E. MALLALIEU.

PAPER-LINED BAGS.

No. 194,359. Patented Aug. 21, 1877.

Fig. 1.

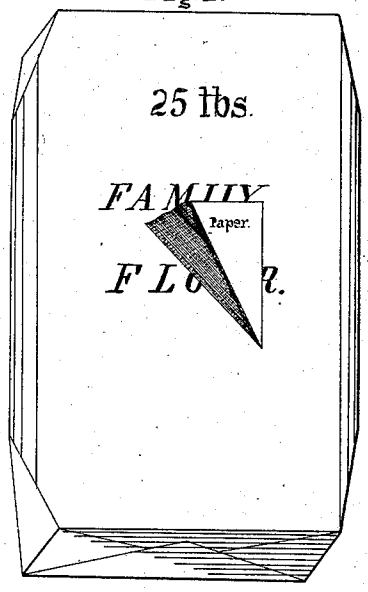
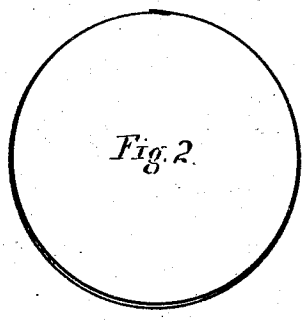


Fig. 2.



Attest.

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UNITED STATES PATENT OFFICE.

EDWARD MALLALIEU, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN PAPER-LINED BAGS.

Specification forming part of Letters Patent No. **194,359**, dated August 21, 1877; application filed May 16, 1877.

To all whom it may concern:

Be it known that I, EDWARD MALLALIEU, of the city of Baltimore, State of Maryland, have invented certain new and useful Improvements in Paper-Lined Sacks; and I hereby declare the same to be fully, clearly, and exactly described as follows:

This invention relates to sacks or bags for holding pulverulent or finely-divided material, such as flour, meal, dust sugar, snuff, guano, &c.; and it consists in a paper-lined textile sack having the features and of the construction hereinafter set forth.

In the accompanying drawings are illustrated, in Figure 1, a perspective view of my sack, and in Fig. 2 a cross-sectional view of the tube for forming the same.

Heretofore, sacks for holding flour, guano, snuff, &c., have been made either of textile fabric or of very strong Manila paper. When made of textile fabric it is found necessary to coat the same with size or paste, to close the meshes of the fabric and prevent loss of contained material; and when made of paper, in order to overcome this objection, so strong and thick an article is required as to make the paper bags quite costly.

In order to obviate these objections, I construct a compound sack of paper and textile fabric, thereby securing the imperviousness of paper and the strength of woven material, while obviating the disadvantages and cost of thickness in the former and of sizing in the latter.

This sizing is further objectionable on account of its liability to crack or peel off if dry, and to putrify if moist.

In constructing my sack, I form a tube of paper and muslin, the materials being attached only at the seam, as shown in Fig. 2, and then form from the same, by the use of any appropriate bag-machine, sacks having any desired form of bottom.

These bags are especially adapted for containing materials—such as coffee and snuff—whose aroma it is desired to retain, and also for fertilizers, as the paper lining almost completely prevents the loss of the valuable ammonia.

I attach especial importance to the fact that the materials composing these bags are unattached, except at the seam, whereby the outer layer is given a certain play or lateral motion over the inner one, and the tendency of the latter to "buckle" along a line where it has once received a crease is lessened.

I am aware that material consisting of paper and textile fabric pasted together is old and well known, and it has been suggested to form bags of the same. Such, therefore, I do not claim.

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

1. As a new article of manufacture, a bag-tube consisting of paper and textile fabric, the same being unattached except at the seam, substantially as described.

2. A bag consisting of paper and textile fabric, the same being attached only at the seam, substantially as described.

Witness my hand this 14th day of May, 1877.

EDWARD MALLALIEU.

Witnesses:
R. D. WILLIAMS,
W. A. BERTRAM.