

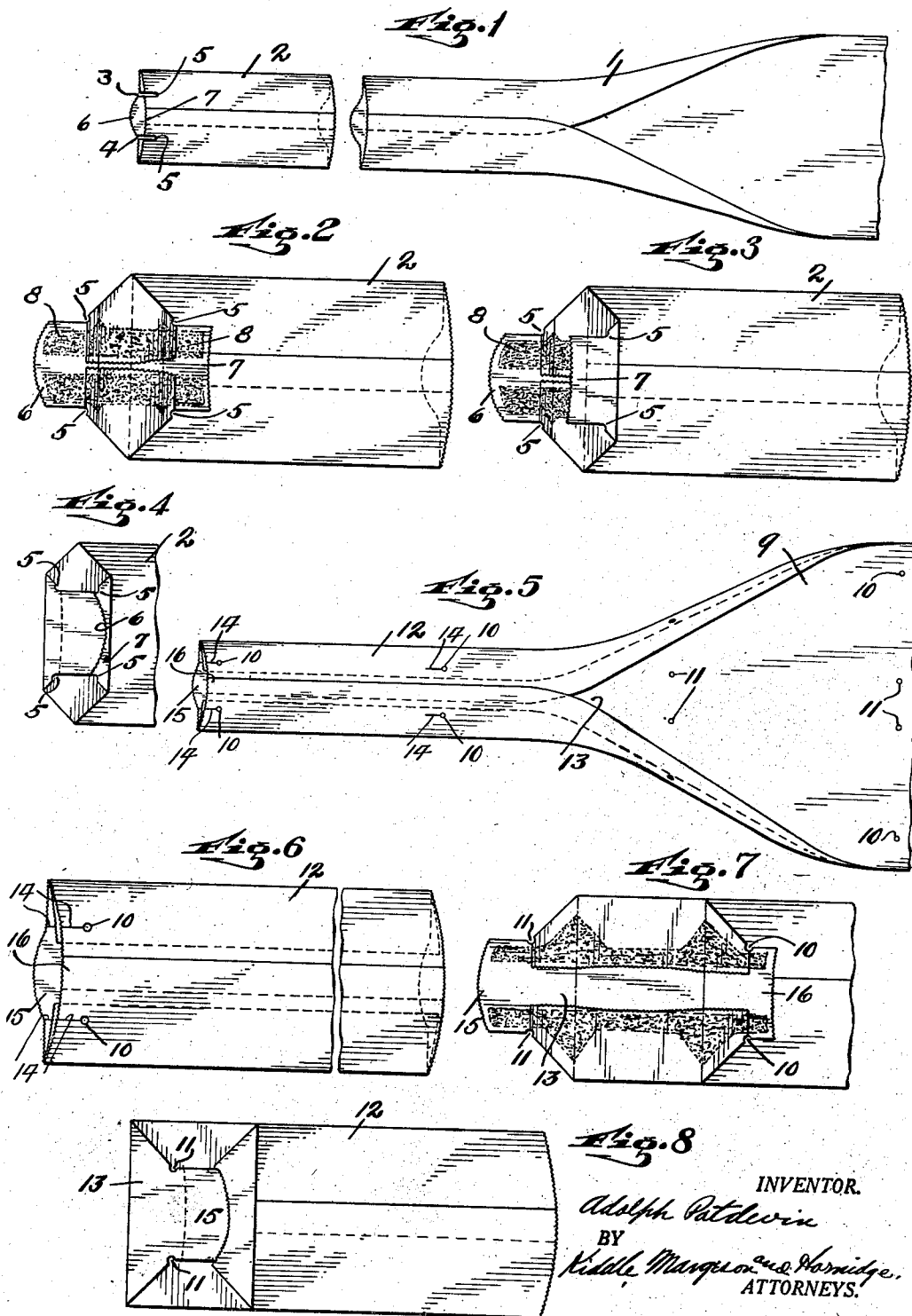
April 26, 1938.

A. POTDEVIN

2,115,281

METHOD OF MAKING BAGS

Filed April 5, 1934



UNITED STATES PATENT OFFICE

2,115,281

METHOD OF MAKING BAGS

Adolph Potdevin, Garden City, N. Y., assignor to
Potdevin Machine Company, Brooklyn, N. Y., a
corporation of New York

Application April 5, 1934, Serial No. 719,120

2 Claims. (Cl. 93—35)

This invention is directed to the production of bags, being more particularly directed to bags of "cellophane", glassine and such materials as compared with paper bags.

5 In the bottoming of bags of the satchel bottom type flaps are provided at the bottom end of the bag which are employed in forming the bag bottom. This necessitates slitting of the bag material lengthwise of the bag tube, and with materials such as "cellophane" and glassine and similar materials such slits are not satisfactory 10 owing to the fact that when such materials are slit it is extremely difficult to perform the bottoming operation without tearing the material. 15 In the practice of the present invention I propose to prevent tearing of the material by slotting the material, the bottom of the slot being rounded or concaved, or I may slit the material providing a stop hole at the inner end of the slit. I have 20 found that both of these methods work much more satisfactorily than prior methods and that tearing of the material is reduced to a minimum.

Two embodiments of my invention are shown in the accompanying drawing.

25 In the drawing:

Fig. 1 is a plan view of a bag tube showing the slots formed therein with a concaved or rounded bottom; while

30 Figs. 2 and 3 show the next succeeding steps in the forming of a bag bottom in such a tube;

Fig. 4 is a plan view of the completed bottom;

In Fig. 5 I show a modification;

Fig. 6 shows the bag tube completely severed;

35 Fig. 7 is a plan view of the bottoming operation; and

Fig. 8 is a plan view showing the finished bottom.

Referring to the drawing in detail and first of all to the embodiment of my invention shown in 40 Figs. 1 to 4. The bag stock is designated 1, and as above mentioned is composed of "cellophane", glassine or similar material as distinguished from paper. The stock may be tubed by any of the methods used in the bag making art.

45 2 designates a bag length which has been severed from the tube.

It will be seen upon reference to Fig. 1 that the walls of the bottom end of the bag length 2 are slotted lengthwise at 3 and 4 the bottom of each 50 of these slots being rounded or concaved as shown at 5. These slots produce two flaps 6 and 7 at the bottom end of the bag length, the flap 6 projecting beyond the end of the bag length.

In the operation of bottoming the bag, which 55 is illustrated in Figs. 2 and 3, it will be seen that

the slotted end of the bag length is opened and the wall having the flap 7 folded back upon the main body of the bag length as shown in Fig. 2. This necessitates deforming of the material of the bag length which is permitted by the slots 3 and 4. Due to the rounded bottom 5 of each of these 5 slots this operation may be performed successfully, however, without tearing the material. I might mention that in the bottoming operation it is customary to effect opening of the bag length by 10 gripping the flaps 6 and 7 and moving them away from each other so that considerable tension is imposed on the fragile material of the bag length, but as above set out despite this fact, the provision of the round bottom slots 3 and 4 enables 15 the operation to be performed without tearing. After the tube has been opened up and folded back as illustrated, paste shown at 8 is applied, flap 7 folded down and the flap 6 folded over to complete the bottoming operation as shown in 20 Fig. 4.

In Figs. 5, 6, 7 and 8 where I have illustrated a modification of the invention above described, the web 9 of "cellophane", glassine or similar materials is punched to provide sets of holes 10 25 and 11 therein, as seen in Fig. 5. This is before tubing. The web is then tubed as shown in the same figure of the drawing, to bring the holes 10, which I will assume for purposes of description are in the upper wall 12 of the tube, into approxi- 30 mate register with the holes 11 in the lower wall 13 of the tube. Both walls of the tube are next slit lengthwise as shown at 14, the slits extending into the holes or perforations 10 and 11.

The operations so far described are prior to the 35 cutting-off operation. The stop-holes or perforations 10 and 11 are formed before the web is tubed and when the web is tubed it is unnecessary that the holes in one wall register precisely with those in the other wall as one slitter can be 40 employed for slitting one wall and another slitter for the other wall, so that absolute accuracy is assured so far as the slits being properly aligned with the holes is concerned.

The tubing is next divided adjacent the ends of 45 the slits 14, to provide a bag length with a flap 15 in one wall and a flap 16 in the other wall.

The bottoming operation is similar to that described in connection with Figs. 1 to 4, and it will be appreciated that the stop-holes or perfora- 50 tions will prevent tearing of the material during the deformation of the material incident to the bottoming operation as explained above.

From the foregoing it will be appreciated that I have provided a method for use in connection 55

with the bottoming of bags wherein danger of tearing of the material during the bottoming operation is reduced to a minimum, the rounded bottom of the slots 3 and 4 and the stop-holes or perforations 10 at the end of the slits 14 effectively preventing such contingency.

What I claim is:—

1. In bag making, the method which comprises tubing the bag material, dividing the bag material transversely into bag lengths to provide a projecting flap on one wall of each bag length, and then preparing the leading end of the bag length for bottoming by removing a narrow longitudinal strip of the material from each wall of the bag

length to provide slots adjacent the sides of said flaps, the bottom of said slots being concaved.

2. In bag making, the method which comprises forming a web of imperforate bag material into a tube, severing the tubed material into bag lengths to provide a projecting flap on one wall of each bag length, then removing a narrow strip of material from each wall of the bag length at each side of said flap and longitudinally of the bag length, the trailing end of said strip being convex thereby to provide slots with a concave bottom adjacent the sides of said flap and finally bottoming the slotted end of the bag length.

ADOLPH POTDEVIN.