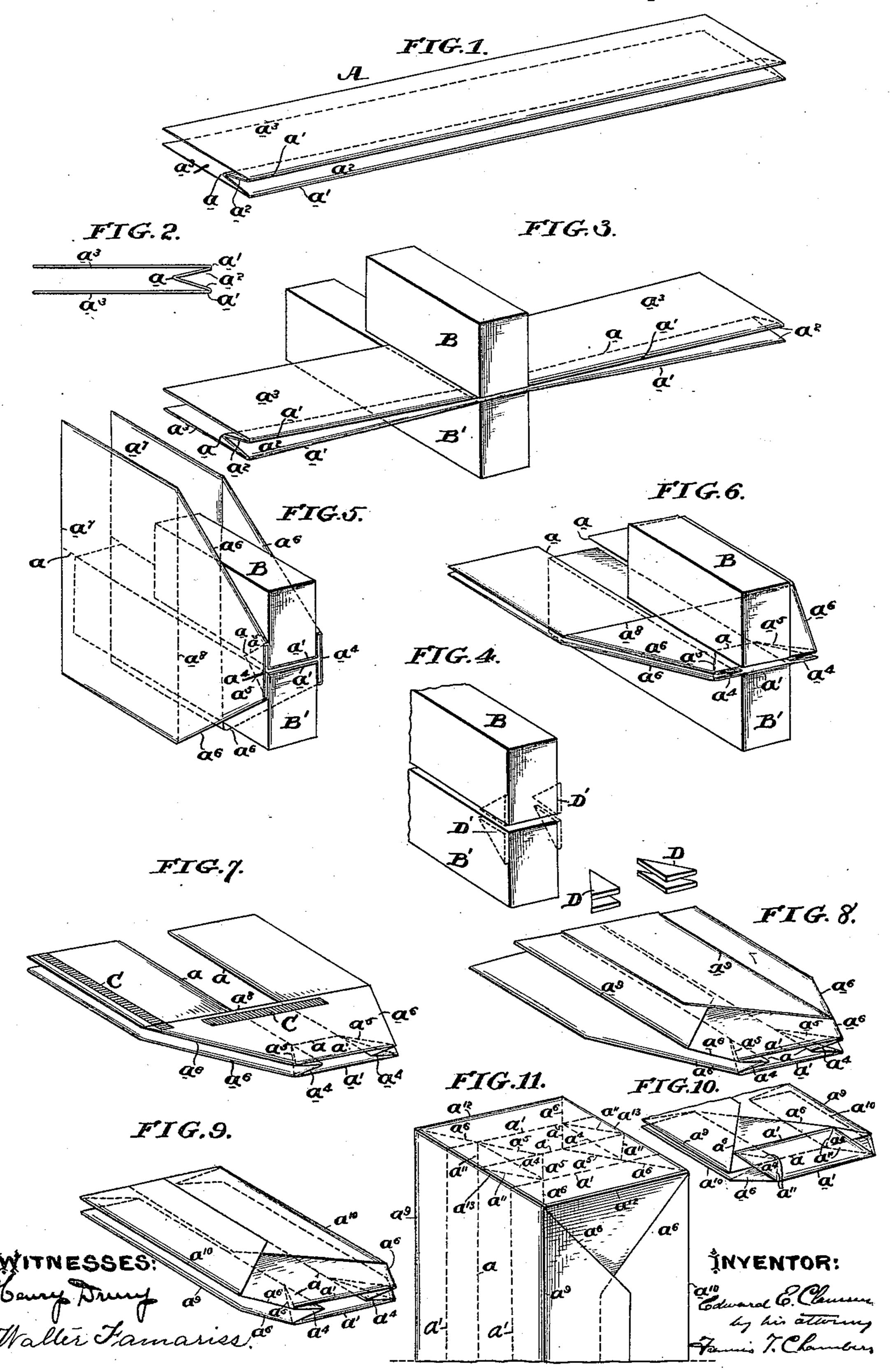
E. E. CLAUSSEN. METHOD OF MAKING PAPER BAGS.

» No. 426,771.

Patented Apr. 29, 1890.



United States Patent Office.

EDWARD E. CLAUSSEN, OF HARTFORD, CONNECTICUT, ASSIGNOR TO THE UNION PAPER BAG MACHINE COMPANY, OF PHILADELPHIA, PENNSYLVANIA.

METHOD OF MAKING PAPER BAGS.

SPECIFICATION forming part of Letters Patent No. 426,771, dated April 29, 1890.

Application filed February 5, 1890. Serial No. 339, 238. (No model.)

To all whom it may concern:

Be it known that I, EDWARD E. CLAUSSEN, of the city and county of Hartford, State of Connecticut, have invented a new and useful Method of Making Paper Bags, of which the following is a true and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to the manufacture of paper bags; and it consists of a new method of making the same, the nature of which will be best understood as described in connection with the drawings, in which it is illustrated.

In the drawings, Figure 1 is a perspective view of the blank with the first fold of my process formed in it. Fig. 2 is a cross-section of the blank as shown in Fig. 1. Fig. 3 20 shows the folded blank grasped between former-blocks preparatory to further manipulation. Fig. 4 shows a convenient device for use in making the second folding of my method. Fig. 5 shows the second folding 25 operation of my method. Fig. 6 shows the third folding. Fig. 7 shows the blank in perspective after the third folding is completed. Fig. 8 shows the fourth folding. Fig. 9 shows the fifth folding, the fourth and fifth fold-30 ings being the same applied to opposite sides of the bag. Fig. 10 illustrates a sixth folding, not, however, essential to the formation of the bag; and Fig. 11 is a perspective view of the bag opened out.

I first take a blank A of paper and form in it a central inward longitudinal fold, as shown in Figs. 1, 2, and 3, the paper being folded in the center at a and on parallel equidistant lines at a' a', so as to form the superimposed layers a³ a² a² a³. For convenience in the next manipulation of the blank, I prefer to clamp the folded blank between blocks B B', arranged to grasp it across the center, as shown in Fig. 3. The second folding is then made by spreading out the ends of the blank and folding them back atright angles, as shown in Fig. 5, in doing which the blank is creased on the lines a⁴ a⁵ a⁵ a⁶ a⁶ and two flat flaps

 a^7 formed, the blank being given the H-like form shown in Fig. 5. For convenience in 50 making the second folding, and especially the inward triangular fold bounded by the creases a^5 a^4 a^4 , triangular folding-blades, such as are shown at D D, Fig. 4, may be used, said blades being introduced between 55 the plies a^2 a^2 and folded out parallel to each other, as shown at D'D', to form the said inward triangular folds. The third folding of my process consists in folding the spreadout sides of the blank upon themselves and 60 about the before-mentioned central line a, as shown in Figs. 6 and 7. Paste is then applied, as at C C, Fig. 7, and one side of the bag completed by folding opposite flaps upon each other upon parallel lines a^9 a^9 , Fig. 8, 65 the other side being completed by folding the other flaps in a similar way upon lines a^{10} a^{10} , Fig. 9. If desired, the bottom of the bag may be spread out, as shown in Fig. 10, forming the new creases a^{11} a^{11} ; but this is immaterial 70 to the completion of the bag.

In Fig. 11, which represents the bag as opened out, the various lines of fold in the blank are indicated by dotted lines where the creases are opened out, and by full lines where 75 the creases remain in the opened bag, d^{12} d^{12} representing the front and back edges of the bottom, and d^{13} d^{13} the side edges thereof.

Having now described my invention, what I claim as new, and desire to secure by Letters 80 Patent, is—

The described method of making paper bags, which consists in forming a central inward fold lengthwise of the blank, spreading out the ends of the blank and folding them 85 back at right angles into an H-like form, folding each spread-out side down upon itself about the said central inward fold-line and then folding and pasting the flaps of each side down upon each other to complete the 90 bag, all substantially as shown and described.

EDWARD E. CLAUSSEN.

Witnesses:

H. S. BARROUR, B. F. CHAPMAN.