

W. H. LAUGHLIN.

Improvement in Carpenters' Bevels.

No. 129,737.

Patented July 23, 1872.

Fig. 1.

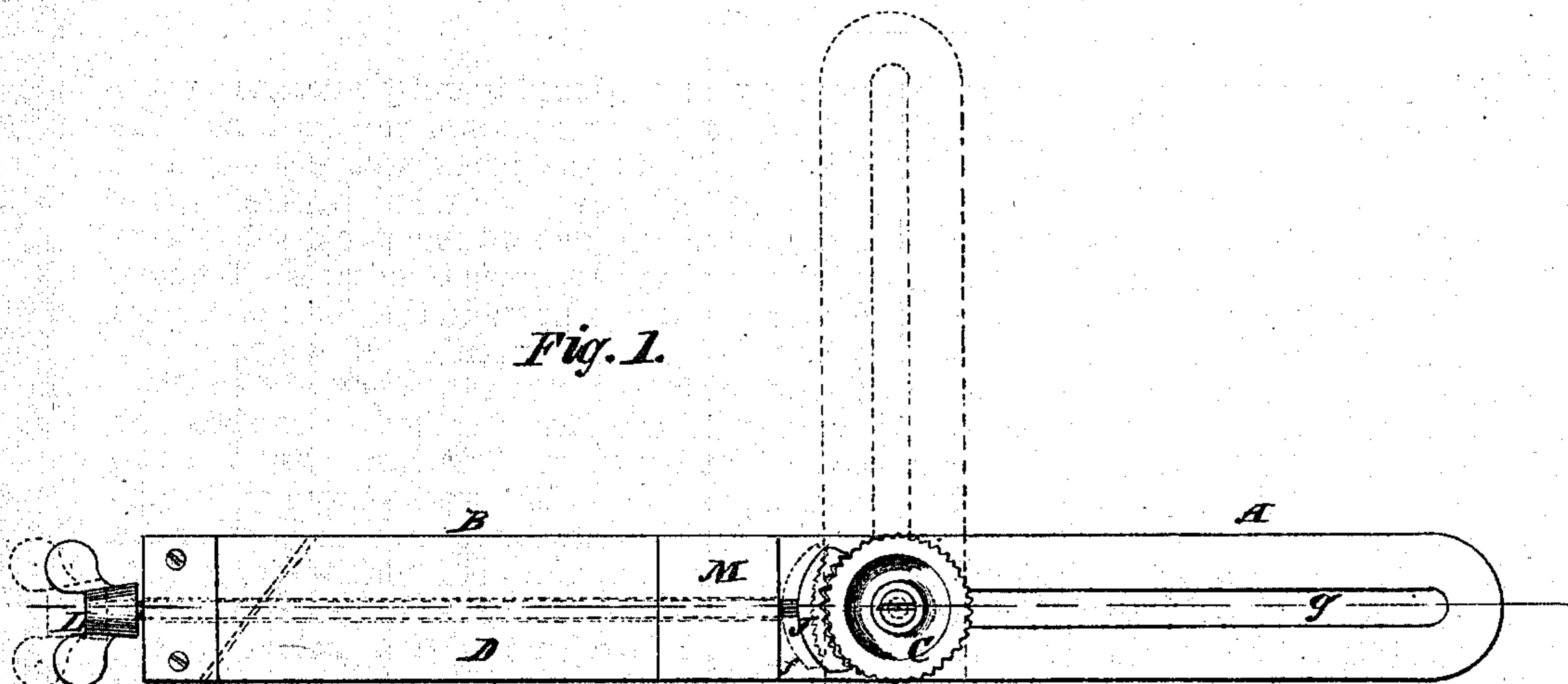
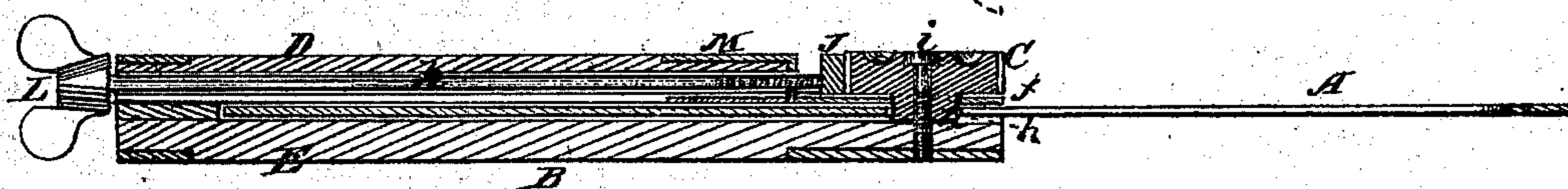


Fig. 2.



Witnesses:

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# UNITED STATES PATENT OFFICE.

WILLIAM H. LAUGHLIN, OF QUINCY, ILLINOIS.

## IMPROVEMENT IN CARPENTERS' BEVELS.

Specification forming part of Letters Patent No. 129,737, dated July 23, 1872.

Specification describing a new and Improved Try-Square and Bevel, invented by WILLIAM H. LAUGHLIN, of Quincy, in the county of Adams and State of Illinois.

The object of this invention is to so construct a try-square and bevel that the blade, in whatever position it may be placed, shall be fastened so as not to vary when adjusted, and so that the combined tool may lie flat on either side, and without the common fastening thumb-screws; and it consists in a milled or serrated disk so connected with the blade that it moves or turns only when the blade moves or turns, and in a double ratchet-pawl, which is made to engage with the disk by means of a screw-rod, by which pawl, and consequently the blade, is held immovable when the blade is once adjusted, as will be hereinafter more fully set forth and described.

In the accompanying drawing, Figure 1 represents a top view, and Fig. 2 a vertical longitudinal section of Fig. 1 taken on the line *x x*.

Similar letters of reference indicate corresponding parts.

A is the blade. B is the stock. C is the fastening serrated disk. The stock B is made of two pieces of wood, D and E, fastened together by brass mountings a sufficient distance apart to allow the blade to pass in between them, as in bevels of ordinary construction. The part D of the stock is shorter than the other part, but a metallic plate, *f*, is attached to its inner sides, which extends out as far as the other part E. Between this part and the plate E the blade works, and on the plate the disk C is placed. The thickness of the disk is equal to the thickness of the part D, so that its face or outside is flush with the side D of the stock. *g* represents the slot in the blade. *h* is a projection on the under side of the disk C of oblong form, which passes through the plate *f* and fits into the slot in the blade, as seen in Fig. 2. It will be seen from this arrangement that while the disk C is held stationary the blade cannot move except longitudinally. The disk is confined to the part E of the stock by means of the central screw *i*, and any desired amount of fric-

tion may be produced thereby when necessary to prevent the longitudinal movements of the blade and hold the parts securely together. Instead of allowing the wood of the part E to extend to the end of the stock, the fastening-screw *i* may be made to enter solid metal, if desired. J is a pawl in the form of an arc of a circle, the inner circle of which corresponds with and fits the edge of the disk. The edge of the disk is milled or serrated, as seen in the drawing. The inner circle of the pawl is provided with teeth—more or less in number—which are made to engage with the teeth of the disk, and hold both ways, so that when pressed up to the disk the latter is immovable. *k* is a screw-rod attached to the back of the pawl, extending back in a groove in the part D of the stock, with a thumb-wrench, L, on its end. The screw of this rod works through the mounting M of the part D. For adjusting the blade to any desired angle the pawl is drawn back by turning the rod, and when the blade is adjusted to the required angle the pawl is pressed up to the disk by turning the rod. The blade, being connected with the disk C, as before stated, is thus held rigidly to its position, whether adjusted to a right angle with the stock to form a try-square, as seen in dotted lines, or at any other angle or parallel with the stock, as seen in the drawing.

I do not limit or confine myself to the precise form or arrangement of any of the parts described, as they may be varied in many ways without departing from my invention.

I am aware that disk C and projection *h* are not new in themselves; but

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The disk C, with the projection *h*, pawl J, rod K, thumb-wrench L, and blade A, in combination with the stock B, when the same are arranged to operate substantially as and for the purposes described.

WM. H. LAUGHLIN.

Witnesses:

FREDERIC E. WESCOTT,  
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