

# UNITED STATES PATENT OFFICE.

HENRY B. MORRIS, OF ITHACA, NEW YORK, ASSIGNOR OF ONE-HALF OF  
HIS RIGHT TO PERRY G. ELLSWORTH, OF SAME PLACE.

## MANUFACTURE OF BUTTONS OR STUDS.

SPECIFICATION forming part of Letters Patent No. 233,869, dated November 2, 1880.

Application filed August 12, 1880. (No model.)

*To all whom it may concern :*

Be it known that I, HENRY B. MORRIS, of Ithaca, county of Tompkins, State of New York, have invented certain new and useful  
5 Improvements in the Manufacture of Buttons and Studs; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to  
10 make and use the same, reference being had to the accompanying drawings, which form part of this specification.

This invention relates to the manufacture of that class of buttons or studs which are made  
15 by compressing or otherwise forming in dies or molds the material used while such material is in a soft or plastic state, either from the application of heat or by admixture with solvents.

20 The object of this invention is to provide means for making buttons ornamented with designs resembling either inlaid figures, mosaics, or cameos, by forming the button or stud of two or more pieces of the material  
25 which are colored with different pigments.

The composition or material used in making the body or groundwork of the button is prepared for the molds in the usual way, by rolling or pressing into flat sheets, out of which  
30 pieces are cut of proper size to fill the molds. A thinner sheet is also prepared, of substantially similar material, of a different color, out of which are cut letters, geometrical figures, or any ornamental designs that may be  
35 desired. One or more of these thin figures or designs so cut out is then placed in the mold against the side which forms the face of the button or stud. The other material is placed upon it and the mold is closed with the usual  
40 pressure, which compresses the whole into a homogeneous mass, presenting the design intended upon the face of the button or stud.

In the drawings, Figure 1, A is the blank, of the composition or material used, ready for  
45 the mold. B B are ornamental figures cut, as above described, from a thinner sheet of the same or any compatible material. C C are the

finished buttons, having the figures B B embedded in their faces.

When it is desired to produce the figures in  
50 relief upon the button, the dies are engraved in the usual way for forming such raised figures—that is, with a corresponding depression in the face-die. Into this depressed figure or  
55 space in the die the ornamental piece of the composition is placed. This will cause the button or stud to appear as in Fig. 2, which is a sectional view, B being the raised design and E the body of the button.

The thin ornamental design B should be  
60 made of material which unites with that used for the body of the button; but it will in many cases be better to employ a substance which, at a given temperature, is somewhat harder than the body material, which will, therefore,  
65 be compressed closely round the design without changing its form. The same result may be attained by using the body material, if identical with it, at a higher heat, and therefore in a softer state than the design-piece,  
70 though both are soft enough to readily assume the form of the die.

The thin piece of composition from which the ornamental design is cut is sufficiently  
75 plastic to permit the design to be molded into the face of the button, at the same time sufficiently harder than the body of the button to preserve clearly the outlines of the design; the advantage of my invention being the fact that thereby one is enabled to produce imita-  
80 tions of inlaid buttons with irregular surfaces without having to turn, cut, curve, or shape the surfaces of the ornaments so as to coincide with the surfaces of the buttons.

I know that buttons and studs are com-  
85 monly made of compositions consisting of differently-colored materials mixed together, giving them a mottled appearance resembling some stones; also, that different compositions, part of which have been colored to suit the  
90 taste, have been molded in one homogeneous mass while in a heated state and compressed in dies, and that pieces of jet, gems, and other ornaments have been inserted in similar com-

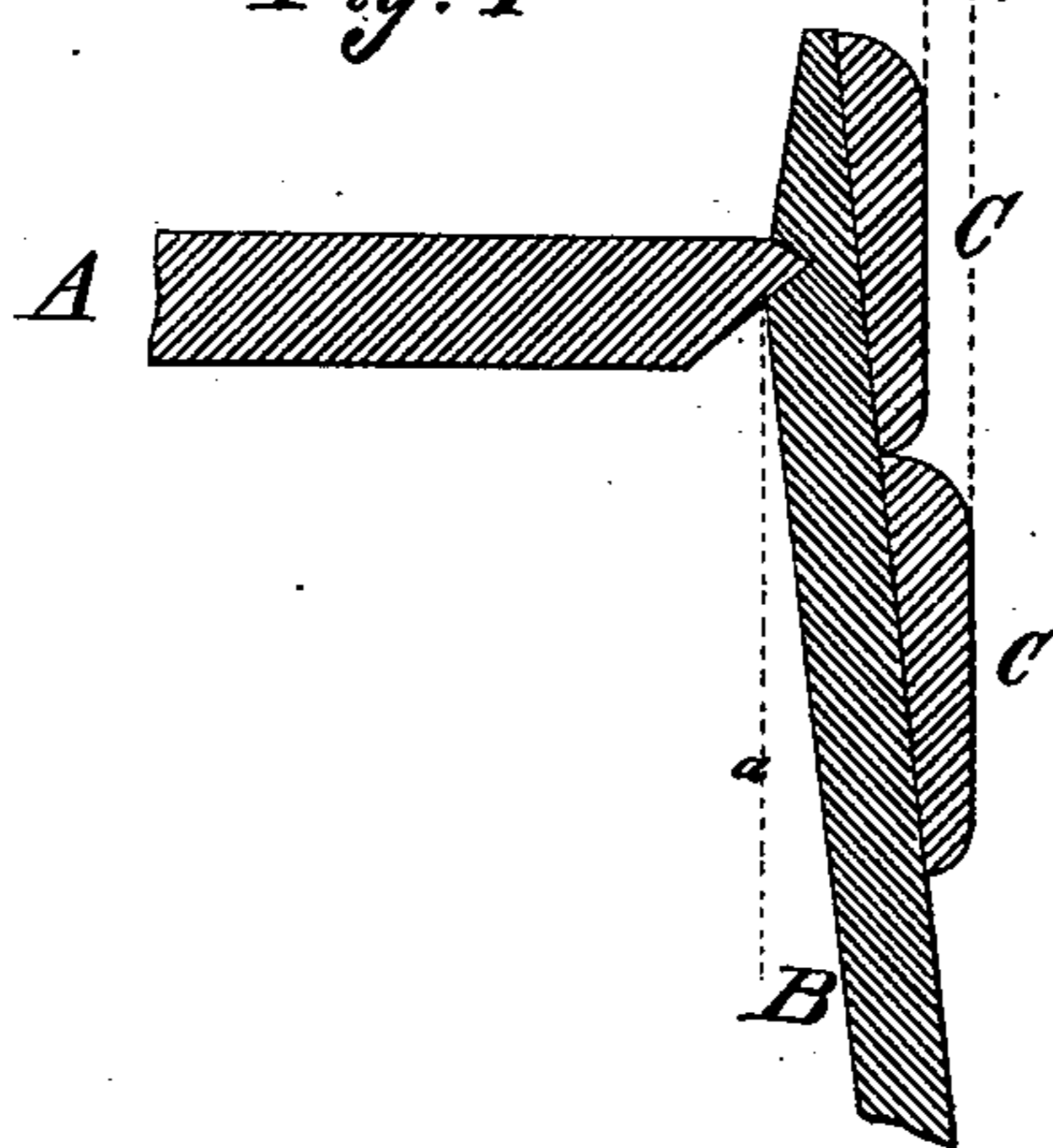
(Model.)

J. NAYLOR, Jr.

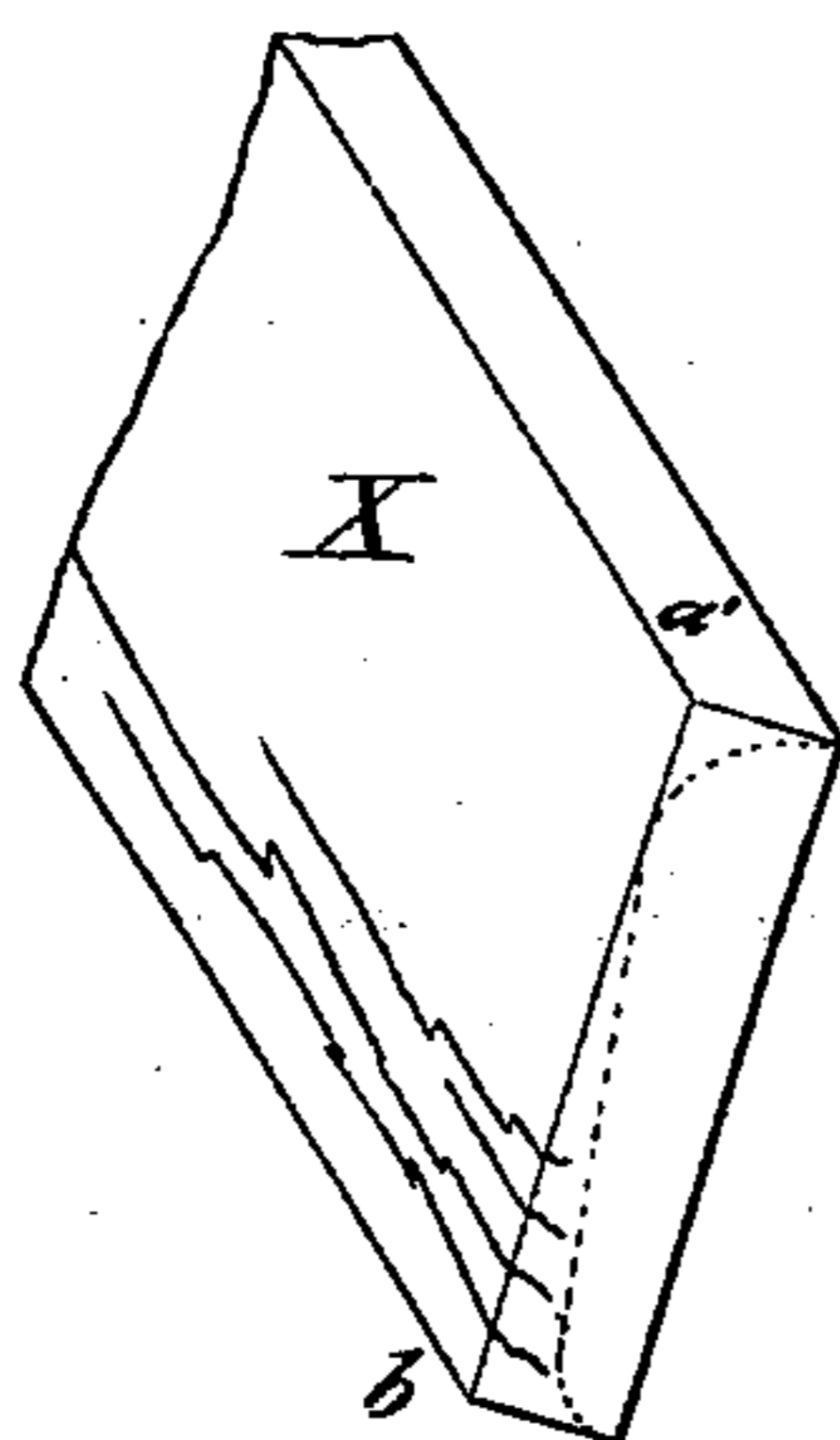
Barrel Hoops and Method of Dressing and Coiling Hoops.  
No. 233,870.

Patented Nov. 2, 1880.

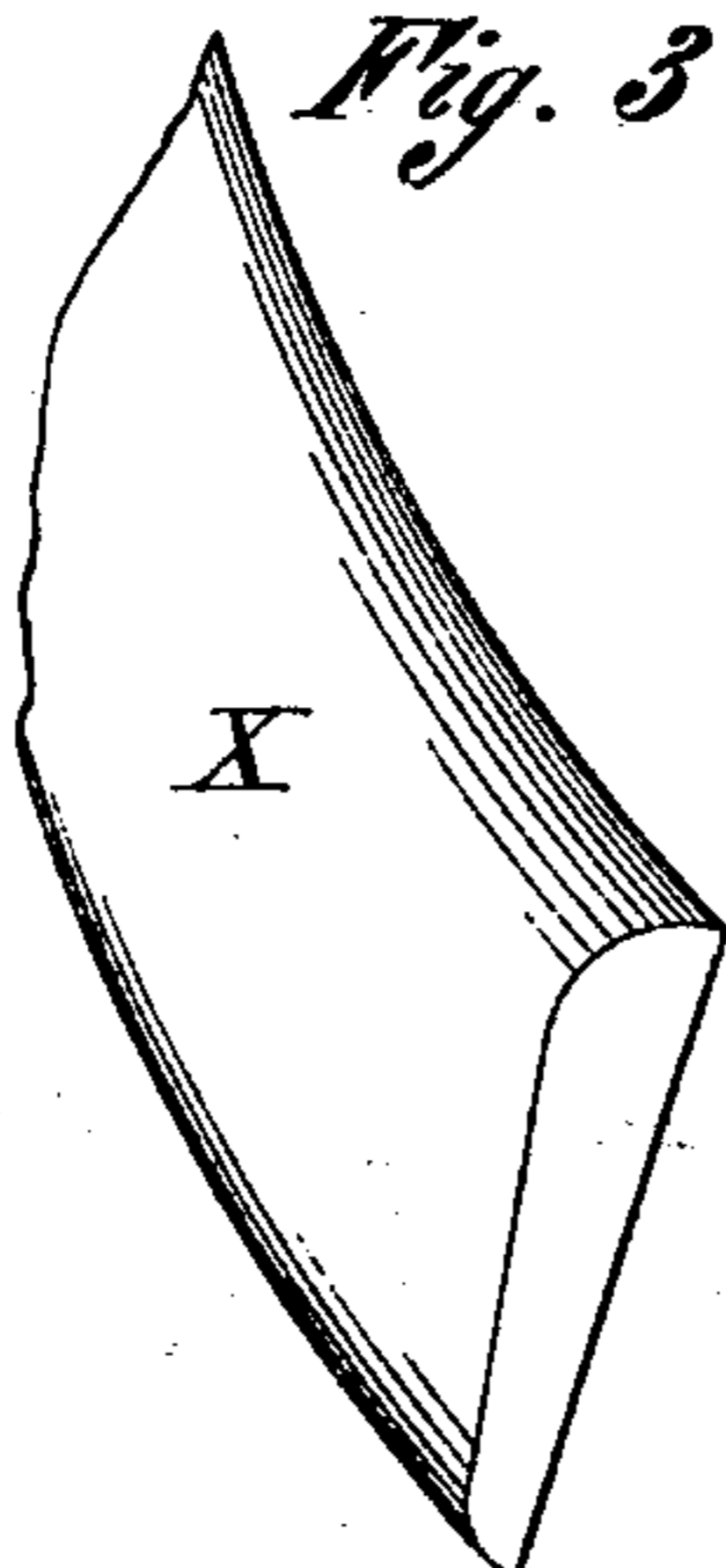
*Fig. 1*



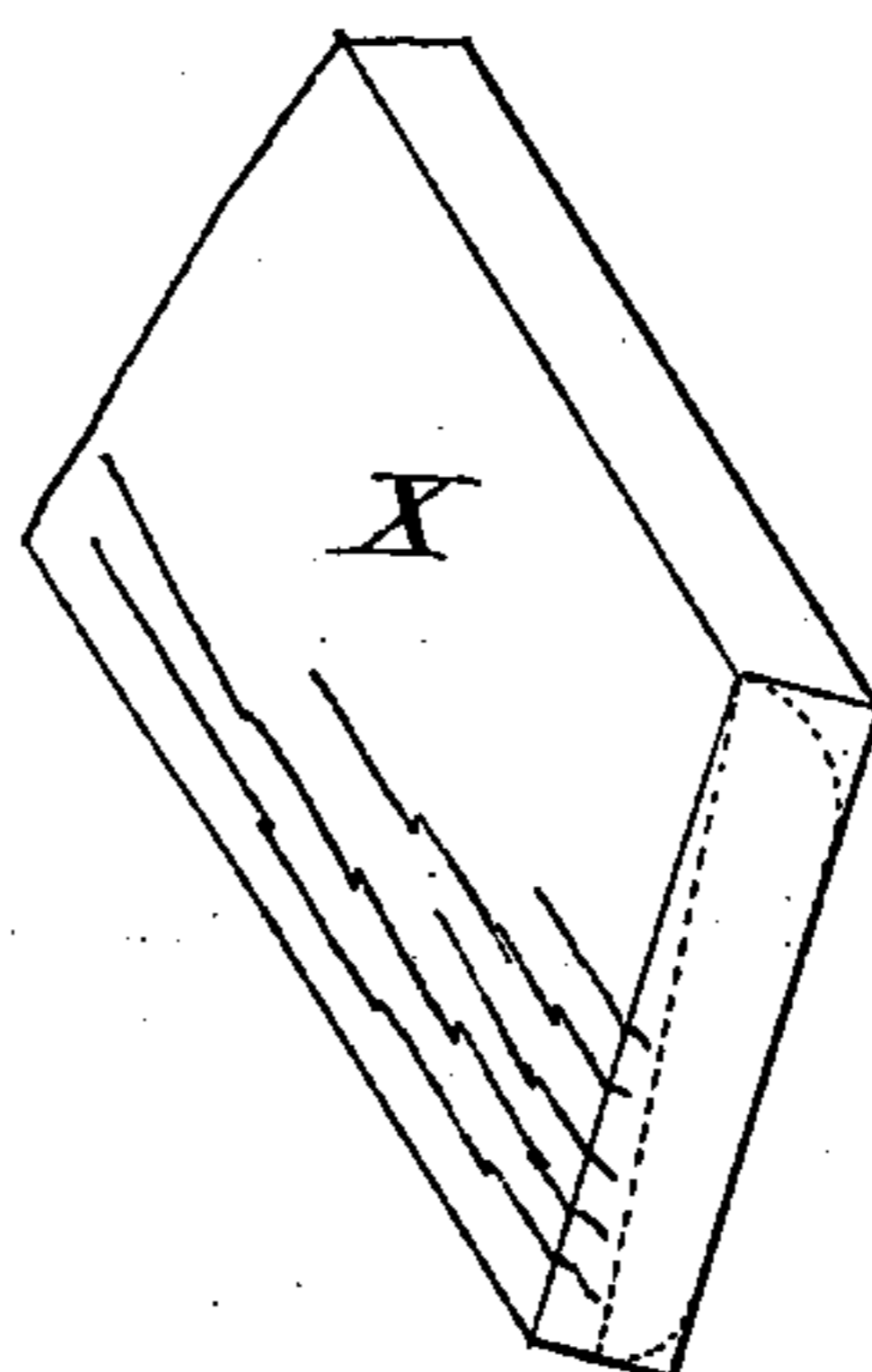
*Fig. 2*



*Fig. 3*



*Fig. 4*



WITNESSES.

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