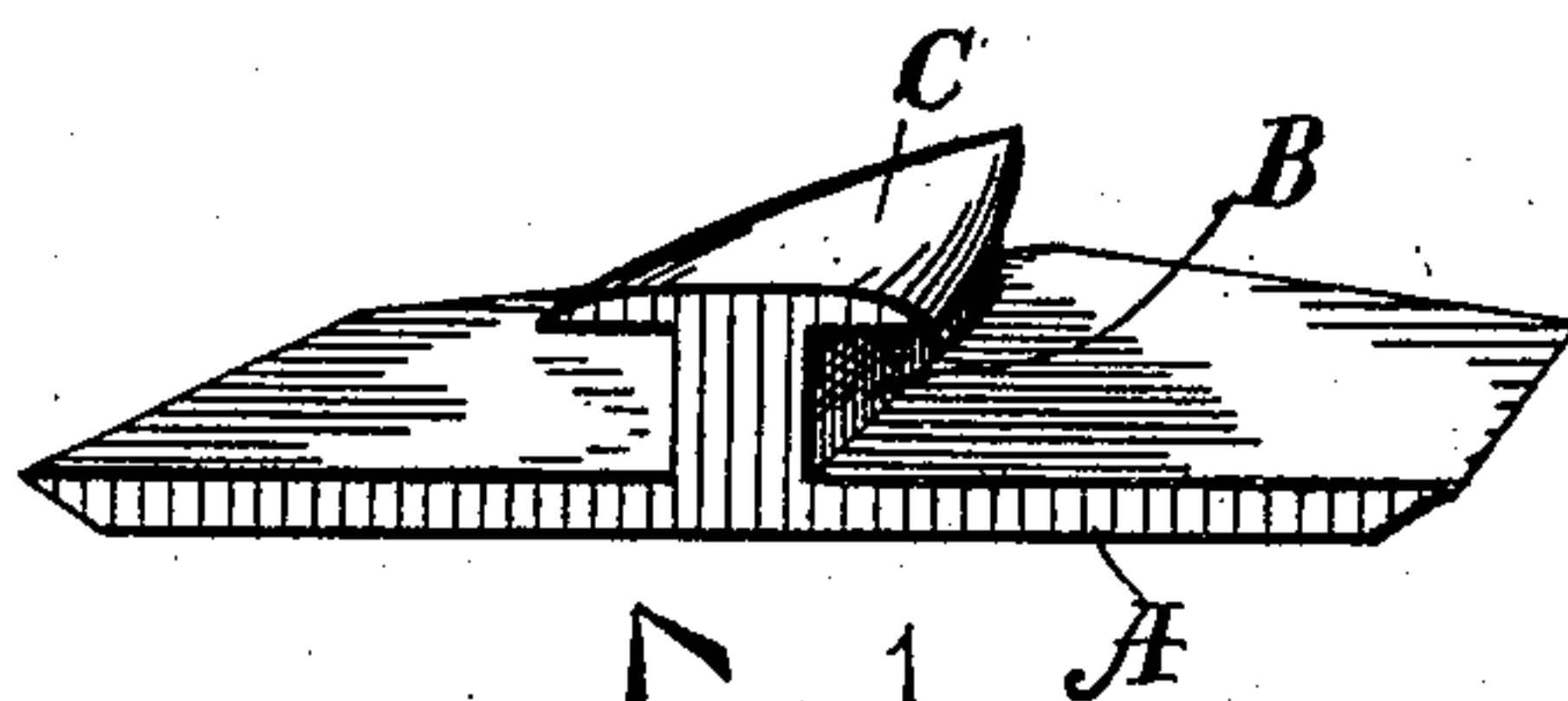


Fig. 1.

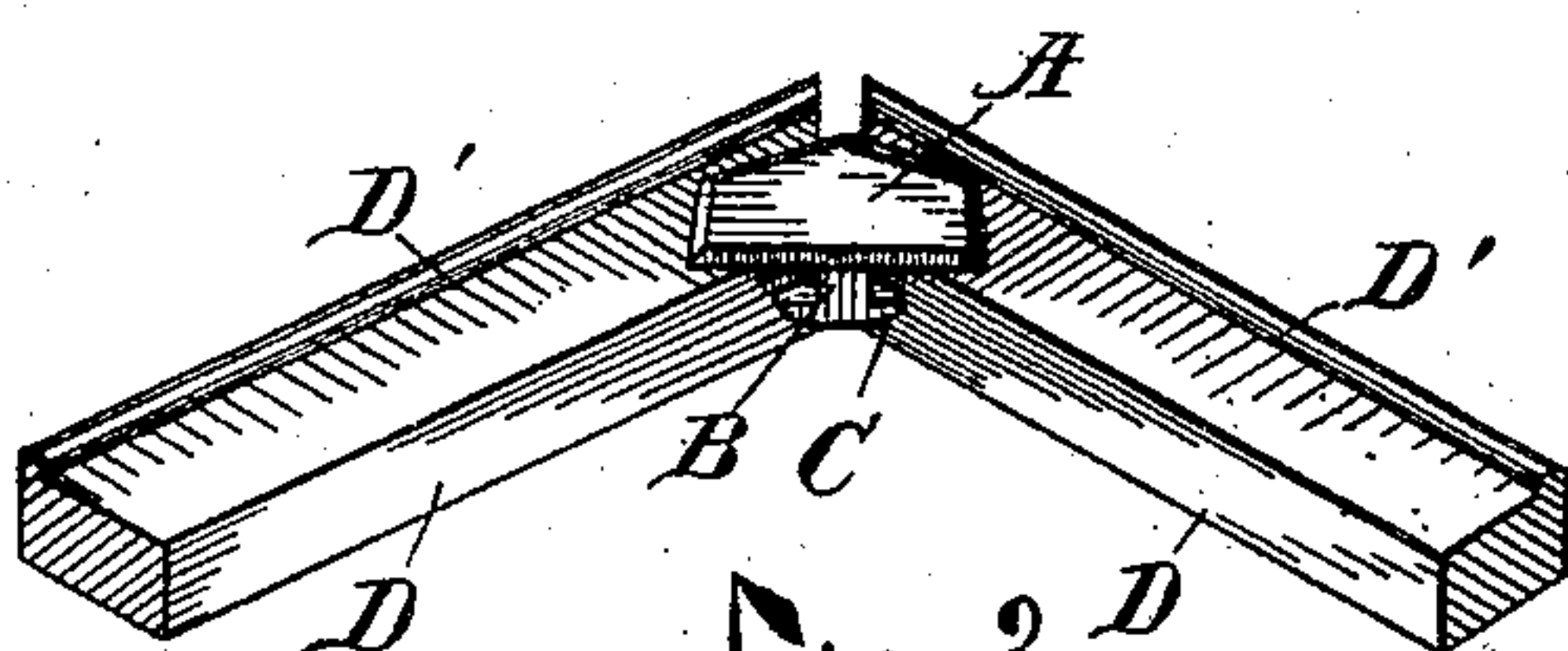


Fig. 3.

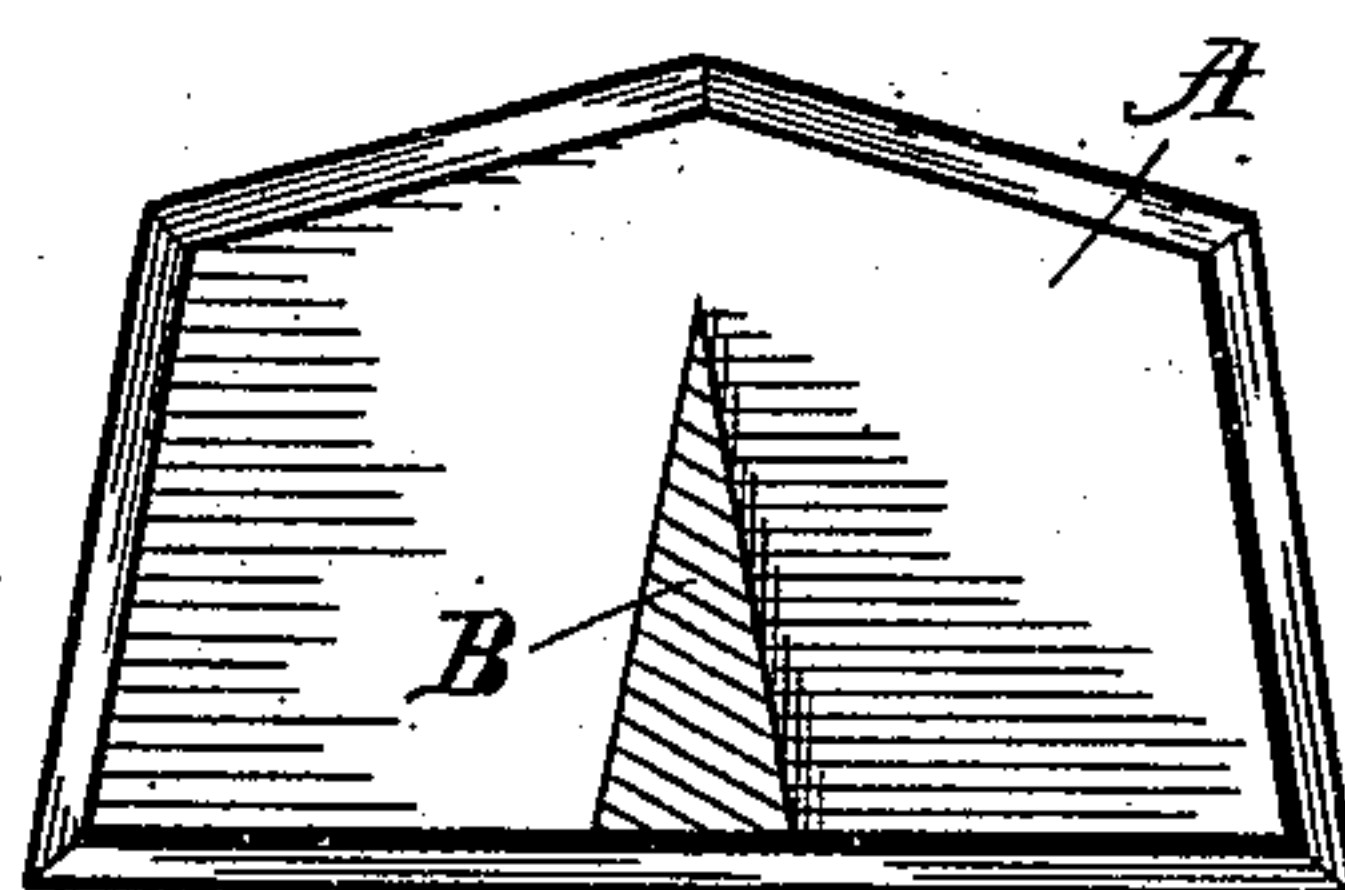


Fig. 2.

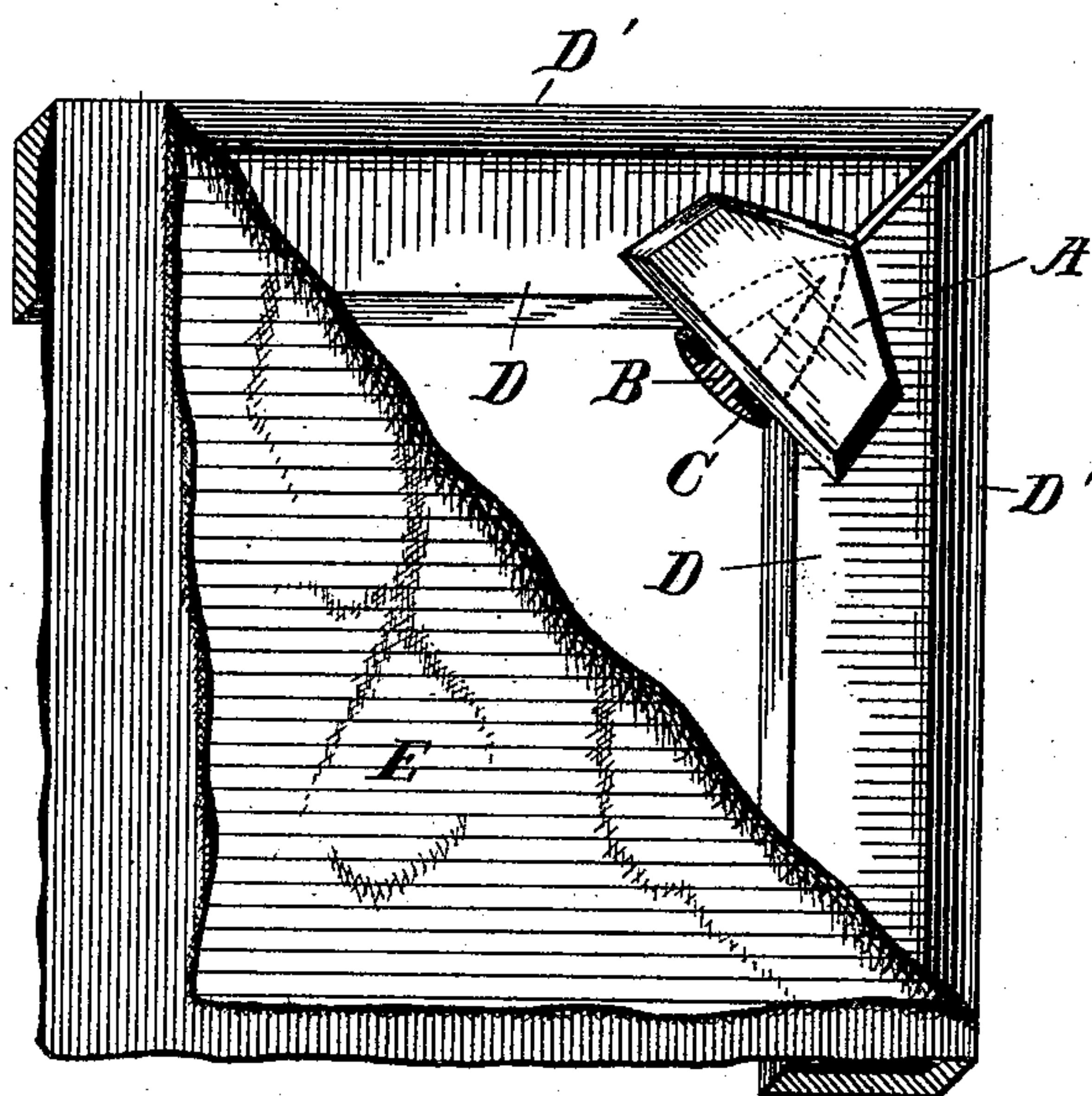


Fig. 4.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

RICHARD H. GRAVES, OF GRAND RAPIDS, MICHIGAN.

## STRETCHER-KEY.

SPECIFICATION forming part of Letters Patent No. 496,223, dated April 25, 1893.

Application filed August 20, 1892. Serial No. 443,679. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD H. GRAVES, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Stretcher-Keys; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improved stretcher key for artists' canvas frames or stretchers, and its object is to provide the same with certain new and useful features hereinafter more fully described and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective of my improved key detached from the stretcher; Fig. 2 a plan view of the same showing the wedge B in section; Fig. 3 a perspective detail of one corner of a stretcher with my improved key applied, and Fig. 4 a plan view of one corner of a stretcher with the canvas attached, having one corner turned back to show the stretcher and key.

Like letters refer to like parts in all the figures.

My improved key consists of a flat metal plate A, of any suitable size or form, having a wedge B arranged perpendicular to the plane of said plate, and attached transversely to one side of said plate. At the side of said wedge, opposite said plate, are laterally projecting barbs C. C., which are also pointed or otherwise provided with a cutting point at their ends adjacent to the end of the wedge B; these barbs are in the same plane as the adjacent surface of the plate A, and their number may be increased, and they may project from the sides of the wedge along other lines parallel with the surface of said plate A, as most convenient.

D. D. represent the bars of the stretcher which are provided with raised outer edges D'. D', to elevate the canvas E clear of the plate A, which plate is located between said canvas and the thinner portion of the bars

D, and diagonally across the angle of the same.

From the foregoing, the operation of my device may be readily understood. The plate A is inserted between the canvas and stretcher at the inner angle of the same, and the wedge inserted in the seam between the adjacent parts, D. D. of the stretcher. Now, by forcing this wedge forward, the seam is opened and the canvas stretched and the barbs C are driven into the ends of the bars D. D., which bars are thus held firmly against the plane surface of the plate A, and are thus prevented from being turned or twisted by the strain of the canvas, and also from lateral displacement. I also thus avoid the use of screws, nails or staples, which are inefficient and tend to split the bars D. The plate A may be dispensed with and a series of barbs arranged on each side of said wedge, and the device will operate, but I prefer the construction shown.

What I claim is—

1. An improved stretcher key consisting of a flat plate having a wedge projecting laterally from one side thereof and lateral barbs on said wedge and arranged in a plane or planes parallel to the adjacent surface of said plate, substantially as described.

2. The combination of bars, as D. D., having raised outer edges and canvas attached, a plate between said bars and canvas, having a wedge inserted in the seam between the adjacent ends of said bars and laterally projecting barbs on said wedge, inserted in the respective ends of said bars substantially as described.

3. In combination with the bars of a stretcher having canvas attached, and a wedge inserted in the seam, between the adjacent ends of said bars, laterally projecting barbs on said wedge inserted in the respective ends of said bars, substantially as described.

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

RICHARD H. GRAVES.

Witnesses:

LUTHER V. MOULTON,  
LEWIS E. FLANDERS.