

(No Model.)

B. ARKELL & C. A. BLOWERS.
PACKING BAG.

No. 529,690.

Patented Nov. 27, 1894.

Fig. 1,

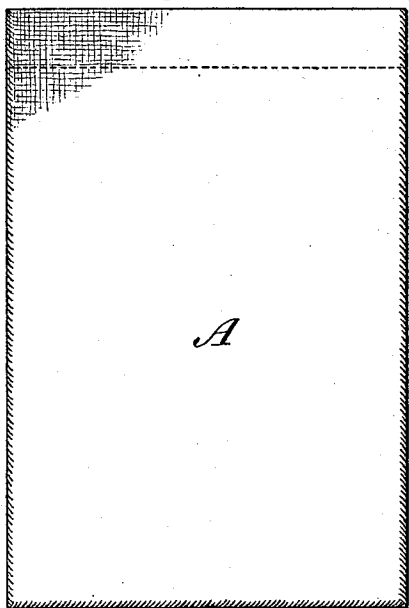


Fig. 4,

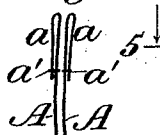


Fig. 2,

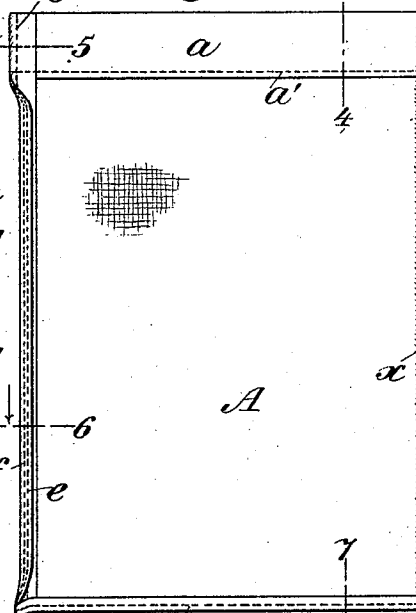


Fig. 5,

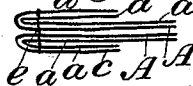


Fig. 6,

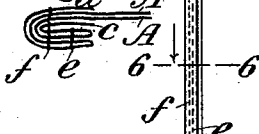
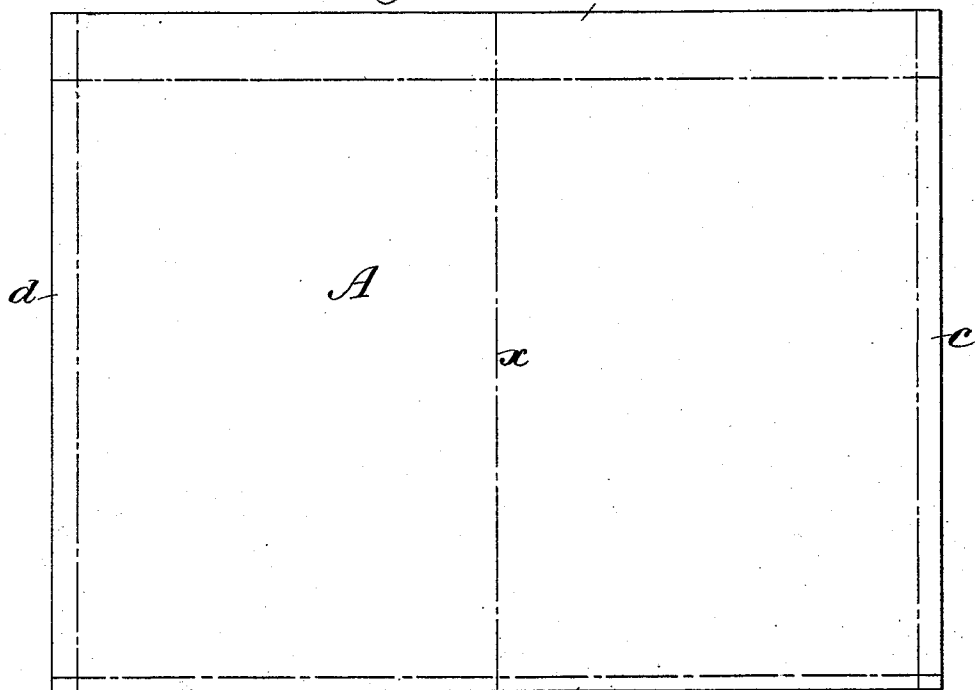


Fig. 7,



Fig. 3,



Witnesses:-

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Inventors

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Nicholas M. Goodlett Jr.

UNITED STATES PATENT OFFICE.

BARTLETT ARKELL AND CHARLES A. BLOWERS, OF CANAJOHARIE, NEW YORK; SAID BLOWERS ASSIGNOR TO FRANK O. MATTHIESSEN, OF NEW YORK, N. Y.

PACKING-BAG.

SPECIFICATION forming part of Letters Patent No. 529,690, dated November 27, 1894.

Application filed May 28, 1894. Serial No. 512,617. (No model.)

To all whom it may concern:

Be it known that we, BARTLETT ARKELL and CHARLES A. BLOWERS, citizens of the United States, residing at Canajoharie, in the county of Montgomery, State of New York, have invented certain new and useful Improvements in Packing-Bags, of which the following, taken in connection with the accompanying drawings, is a specification.

Our invention relates to packing bags and it has for its object to provide a bag adapted to securely hold a fine granulated or powdered substance such as sugar, salt, starch and similar substances, whereby any of these substances may be safely packed and shipped in the bag in bulk.

Heretofore it has been customary to pack sugar and salt in barrels for shipping, but the great expense involved by the barrels has induced those interested to seek some other satisfactory and less expensive package. Sugar refiners were thus induced to employ a cotton bag inclosed in an outer bag of a coarsely woven textile fabric, the cotton bag affording a clean surface for contact with the sugar and the outer textile bag affording a strong reinforcement for the cotton bag. This package was little if any less expensive than the barrel, and was objectionable for the reason that any puncture of the cotton bag would permit the sugar to escape, the mesh of the outer bag being too coarse to retain it. Moreover, if the mesh of the outer bag were fine enough to retain the sugar, the seams of the bag would open at the stitches under the ordinary strain to which they were subjected in handling.

Our invention is designed to remedy the defects of the old packing bag and also to provide a much cheaper bag in which a large bulk of sugar, or similar substance of a hundred pounds or more if desired, may be safely packed and shipped without damage to the substance inclosed or liability of its escape.

In the drawings, in which like letters designate similar parts in all the views, Figure 1 is an elevation of a bag embodying our invention. Fig. 2 is a similar view showing the bag turned inside out. Fig. 3 shows a strip

of fabric before it is folded into the form of a bag and stitched. Figs. 4, 5, 6 and 7 are detail sectional views on the lines 4-4, 5-5, 6-6, 7-7 respectively of Fig. 2.

The bag is made of a cheap, strong, firmly woven textile fabric, capable of sustaining a considerable weight, say a hundred pounds or more, and having a mesh sufficiently fine to retain a fine granular or powdered substance such as sugar, salt, starch, &c. We have found that burlap, having about twelve threads to the inch is admirably adapted to fill the requirements. A body strip *A* of the fabric is cut to proper dimensions and a deep fold *a* of about four inches is turned over along the top. A narrow fold *b* about two inches wide is then turned down along the bottom, as shown in Fig. 3. The fold *a* is secured in place by a row of stitching *a'* and then the strip of fabric *A*, is turned over along the line *x* and the folds *c* and *d* are turned down and secured by a row of stitching *e*, passing through these folds and through the body *A* of the fabric, making thus four thicknesses of fabric secured by the stitching *e*. The bottom is then fastened by a row of stitching *g*, which passes through two thicknesses of the fold *b* and two thicknesses of the body *A*, and thus makes a bag. To make the side seam thoroughly secure it is then folded over and a second row of stitching *f* run along this fold, passing through eight thicknesses of fabric. The bag as now made is inside out and when turned the finished bag is produced. When the bag is filled with the substance which it is intended to carry, the fold *a* may be turned over and the bag securely closed by stitching which passes through at least four thicknesses of fabric. The bag as thus made is exceedingly strong, and it is, moreover, easy and inexpensive to make. The stitches will not pull apart the threads of the fabric when subjected to great strain and there is therefore no danger of escape of the sugar, salt, starch or other substance inclosed. The reinforcing strip *a* is made as herein shown and described, by folding over the upper edge of the bag, but instead of forming the reinforcing strip in this way, if desired a separate reinforcing strip

may be stitched around the upper edge of the bag. While we prefer to employ the reinforcing strip *a*, yet in some cases it may be omitted.

5 In practically making our bags in quantities for commerce we proceed as follows: We take a long strip of the fabric out of which the bags are to be made, and fix along its upper edge, preferably by stitching a reinforcing band consisting either of a separate and distinct band stitched in place along its upper and lower edges to the strip of fabric, or a band folded over from the upper edge of the strip of fabric and stitched in place along its lower edge. We then cut the strip of fabric into a number of short strips of a proper bag length and fold each of these short strips into the form of a bag, completing the bag by a seam along its bottom and a seam along its side which has one or more rows of stitching through four or more thicknesses of fabric.

We have shown in the drawings the seam at the bottom of the bag as comprising a single row of stitching through only four thicknesses of fabric, but it is of course understood that we may make this seam so as to comprise one or more rows of stitching through four or more thicknesses of fabric, and if desired may have one row of stitching through four thicknesses and another row through eight thicknesses of fabric, similar to the side seam.

What we claim as new, and desire to secure by Letters Patent, is—

1. A bag made of strong, firmly woven textile fabric adapted to securely hold a fine granular or powdered substance, having its side closed by a seam provided with a row of stitching through four thicknesses of fabric and a row of stitching through eight thicknesses of fabric, and having its bottom closed by a seam provided with one or more rows of stitching through four or more thicknesses of fabric, substantially as set forth.

2. A bag made of a strong, firmly woven textile fabric adapted to securely hold a fine granular or powdered substance, provided with a reinforcing strip of textile material stitched about its open end and made by folding over the fabric of the bag, adapted together with the body of the bag to receive and securely hold a row of needle stitches when the bag is closed, and having its bottom closed by a seam having one or more rows of stitching through four or more thicknesses of fabric, and one side closed by a seam having a row of stitching through four thicknesses of fabric and a row of stitching through eight thicknesses of fabric, substantially as set forth.

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Witnesses:

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