J. B. DAVENPORT.

Paper-Bag.

No. 205,840. Patented July 9, 1878.

Fig. 1.

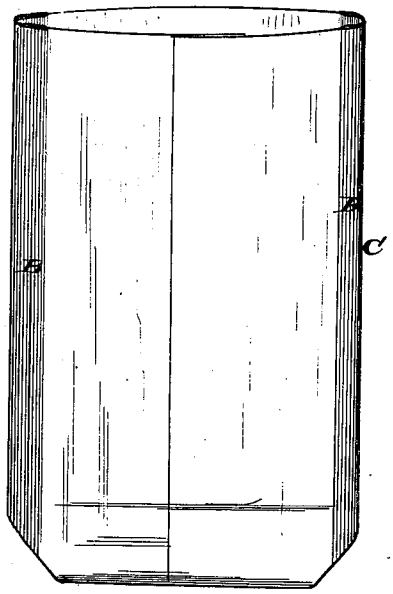


Fig. 2.

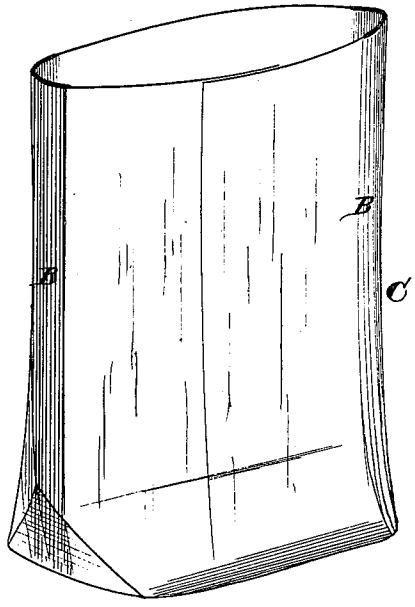


Fig. 3.

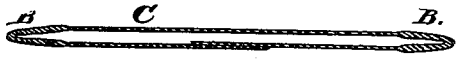


Fig. 4.

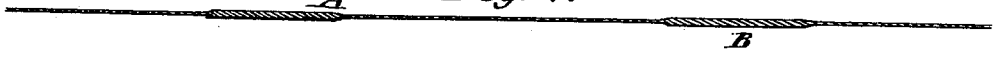
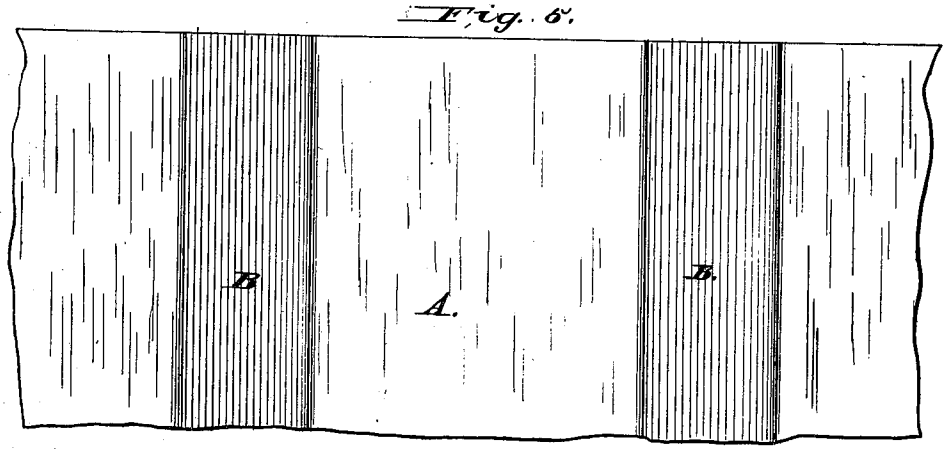


Fig. 5.



Attest.
H. D. Perrine
J. A. Rutherford

James B. Davenport,
Inventor.
By James L. Norris.
Atty.

UNITED STATES PATENT OFFICE.

JAMES B. DAVENPORT, OF NEW YORK, N. Y.

IMPROVEMENT IN PAPER BAGS.

Specification forming part of Letters Patent No. **205,840**, dated July 9, 1878; application filed April 29, 1878.

To all whom it may concern:

Be it known that I, JAMES B. DAVENPORT, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Bags, Sacks, Boxes, &c., made of Paper, Pasteboard, &c., of which the following is a specification:

This invention relates to certain improvements in the manufacture of bags, sacks, boxes, and other similar articles of paper and card-board; and it has for its object to strengthen the paper at those parts where the creases, folds, or bends of the article occur, where the paper or card-board is weakened, or where any special strain or wear is likely to take place, by making the paper or card-board thicker or of tougher material at such parts; and my invention consists in a new article of manufacture consisting of a bag, sack, or box constructed of paper or card-board, and having the body of the material made thicker or stronger at the creases, folds, or bends, or the portions subjected to the greatest wear or strain, as more fully hereinafter specified.

In the drawing, Figure 1 represents a side elevation of a bag constructed according to my invention. Fig. 2 represents a perspective view of the same. Fig. 3 represents a transverse section of the bag; Fig. 4, a transverse section of the blank from which the bag is constructed, and Fig. 5 a front view of a portion of the blank.

The letter A represents the blank constructed, in the present instance, for the manufacture of a paper bag. Said blank may be formed on the ordinary cylinder paper-machine by making the wire-gauze on the cylinder coarser at specified parts than at other parts, so that more pulp will be deposited at the coarse parts than at the others. Thus an extra thickness of pulp is obtained at parts of the sheet made at these coarse parts, as shown at B in the drawings. Or the blank may be formed by covering or decking one of two or more cylinders in a paper or board machine, leaving strips or bands on the cylinder of the desired width bare at the points required, so that the cylinder so decked will only take up pulp and deposit it on the felt at the proper specified points in narrow bands or strips, while at the other cylinder or cylinders will deposit the pulp the full width of the sheet desired, and the sheet of pulp thus produced will be thicker at these points than elsewhere. I also, if desired, use on the cylinder thus decked a pulp of a stronger, tougher, or different quality from that used on the other cylinder, giving additional strength to the weak or exposed portions of the finished article.

This combination of pulp, in layers of unequal width, is pressed and felted in the ordinary manner, and the blank thus produced is formed into a bag, C, or other article by folding the paper at the thickened or toughened parts B, as shown in Figs. 1, 2, and 3, and pasting and otherwise securing the edges of the same in the usual manner.

It is evident that the blank may be formed by hand, if desired, or by other descriptions of paper-making machines.

What I claim is—

As a new article of manufacture, a bag, sack, or box constructed of paper or card-board, and having the body of the material made thicker or stronger at the creases, bends, or folds, or the portions subject to the greatest wear or strain, substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

JAS. B. DAVENPORT.

Witnesses:

JOHN S. DAVENPORT,

WALTER L. COYT.