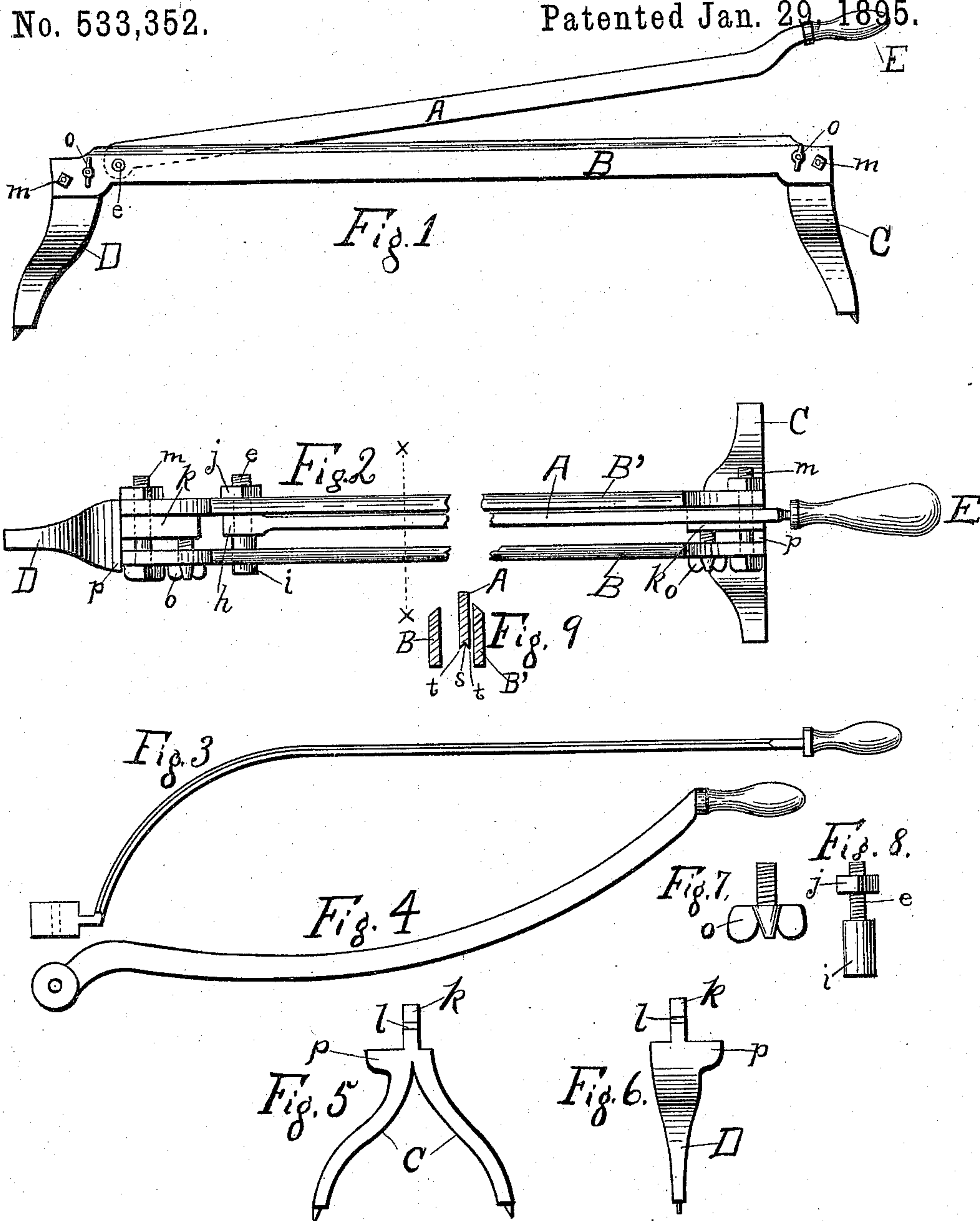


(No Model.)

J. E. ERNEST.  
SLATE CUTTER AND TRIMMER.

No. 533,352.

Patented Jan. 29, 1895.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOSEPH E. ERNEST, OF FRANKTON, INDIANA, ASSIGNOR OF TWO-THIRDS TO  
JESSE A. NISWONGER AND EDWARD FRANK.

## SLATE CUTTER AND TRIMMER.

SPECIFICATION forming part of Letters Patent No. 533,352, dated January 29, 1895.

Application filed October 24, 1894. Serial No. 526,876. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH E. ERNEST, a citizen of the United States, residing at Frankton, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in Slate Cutters and Trimmers, of which the following is a specification.

My invention relates to that class of slate cutters and trimmers by which sheets of ordinary roofing slate are cut and trimmed into any desired shape or size.

The object of my invention is to provide a slate cutter and trimmer that can be taken upon the roof by the workmen, when necessary, whereby the slates may be cut and trimmed so as to fit any irregular portions of the roof, such as fitting around chimneys or in hips or valleys, without leaving the roof and the consequent loss of time, to enable the workmen to cut the slate with any desired bevel along its edges, for the purpose of making a perfect fit and tight joint where the edges of the slates meet, as is the case on the ridge or hip of a roof; and a further object is to prevent the breakage and waste usually attendant upon cutting and trimming slates by means of the ordinary slater's hammer.

To this end, my invention consists, in general, in the constructions hereinafter described, and particularly pointed out in the claims and will be fully understood by reference to the accompanying drawings, which are made a part hereof, and in which similar letters of reference refer to similar parts.

Figure 1 is a side view. Fig. 2 is an enlarged, top plan view having a portion of the center broken away. Fig. 3 is a view of the under or cutting edge of a modified form of the cutting bar. Fig. 4 is a side view of another modification in the form of the cutting bar. Fig. 5 is a front view of the double front legs or feet. Fig. 6 is a back view of the single back leg or foot. Fig. 7 is a plan view of the thumb-screw used in regulating the left side bar. Fig. 8 is a plan view of the stud bolt which carries the cutting bar, and Fig. 9 is a vertical sectional view taken on the line  $x, x$ , of Fig. 2.

The cutting bar A, is pivoted between the side bars B and B', upon the bolt  $e$ , said bolt securing the cutting bar A to the side bar B',

and having the elongated head  $i$ , which is adapted to pass through and fit into a circular opening in the side bar B, without binding. This agreement permits of the lateral adjustment of the side bar B, without loosening the nut  $j$ , on the bolt  $e$ , and at the same time gives a bearing for the head of the bolt and prevents a side strain on the bar B', when in the act of cutting a slate.

The front legs C, and the rear leg D, are each provided with the upright studs  $k$ , which are pierced by the openings  $l$ , for the reception of the bolts  $m$ , which bind the side bars B and B', to the studs  $k$ . The legs C and D are also provided with a greater projection P, upon one side of the stud  $k$ , than on the other, for the purpose of giving a bearing to the side bar B, when it is adjusted at a distance from the cutting bar A. The side bar B, is adjusted by means of the bolts  $m$ , and the thumb-screws  $o$ . The thumb-screws pass through threaded openings in the side bar B, and press against the studs  $k$ , thereby holding the side bar B, firmly against the heads of the bolts  $m$ . The side bars B and B' are beveled on their upper edges, as shown in Fig. 9. The cutting edge of the cutting bar A, has the V shaped groove  $s$ , throughout its entire length, forming sharp edges  $t$ , along the outer sides of the cutting edge of the bar. This construction of the cutting edge of the cutting bar A, as above described, facilitates the operation of cutting the slate and makes a clean cut of the width of the cutting bar, leaving the edges of the slate even and regular. In many cases, it is found desirable to have the edge of the slate cut to a bevel to permit of making a tight joint where the edges of two slates meet; as for example, the ridge or comb of a building. To meet this requirement, I provide the adjustable side bar B, by means of which any desired bevel can be given to the edge of the slate. If a straight cut is desired, the side bar B, is brought up against the studs  $k$ , and the nuts of the bolts  $m$ , are tightened. To produce a bevel, the nuts of said bolts are loosened and the thumb-screws tightened until the side bar B is at a sufficient distance from the cutting bar A, to produce the desired bevel on the edge of a slate. The outer end of the cutting bar A, is pro-



vided with a suitable handle E, and the inner end *h*, is of greater thickness than the body, to form a bearing for the side bar B', and the head of the bolt *e*.

5 In Fig. 3, a modified form of cutting bar is shown in which the inner end of the bar represents the segment of a circle, and is designed for cutting slates in circular form.

Fig. 4, is a modification in which the cutting  
10 bar is turned upwardly, instead of straight, as shown in Fig. 1.

Having described my slate cutter and trimmer, what I claim, and desire to secure by Letters Patent of the United States, is—

15 1. In a machine for the purpose described, the combination of the cutting bar A, having the V shaped groove S, and cutting edges *t*, with the fixed side-bar B', the adjustable side-bar B, said side-bars having the beveled upper edges; the adjusting bolts *m*, the stud-bolt *e*, the thumb-screws *o*, and the legs C and

D, having the studs *k*, and the projections *p*, substantially as described.

2. In a slate cutter and trimmer the combination of the legs C, and D, having the pro- 25  
jections *p*, and studs *k*; and the side-bars B, and B', bolted to the studs *k*, with the cutting-bar A, having the V shaped groove S, and sharp edges *t*, along its cutting edge, substantially as set forth. 30

3. The combination in a portable slate cutter or trimmer having the frame consisting of the legs C, and D, and the side-bars B, and B', bolted thereto, of the cutting-bar having the V shaped groove S, and cutting edges *t*, 35  
along its lower or cutting edge, substantially as set forth.

JOSEPH E. ERNEST.

Witnesses:

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