June 13, 1939. O. H. HULTIN 2,162,258

PAPER BAG

Filed Nov. 17, 1936

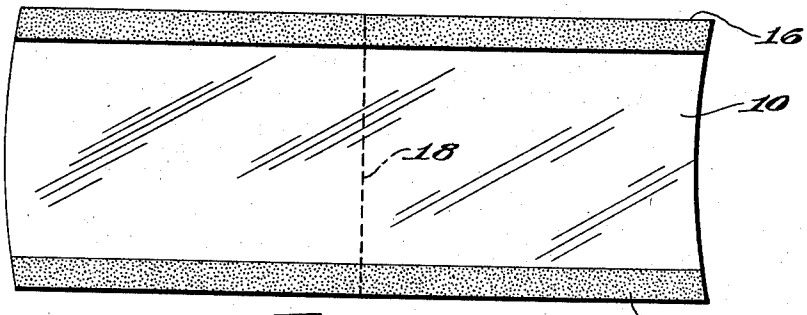


Fig. 1

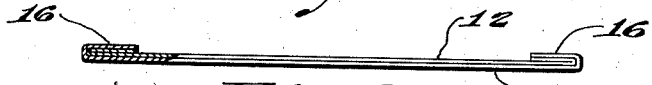


Fig. 2

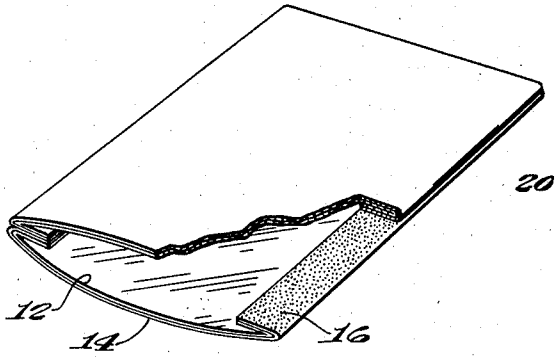


Fig. 3

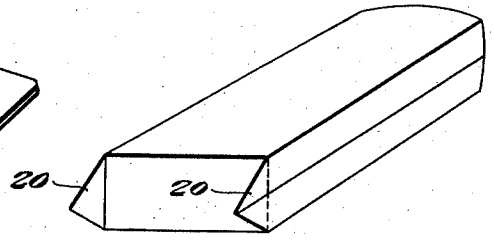


Fig. 4

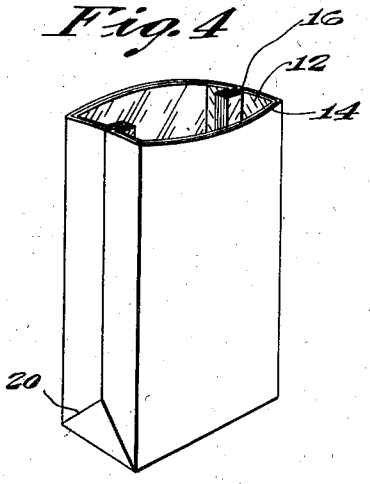


Fig. 6

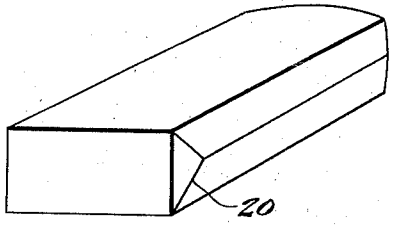


Fig. 5

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PAPER BAG

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Application November 17, 1936, Serial No. 111,267

4 Claims. (Cl. 229—55)

This invention relates to a paper bag.

One object of the invention is to provide a novel construction of paper bag possessing superior moisture resisting properties, which may be economically manufactured, and lends itself particularly for use as a liner for a carton.

With this general object in view, and such others as may hereinafter appear, the invention consists in the paper bag, hereinafter described and particularly defined in the claims at the end of this specification.

In the drawing, Fig. 1 is a plan view of a blank from which the present bag may be made; Fig. 2 is a view partly in section and partly in end elevation of the blank shown in Fig. 1; Figs. 3, 4, 5 and 6 are perspective views illustrating the successive steps in the production of the bag, the completed bag being shown in Fig. 6.

In general, the present paper bag comprises a composite sheet of paper and thin metallic foil, or equivalent, folded into bag form and with the metallic foil disposed to form the inner surface of the bag. The side edges of the composite sheet are folded inwardly to thereby present a paper to paper contact when the two half portions of the bag blank are folded together, and to thus enable the paper surfaces of the folded side portions of the bag to be adhesively secured together. The bag thus produced presents a continuous moisture resisting metal foil extending completely around the body of the bag, thus rendering the bag particularly useful in packaging tea and various commercial products. The improved bag may be used with advantage as a liner for a carton.

In accordance with the preferred method of making the present bag, the foil and paper may be adhesively affixed together in any usual or preferred manner and in any usual or preferred form of apparatus. A continuous strip of such composite material is preferably fed forwardly and the side portions thereof folded inwardly against the metallic foil to form relatively narrow side strips, presenting a paper upper surface. After the side portions of the composite strip have been thus folded, the strip is severed to form an individual bag forming blank and the latter is then folded about a central transverse line to bring the two halves of the bag together. The paper surfaces of the folded side strips are adhesively secured together to form the side seams of the bag.

Referring now to the accompanying drawing, 10 represents a sheet of laminated or composite bag forming material, comprising a sheet of metal foil 12 and a sheet of paper 14, and as above stated, the metal foil and paper sheet may be adhesively affixed together in any usual or preferred manner. As herein shown, the longitudinal edges of the composite sheet 10 are folded over against the metal foil to provide side strips 16 having paper upper surfaces upon which adhesive is applied. The sheet is folded laterally on the central line 18, so that the adjacent adhesive coated surfaces come in contact with each other, to form a seal at each side of the bag as illustrated in Fig. 3. The flat bag thus pdoduced is then preferably expanded into a square or rectangular shape as shown in Fig. 4, leaving two triangular flaps or tabs 20 projecting from the bottom of the bag. These projecting tabs are preferably folded over against the sides of the bag, as illustrated in Fig. 5 to form a sturdy and reliable bag, neat in appearance and which will hold its shape, preparatory to insertion into a carton or other protective outer container. It will be observed that in the present construction of the bag the metal foil comprises the entire inner exposed surface of the bag. While at the same time the side seams of the bag possess maximum strength because of the strength of the paper to paper adhesive seal or bond. In this manner a strong and durable metal lined bag is produced in a simple economical and practical manner, and one which is particularly suitable for use as a liner for cartons in the packaging of various commodities such as tea, coffee or the like.

While it is preferred to utilize a metallic foil, such as tin foil, in the production of the composite bag forming sheet as above described, other moisture resisting sheets may be used if found advantageous in place of such metallic foil, such as moisture resisting regenerated cellulose.

While the preferred embodiment of the invention has been herein illustrated and described, it will be understood that the invention may be embodied in other forms within the scope of the following claims.

Having thus described the invention, what is claimed is:

1. As a new article of manufacture a metal foil lined paper bag, comprising an outer paper bag, a metal foil lining therefor, said lining being adhesively affixed to the paper bag, the portions of the lined bag forming both of the side seams being folded inwardly beyond the inner surfaces of the two sides of the bag and the adjacent con-

tacting paper surfaces of said folded portions being adhesively secured together.

2. As a new article of manufacture, a metal foil lined bag formed from a composite sheet comprising a paper sheet and a sheet of metal foil adhesively secured thereto, both paper and foil sheets being of substantially uniform width, the opposite longitudinal marginal edges of the composite sheet being folded over and upon the metal foiled surface of the composite sheet, and the composite sheet being folded transversely to form the bag, the contacting paper surfaces of the longitudinally folded marginal portions of the bag being adhesively secured together to form the side seams of the bag, the longitudinally folded marginal portions projecting inwardly beyond the two sides of the bag.

3. As a new article of manufacture, a metal foil lined bag formed from a composite sheet comprising a paper sheet and a sheet of metal foil, both paper and foil sheets being of substantially uniform width, the opposite longitudinal marginal edges of the composite sheet being folded over and upon the metal foiled surface of the composite sheet, and the composite sheet being folded transversely to form the bag, the contacting paper surfaces of the longitudinally folded marginal portions of the bag being secured together to form the side seams of the bag, the longitudinally folded marginal portions projecting inwardly beyond the two sides of the bag.

4. As a new article of manufacture, a lined paper bag, comprising an outer paper bag of rectangular shape in section, a moisture resisting foil lining therefor, said lining being adhesively affixed to the paper bag, and the portions of the lined bag forming the side seams being folded inwardly and extending beyond the inner surfaces of the sides of the lined bag and the adjacent contacting paper surfaces of said folded portions being adhesively secured together.

OSCAR H. HULTIN.