

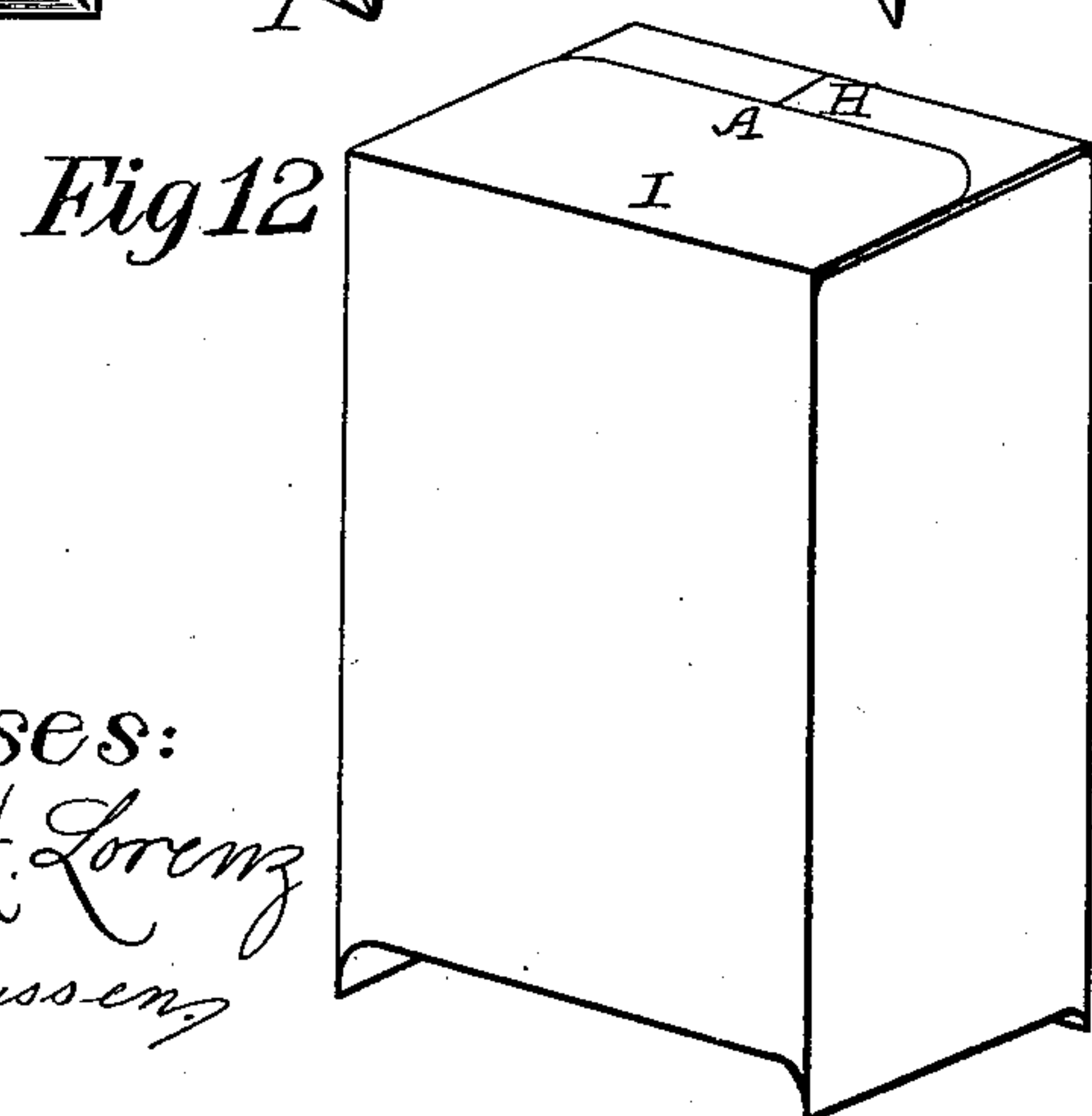
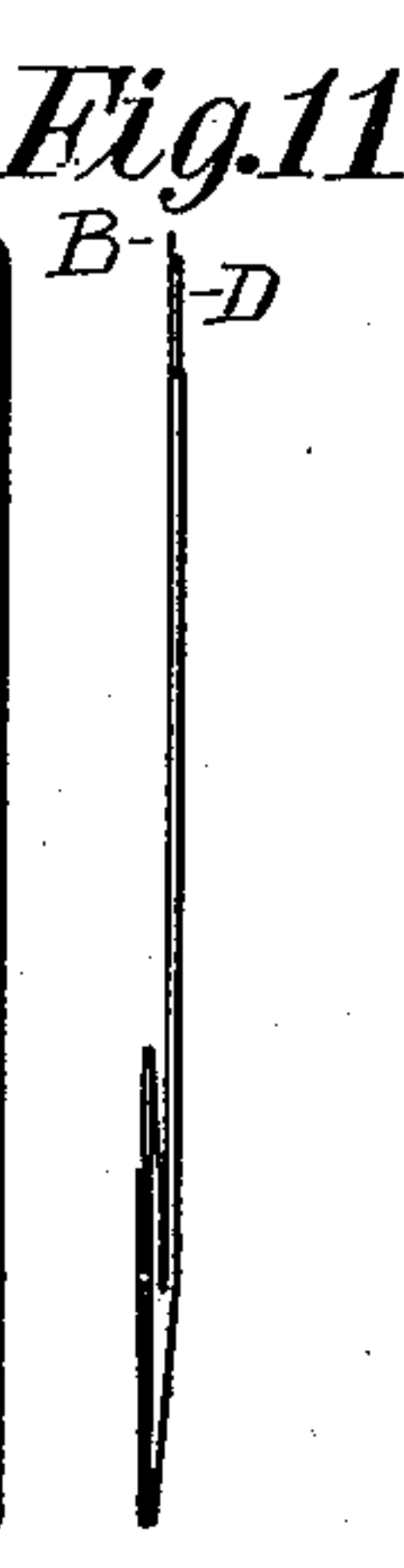
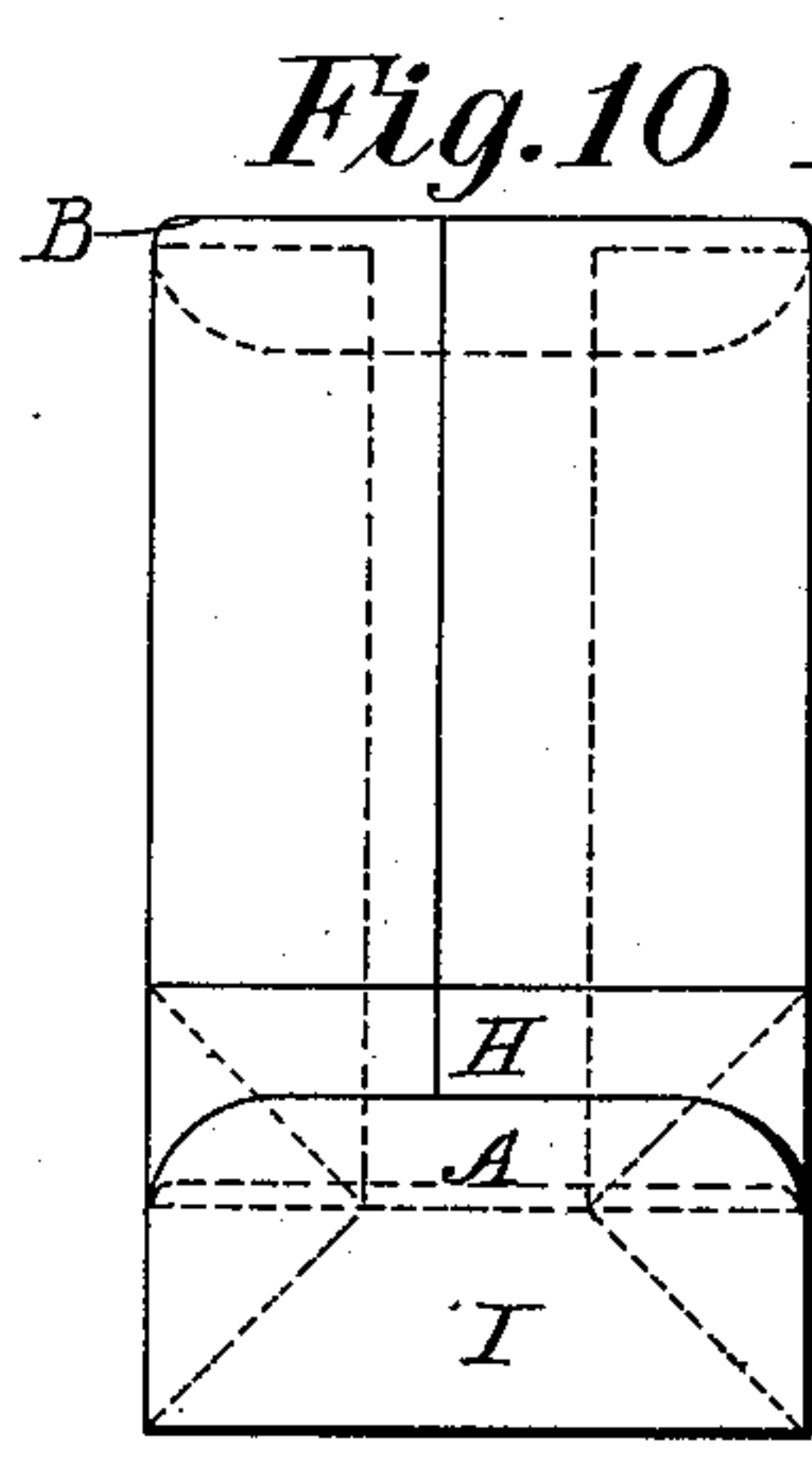
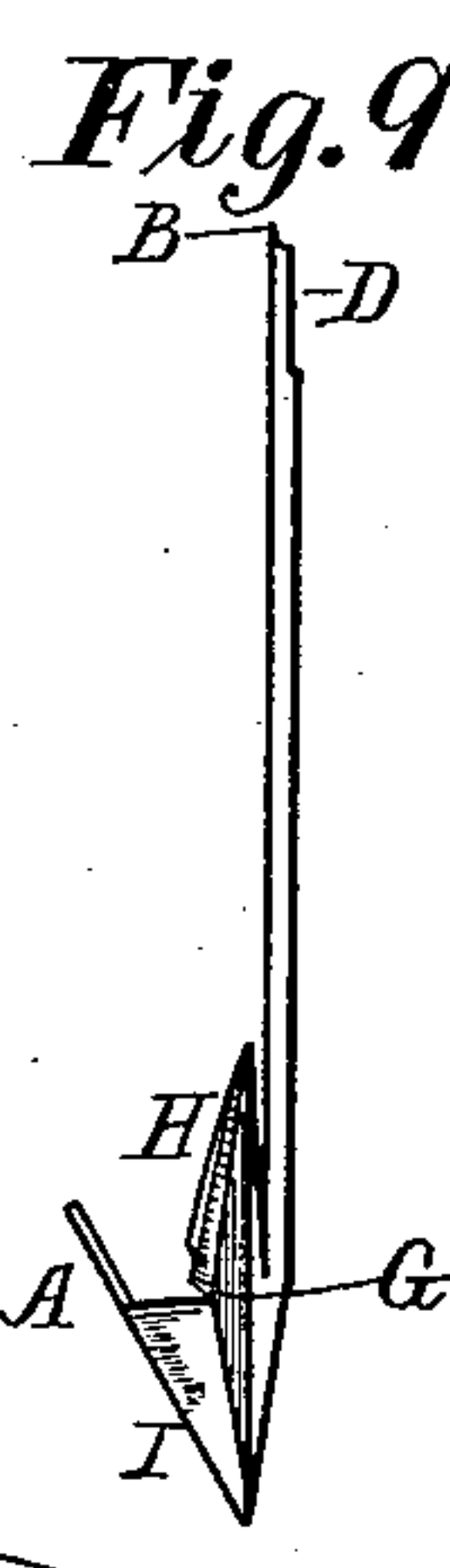
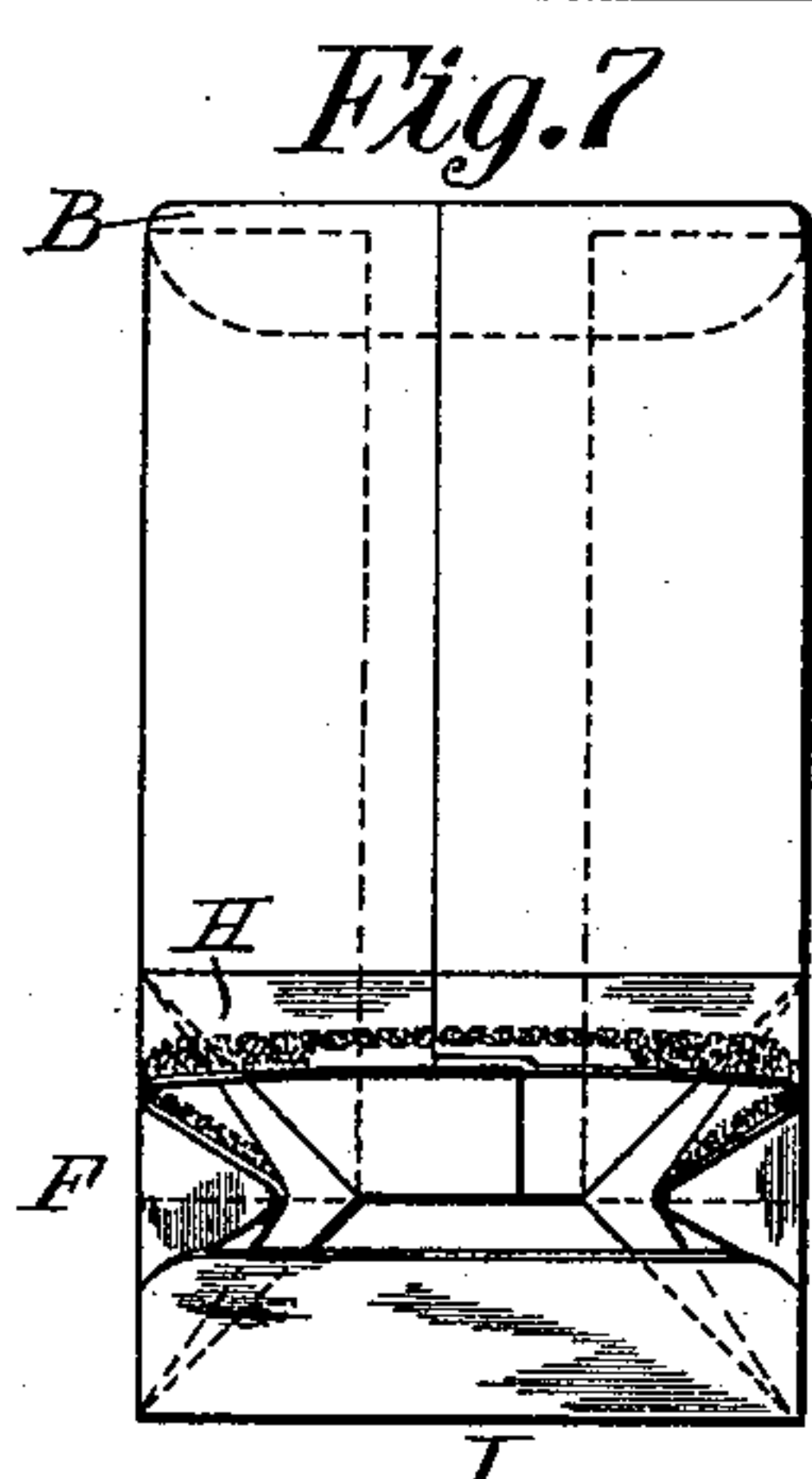
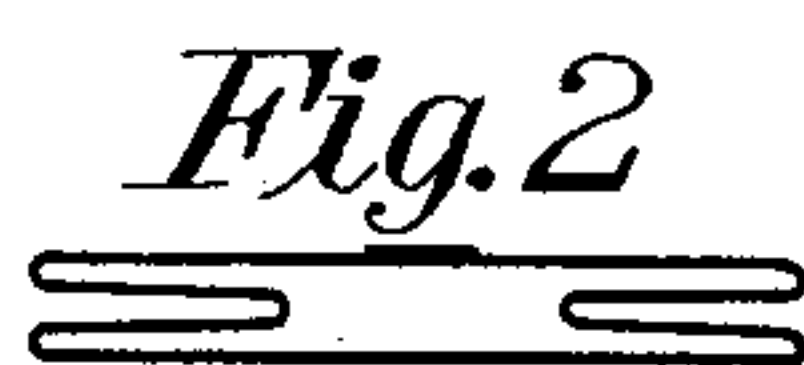
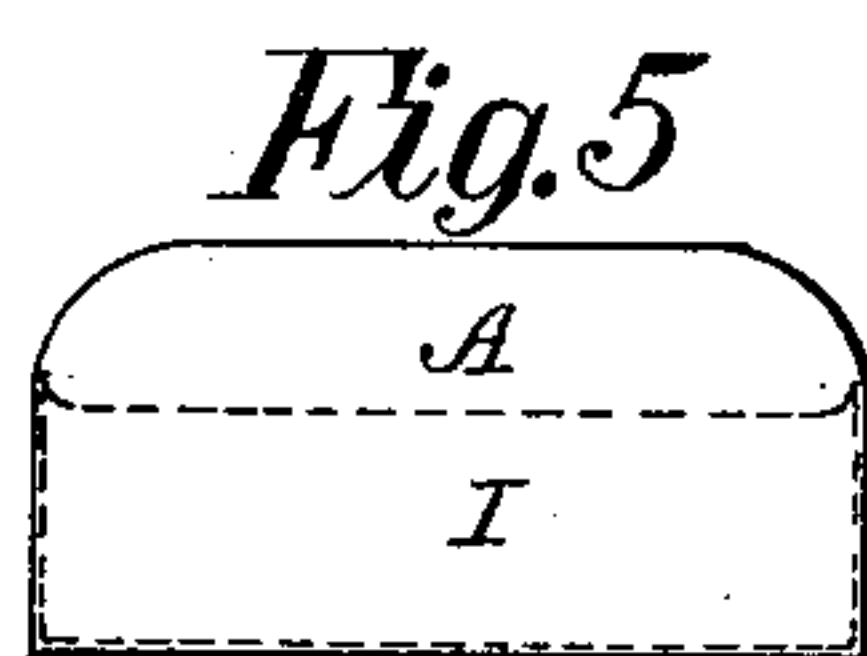
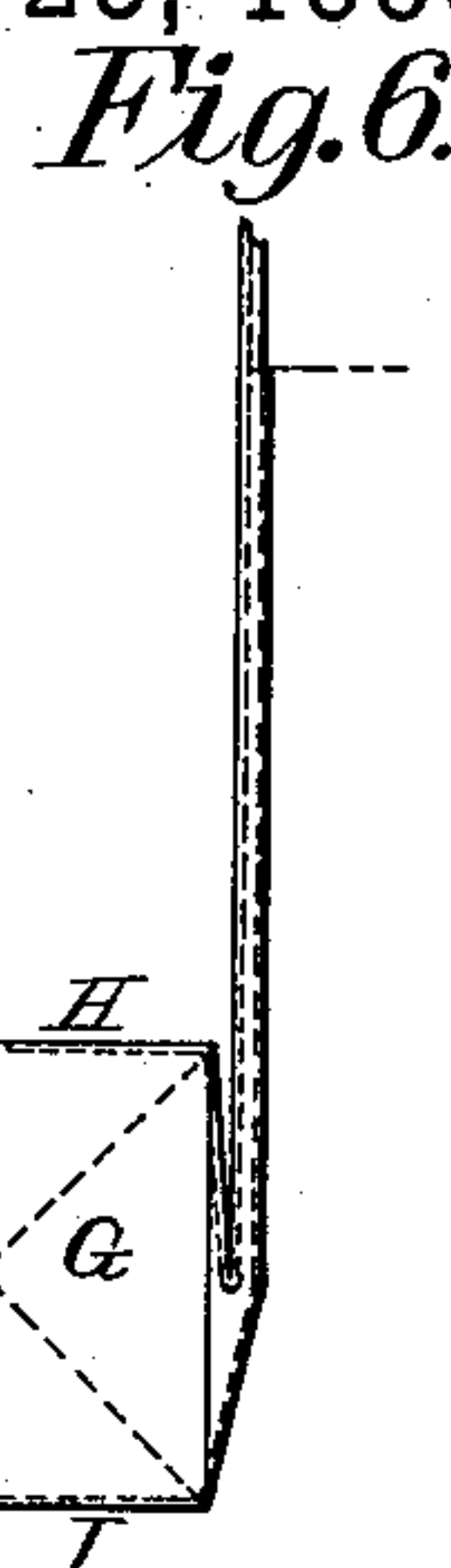
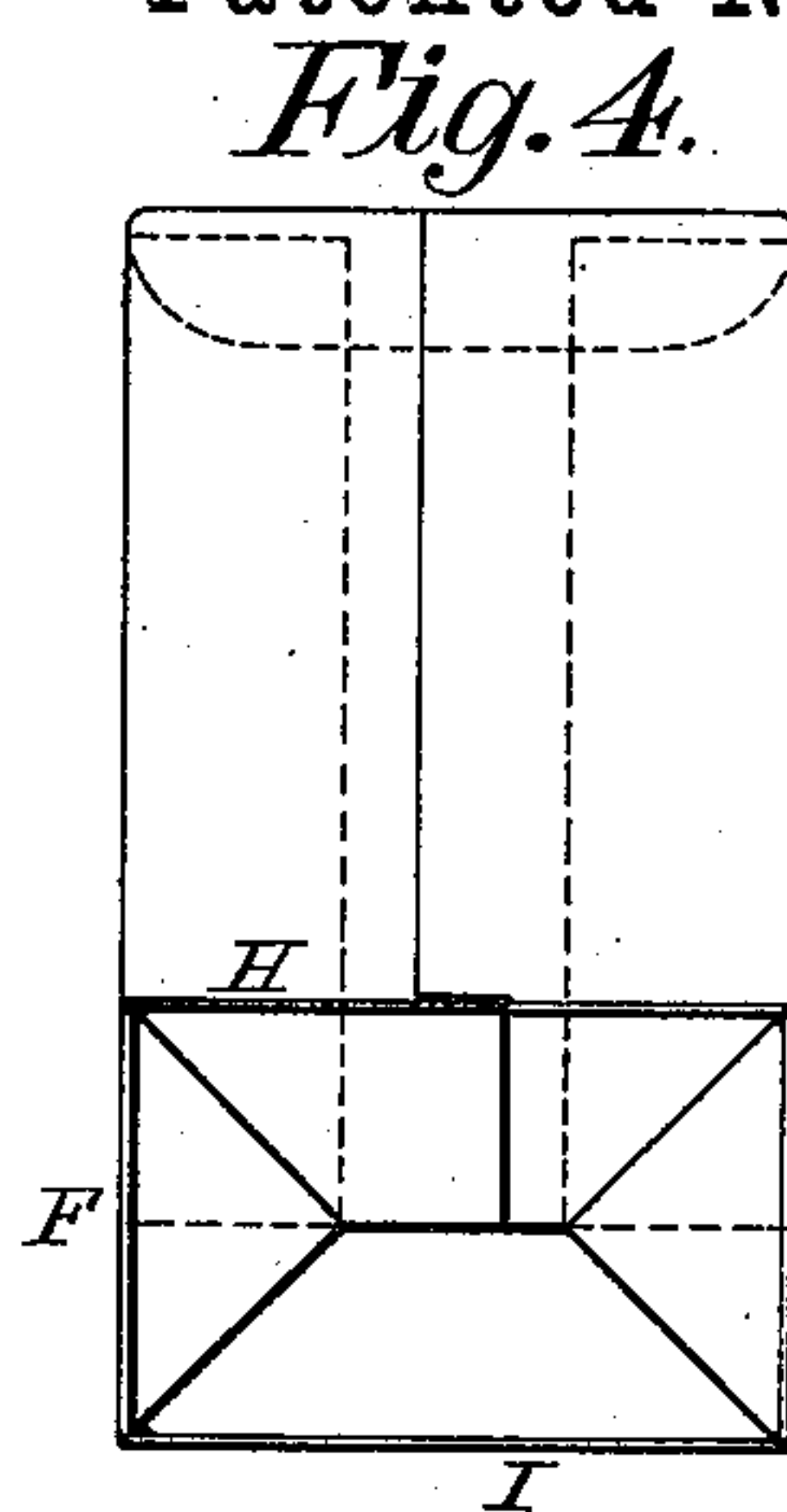
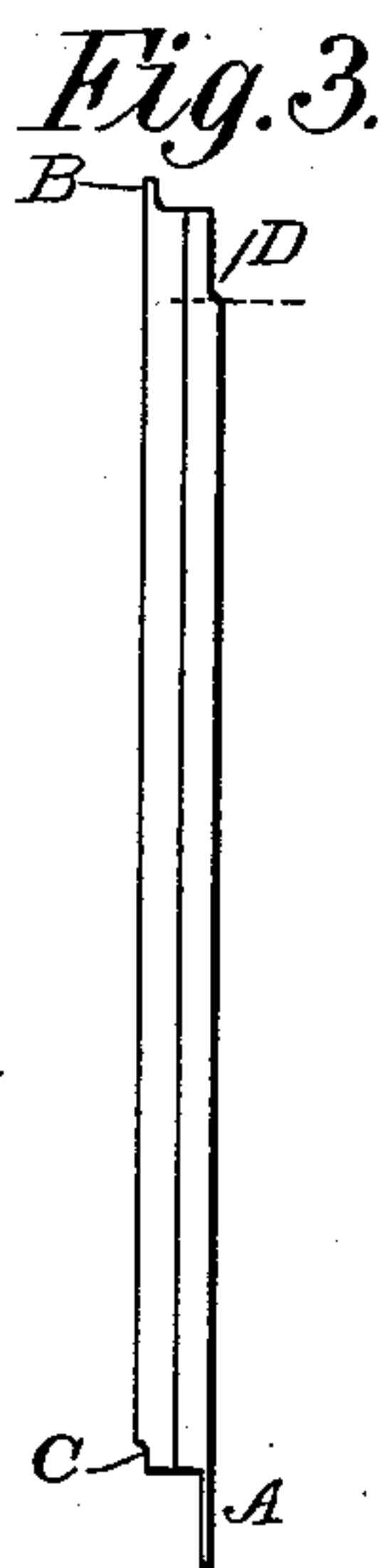
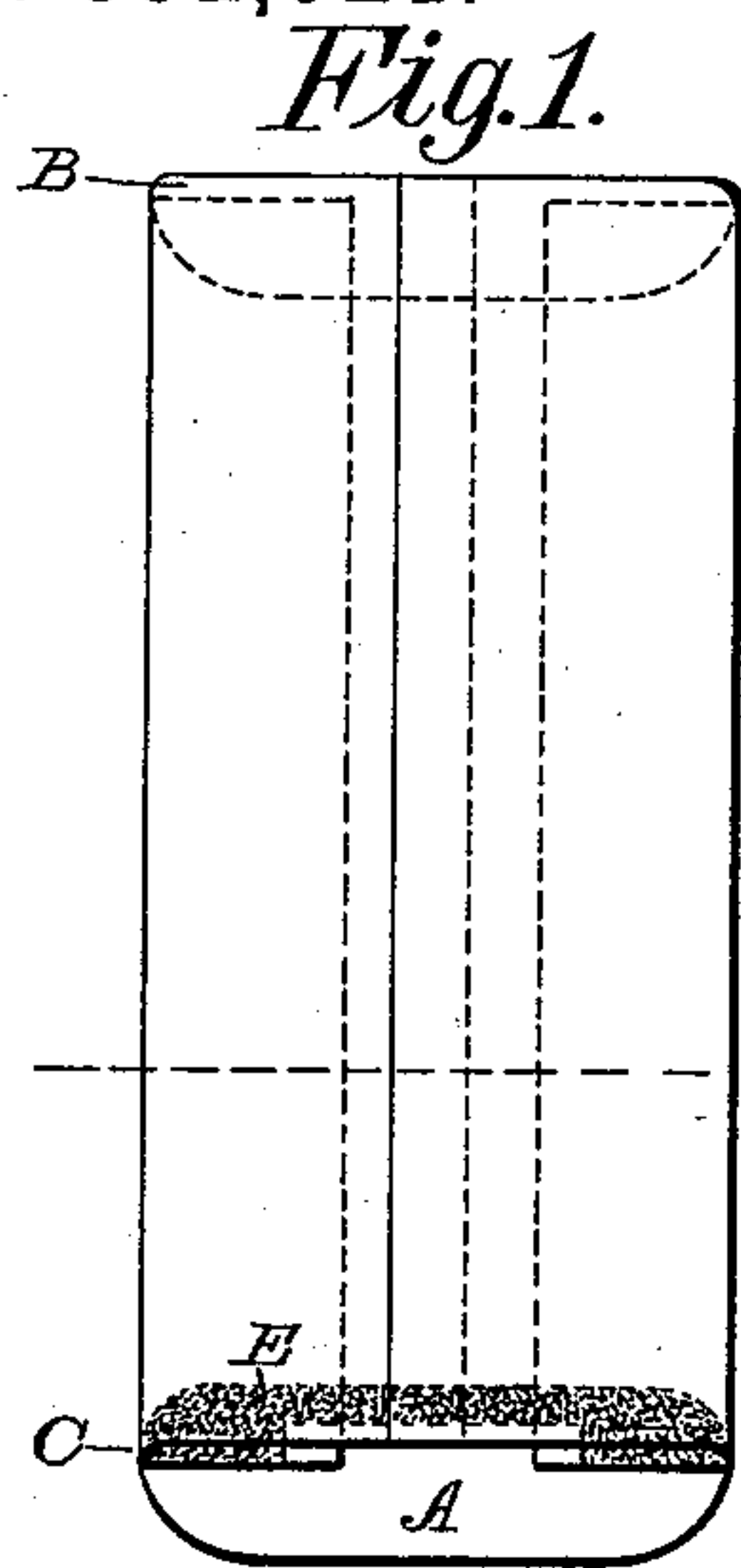
(No Model.)

W. H. HONISS.

PROCESS OF MAKING PAPER BAGS.

No. 352,921.

Patented Nov. 23, 1886.



Witnesses:  
William A. Lorenz  
Edmond E. Claussen

Inventor:  
William H. Honiss.

# UNITED STATES PATENT OFFICE.

WILLIAM H. HONISS, OF HARTFORD, CONN., ASSIGNOR TO FELIX W. LEINBACH AND CLARENCE A. WOLLE, BOTH OF BETHLEHEM, PA.

## PROCESS OF MAKING PAPER BAGS.

SPECIFICATION forming part of Letters Patent No. 352,921, dated November 23, 1886.

Application filed March 20, 1886. Serial No. 195,911. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. HONISS, of Hartford, Connecticut, have invented an Improvement in the Process of Making Paper Bags, of which the following description and claim constitute the specification, and which is illustrated by the accompanying sheet of drawings.

This invention is a new and useful process of making the bottom of a square-bottom paper bag.

Figure 1 is a view of a length of tucked-paper tube suitable for use in the process. Fig. 2 is a cross-section of the tube of Fig. 1, and Fig. 3 is a view of one edge of the same. Fig. 4 is a view of the tube of Figs. 1, 2, and 3 opened out into a box-like form. Fig. 5 is a view of the lower end, and Fig. 6 a view of the right-hand side of the same. Fig. 7 is a view of the blank of Figs. 4, 5, and 6 when the side walls of the box-like form have been pressed toward each other and its upper wall and its lower wall thereby drawn toward each other. Fig. 8 is a side view of the blank of Fig. 7. Fig. 9 is a side view of the same blank when its upper wall is being pressed down upon its side walls. Fig. 10 is a view of the blank after the side walls have been pressed completely down upon the body of the blank and the upper wall has been completely pressed down upon the surfaces beneath it and the lower wall of the box-like form has been pressed and pasted down upon the upper wall and the side walls, and the bag has been thus completed. Fig. 11 is an edge view of the bag of Fig. 10, and Fig. 12 is an isometric view of the same bag opened out as in use, but with its bottom turned upward for easy inspection.

A is the lower lip of the tube of Fig. 1, and B is the upper lip thereof.

C is a recess in the lower end of the tube, made by cutting from a continuous tucked-paper tube a lip like the lip B, but belonging to another blank like that of Fig. 1.

D is a recess in the upper end of the tube, made by cutting from a continuous tube a lip like the lip A, but belonging to still another blank like that of Fig. 1. The lip B and the recess C may be dispensed with; but the lip A is necessary to my process and the recess D is

highly desirable in the resulting bag. E is an area of paste applied to the presented surfaces of the blank of Fig. 1 in the places indicated before the folding up of the bottom begins.

F, G, H, and I are the four walls of the box-like form, into which the lower end of the blank of Fig. 1 is opened up, and the same letters indicate the same parts in all the subsequent positions assumed by them.

The process of making the bottom of this bag is as follows: Continuous tucked-paper tubing is cut up into lengths, each of which has the lips A and B and the recesses C and D. Then paste is applied to one of those lengths, substantially as shown in Fig. 1. Then the lower end of the tube of Fig. 1 is opened up into the box-like form shown in Figs. 4, 5, and 6. Then the walls F and G are pressed toward each other by two flat implements, each of which has an outline corresponding with the right-angled dotted line of Fig. 6. That pressing drives the walls F and G toward each other, and thereby draws the walls H and I toward each other to the positions shown in Figs. 7 and 8. A suitable implement is pressed upon the wall H adjacent to its pasted surface, so as to flatten it and the walls F and G beneath it completely down upon the body of the blank. Then the wall I is pressed down upon those which preceded it, and the bag is thus completed.

The central feature of this process is pressing the side walls of the box-like form toward each other by means of two flat implements, the working part of each of which has the outlines of two equal arms of a right-angled triangle, so that the folds made thereby will be at right angles to each other. If such an implement were to have its two edges at a less angle to each other than a right angle, the sides of the flaps H and I, when folded completely down, would incline inward from the ends of the bottom of the bag, and if the two edges of such an implement were at a greater angle to each other than a right angle the sides of the flaps H and I, when folded completely down, would incline outward from the ends of the proper bottom of the bag. The first of these plans is that embodied in an application of William A. Lorenz, of even date herewith, for



a patent for an improvement in paper bags, and, his invention being older than mine, I disclaim said plan. The second of these plans would be wanting in utility, and for that reason I also disclaim it.

I claim as my invention—

That process of making the bottom of a paper bag which consists in cutting a paper tube having the lip A and the recess D from a continuous length of paper tubing, and then in opening out the lower end thereof into a box-like form at right angles to the body of the tube, as shown in Figs. 4, 5, and 6, and then in pressing the side walls, F and G, of

that box-like form toward each other by flat implements, each of which has its edges at right angles to each other, so as to make right-angled folds in said side walls, and then in pressing the wall H down upon the walls F and G and under the wall I, and then in pressing the wall I, with its lip A, down upon those which preceded it, all substantially as described.

February 19, 1886.

WILLIAM H. HONISS.

Witnesses:

ALBERT H. WALKER,  
WILLARD EDDY.