

S. H. Wood.

*Sheet 1,
2 Sheets.*

Making Tools

N^o 76,574.

Patented Apr. 7, 1868.
Fig. 1

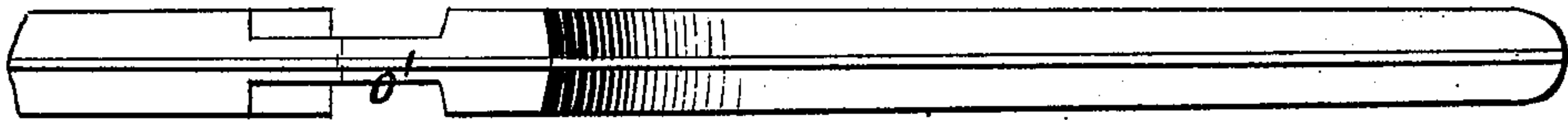


Fig. 2.

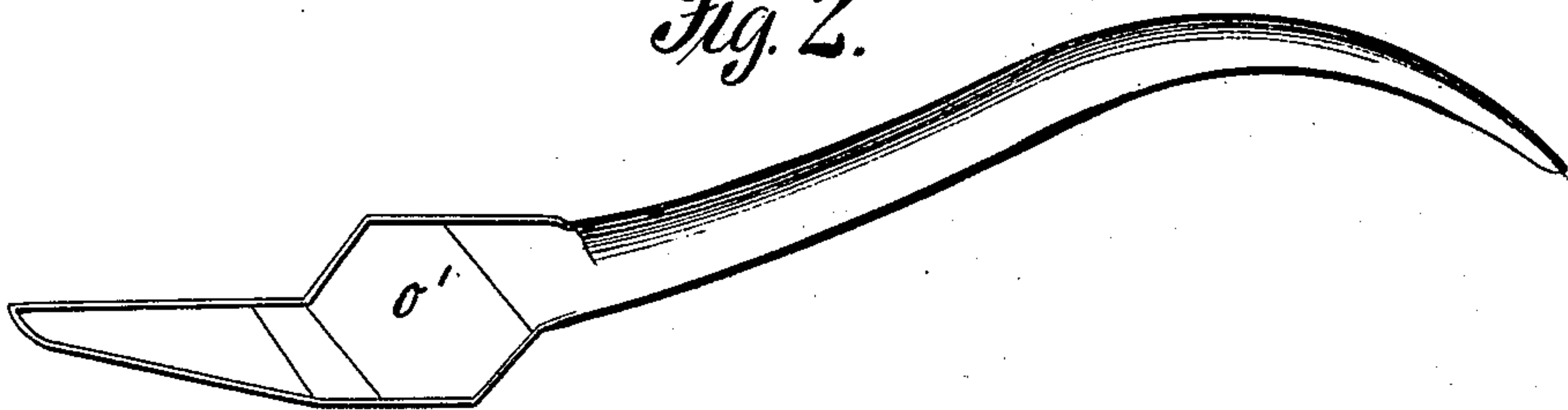


Fig. 3.

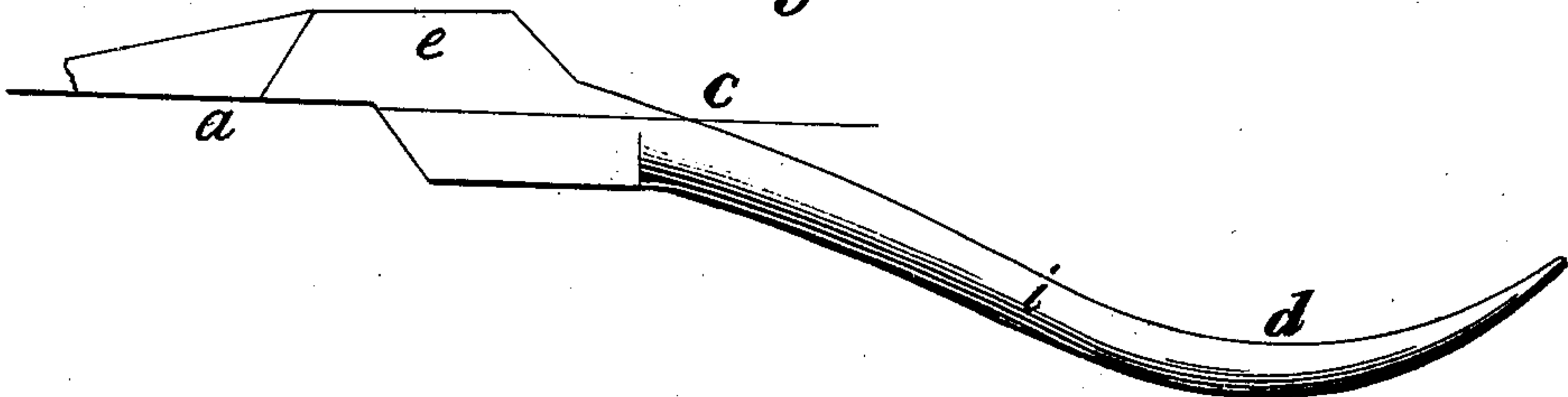
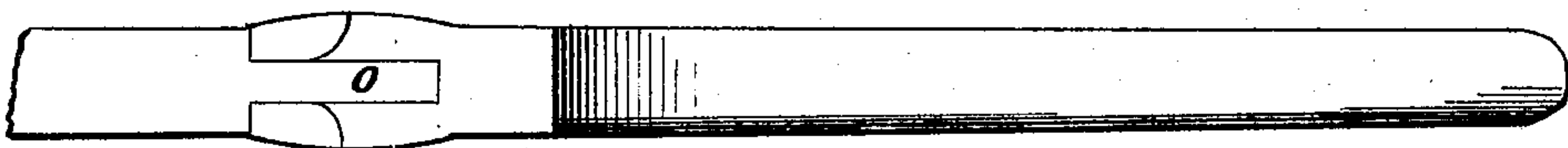


Fig. 4.



Witnesses.
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*Sheet 2.
2 Sheets.*

Making Tools.

N^o 46,574. Fig. 5.

*Patented Apr. 7, 1868.
Fig. 6.*

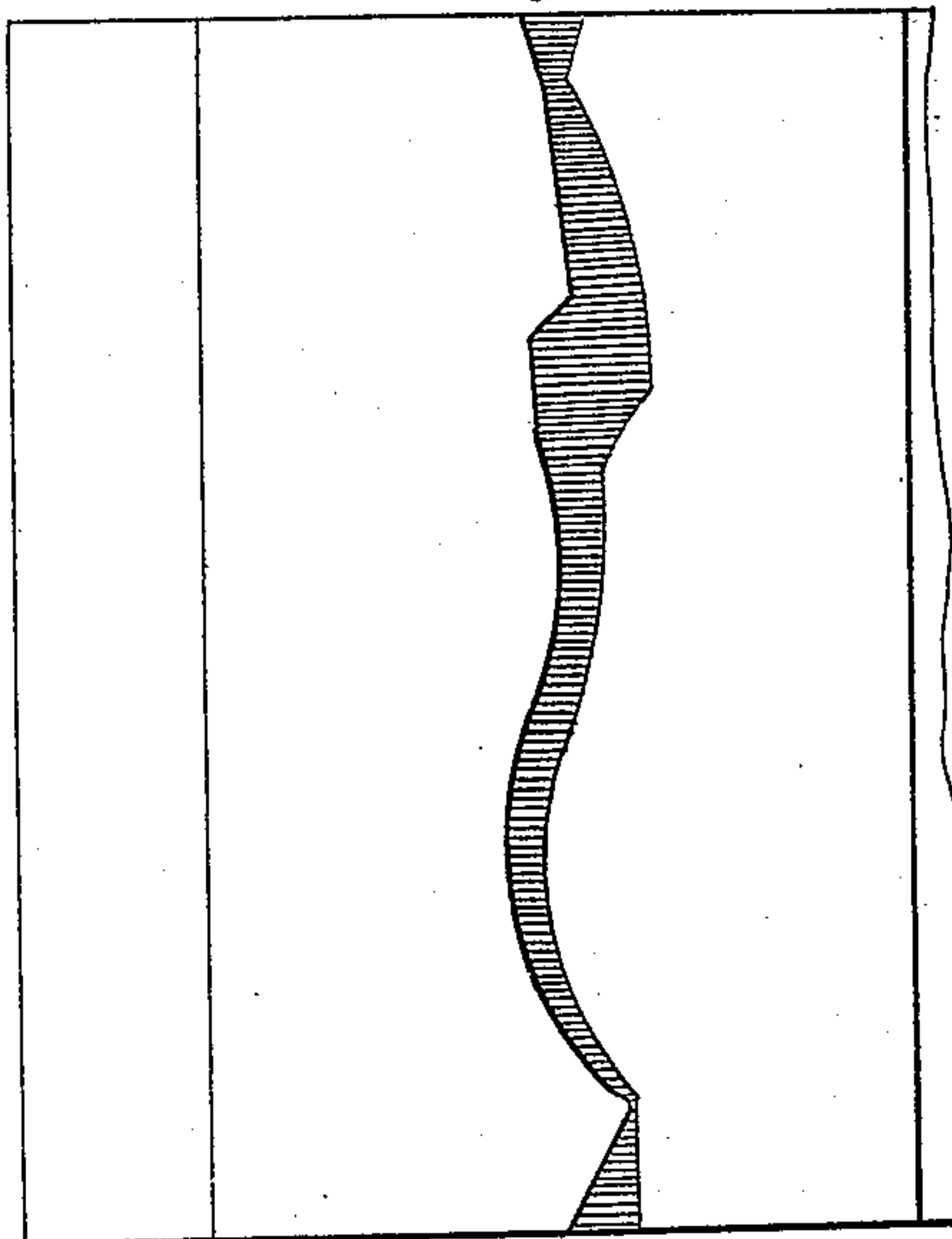
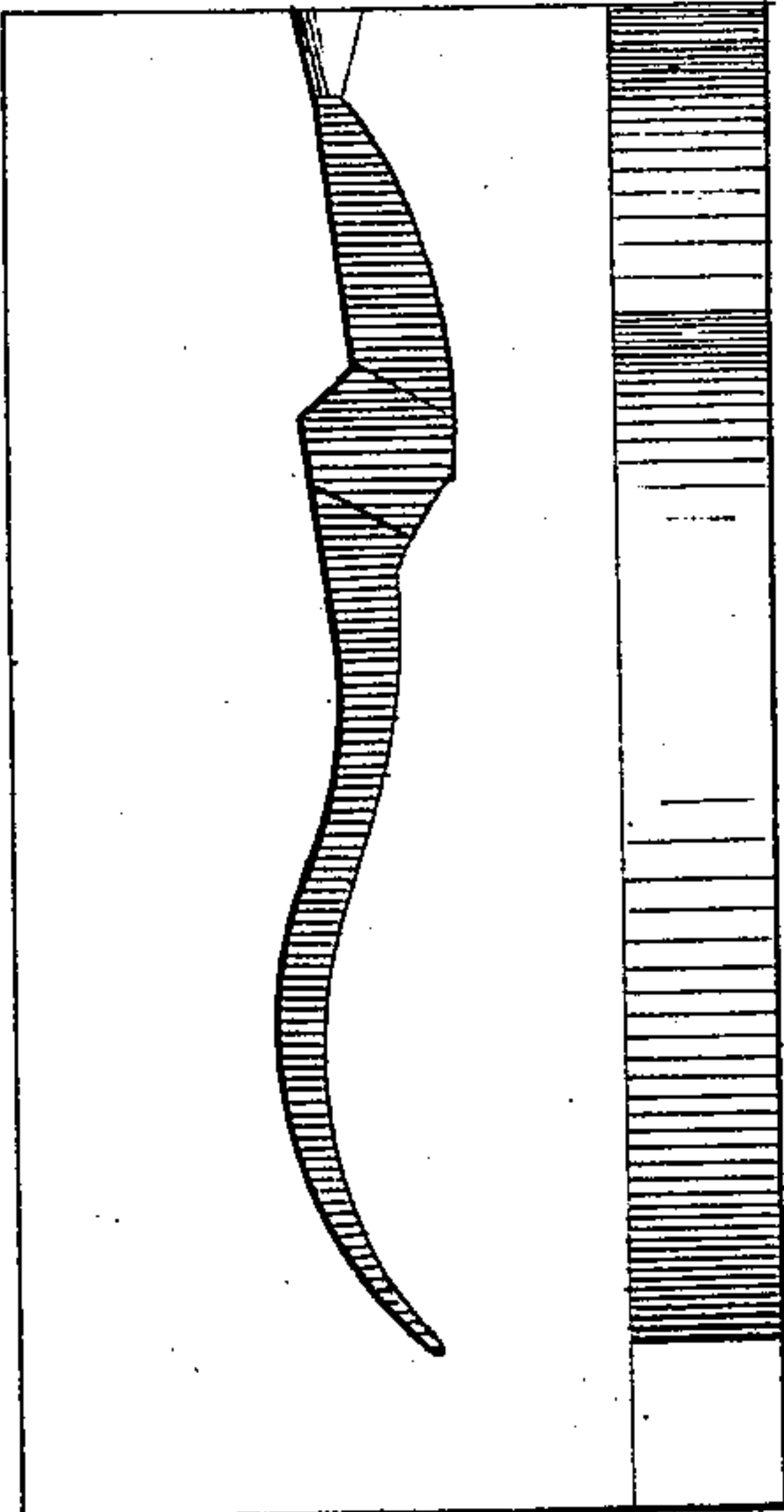
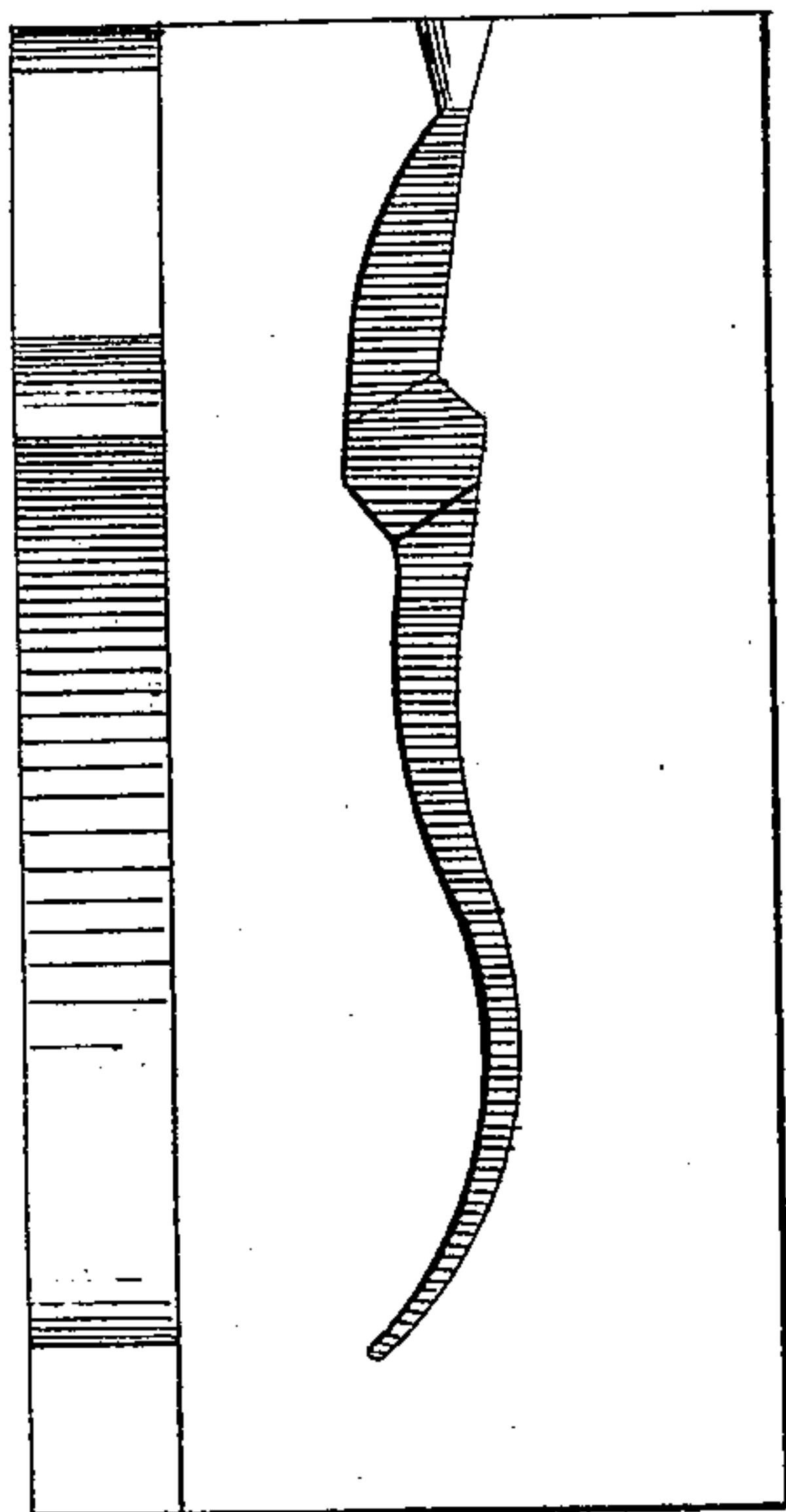
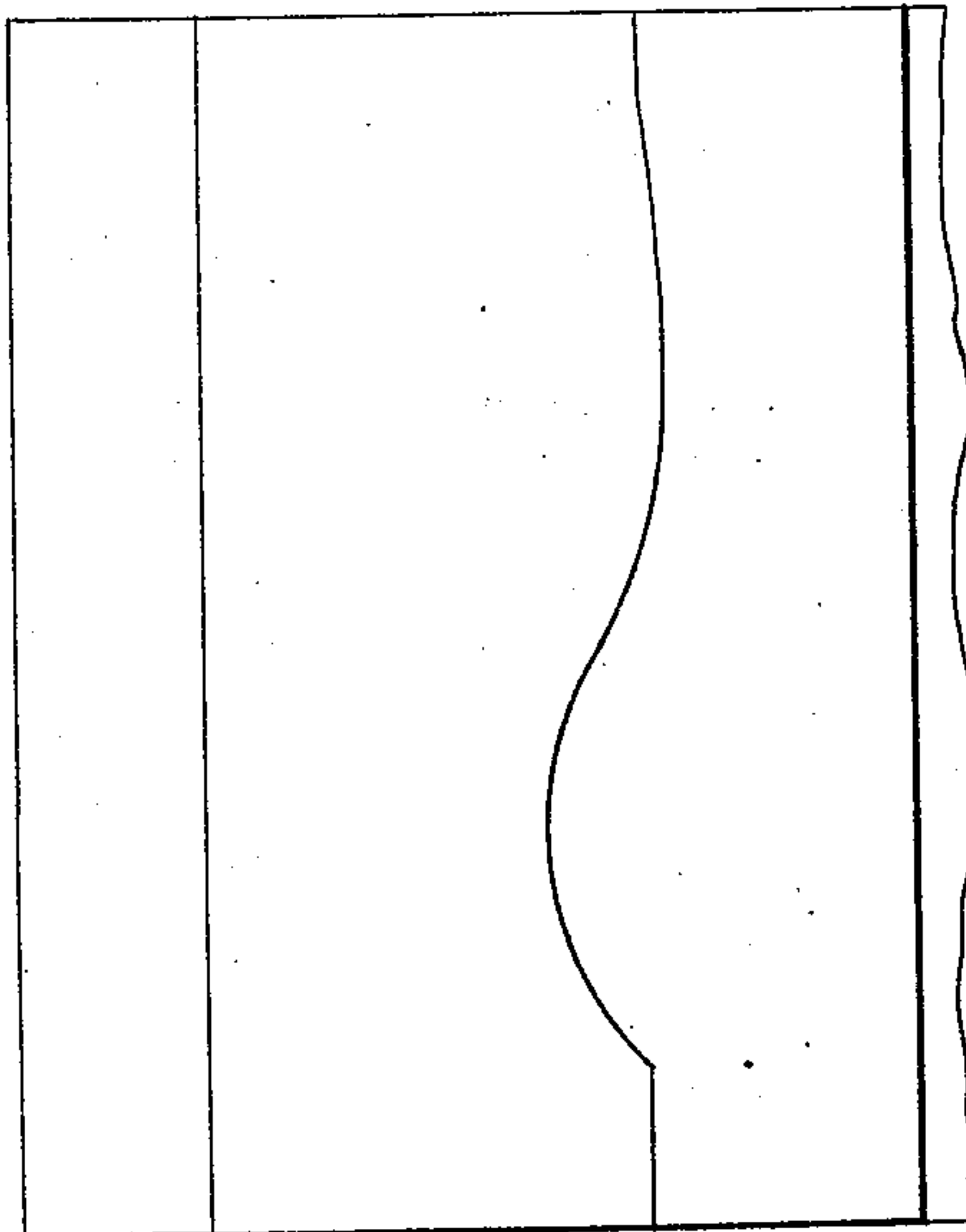
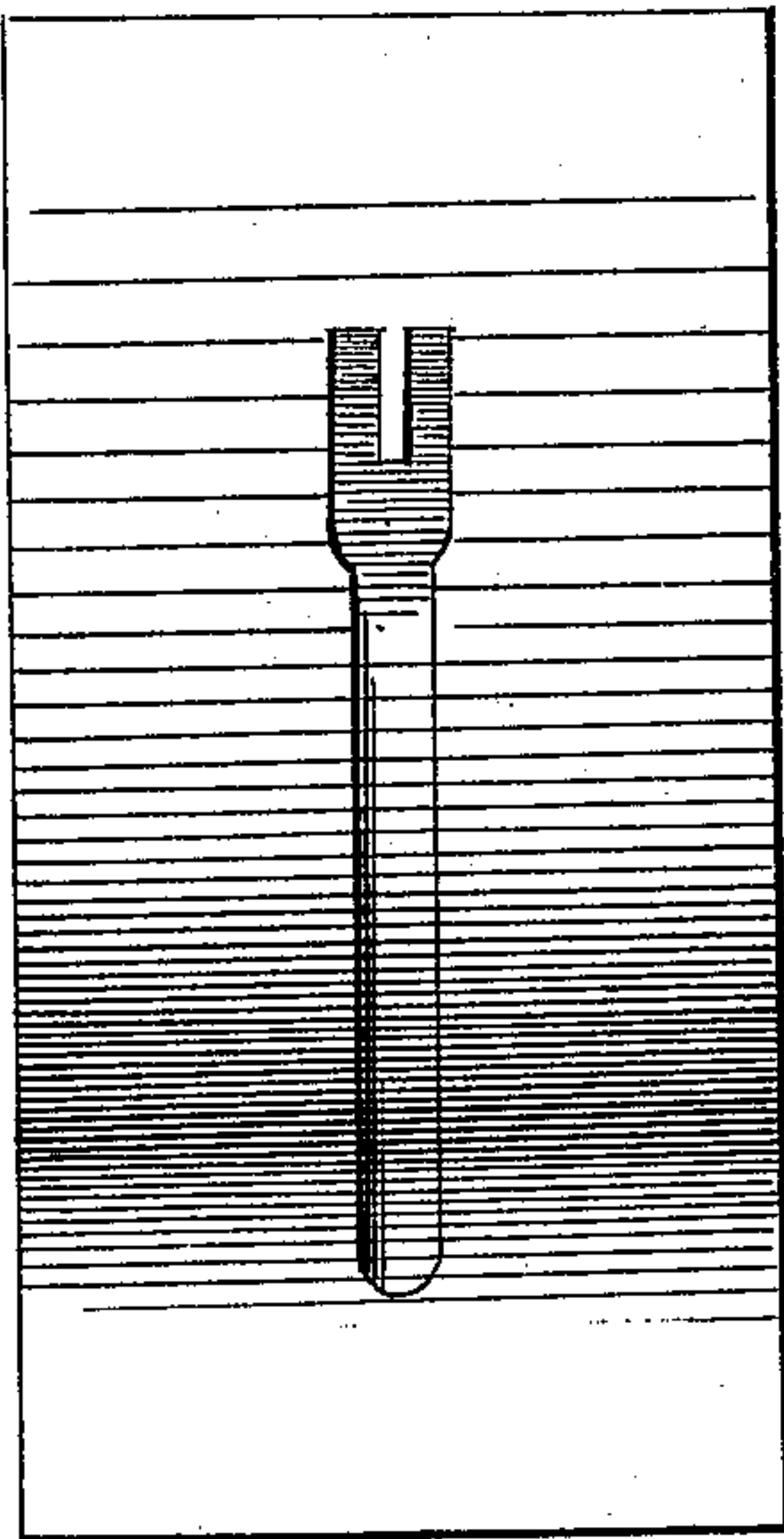
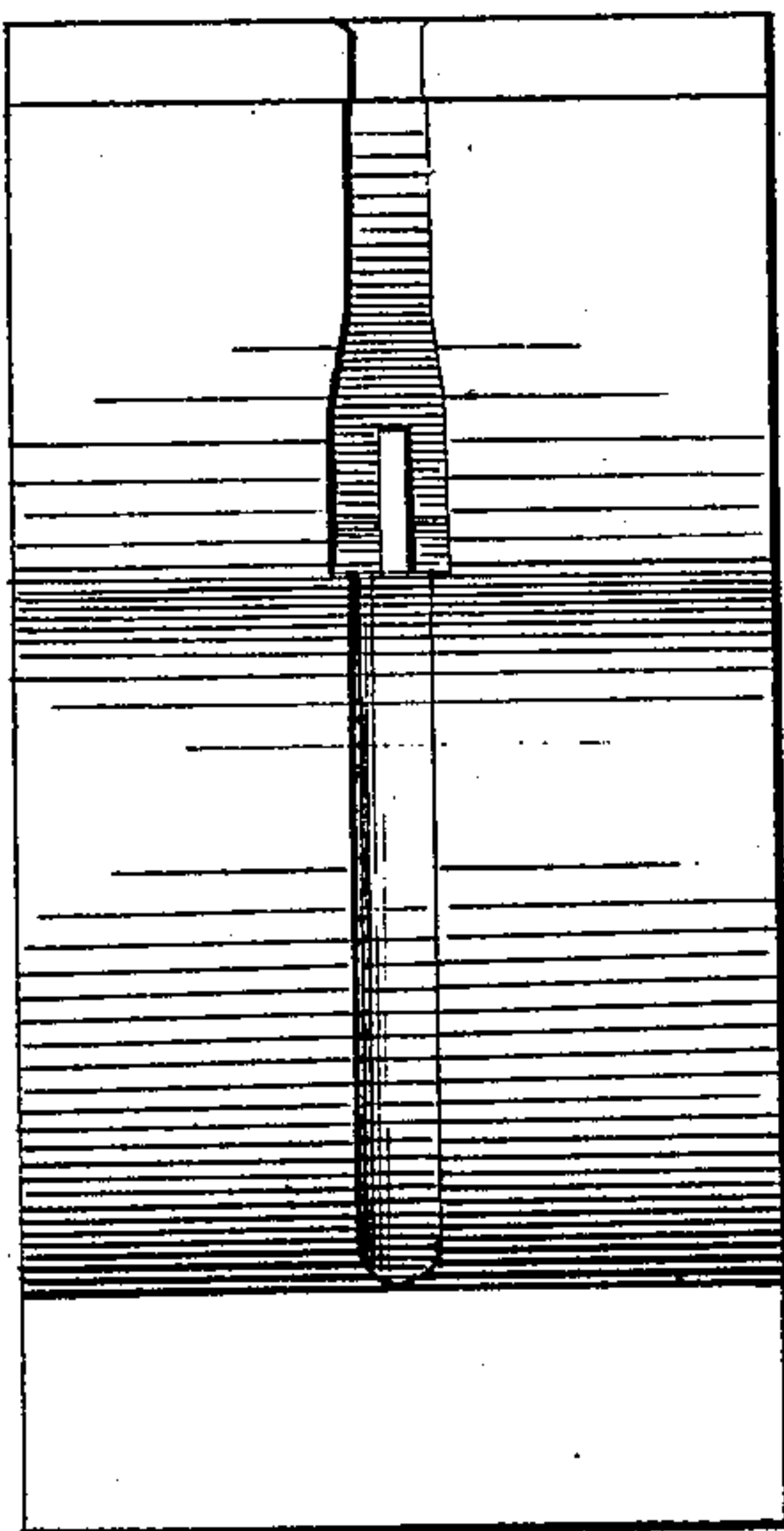


Fig. 7.

Fig. 8.



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SOLOMON H. WOOD, OF EAST BERLIN, CONNECTICUT.

Letters Patent No. 76,574, dated April 7, 1868.

IMPROVED DIES FOR MAKING PLIERS.

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, SOLOMON H. WOOD, of East Berlin, county of Hartford, and State of Connecticut, have invented certain new and useful Improvements in the Manufacture of Pliers, and other like tools; and to enable others skilled in the art to practise the same, I will proceed to describe by referring to the drawings, in which the same letters indicate like parts in each of the figures.

The nature of this invention consists in constructing a pair of swage-dies (upper and lower dies) for each half, consisting of the handle, joint, and jaw. One set of these dies is constructed to receive the metal, and form the jaws, joint, and handle edgewise. One set of these dies is constructed to receive the metal, and form the jaws, joint, and handle sidewise.

The object of this invention is to facilitate and cheapen the manufacture, and render the work less irksome, and more agreeable and pleasant for the workman, and produce greater uniformity of shape and style. In the accompanying drawings—

Figures 1 and 2 are side and edge views of one-half of a pair of pliers formed by the dies, as seen in figs. 5 and 6.

Figures 3 and 4 are side and edge views of the other half of a pair of pliers formed by the dies, as seen in figs. 7 and 8.

Figure 5 shows the form of the face of the dies employed for forming one part of the pliers.

Figure 6 shows the two dies, fig. 5, closed together, with one portion of a handle as formed between them.

Figure 7 shows the face of the dies employed in forming the other part of the pliers.

Figure 8 shows the two dies, fig. 7, closed together in forming the other part of the pliers.

Fig. 2 shows the shape of the depression formed in each half of one pair of dies.

In fig. 3, *a d* show the lines (which intersect at *c*) of the face of the dies in which fig. 4 is formed.

e is depressed or formed in one part of the die. *z* is depressed or worked out of the other part of the die, so that when a suitable-sized piece of metal is heated to a proper heat, and placed between the dies, (when they are arranged in a drop or press in the common way of securing dies,) and power is applied thereto in the usual way, the shapes, as shown in figs. 1, 2, 3, and 4, will be produced. A slight, thin scale of metal, *o*, will remain, which will be readily removed by a punch and die in the common way of punching metal. After this the slitted or female portion of the pliers, fig. 4, is heated and expanded, so as to receive the joint portion *o'* of fig. 2. Then the flush metal is hammered or compressed to fill the depression *o'* in fig. 2. Then a hole is drilled through the joint portion, and a fulcrum-pin inserted, when a finish is produced much in the usual way.

Thus I am enabled to produce pliers of a superior quality at less than present importing prices, the labor is rendered pleasant and agreeable, and also to produce a valuable acquisition to home trade and manufacture.

I believe I have thus shown the nature and process of this, my improvement in the manufacture of pliers and other such like tools.

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

The dies represented in figs. 5 and 7, constructed and used in the manner and for the purpose substantially as set forth.

SOLOMON H. WOOD. [L. s.]

Witnesses:

A. H. HATHEWAY,

N. C. WILDER.