

(No Model.)

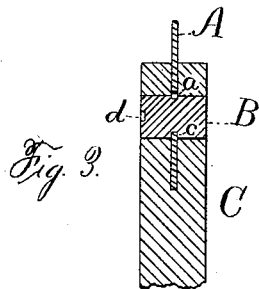
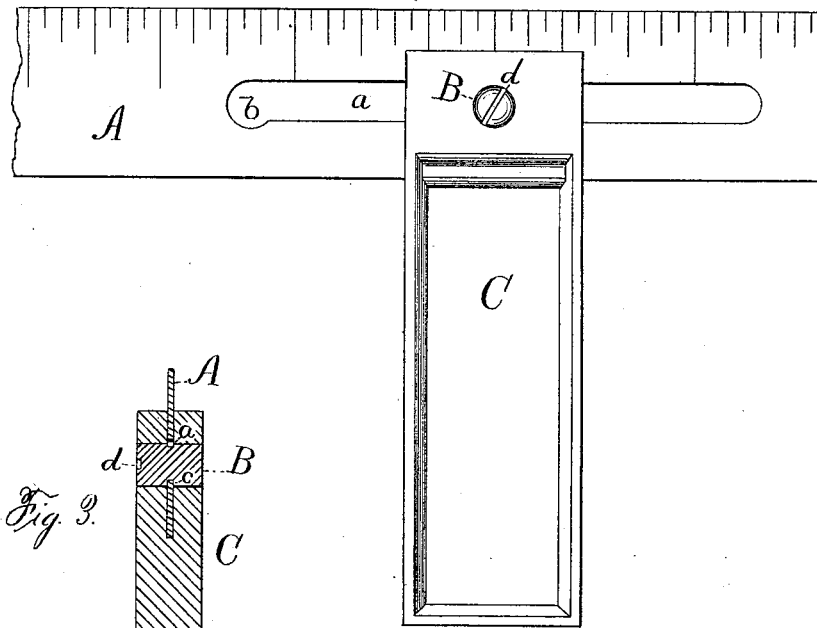
J. A. TRAUT.

TRY SQUARE.

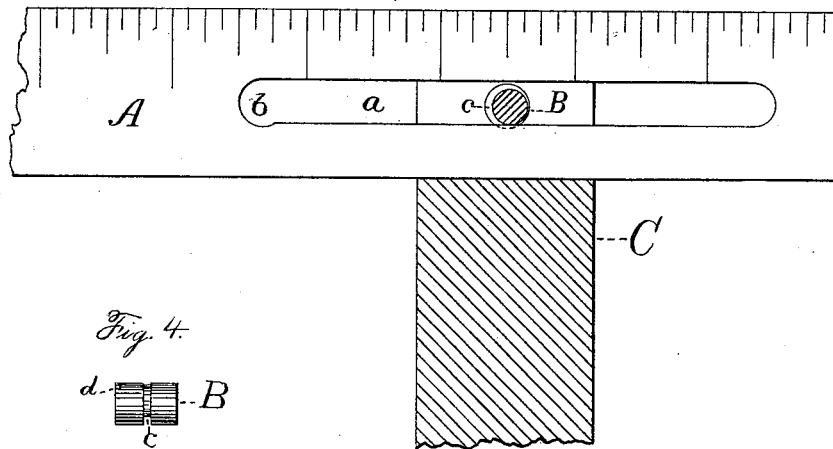
No. 266,556.

Patented Oct. 24, 1882.

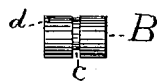
*Fig. 1.*



*Fig. 2.*



*Fig. 4.*



*Witnesses.*

*John Edwards Jr.  
Samuel L. Burr*

*Inventor*

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By James Shepard Atty.*

# UNITED STATES PATENT OFFICE.

JUSTUS A. TRAUT, OF NEW BRITAIN, CONNECTICUT.

## TRY-SQUARE.

SPECIFICATION forming part of Letters Patent No. 266,556, dated October 24, 1882.

Application filed May 3, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, JUSTUS A. TRAUT, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Try-Squares, of which the following is a specification.

My invention relates to an improvement in try-squares in which the blade is longitudinally adjustable and is held in place by an eccentrically-grooved pin which rests in a slot in said blade, the width of which slot is less than the diameter of said pin; and the objects of my improvement are to provide a cheap and efficient means for effecting said adjustment and for inserting and holding the blade within the stock or head. I attain these objects by the simple mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the square. Fig. 2 is a sectional view of the same, taken on a line parallel to the blade and immediately by the side of it. Fig. 3 is a section on a line transversely to the blade and through the eccentric, and Fig. 4 is a side elevation of said eccentric.

A designates the blade, which may be plain or provided with scale-marks, as may be desired. This blade is provided with a longitudinal slot, *a*, having an enlargement, *b*, at one end for the purpose of admitting the eccentric B. A narrow slot is made in the end of the stock or head C to receive the blade A. The bottom of this slot must be at right angles to the head C in order to make a perfect square. Through this end of the head, and transversely to the slot therein, there is a circular hole which receives the eccentric B. This eccentric consists of a plain pin with an eccentric groove, *c*, formed therein, of such width as to receive the thickness of the blade within it, as shown in Figs. 3 and 4. One end of this eccentric B may be provided with a slot, *d*, for the reception of a screw-driver blade, to facilitate turning the eccentric; or it may be provided with a suitable operating-handle, like a thumb-screw, when the projection of said handle is not objectionable.

The opening or enlargement *b* at the end of the slot *a* is of such size and so located with reference to the bottom of the slot in the head C and the hole for the eccentric that said en-

largement will coincide with the eccentric-hole, or so nearly so that no portion of the blade will obstruct said hole when the blade is resting upon the bottom of the slot in the head and the enlargement is brought opposite said hole. The slot *a* should also be located in the blade so as to be a little to one side of the hole for the eccentric, as shown. The width of the slot *a* is a little less than the diameter of the main portion of the pin B.

When the blade is in the position above described the eccentric pin B may be inserted endwise into place and stopped when its groove *c* is opposite the edge of the blade at the slot *a*. By then turning the eccentric until the neck is in the middle of the slot *a* the blade may be slipped endwise to any desired point. By merely rotating the eccentric B the body of the pin will bear against the outer wall of the hole through the head, and the lower side of the neck, which forms the bottom of the eccentric groove, *c*, will bear against the blade at the inner wall of the slot *a* and force the blade firmly against the bottom of the slot in the head.

The blade may be unfastened by reversing the eccentric, and fastened again, as before described. The blade at the edge of the slot *a* enters into the groove *c* of the eccentric, and thereby prevents a disengagement of the parts, except when the pin enters the enlargement in the slot *a*, by which the engagement was effected.

If desired, instead of the slot *a* with an enlargement at one end, the slot may be open and extend to one end of the blade; but I consider the slot with the enlargement at one end far preferable.

Although I have represented in the drawings a solid iron head for the square, the invention is equally applicable to squares with a wooden head with metal-bound edges, in which case, also, there should be a metal bushing around the hole for the eccentric.

I am aware that squares and bevels with slotted and adjustable blades are old when provided with clamping mechanism for binding the blade flatwise; also when provided with mechanism for binding the edge of the square against the bottom of the groove in its head, which mechanism extended lengthwise through the head of the square; also, that an eccen-

tric pin has been used to fasten the non-adjustable blade of a try-square in place, but not in combination with a slotted blade. All such prior devices are hereby disclaimed.

5 I claim as my invention—

The combination of the slotted head, the eccentrically-grooved pin, and the blade having a longitudinal slot, the width of which slot is

less than the diameter of the pin B, substantially as described, and for the purpose specified.

JUSTUS A. TRAUT.

Witnesses:

JOHN EDWARDS, Jr.,

LYMAN S. BURE.