

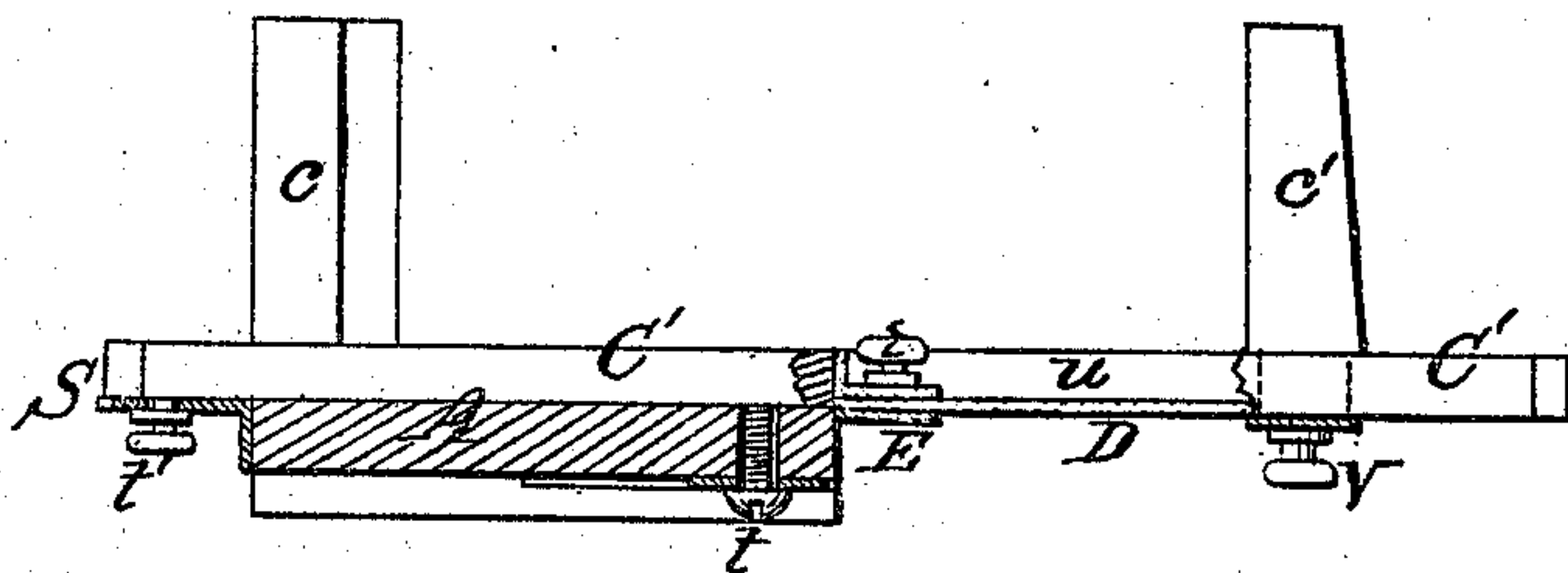
*J. Pons.*

*Miter Box.*

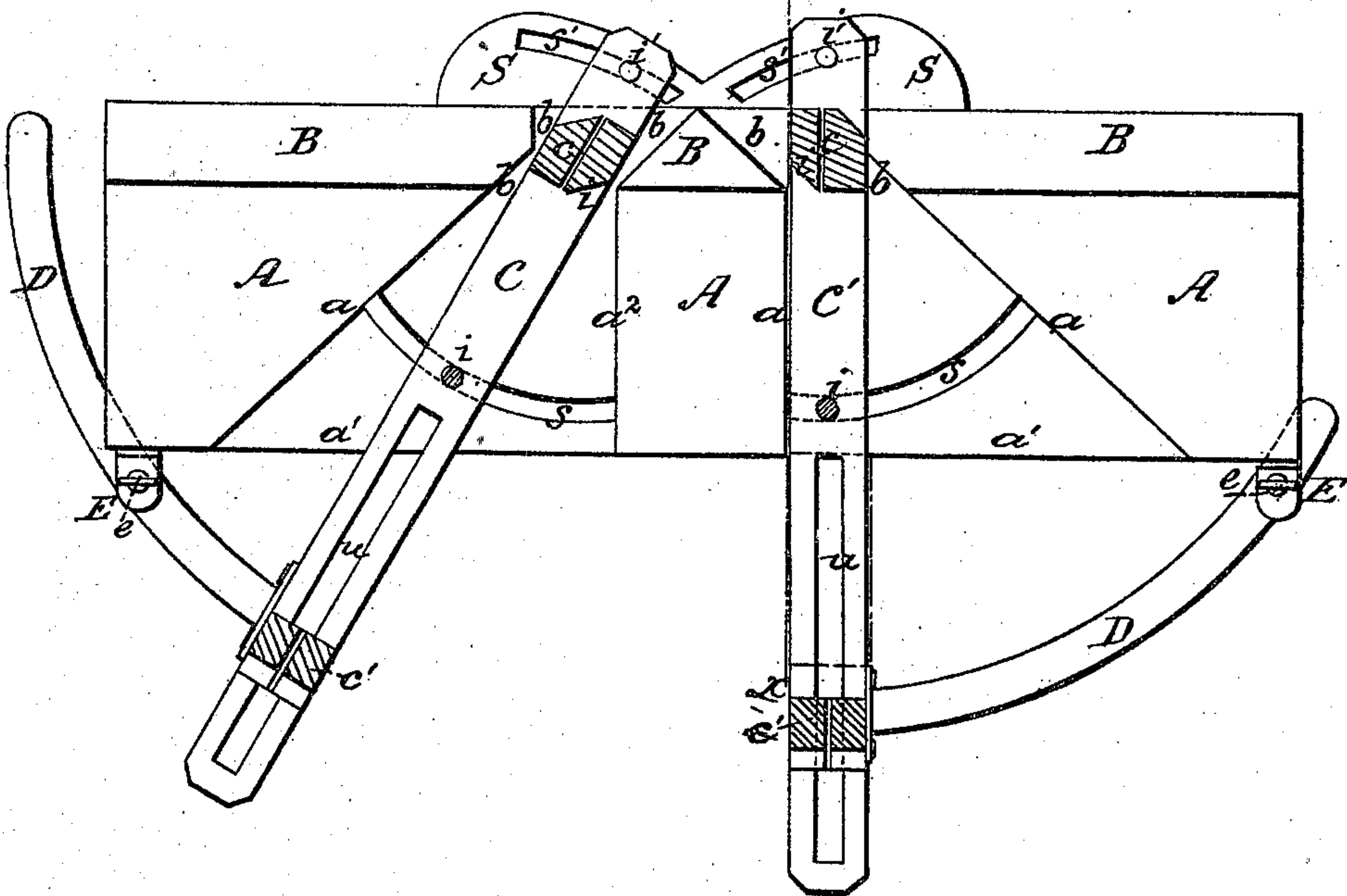
*Nº 87,703.*

*Patented Mar. 9, 1869.*

*Fig. 1.*



*Fig. 2.*



Witnesses.

*C. A. Pettit.*  
*J. C. Kemou.*

Inventor.

*John Pons*  
by *Henry H. C.*  
*Attys.*

# United States Patent Office.

JOHN PONS, OF BALTIMORE, MARYLAND, ASSIGNOR TO HIMSELF,  
JOHN S. RUSSELL, AND HENRY VOGLER, OF SAME PLACE.

Letters Patent No. 87,703, dated March 9, 1869.

## IMPROVEMENT IN MITRE-BOX

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN PONS, of the city and county of Baltimore, and State of Maryland, have invented a new and improved Mitre-Box; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical cross-section through line  $x x$  of fig. 2.

Figure 2 is a top view.

The object of this invention is to construct a cheap and convenient mitre-box, of such a nature that it can be gauged at any angle without difficulty, and in a moment of time.

In the drawings—

A indicates the base-board;

B, the side-board; and

C C', two arms, each pivoted to the base-board, by means of two curved slots,  $s s'$ , in the latter, and set-screws,  $t t'$ , attached to the arms, and projecting through the slots.

The slots  $s s'$  may be formed either in a projecting part of the board itself, or in a metallic plate, S, affixed to the board, as shown in the drawings.

Each arm C C' is provided with a fixed standard,  $c$ , and a movable standard,  $c'$ , both slit, to receive and guide the saw.

The movable standard may be constructed to slide back and forth in a slot,  $u$ , in the arm, and to be fixed in any required position by means of a set-screw,  $v$ , on the under side of the arm.

Each arm is also provided with a curved arm or rod, D, rigidly affixed to it, and extending through a slot in the corner of the base-board, or a clamp, E, attached to said board, and capable of being fixed in any required position by means of a set-screw,  $e$ .

The board or plank to be sawn is placed upon the instrument, so as to rest upon the base-plate, along the line of the letters A A A, fig. 2, and against the

side wall B B. The arms C C' are then adjusted at the required inclination thereto, and fixed in that position by the set-screws  $e t t'$ , or any of them, when the operation of sawing at the required angle can be readily performed.

It is evident that it will not answer to have the plank resting upon the arms C C'. Hence they are made flat between the standards, and are countersunk in the base-plate, so as to bring the weight of the plank on the board A, and allow the arms to move freely.

The countersink is made in the triangular form shown by the lines  $a a' a''$ , so that the arms can each move through an eighth of a circle.

The two together will then move over ninety degrees, and will gauge the plank to be sawn, at any angle, from nothing up to ninety degrees.

The standards  $c c'$  are made to operate in the line of the side wall B, the latter being cut away at  $b b$ , to accommodate them.

The edges of these standards are bevelled off, as shown at  $i$ , so as not to project beyond the inner face of the side wall.

I do not claim, as my invention, a mitre-box, of any form, having but one pivoted arm, operating like the arm C; but, having thus described my invention,

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

The adjustable mitre-box, herein described, consisting of the base-board A, recessed at  $a a' a''$ , and slotted at  $s s'$ , the side-board B, being cut away at  $b$ , and two arms C C, pivoted in the slots  $s s'$ , working in the recesses, and each provided with an adjusting-rod, D, fixed standard  $c$ , and an adjustable standard,  $c'$ , all said parts being constructed and arranged to operate together in the manner and for the purpose herein set forth.

JOHN PONS.

Witnesses:

HENRY VOGLER,  
OTTO MEYERS.