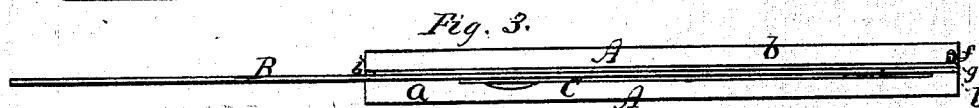
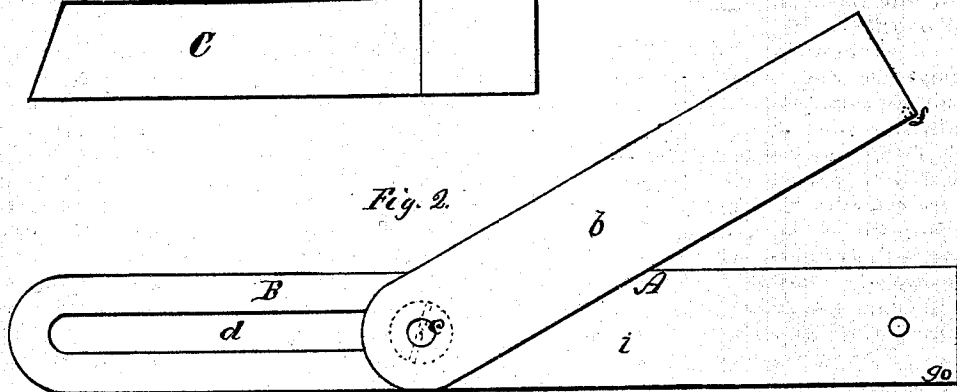
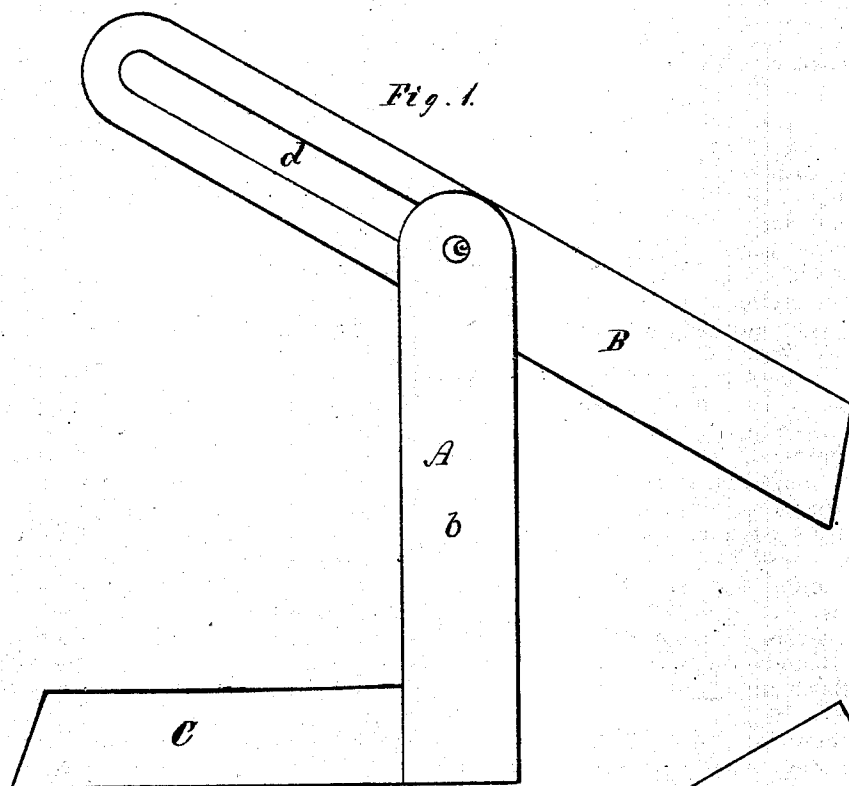


J. W. HARDIE.
Bevels and Try-Squares.

No. 146,763.

Patented Jan. 27, 1874.



Witnesses,

C. McCallahan.
A. D. Smith.

Inventor,

Jason W. Hardie
By his atty.
J. S. Brown.

UNITED STATES PATENT OFFICE.

JASON W. HARDIE, OF NEW YORK, N. Y.

IMPROVEMENT IN BEVELS AND TRY-SQUARES.

Specification forming part of Letters Patent No. **146,763**, dated January 27, 1874; application filed May 3, 1873.

To all whom it may concern:

Be it known that I, JASON W. HARDIE, of the city, county, and State of New York, have invented an Improved Bevel and Try-Square; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings making part of this specification—

Figure 1 being a side view of the instrument with the blades in position for use; Fig. 2, a side view of the instrument with the blades closed into the handle or stock, showing the mode of loosening and tightening the bevel-blade in the handle; Fig. 3, an edge view of the instrument with the blades closed into the handle.

Like letters designate corresponding parts in all of the figures.

The instrument consists of a handle or stock, A, a bevel-blade, B, and a try-square blade, C. The bevel-blade B is held between the two side pieces *a b* of the handle, at one end thereof, by means of a clamping-screw, *c*, which extends through one side, *a*, of the handle, through a hole or longitudinal slot, *d*, in the blade, and screws into the other side, *b*, of the handle. The head of the screw is countersunk in the handle, so as to be smooth and flush therewith; and the other end of the screw, if it reaches through the side of the handle, is flush with its surface, or does not project beyond it. In order to loosen the blade B in the handle, one side, *b*, of the handle is arranged to swing edge-wise out from the other part of the handle, turning on the screw *c* as a pivot, as indicated in Fig. 2, in the proper direction to rise on the screw-thread, and thereby free it from close contact with the blade, which is then adjusted to the required angle or position, and then the side *b* is turned back into its proper position on the other part of the handle, thereby again tightening the blade in its position. A notch, *f*, in the edge of the part *b*, strikes a stop or projection, *g*, on the other part of the handle,

to prevent said movable part from turning too far in that direction. The slot *d* in the blade B allows the same to be adjusted lengthwise. A very thin friction-plate, *i*, is, or may be, placed in the handle between the movable part *b* and the blade B, to prevent rubbing and scarring the blade. Any wear between the part *b* and the blade, so that the shutting in of the former does not fully tighten the blade in place, is taken up by turning the screw *c* with a screw-driver. A block or piece of metal, *l*, is placed between the parts *a b* of the handle at the outer end thereof, to keep the parts properly separated for the reception of the blade B. The try-square blade C is pivoted to the part *a* of the handle at the outer end thereof, or the end opposite to that in which the other blade, B, is pivoted. It shuts into the handle like the blade of a pocket-knife. It has a suitable stop or shoulder to hold it in exactly a right-angled position to the handle when the blade is swung out for use.

The great advantage and improvement in this construction of the instrument will be found to consist in the thinness of the handle, and in its having no thumb-screw or any projecting part for tightening the bevel-blade in the handle, so that it can be used with as perfect convenience as if there were no adjusting device. The adjustment is also very simple and expeditious, requiring no screw-driver, wrench, or key for the purpose. By its folding and shutting features it is rendered very compact and portable.

What I claim as my invention, and desire to secure by Letters Patent, is—

The swinging side B of the handle A, in combination with the bevel-blade B and tightening-screw *c*, substantially as and for the purpose herein specified.

JASON W. HARDIE.

Witnesses:

GEO. W. MCADAM,
CHARLES DUFF.