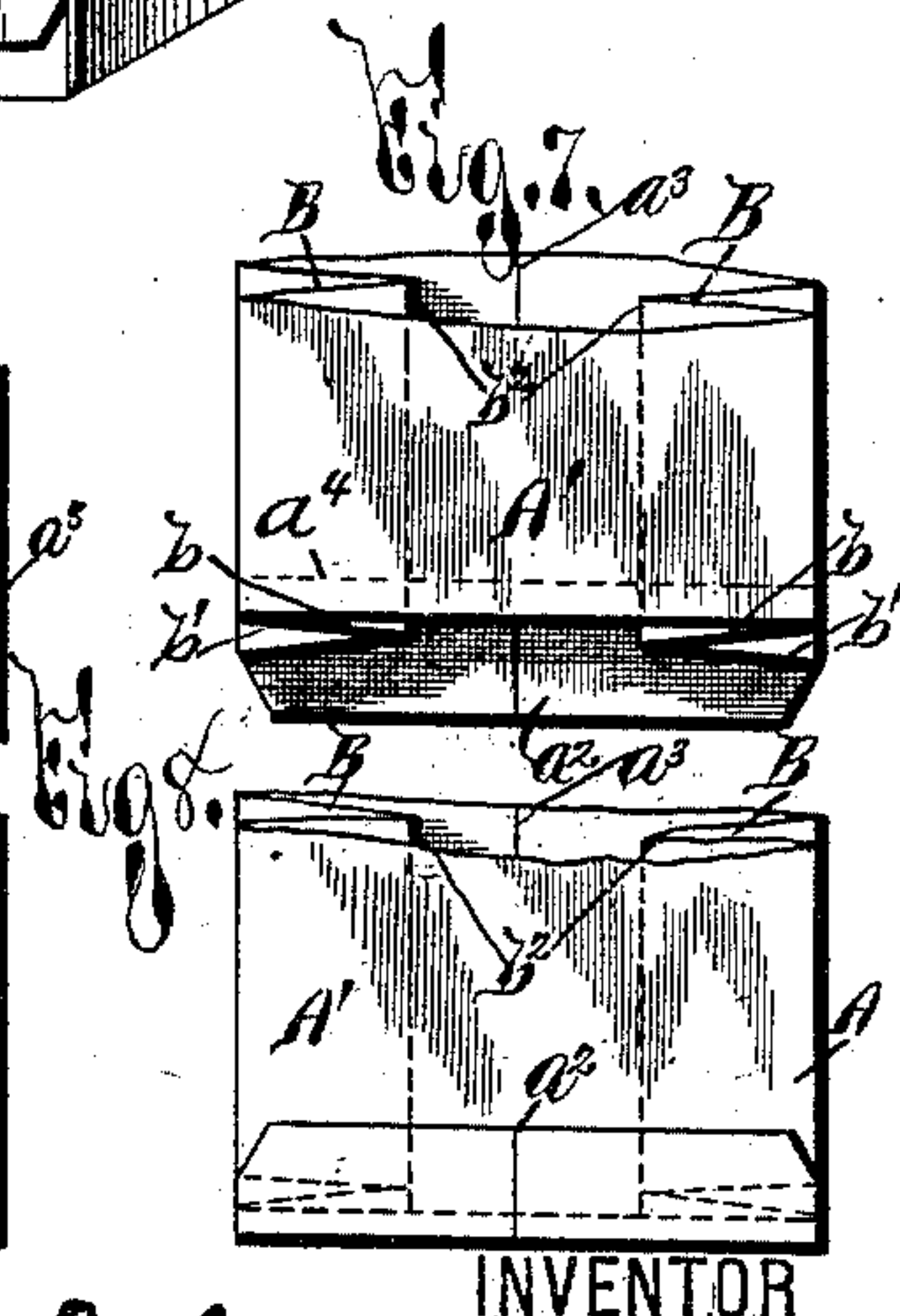
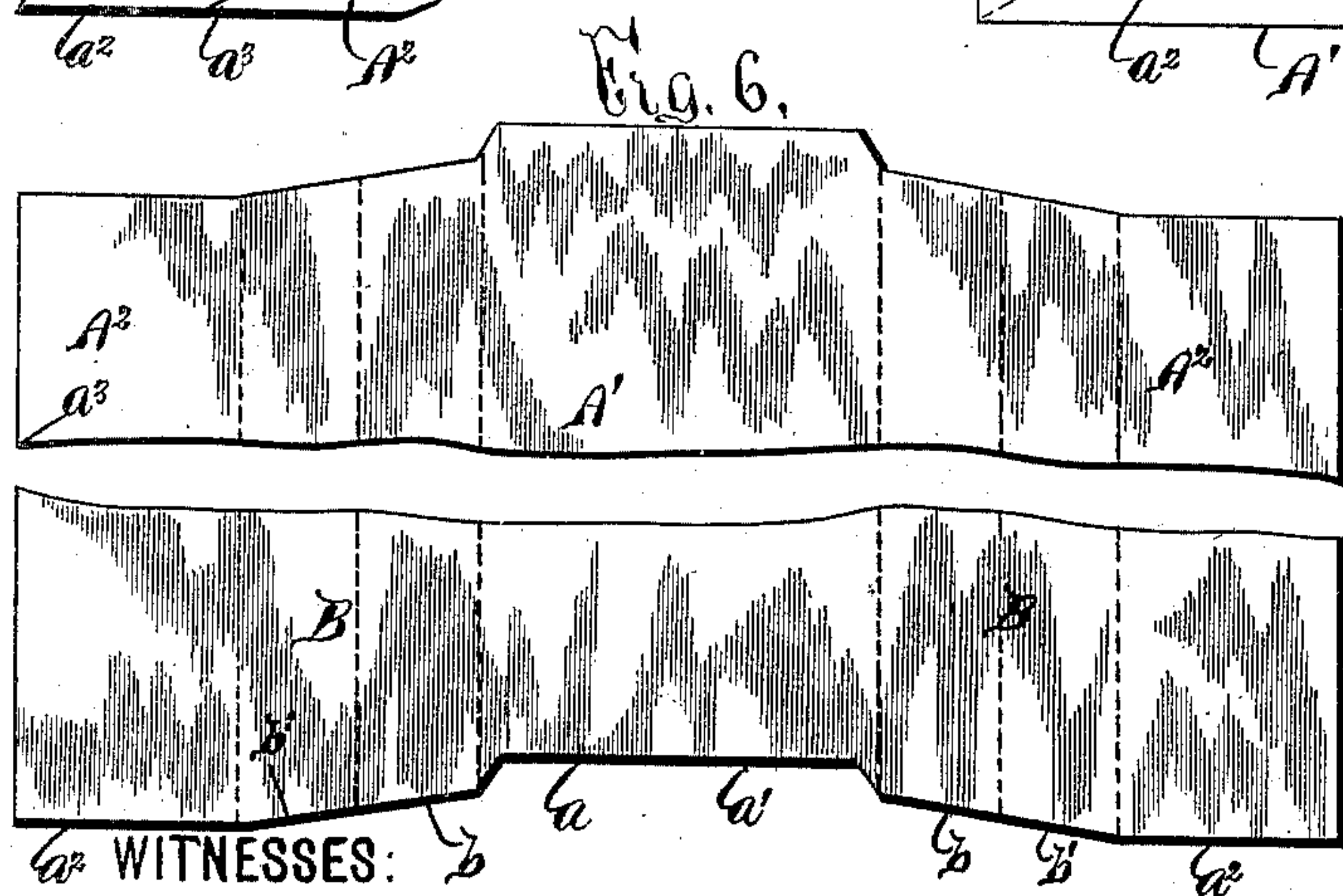
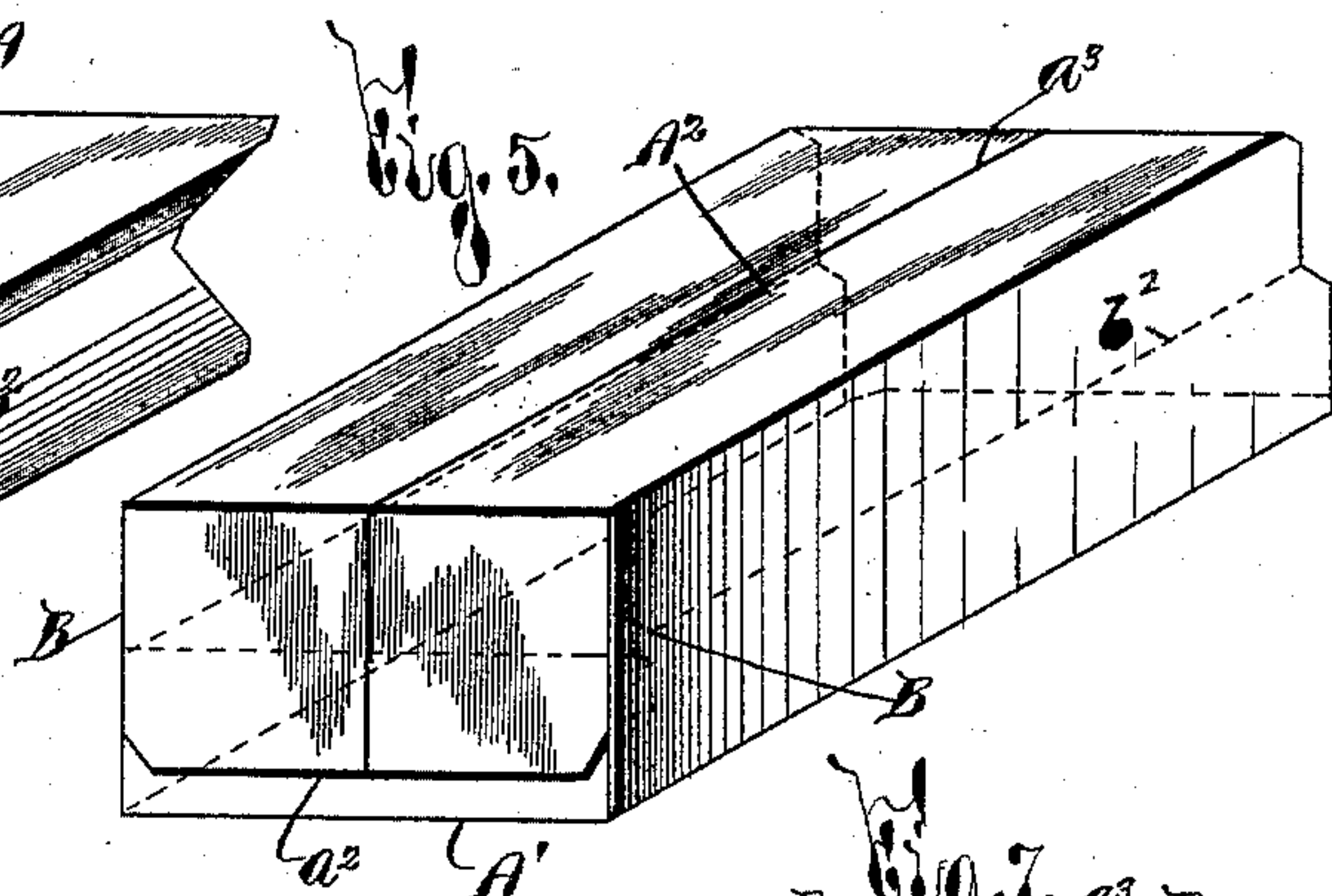
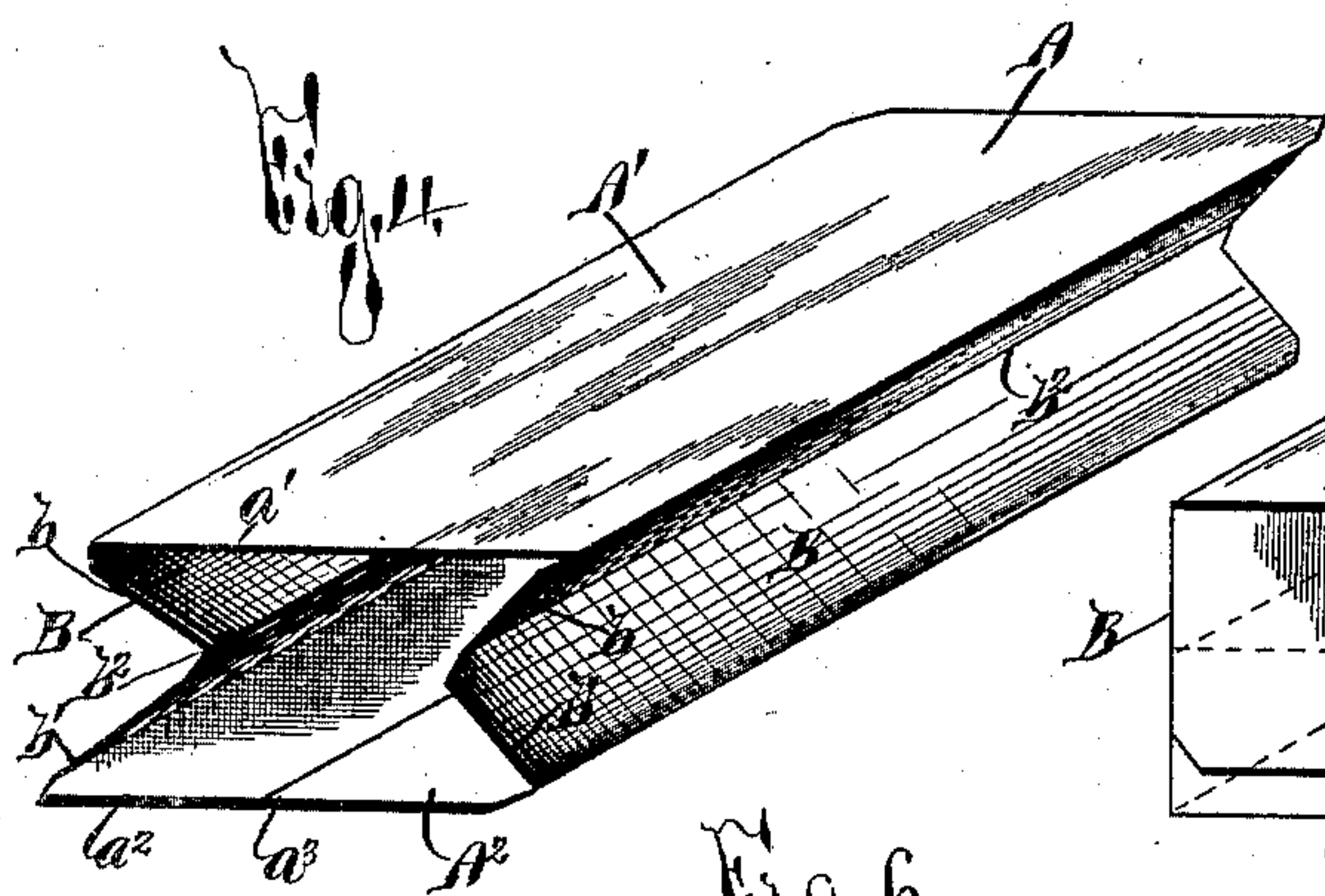
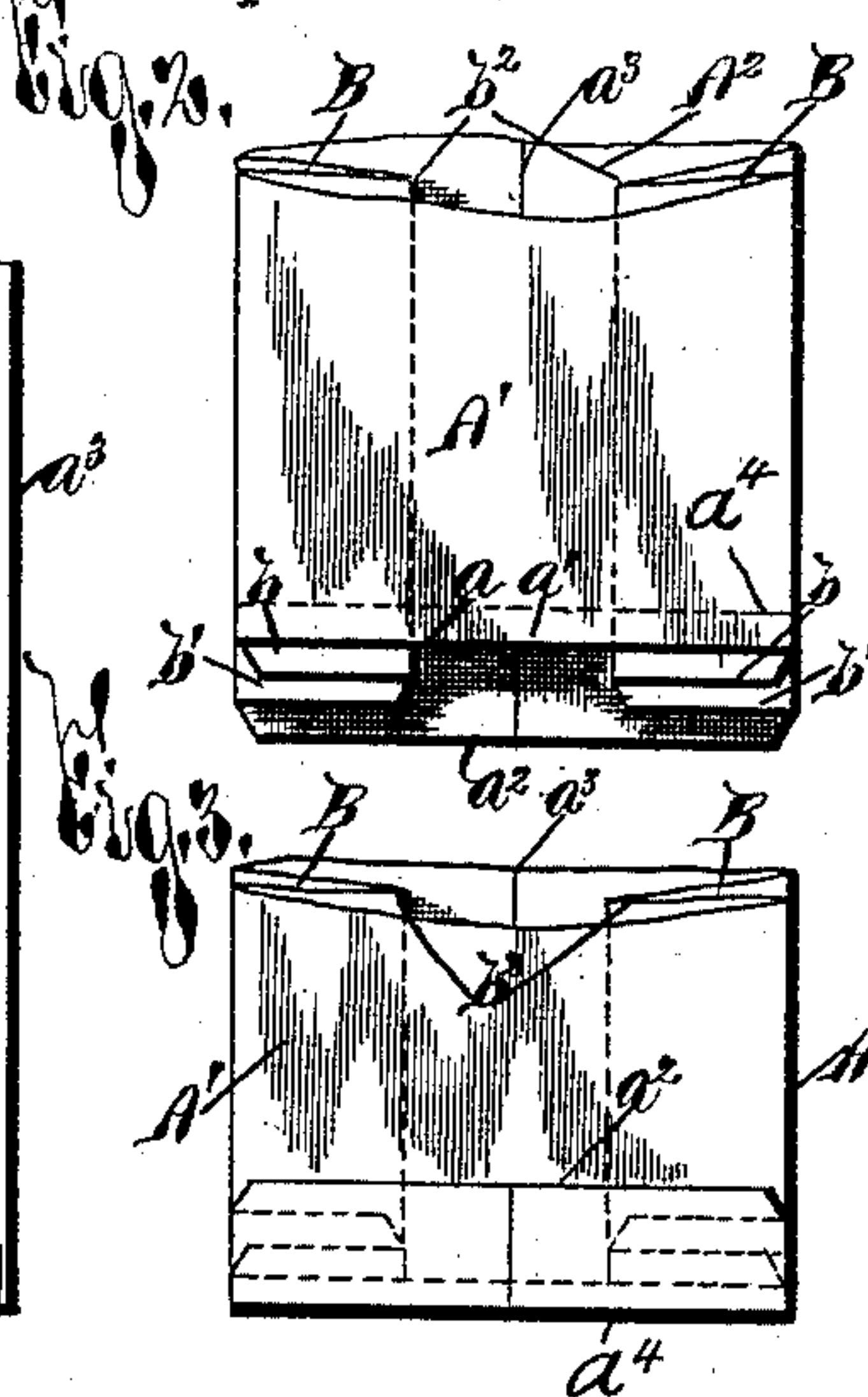
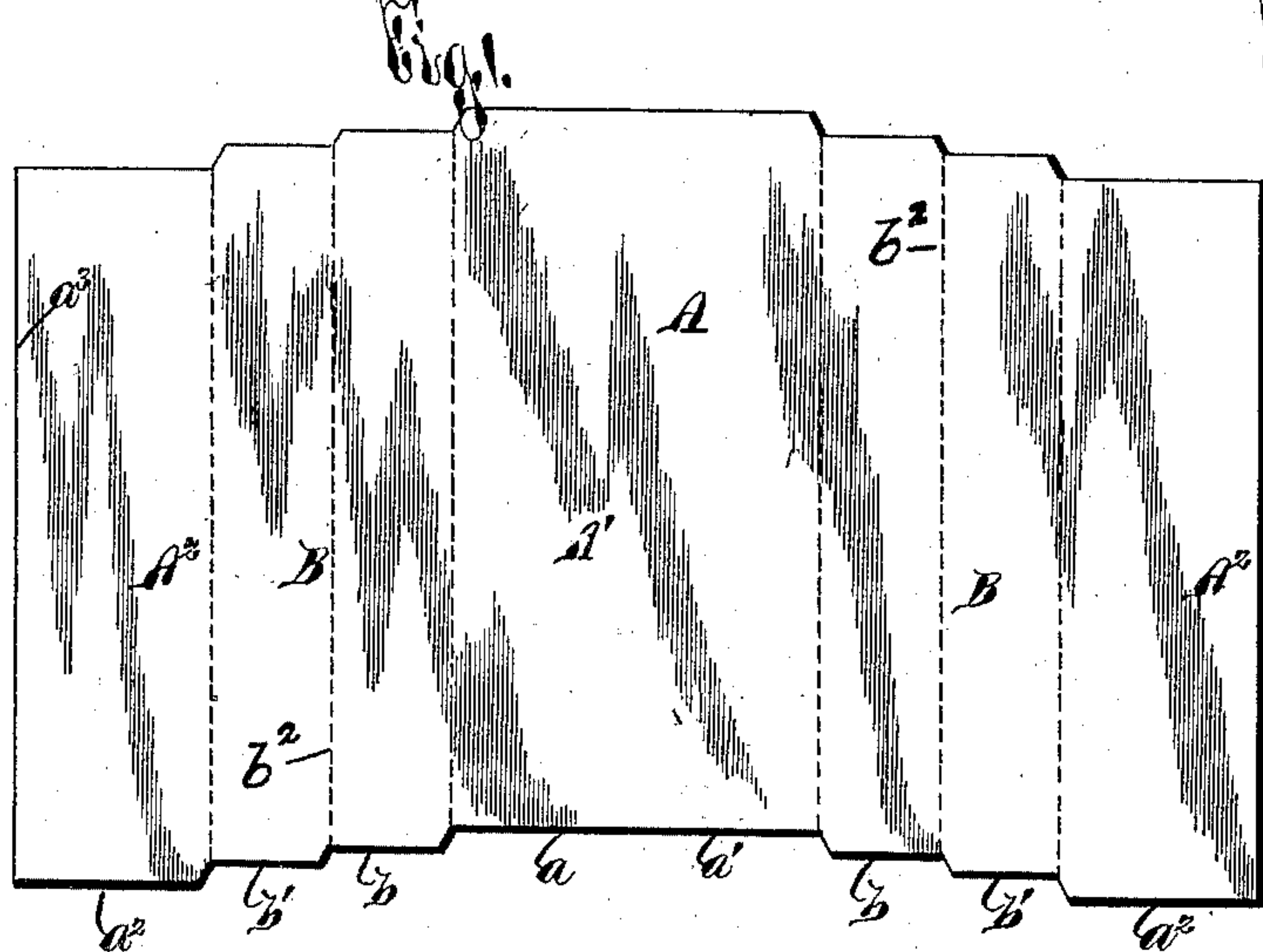


(No Model.)

J. SINGLE.
PAPER BAG.

No. 426,607.

Patented Apr. 29, 1890.



WITNESSES:

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PAPER BAG.

SPECIFICATION forming part of Letters Patent No. 426,607, dated April 29, 1890.

Application filed January 31, 1890. Serial No. 338,792. (No model.)

To all whom it may concern:

Be it known that I, JOHN SINGLE, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Paper Bags, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to an improved paper bag, and has for its object the production of a simple and effective construction which can be quickly and economically assembled; and to this end my invention consists, essentially, in a blank having the edge of its bottom or top and bottom cut with a series of steps one above the other, two of which steps are preferably formed on the portion of the blank designed for each side, and the remaining steps on the portion composing the front and back of the bag, and in folding over the bottom of said bag upon its body, whereby each of the said steps contact with the portion upon which they are folded, thereby enabling paste or other adhesive material to secure each of said steps directly to the body of the bag.

In describing this invention reference is had to the accompanying drawings, forming a part of this specification, in which like letters indicate corresponding parts in all the views.

Figure 1 is a plan view of the preferable form of blank from which my improved bag is constructed. Fig. 2 is a plan of the detached end of the blank, illustrating the separate steps thereof and showing by a dotted line the line upon which the bottom is folded. Fig. 3 is a like plan view with the bottom of a blank of the construction illustrated in Fig. 2 folded upon itself for completing the construction of the bag. Fig. 4 is an isometric perspective of the blank as seen in plan in Fig. 2. Fig. 5 is an isometric perspective of the completed bag. Fig. 6 is a plan of a modified form of blank having a portion thereof broken out. Fig. 7 is a top plan view of the detached end of a bag constructed from said blank and illustrating the bag before the final operation of folding the bottom upon itself; and Fig. 8 is a like view to Fig. 7, illustrating as completed the final operation of folding upon itself the bottom of the bag.

A represents the blank, which may be of suitable size, form, and material best adapted

for the desired size, proportion, and character of paper bag. As illustrated, the lower edge a of the blank is formed with a series of steps a' , b , b' , and a^2 , one below the plane of the other, and the portions of said blank having the steps a' and a^2 at their edge are adapted to form the front A' and back A^2 of the bag. The sides B are what are termed "bellows" sides, and are formed by bending them inwardly at the center b^2 , as best seen in Fig. 4.

By reference to the drawings, particularly Figs. 1 and 4, it will be noticed that the bottom edges of the sides B are provided with the steps b and b' , which extend from the outside edges to the center line b^2 , and are preferably in planes one above the other.

The portion of the blank for forming the back of the bag is here illustrated as divided in its central part and adapted to have its edges a^3 pasted together; but it will be understood that this lapped portion may be located at the front or at either of the sides, although the illustrated way is preferable.

After forming the bag, as illustrated in Fig. 4, by pasting together its longitudinal edges a^3 , the sides are bent inwardly into the position illustrated in Fig. 2, whereupon it will be noticed that the steps of the front, back, and sides are one above the other, thereby enabling paste or other suitable adhesive material to be brushed or wiped upon each step by a single movement crosswise of the end of the bag without necessitating the insertion of the brush between any of the parts, as is the case when two or more of the edges of said parts are in the same plane.

After the bag is formed, as illustrated in Fig. 2, and the paste is placed thereon, the bottom is folded upward from the dotted line a^4 , which is a sufficient distance above the top step a' of the bag, whereupon it is evident that a slight portion of the front, back, and sides will rest against the body of the bag and produce a very strong construction of bottom, which, as previously set forth, may be pasted with great rapidity, since but one movement is required.

After forming, as described, the bottom of the bag may be squared, as shown in Fig. 5, whereupon it may then be refolded and is in condition for shipment and sale.

As seen in the drawings, in order to econo

mize the amount of paper required in cutting the bag, and to enable one cut to form the top of one bag and the bottom of the other, I prefer to construct the top of the same shape as the bottom, and this presents an additional feature of advantage, since it makes no difference which end of the blank, as folded in Fig. 5, is picked up first in applying the paste, since the paste may be applied to either, as both are of the same construction, thus obviating the necessity of careful handling in pasting. This feature is especially advantageous when pasting the bags by a machine, since after the blanks are folded, as shown in Fig. 4, it is only necessary for the operator to place the steps so as to be supplied with paste, and it makes no difference which end of the blank he pastes.

At Figs. 6, 7, and 8 I have shown a modified form of my bag, in which, instead of forming the edges of the sides of steps in separate planes, the said edge is cut slanting from the top to the bottom of the sides, thereby effecting the same result; but it is evident that this construction is not as desirable, as it does not produce as strong a bag, since there is not as much surface to which the paste may adhere.

The operation of my invention will be readily perceived from the foregoing, and it is evident that a bag constructed as aforesaid is very quickly and economically manufactured, and possesses a stronger and more efficient bottom than bags as ordinarily constructed, which is a feature of great advantage, greatly increasing its sale and desirability. It is evident, however, that the described construction of bag may be somewhat varied without departing from the spirit of my invention.

Having thus fully described my invention,

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

1. The herein-described blank for paper bags, the same having one edge formed with a series of four steps, one above the other, the portions having the highest and lowest steps being adapted to form the front and back of the bag, and the intermediate portions having the remaining steps being adapted to form the bellows sides of the bag, substantially as specified.

2. The herein-described blank for paper bags, the same having its top and bottom edges provided with a series of four steps, one above the other, the portions having the highest and lowest steps being adapted to form the front and back of the bag, and the intermediate portions having the remaining steps being adapted to form the bellows sides of the bag, substantially as set forth.

3. The herein-described bag having the edge of the front and back sides in separate planes and having bellows sides folded inwardly, with the edges of the separate folds of each side out of the plane of and between the aforesaid edges, and also out of the plane of each other, and a portion of said front and back sides and the bellows sides being folded over and pasted upon the body of the bag, substantially as set forth.

In testimony whereof I have hereunto signed my name, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 21st day of January, 1890.

JOHN SINGLE.

Witnesses:

CLARK H. NORTON,
M. BAXTER.