(No Model.)

J. F. BRAYER.

TINNERS' SHEARS.

No. 257,465. Patented May 9, 1882.

Fig. 1

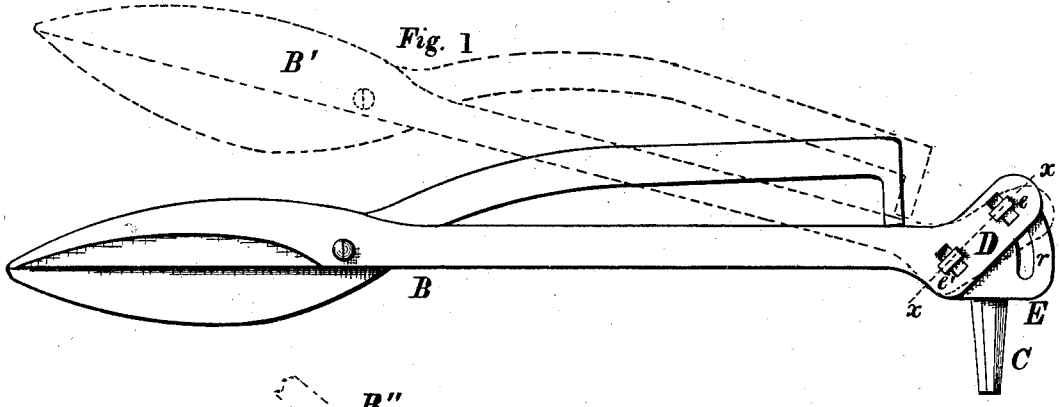


Fig. 2.

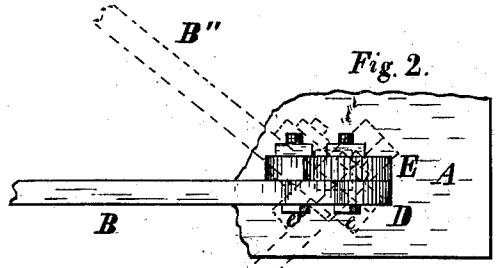


Fig. 6.

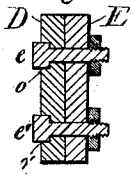


Fig. 5.



Fig. 3.

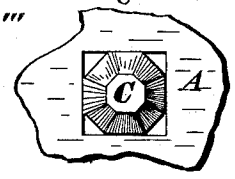
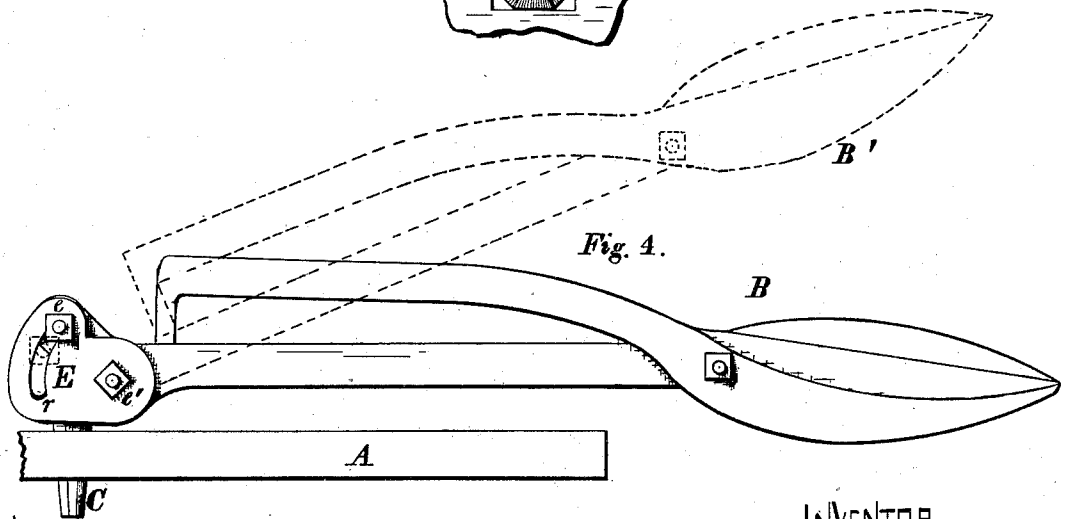


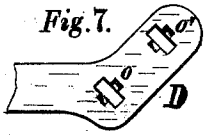
Fig. 4.



WITNESSES=

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Fig. 7.



INVENTOR=

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UNITED STATES PATENT OFFICE.

JOHN F. BRAYER, OF ROCHESTER, NEW YORK.

TINNER'S SHEARS.

SPECIFICATION forming part of Letters Patent No. 257,465, dated May 9, 1882.

Application filed March 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. BRAYER, of Rochester, Monroe county, New York, have invented certain Improvements in Tinsmiths' Shears, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improved means for attaching tinsmiths' shears to the bench, so that the same may be adjusted in position laterally or vertically, all as hereinafter more fully described.

My improvements in tinsmiths' shears are represented in the accompanying drawings, in which—

Figure 1 is a side elevation. Fig. 2 is a partial plan view. Fig. 3 is a partial inverted view. Fig. 4 is a side elevation, showing the opposite side from Fig. 1. Fig. 5 represents one of the bolts. Fig. 6 is a section on the line *x x*, Fig. 1. Fig. 7 is a detail view.

The first part of my invention relates to the lateral adjustment of the shears with reference to the bench; and it consists in providing the lower leg of the shears with an octagonal tapering arm or shank, C, which fits into a square opening in the bench A, which opening may be straight or tapering. The advantage of the octagonal shank over the square shank in ordinary use is that by its use the shears may be set and securely held at a number of different positions relatively to the bench, as represented by the dotted lines B″ B‴ in Fig. 2.

My invention also relates to means for adjusting the inclination of the shears with reference to the horizontal line; and it consists in combining the lower leg of the shears with a slotted plate provided with bolts or adjusting-screws, so that the shears can be set and fastened for use at any desired angle with the horizontal surface of the bench. The lower leg of the shears terminates in a bent arm or enlargement, D, through which pass the bolts *e e′*, by which the arm is adjustably clamped against the slotted plate E. The bolt *e′* passes through a hole in the arm and the plate, forming a pivot, about which the shears swing in the vertical direction. The bolt *e* passes through the curved slot *r* in the plate E. The plate E is made beveling or wedge-shaped, being slightly thicker at its upper edge than at its lower. (See Fig. 6.) The object of this construction is to prevent the shears, when inclined upward, as represented at B′, Fig. 1, from being depressed or forced downward by pressure applied to them when in use. The bevel on the plate E causes the bolt *e* to draw tighter and increases the friction between the arm D and the plate E when a downward pressure is applied to the shears.

Any form of bolts may be employed for the purpose of securing the shears to the plate; but I prefer to use flat-headed bolts, as represented in the drawings, the arm D being provided with slotted openings of a sufficient size to permit the passage of the bolt-heads through them, and with recesses *o o′* sunk into the arm, which receive the heads of the bolts and hold them in place. By this construction I am enabled to detach the shears from the plate without removing the nuts from the bolts *e e′*.

The octagonal shank C may be used in connection with the plate E and means for adjusting the position of the shears horizontally, as it may be attached directly to the lower leg of the shears.

I claim—

1. The combination, with the shears B, of the octagonal tapering shank C, substantially as and for the purposes described.

2. The combination, with the shears B, of the slotted plate E, bolts *e e′*, and shank C, for attaching the slotted plate to the bench, substantially as and for the purposes described.

3. The combination, with the shears B, of the slotted plate E, provided with the octagonal shank C, and means for adjusting the inclination of the shears, substantially as and for the purposes set forth.

4. The combination, with the shears B, of the beveled plate E and bolts *e e′*, substantially as and for the purposes set forth.

JOHN F. BRAYER.

Witnesses:

GEO. B. SELDEN,

H. G. PHILLIPS.