

(No Model.)

F. W. LEINBACH.
PAPER BAG.

2 Sheets—Sheet 1.

No. 391,804.

Patented Oct. 30, 1888.

Fig. 1

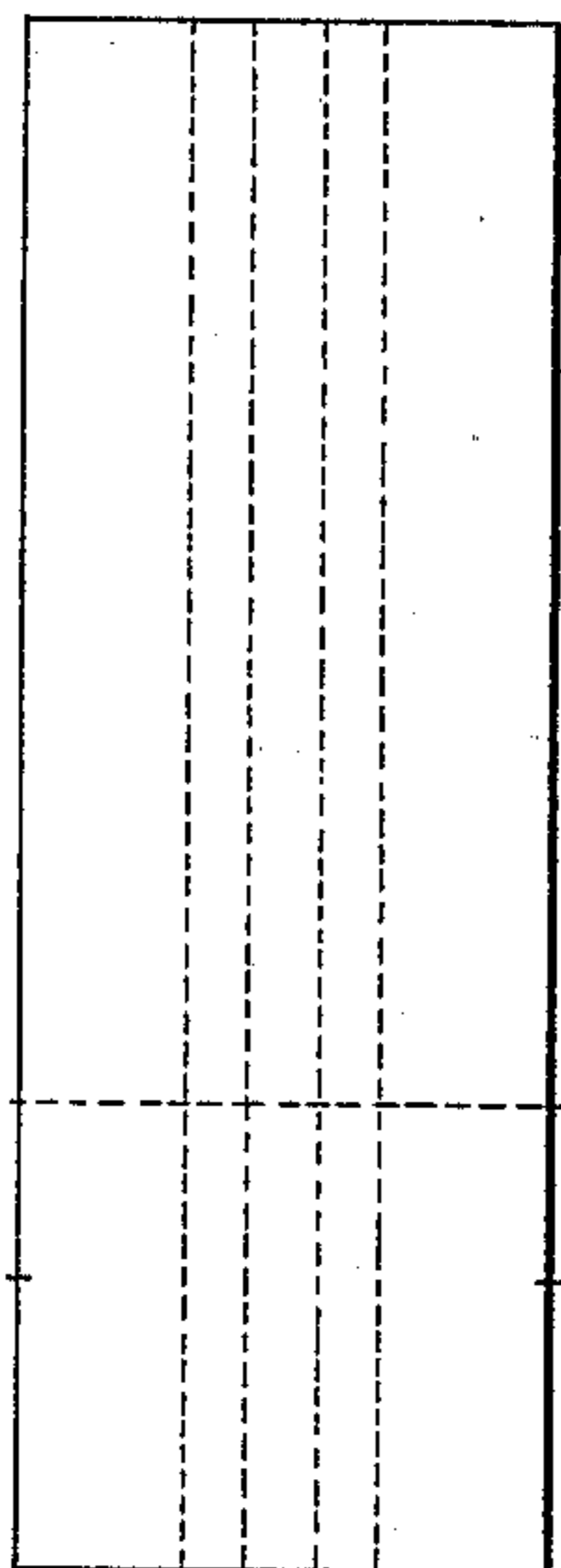


Fig. 3

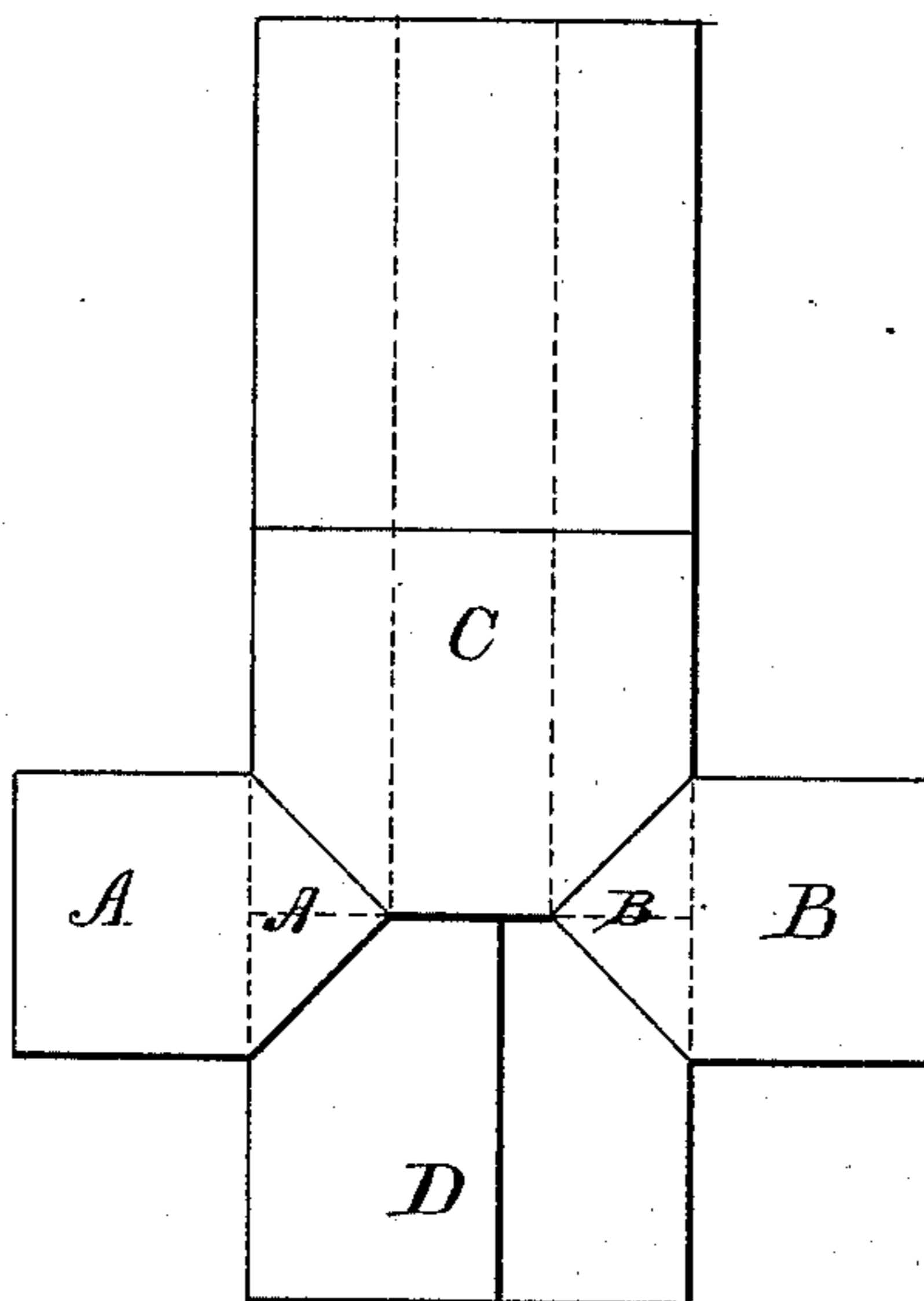


Fig. 4

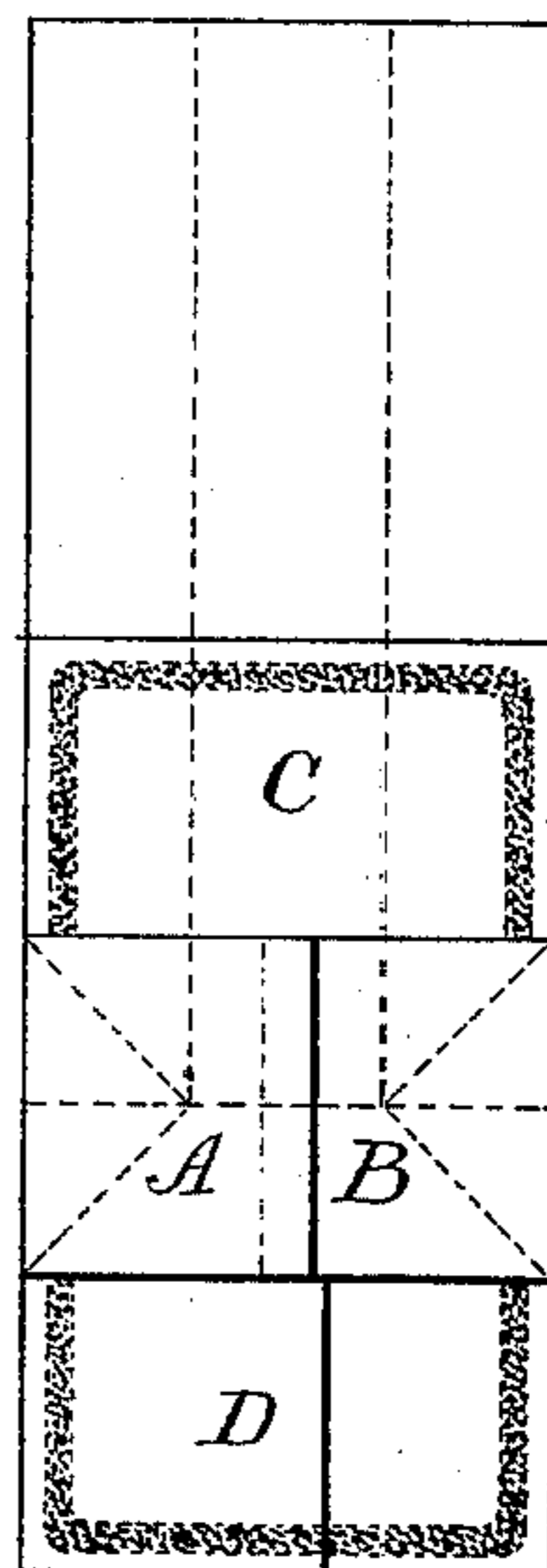


Fig. 2



Fig. 5

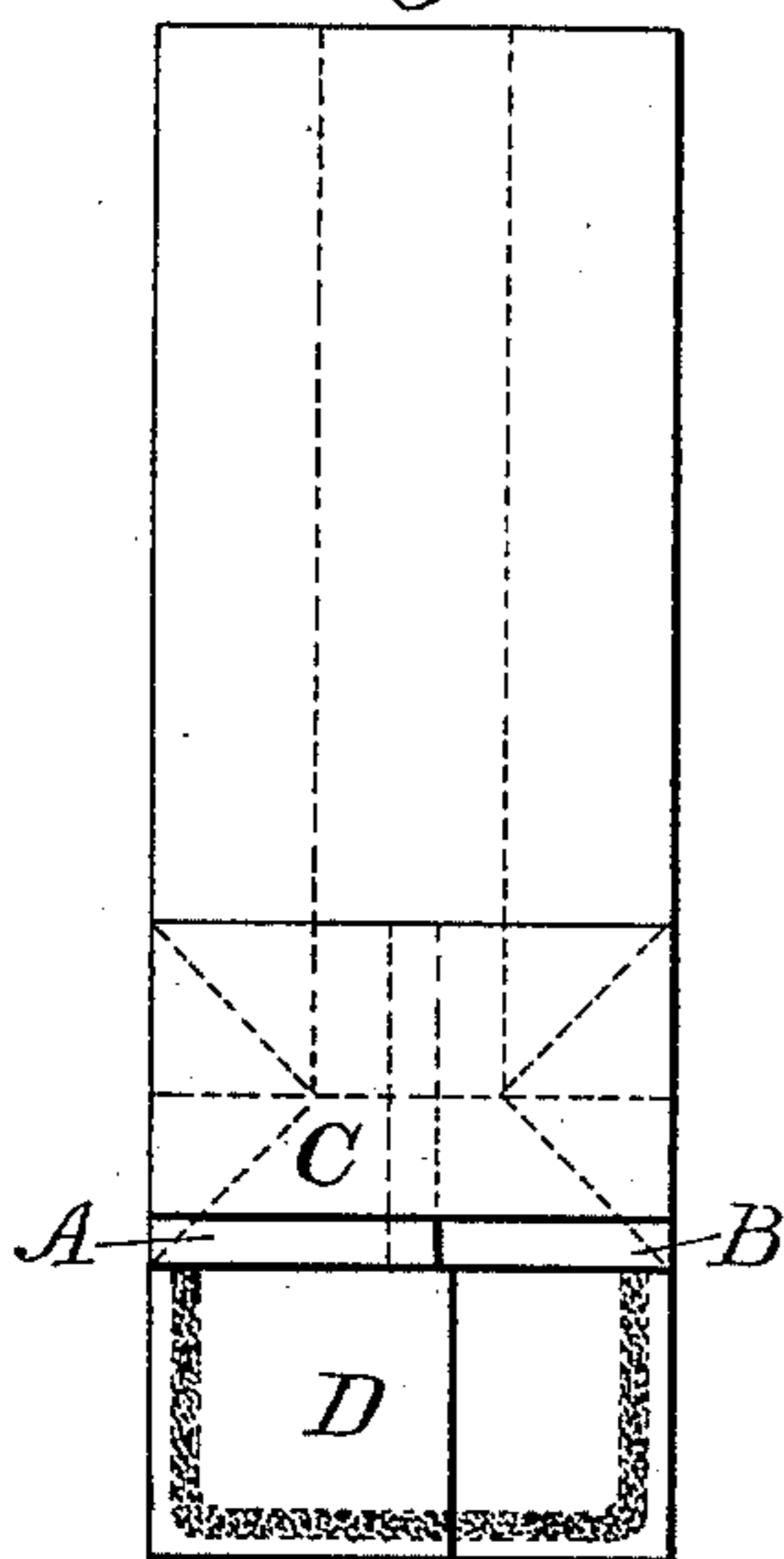


Fig. 6

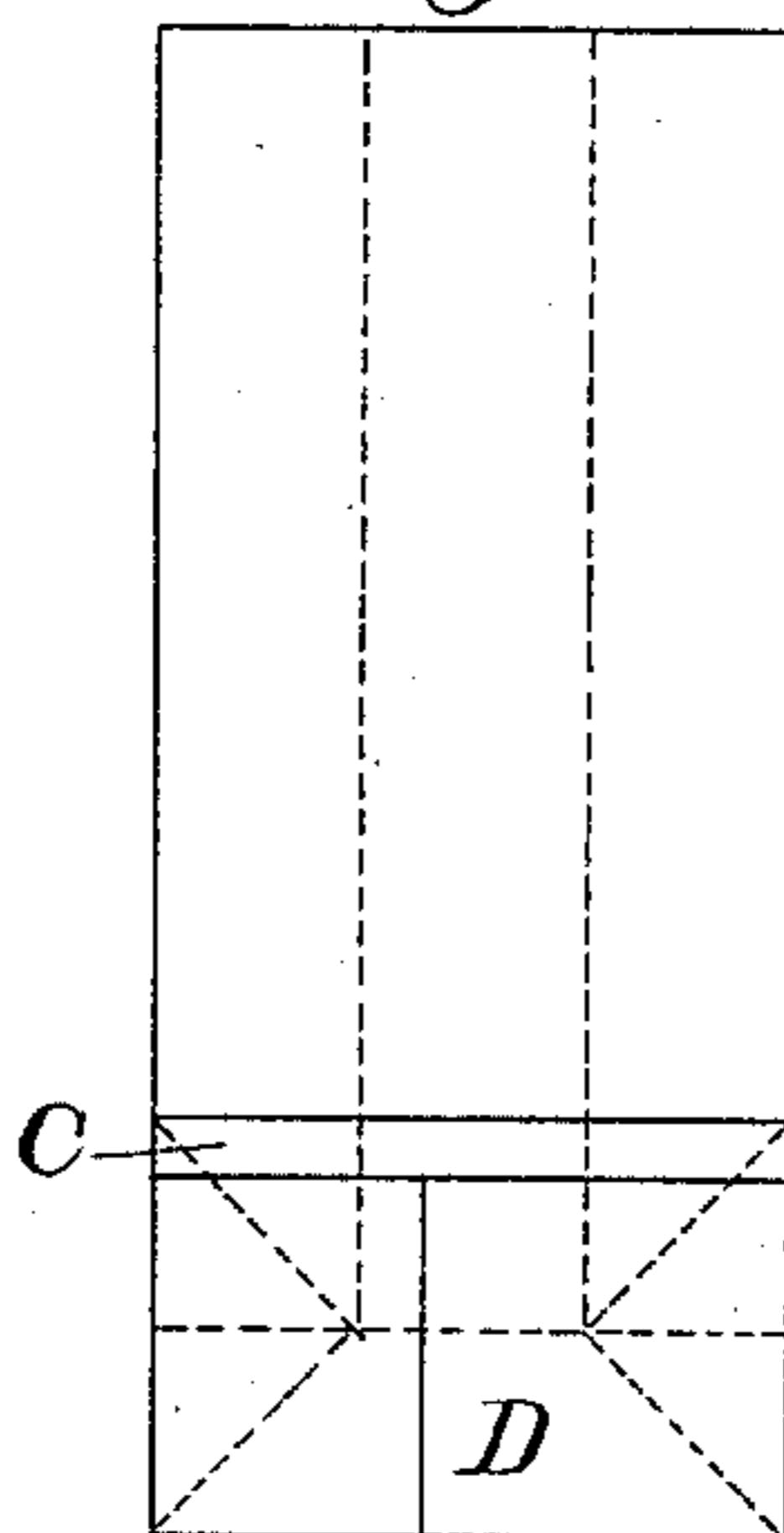
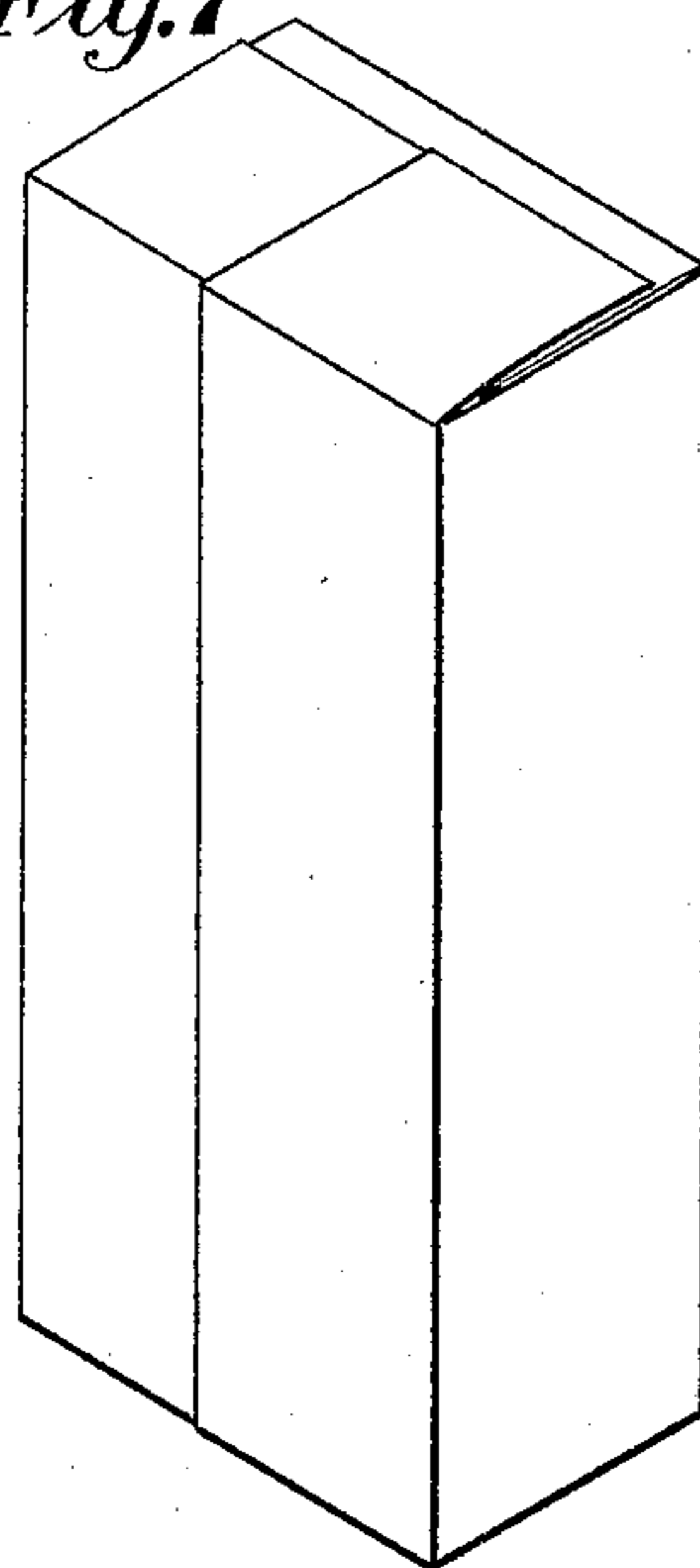


Fig. 7



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(No Model.)

2 Sheets—Sheet 2.

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Fig. 8

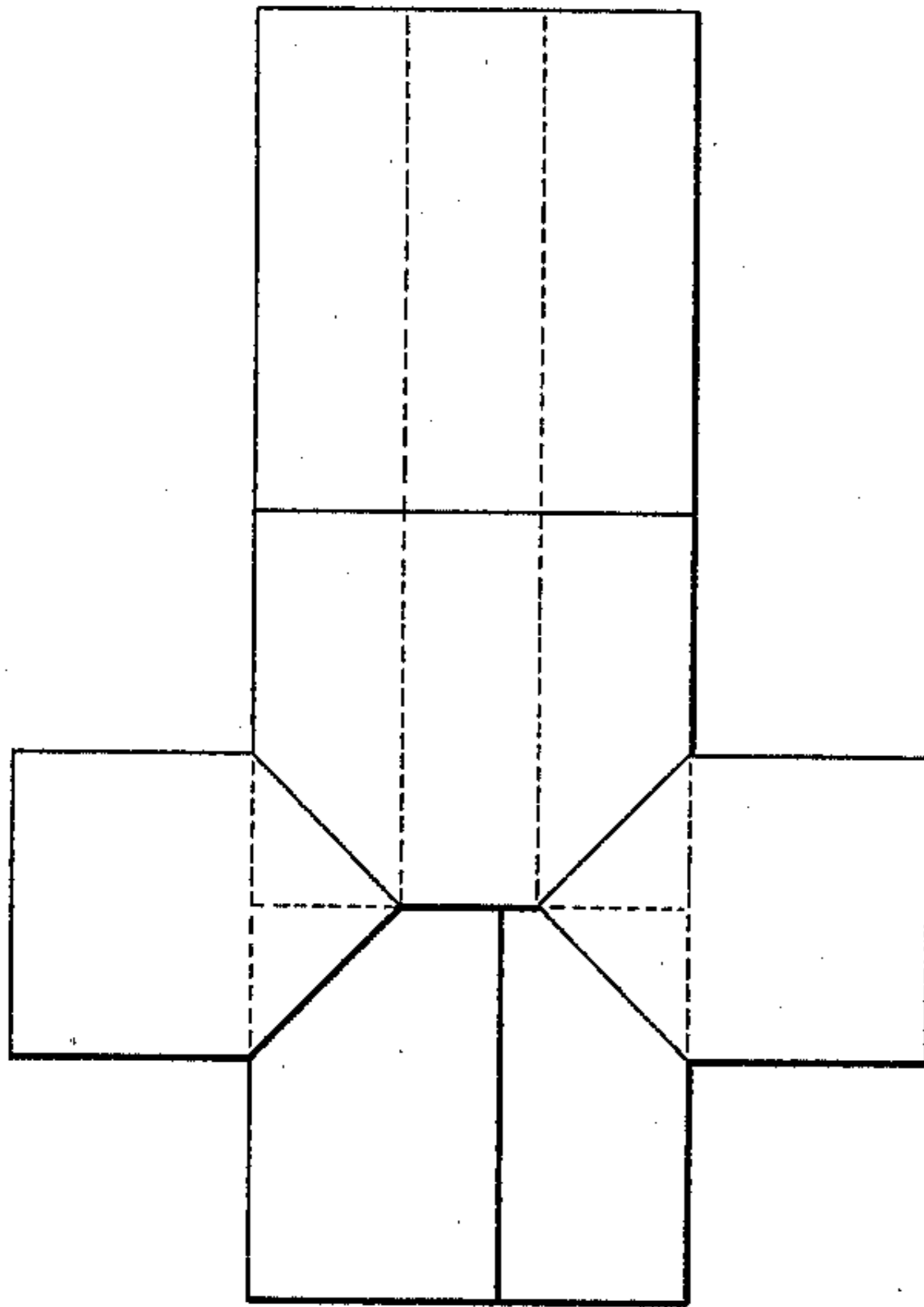


Fig. 9

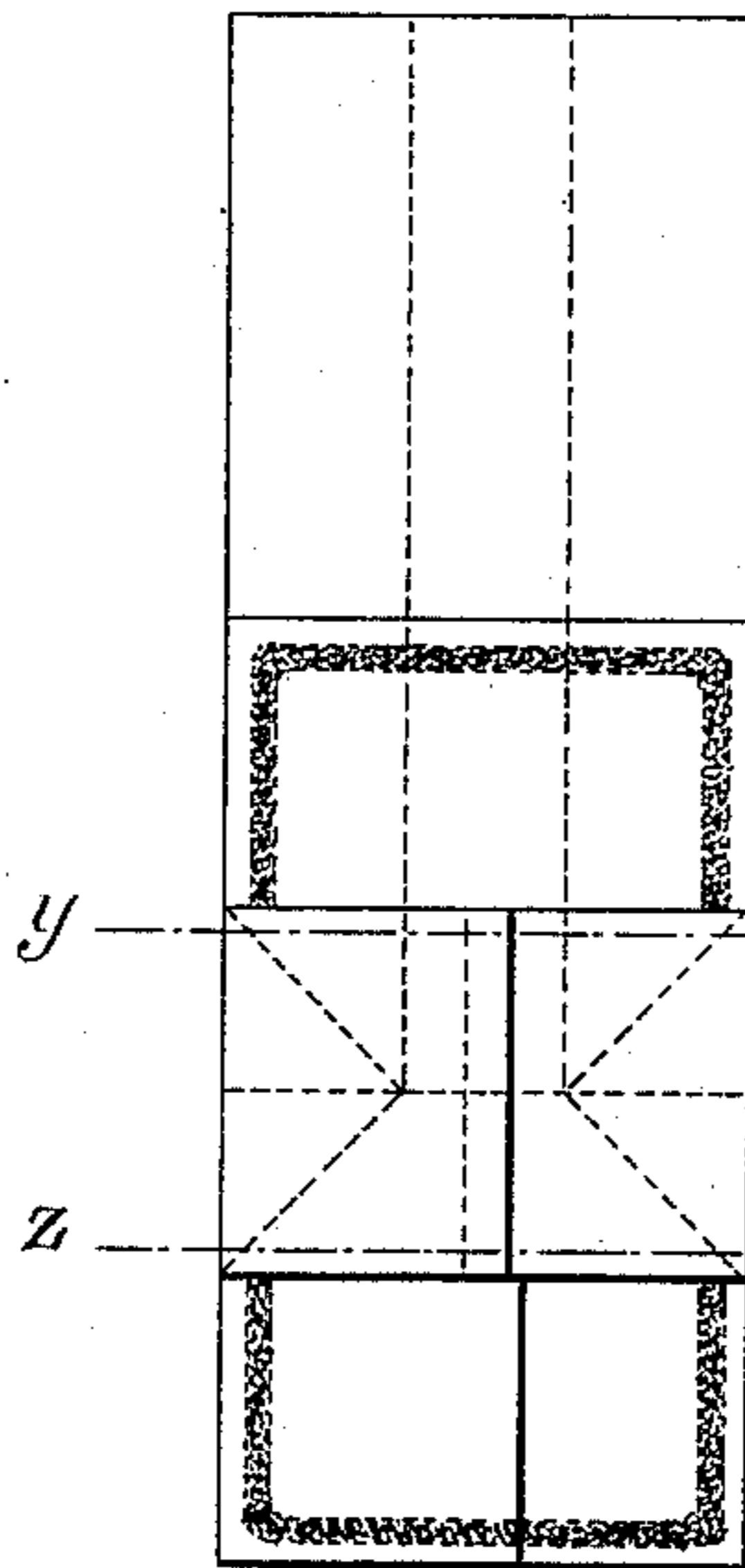


Fig. 10

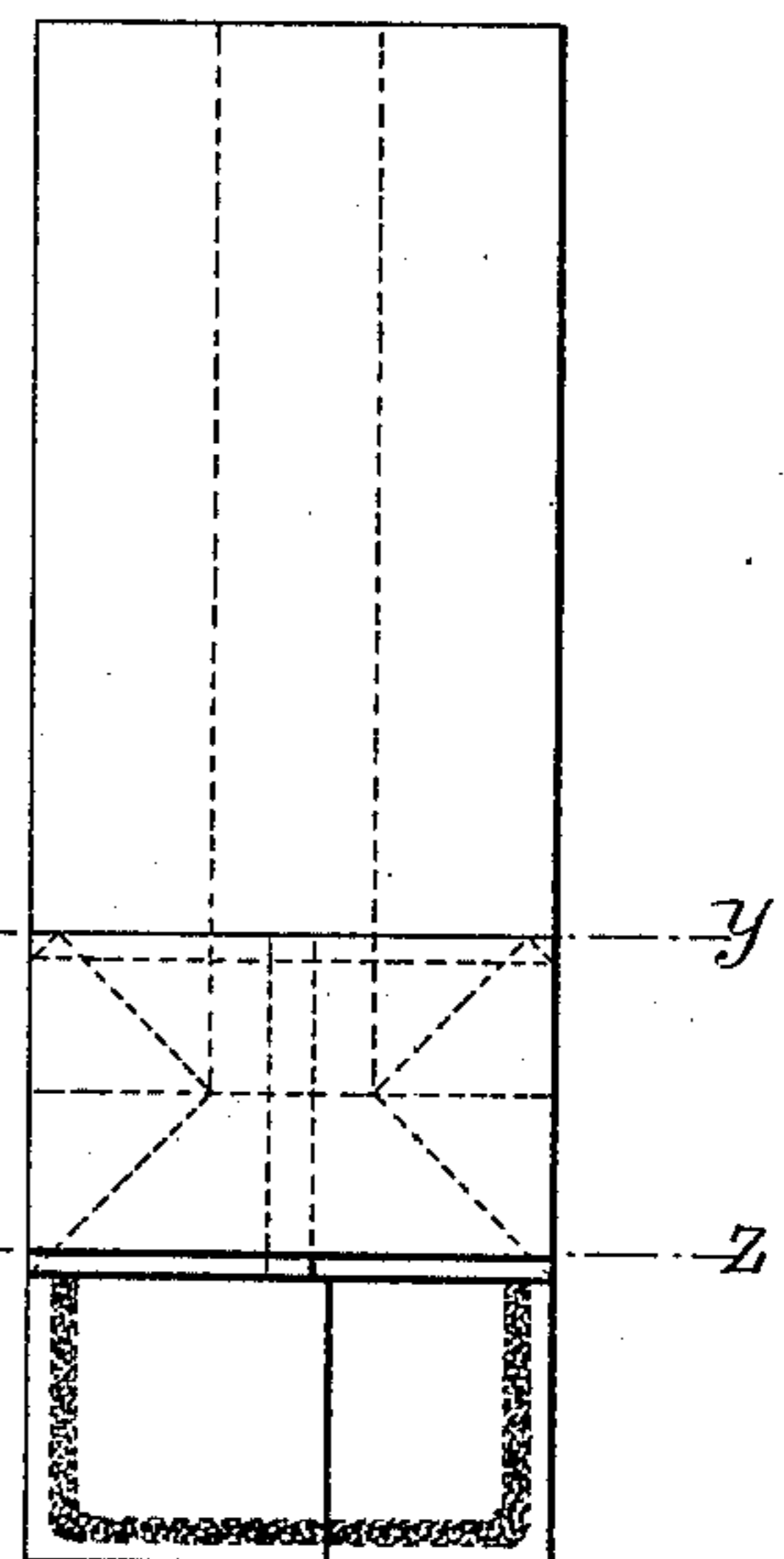


Fig. 11

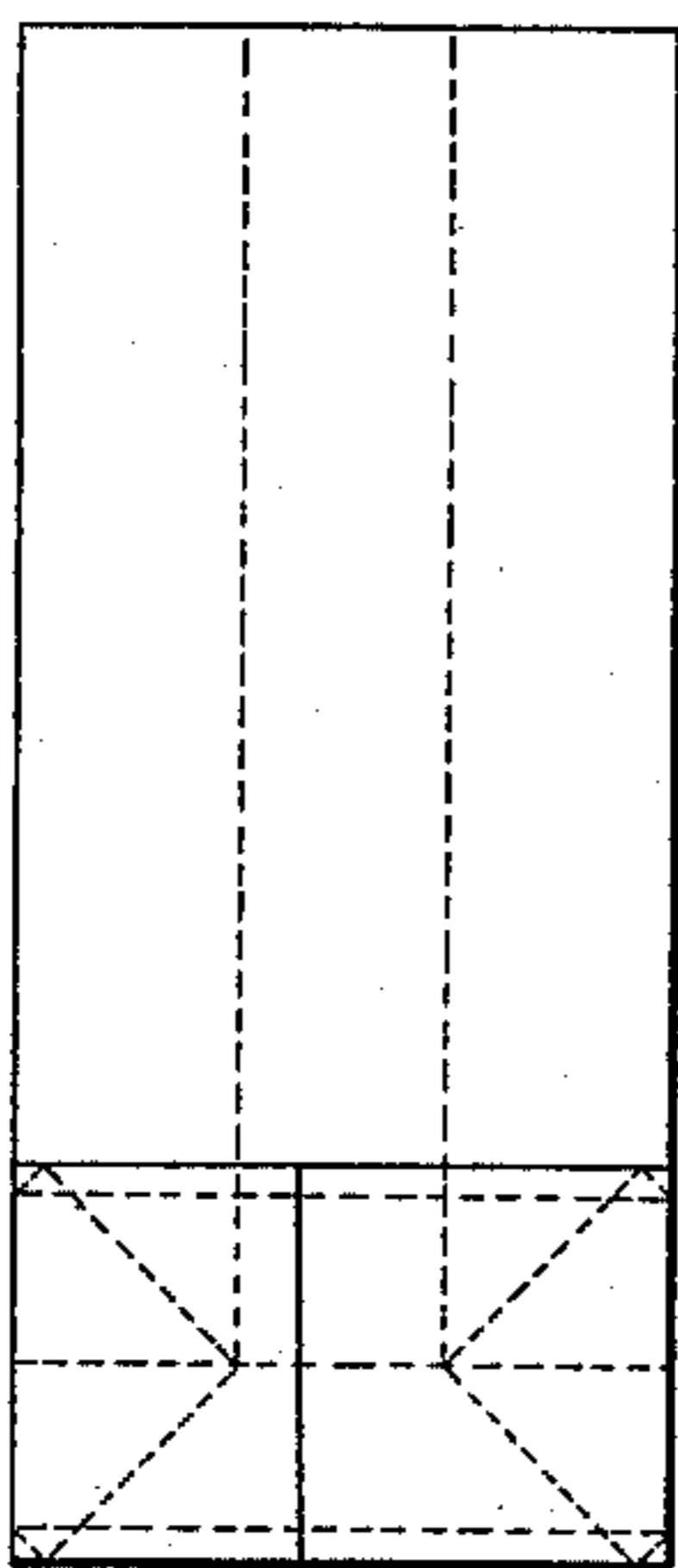
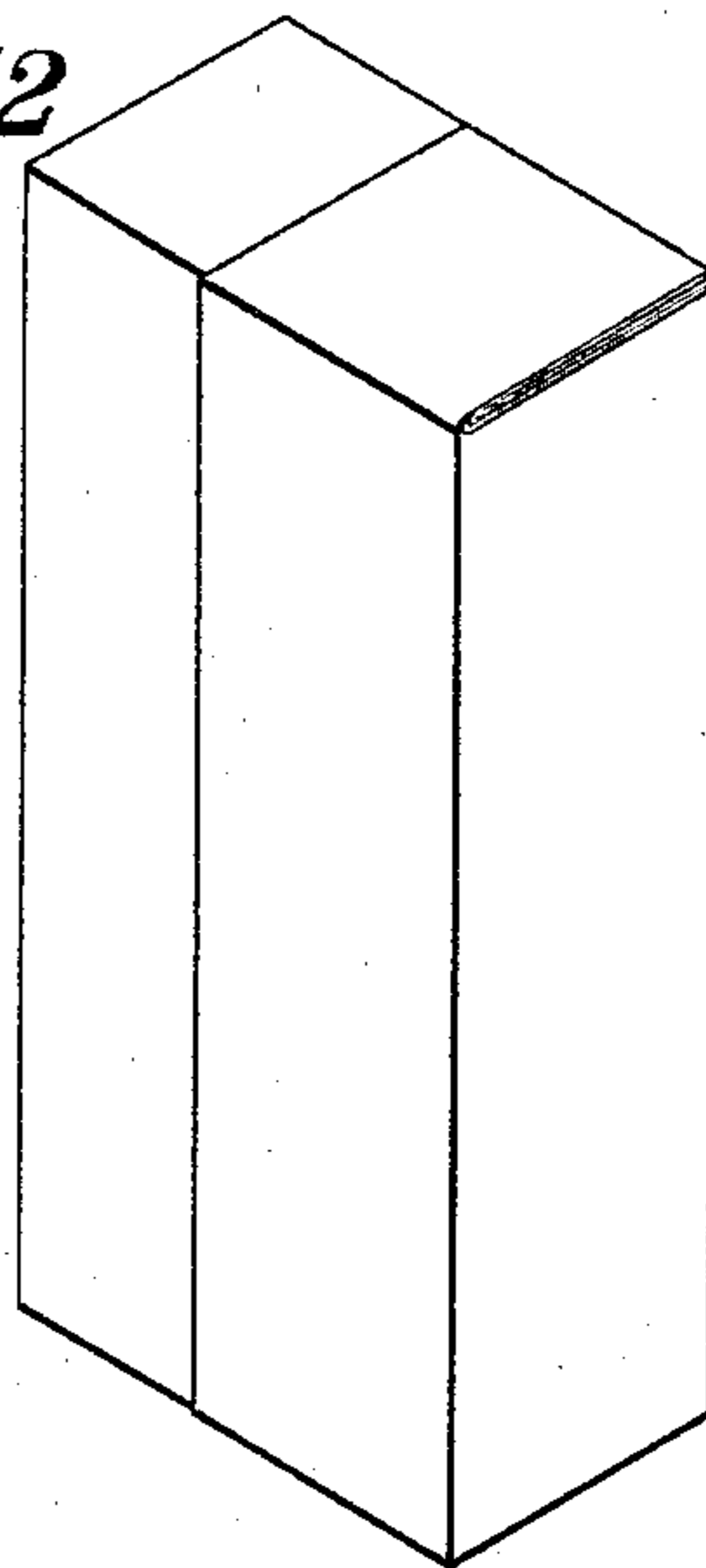


Fig. 12



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UNITED STATES PATENT OFFICE.

FELIX W. LEINBACH, OF BETHLEHEM, PENNSYLVANIA.

PAPER BAG.

SPECIFICATION forming part of Letters Patent No. 391,804, dated October 30, 1888.

Application filed March 12, 1886. Serial No. 194,961. (No model.)

To all whom it may concern:

Be it known that I, FELIX W. LEINBACH, of Bethlehem, Pennsylvania, have invented an Improvement in Paper Bags, of which the following description and claim constitute the specification, and which is illustrated by the accompanying two sheets of drawings.

This invention is an improvement in square-bottom paper-bags having inward bellows folds.

Figure 1 is a view of a length of tucked-paper tube. Fig. 2 is a cross-section of the same. Fig. 3 is a view of a bag-blank which is made by cutting four slits in the lower end of the tucked tube of Figs. 1 and 2 and then opening out and folding down sundry of the flaps thus formed. Fig. 4 is a view of the blank of Fig. 3 with its two side flaps folded back into place and with paste applied to the presented surfaces of the other two flaps. Fig. 5 is a view of the blank of Fig. 4 with one of the latter flaps folded and pasted down in place; and Fig. 6 is a view of the same with both those flaps thus folded and thus pasted and the bag thus completed. Fig. 7 is a perspective view of the bag of Fig. 6 opened out for use, but having its bottom upward in order to show the final appearance thereof. Fig. 8 is a view identical with Fig. 3. Fig. 9 is a view of the blank of Fig. 8 with its two side flaps folded back into place and with paste applied to the presented surfaces of its other two flaps. Fig. 10 is a view of the blank of Fig. 9 with one of the latter flaps folded and pasted down in place; and Fig. 11 is a view of the same with both flaps thus folded and pasted and the bag thus completed. Fig. 12 is a perspective view of the bag of Fig. 11 opened out for use, but with the bottom upward to better show its construction.

To make the bag of Fig. 6, a length of tucked-paper tube like that of Fig. 1 is taken and longitudinal slits are cut in its outer bends at the points indicated by the short lines *a a a a* in Fig. 2. These slits terminate at the points indicated by the short lines *b b* in Fig. 1. Then the bottom of the tube is opened out and the upper wall thereof is folded back on the

transverse dotted line *x x* of Fig. 1. That operation causes the formation of the blank of Fig. 3, having the four flaps A, B, C, and D. Then the flaps A and B are folded down on lines coincident with the sides of the flaps C and D, and after paste has been applied to the latter, as shown in Fig. 4, the flaps C and D are successively folded down on lines coincident with the sides of the flaps A and B.

The bag of Fig. 11 is made in all respects like that of Fig. 6, except that the folds C and D in it are folded, finally, down upon the dotted lines *y y* and *z z*, respectively, instead of upon lines coincident with the sides of the flaps A and B. This latter method of folding surely closes the minute openings which otherwise are apt to exist at the four corners of the bottom of the completed article. The bag of Fig. 11 is therefore better than the bag of Fig. 6 in that single respect, while the last-mentioned bag is better than the other in respect that the width of its bottom is coextensive with the thickness of the opened bag, whereas the width of the bottom of the bag of Fig. 11 is somewhat less than the thickness of that bag when opened out.

The merit of this invention as compared with prior forms of square-bottom bags resides in the ease with which its bottom may be made and in the uniform distribution of paper throughout all parts of that bottom.

I do not herein claim that process of making a square-bottom paper bag which I describe, because I do claim it in my application, No. 284,980, for Letters Patent of the United States of America.

I claim as my invention—

A square-bottom paper bag two sides of which are inwardly tucked and the four sides of which are longitudinally severed at their junctions to produce the four flaps A, B, C, and D, which are folded together to produce the bottom of the bag, all substantially as described.

FELIX W. LEINBACH.

Witnesses:

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WILLARD EDDY.