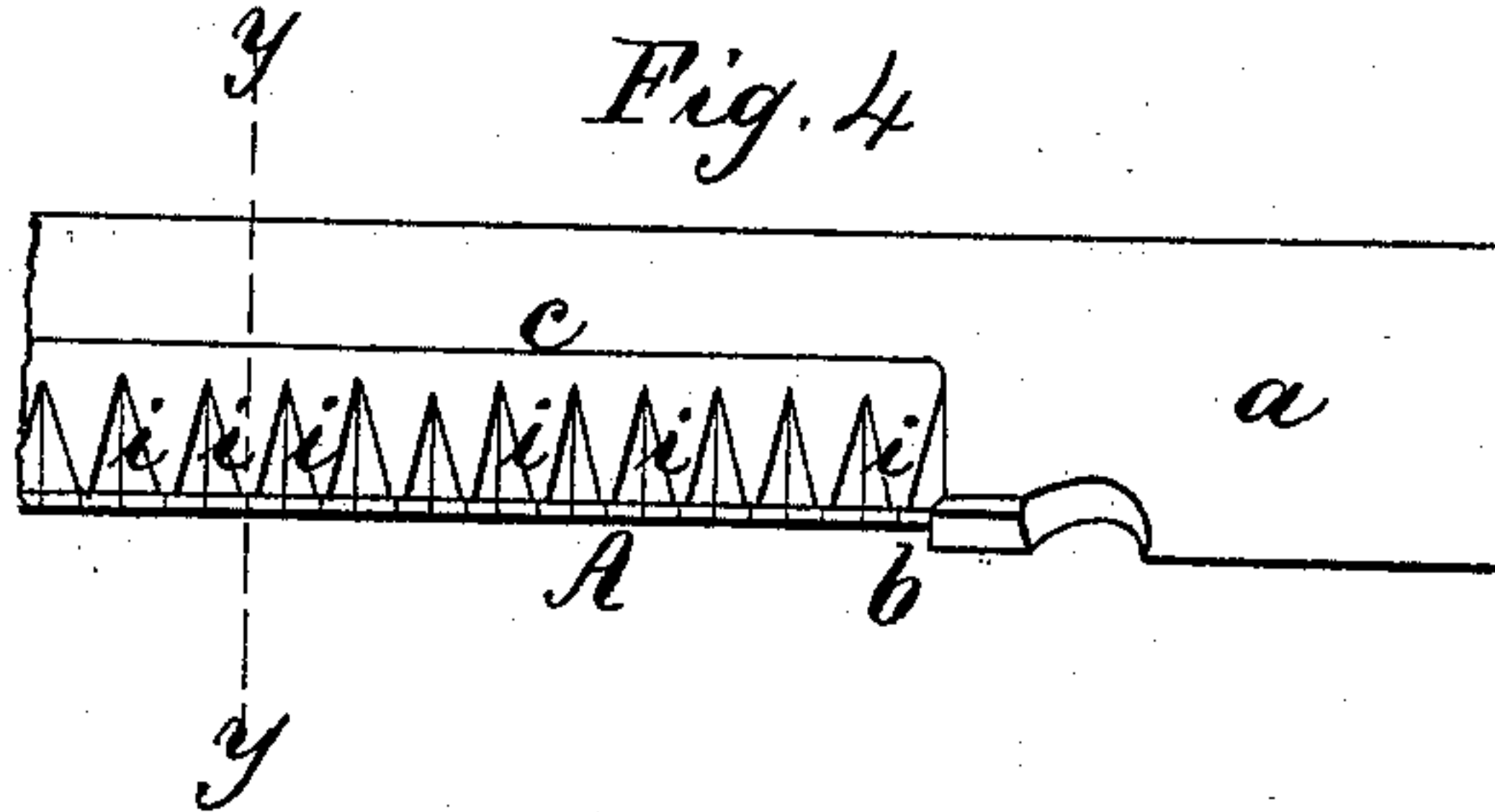
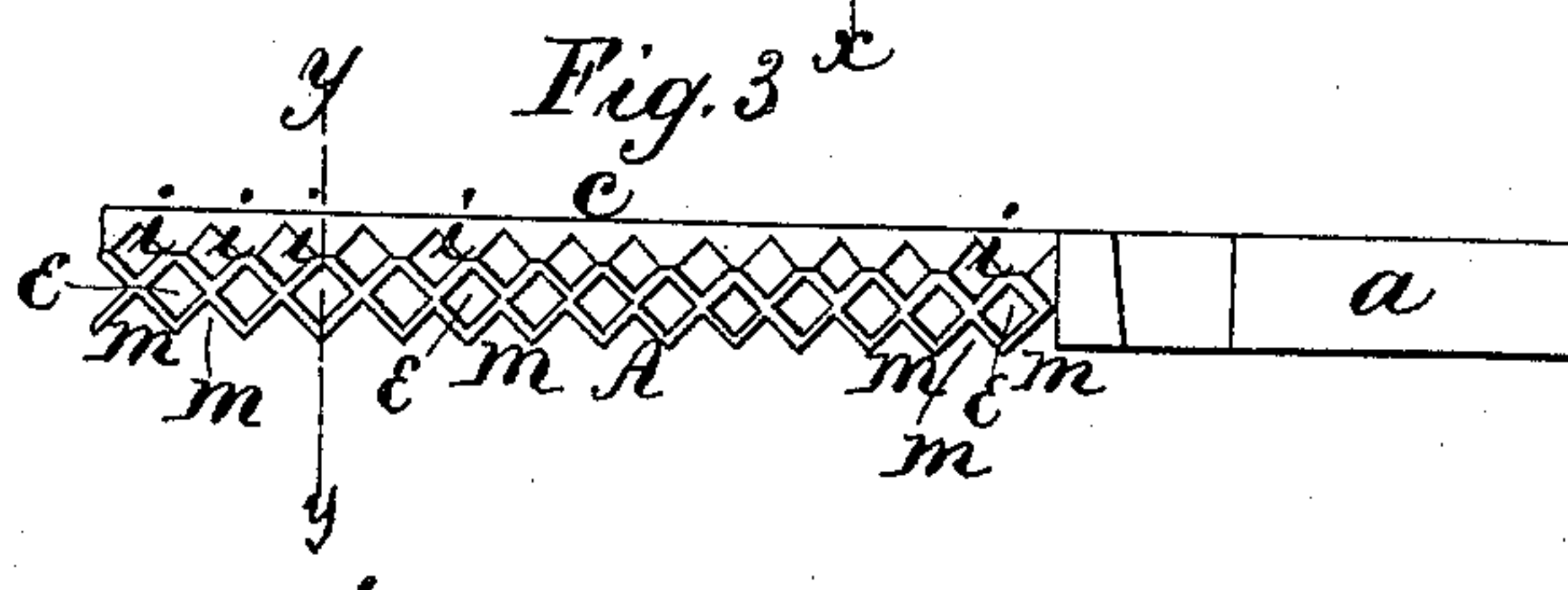
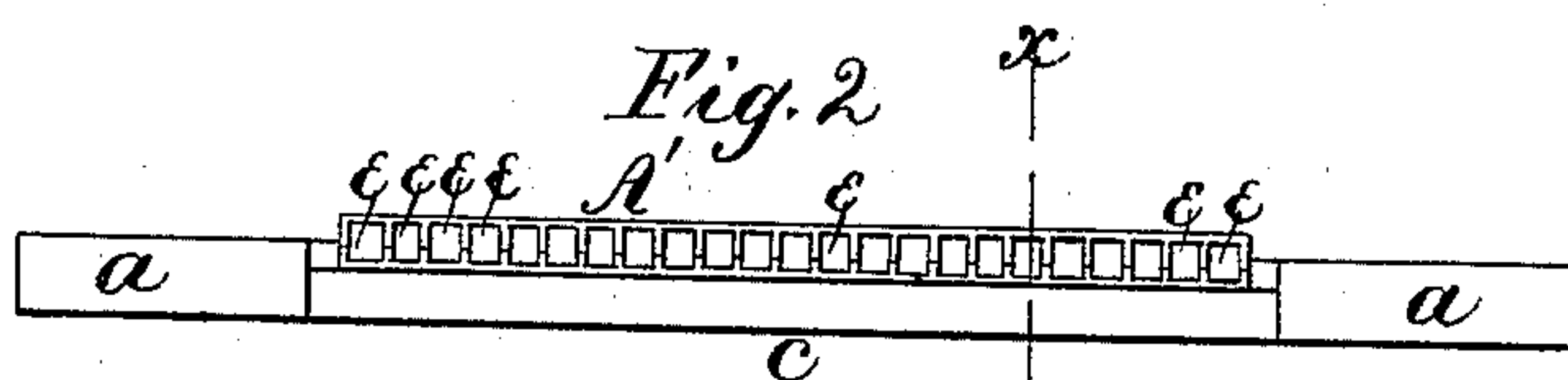
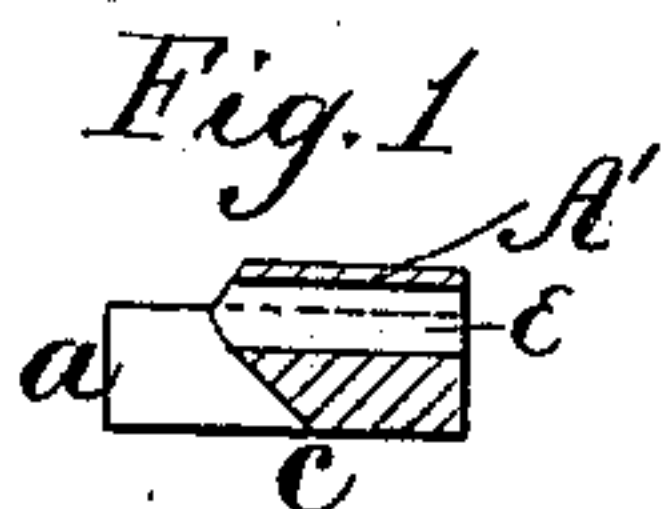


*Murphy & Barber*

*Match Machine.*

*N<sup>o</sup> 86,576.*

*Patented Feb. 2, 1869.*



Witnesses  
*Chas. A. Pettit*  
*S. C. Newon*

Inventor  
*No. D. Murphy and O. C. Barber*  
*By [Signature] Attorneys.*

# United States Patent Office.

M. D. MURPHY AND OHIO C. BARBER, OF MIDDLEBURY, OHIO, ASSIGNORS TO "THE BARBER MATCH COMPANY," OF SAME PLACE.

Letters Patent No. 86,576. dated February 2, 1869.

## IMPROVED DEVICE FOR SPLITTING MATCH-SPLINTS.

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

To all whom it may concern:

Be it known that we, M. D. MURPHY and OHIO C. BARBER, of Middlebury, in the county of Summit, and State of Ohio, have invented a new and improved Match-Splint Cutter; and we 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 cross-section through line *x x* of fig. 2.

Figure 2 is an edge view of the instrument when made with the cutters arranged side to side.

Figure 3 is a similar view, showing the cutters arranged corner to corner, and the edges bevelled differently from the instrument above referred to.

Figure 4 is a side view of the instrument represented in fig. 3.

Figure 5 is a cross-section through the line *y y* of figs. 3 and 4.

The object of this invention is to produce a cutter which can be kept sharp more easily and perfectly than those hitherto used, and which will economize the material to better advantage. To this end,

The invention consists, first, in the form of the edge, and of the holes through which the splints are forced, and secondly, in the method of forming the said edge and holes in manufacturing the instrument.

The instrument is formed of a single piece of metal, having its ends extending beyond the cutting-edge, so that they can be secured and held firmly by the machine in which it is operated.

In the drawings these ends are represented at *a a*, and the cutting-edge is shown at *A A'*.

The holes *e e*, through which the splints are forced, are not made round, as heretofore, but square, and are arranged as shown in figs. 2 and 3, or in any other suitable manner.

The cutting-edge of the instrument may come out flush with the ends *a a*, or may be left slightly retreating, as shown at the shoulder *b*, fig. 4.

From a line, *c*, near the middle of its side, the in-

strument is bevelled towards the edge, and on the opposite side it is also slightly bevelled, so that the cutting-edges, between the holes *e e*, terminate in comparatively sharp points, which strike the wood in advance of the other parts of the edge, and penetrate it easily.

When the holes are arranged side to side, both sides of the instrument are flat and straight, and the thin cutting-edge may be slightly raised above the rest of the instrument, as seen at *A'*, figs. 1 and 2.

When the holes are arranged corner to corner, the metal is cut away between them on the bevelled edge, as shown at *i i*, and on the opposite or thin edge, as seen at *m m*, figs. 3 and 4. The metal immediately around the holes *e e* is then sharpened down to a fine edge, if preferred, or it may be left, as seen in fig. 2, sharpened only by the bevels of the sides, above described.

When made in this form, every part of the edge can be made and kept sharp without difficulty, so that the splints can be cut better, and with the outlay of less power than heretofore, while, from the form and arrangement of the holes, a great saving of the wood is effected.

The cutters are formed by preparing the metal in the shape above described, and drilling a small round hole where the centre of each square hole is ultimately to be, and then, having removed the drill, forcing through each round hole a square punch a little larger than the hole; then another, a little larger than the former, and so on, till the hole is of the required size.

Having thus described our invention,

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

The instrument represented in figs. 2 and 3, as and for the purpose described and shown.

M. D. MURPHY.  
OHIO C. BARBER.

Witnesses:

A. W. BOARDMAN,  
V. I. MORTON.