

H. A. GENEST.
PAPER BAG.
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1,158,042.

Patented Oct. 26, 1915.

Fig. 1

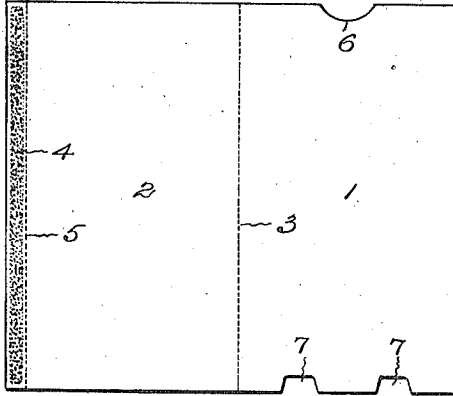


Fig. 2

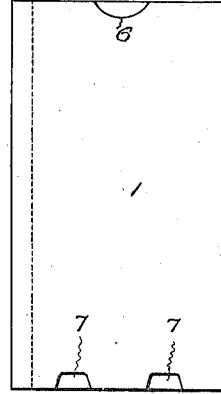


Fig. 4

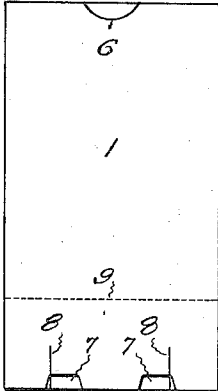


Fig. 3

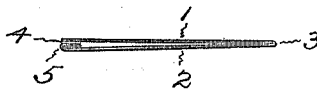


Fig. 5

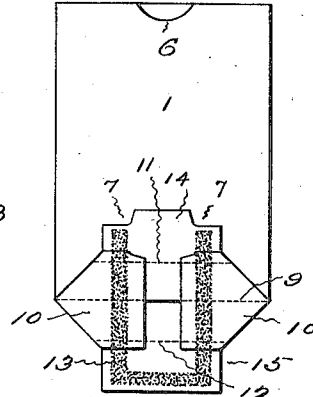


Fig. 6

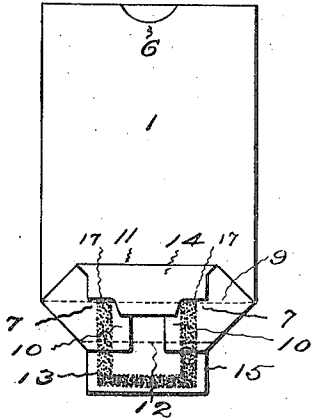
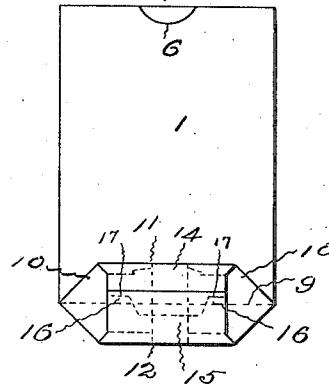


Fig. 7



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PAPER BAG.

1,158,042.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HOMER A. GENEST, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Paper Bags, of which the following is a specification.

This invention relates to the construction of paper bags and sacks, and while it may be advantageously employed in the production of bags of all sizes and weights of stock, it has special utility in connection with the manufacture of bags of the larger sizes and bags which are made of thick paper stock.

The object of the invention is to so shape the blanks that they will be manipulated with greater certainty in the forming machine; that more paper will be saved; and that the bottoms can be more easily and securely pasted, thus insuring tighter and more reliable bags, than those previously made from blanks of the common shape.

This object is attained by cutting notches in the bottom edge of one of the sides of the blank in such positions that the feed fingers of the bag machine will only grip one ply, leaving the other ply free to spring up and facilitate the entrance between the plies of a folding blade, which notches are also located so that when the bottom of the bag is folded and pasted, the spaces formed by the notches will be between the thickened and creased portion along the middle of the side flaps and the side edges of the outer flap, and, therefore, as there will be less thickness of paper at these localities the outer flap can be pasted down with greater ease and certainty, and thus produce a cheaper and more reliable bag.

Figure 1 of the accompanying drawings shows a plan of a sheet of paper cut to such size and so creased that it is ready to be folded into a tube, paste being indicated as applied along one edge. Fig. 2 is a plan of the tube made by folding one section of such a sheet over onto the other section. Fig. 3 is an end view of the tube previous to having its edges united. Fig. 4 shows the tube with the bottom end slitted and creased. Fig. 5 shows the tube with its bottom end "diamond-folded" and with paste applied to the flaps. Fig. 6 shows the blank with the inner flap folded over and pasted onto the side flaps. Fig. 7 shows the blank

with the outer flap folded over and pasted, as when the bag is complete.

The sheet of stock from which the tubular blank is formed has a front section 1 and a back section 2 separated by the crease 3, and a lap section 4 that is separated from the section 2 by the crease 5. The section 1, at the top desirably, has a thumb notch 6, and at the bottom has two notches 7. Paste is applied to the back of the lap section 4 and this section is folded on the crease 5 over onto the section 2 and the section 1 is folded on crease 3 over onto the section 2 and its edge caused to adhere to the pasted surface of the section 4, thus forming the tube. Both sections or plies of the tube are slitted, as at 8, for a short distance up from the bottom, these slits passing through the notches 7, as seen in Fig. 4. The lower end of the front section 1 is folded up on the crease 9 and the side flaps 10 are folded in to form the common "diamond-fold" at the bottom end of the tubular bag blank, as seen in Fig. 5. The diamond is creased on the lines 11 and 12 and after paste is applied to the bottom, as indicated by 13 on Fig. 5, the inner flap 14 is folded over on the crease 11 as shown in Fig. 6, and then outer flap 15 is folded over and pressed down so as to complete the forming of the bottom, as illustrated by Fig. 7.

Cutting out the notches 7 saves paper and the removal of these sections of the front ply allows the feeding fingers of the machine in which the bag is formed, to grip the edge of the back ply, leaving the front ply free so that it will spring up and insure the passage between the plies of the folding plate which turns the front ply over. This operation being made more certain, as a result of the forming of the notches 7, fewer blanks are likely to be damaged in the machine, and consequently there is less waste in manufacture. Furthermore with the notches 7 so cut that when the bottom of the bag is folded the bottom edges 17 of the notches do not reach as far as the middle crease line 9, the thickness of the portion of the bottom of the bag at the points 16, where the notches are, is not as much as it would be if the stock had not thus been cut away. Consequently these sections will not be "bunched" as thickly as in the bags heretofore made, and, therefore, the pasting may be more certainly and securely accomplished, for it is

well known that bunched up thicknesses of heavy paper overlapping each other do not adhere securely when pasted together. This feature is a decided advantage as it not only facilitates the manipulation of the blanks in the machine and saves waste, but also increases the reliability of the bottom pasting.

The invention claimed is;—

1. A bag blank comprising a sheet of paper having a front section, a back section, and a lap section, the front section having two notches in its lower edge, each notch being located at a distance from the edge of the tube and the lap section having a coating of adhesive along its length.

2. A tubular paper bag blank having two notches cut in the lower edge of one of the plies, each notch being located at a distance from the edge of the tube.

3. A tubular paper bag blank having two notches cut in the lower edge of one of the plies, each notch being located at a distance from the edge of the tube, and slits cut in both plies through said notches.

4. A paper bag having a folded and pasted bottom, said bottom consisting of side flaps formed by diamond folding the blank, an

inner flap with its corners cut away and folded down upon the side flaps, and an outer flap folded over upon the side flaps and the edge of the inner flap.

5. A paper bag having a folded and pasted bottom, said bottom consisting of angular side flaps formed by diamond folding the blank, an inner flap folded upon the side flaps, said inner flap having its corners cut back of the middle line of the side flaps and having a central portion that extends beyond the middle line of the side flaps, and an outer flap folded upon the side flaps and having its edge extending upon the edge of the inner flap and covering the cut-away sections of the same.

6. A bag blank comprising a sheet of paper having a front section, a back section, and a pasted lap section, one section having two notches in its lower edge, each notch being located at a distance from the edge of the tube.

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