

No. 686,847.

W. N. GREEN.
BAG OR SACK.

Patented Nov. 19, 1901.

(No Model.)

(Application filed Aug. 7, 1901.)

FIG. 1.

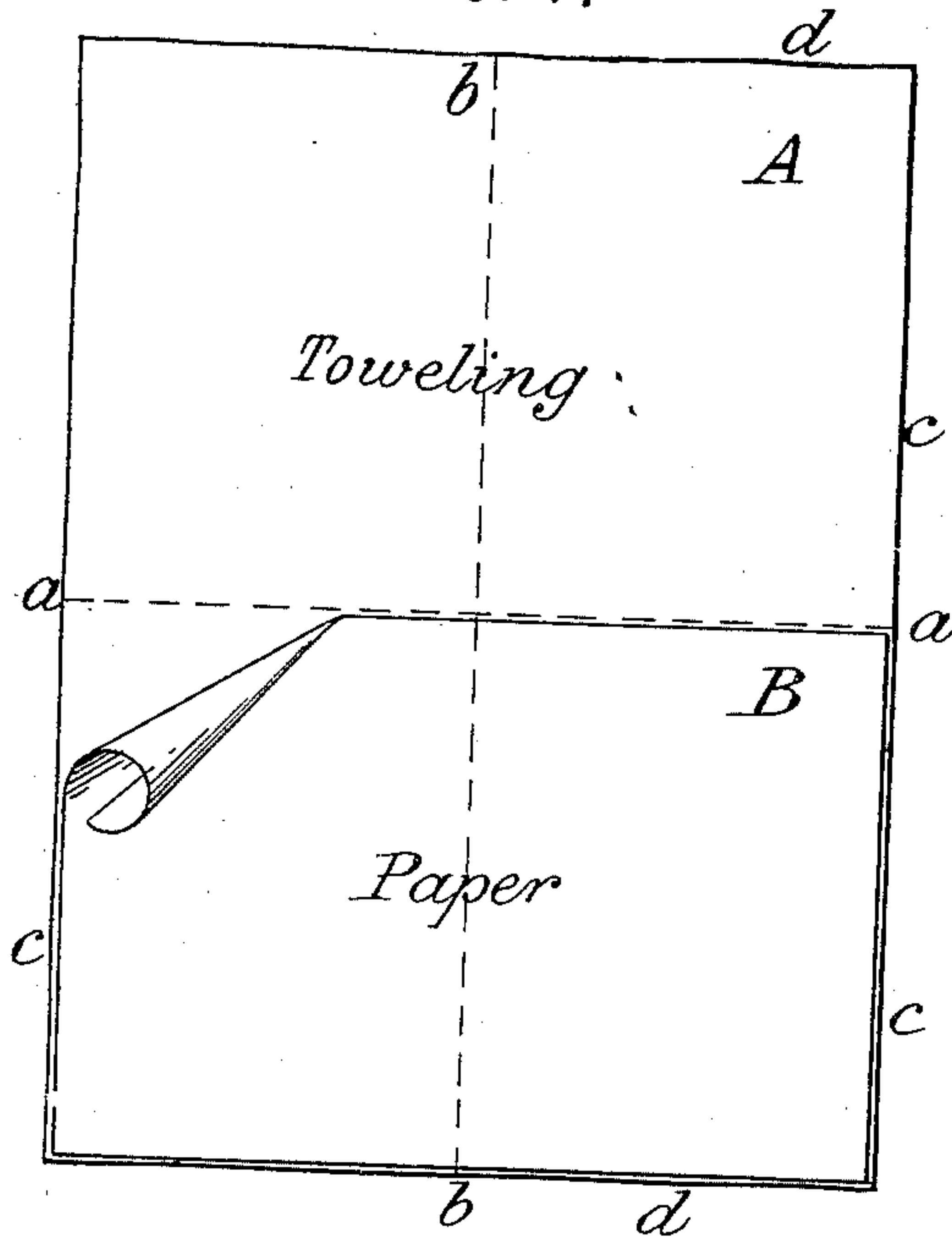


FIG. 2.

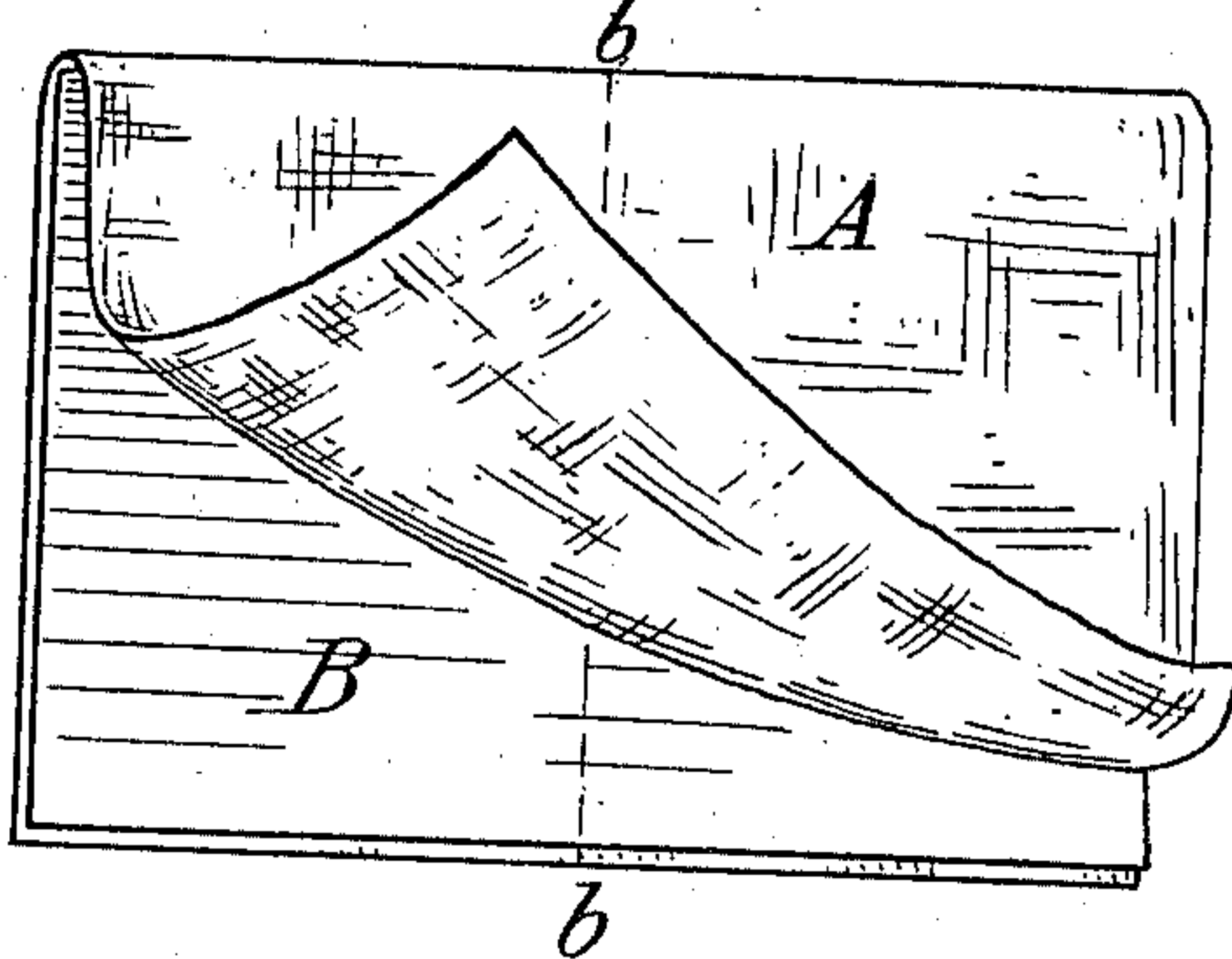


FIG. 3.

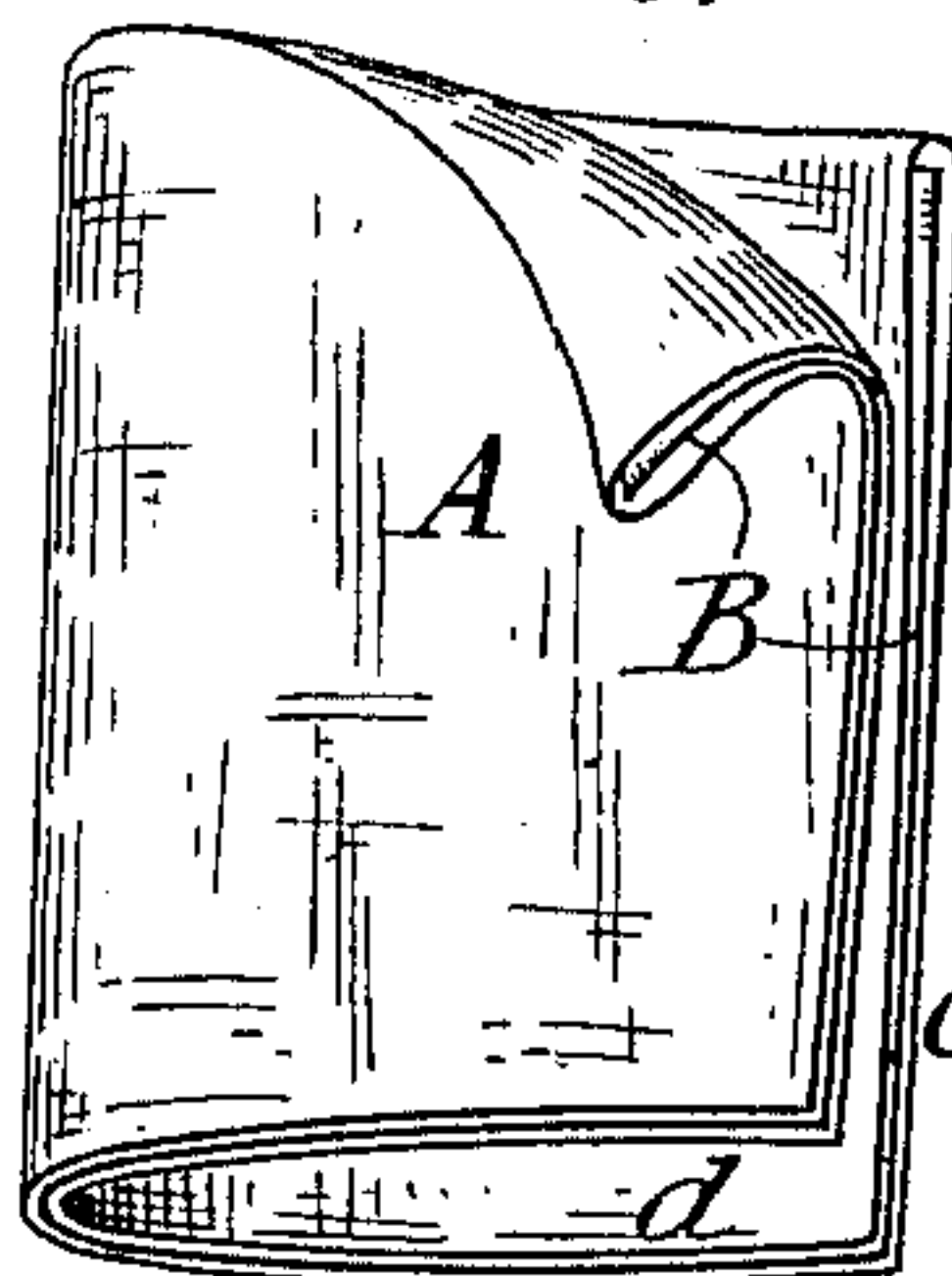


FIG. 4.

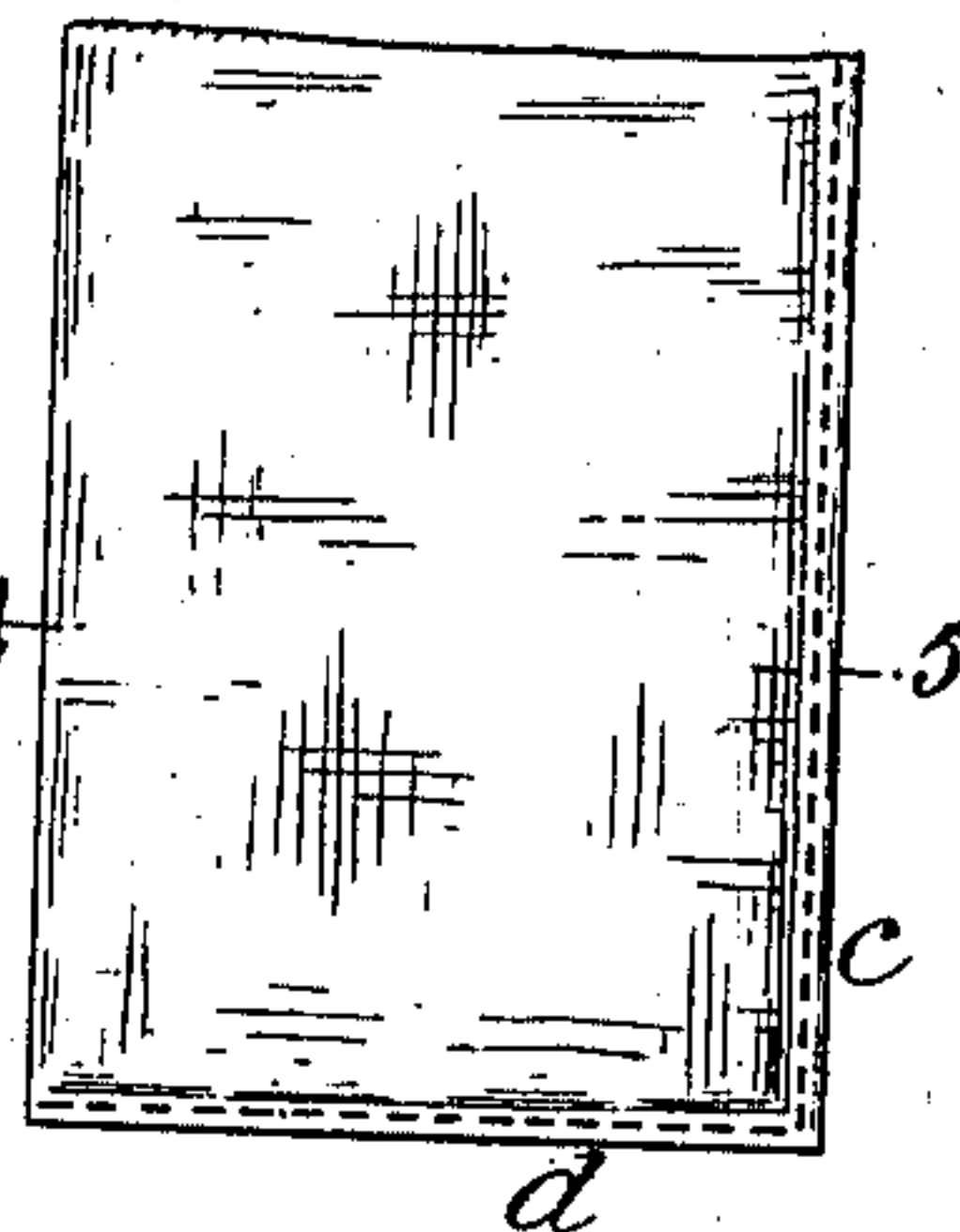


FIG. 5.

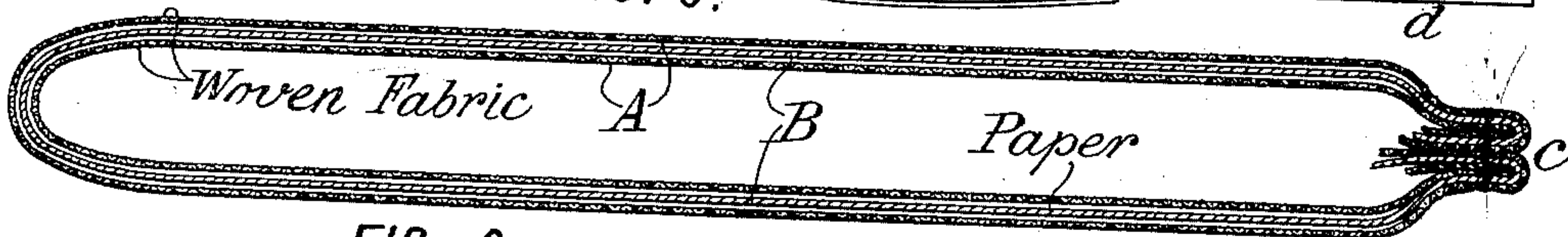


FIG. 6.

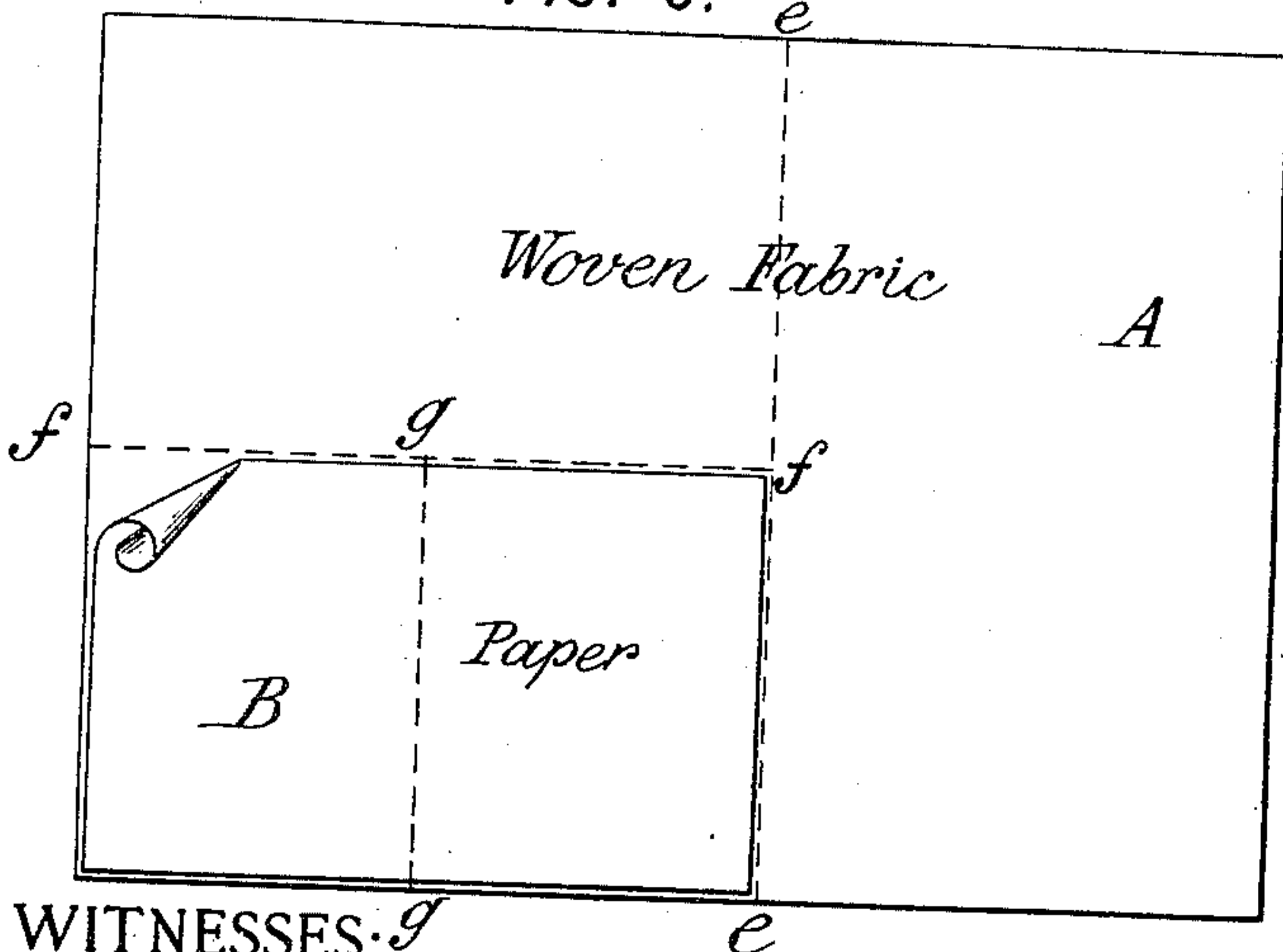
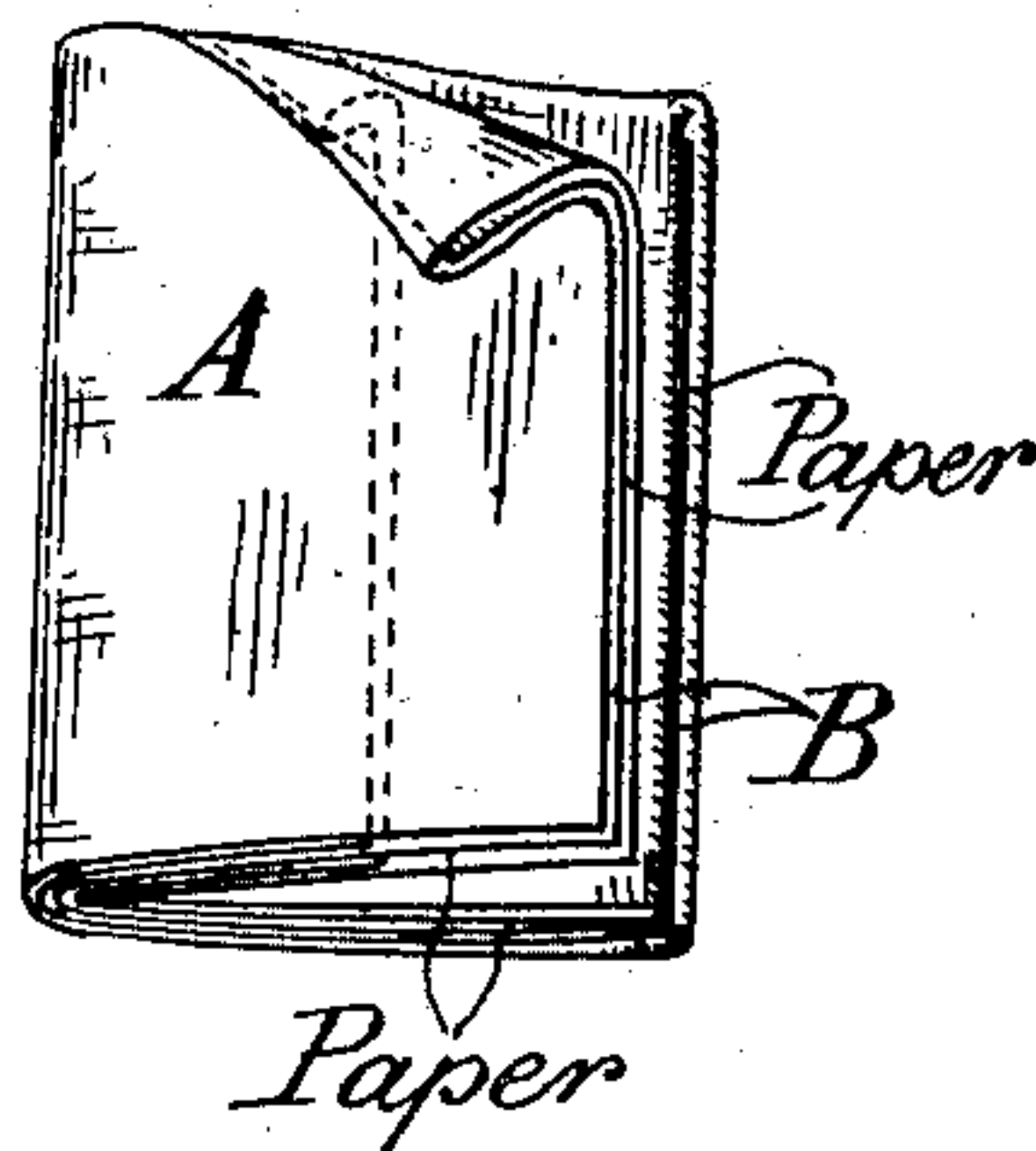


FIG. 7.



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BAG OR SACK.

SPECIFICATION forming part of Letters Patent No. 686,847, dated November 19, 1901.

Application filed August 7, 1901. Serial No. 71,128. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. GREEN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Bags or Sacks, of which the following is a specification.

This invention relates to bags or sacks adapted for the shipment and sale of coffee, rice, oatmeal, or other farinaceous foods and generally of comminuted or subdivided materials. Such substances are commonly shipped or sold in bags of either paper or woven fabric or sometimes in woven bags with a paper lining. The bags heretofore used have been so made as to be practically useless when emptied of their contents, except in some instances as bags for other materials for which there is but little domestic need, and the paper-lined bags have been objectionable in that the paper lining is liable to be ruptured or abraded, thereby destroying its impermeability, which is the principal advantage of the use of a paper lining, and permitting part of the contents of the bag to slip into the space between the paper and woven fabric, where it is difficult of access.

One object of my invention is to provide a bag of such material and construction as will render it useful and valuable to the consumer after it is emptied of the goods shipped or sold in it. To this end I make the bag of a continuous piece of woven fabric suitable for use as a towel or for other analogous purpose—such, for example, as a table-cloth. The size of the piece of cloth is determined, first, by the use to which it is to be put ultimately, and, second, by the size of bag desired to be made. For example, for a towel the cloth is cut or woven of suitable size—say, for example, twenty by twenty-seven inches—and is folded as many times as is needed to reduce it to the size desired for a bag, according to the bulk of material to be inclosed, whereupon the folded fabric is sewed, so as to form the desired bag without cutting or mutilating it in any way, so that when its function as a bag has been fulfilled it is only necessary to rip out the sewed seam and the material becomes at once useful as a towel. The same idea is applicable to a piece of woven fabric of suitable size and material

to be used as a table-cloth or as a carriage-cloth or lap-robe or for many other uses.

My invention also has for its object to produce a bag which shall be very strong, durable, and impervious. To this end I provide a lining of paper or other equivalent fabric inclosed between two layers of cloth or woven fabric, the outer layer constituting the exterior of the bag and the inner layer constituting the interior of the bag. The outer and inner layers are suitably joined by stitching, and the paper is preferably united by entering the seam, so as to be stitched with them. Preferably the inner and outer layers of woven fabric are continuous, being formed by a single large sheet folded together in such manner as to bring the fold at the mouth of the bag, thereby avoiding the inconvenience of a seam at the mouth and saving the expense of stitching the mouth.

My invention may be best understood by reference to the accompanying drawings, wherein—

Figure 1 is a plan of a piece of cloth or woven fabric, such as toweling, from which to make a bag and on which is superposed a sheet of the paper to constitute its impervious lining. Fig. 2 shows the same, the woven fabric being folded down upon the paper to inclose it. Fig. 3 shows a further stage in the manufacture, the combined woven fabric and paper being again folded to approximately the shape and size of the bag. Fig. 4 is an elevation of the completed bag, its open side and bottom having been turned in and seamed. Fig. 5 is a horizontal section of the bag on the line 5 5 in Fig. 4, showing the respective thicknesses of cloth and paper. Fig. 6 is a plan similar to Fig. 1, showing a different proportioning of the parts in order to make a bag of smaller capacity. Fig. 7 is a view corresponding to Fig. 3, showing the cloth and paper folded together ready for stitching to form the bag.

Referring to the drawings, let A designate a piece of cloth or woven fabric of any suitable kind—say, for example, what is commonly known as “toweling”—and let B designate a sheet of paper, preferably some dense tough paper that is sufficiently flexible, but practically impervious. If desired, a waxed paper may be used, or instead of paper any

thin dense flexible fabric having similar qualities as to toughness and impermeability may be substituted as its equivalent.

One example of carrying out my invention I have shown in Fig. 1, the toweling fabric A being of a suitable size and proportion for use as a towel—say, for example, twenty by twenty-seven inches—and I have shown in Fig. 4 the same folded and stitched together to make as large a bag as is feasible—that is to say, a bag of, for example, about nine and one-half by thirteen inches in size when flat and capable of holding about five pounds of coffee. To make this bag, the paper B is cut to about one-half the size of the woven fabric A, and the latter is then folded upon the paper on the line *a a*, as shown in Fig. 2. The two are then folded together upon the line *b b*, as shown in Fig. 3, whereby the paper sheet is folded within and confined between two thicknesses or layers of the woven fabric, as shown. The fold *a a* becomes the top or mouth of the bag, while the free side edges *c* become one of the sides and the end edges *d* become the bottom of the bag. These free edges *c* and *d* are then stitched in the manner shown in Fig. 4, preferably turning them in in order to make a neat seam, as shown best in Fig. 5, which is an enlarged cross-section of the bag. The bag thus made is very tough and durable, and by reason of its inner layer of paper is substantially impervious, so that it prevents evaporation of the contents, and by the use of waxed or waterproof paper may be made completely impervious. The paper layer is so thoroughly protected both outside and inside that it is not affected by abrasion or by any strains to which the package would ordinarily be subjected. When the purchaser of the commodity has emptied the bag he has only to rip out the stitched seam, whereupon by unfolding the woven fabric he restores it to its original condition, when it is useful for a towel or other predetermined purpose.

Where from a given size of the woven fabric it is desired to make smaller bags or in case it is desired to use a larger sheet of woven fabric for a given-sized bag, it is only necessary to fold the woven fabric to a smaller size. One instance of this is given in Figs. 6 and 7, where the cloth or woven fabric A is first folded on the line *e e* and a sheet of paper B being inserted is again folded on the line *f f*, so as to inclose the paper. Then a final fold is made on the line *g g*, thereby reducing it to the form shown in Fig. 7, which only requires stitching on the right-hand open side and the bottom.

In manufacturing bags according to my invention the inner layer of paper may either be sewed into the seams with the cloth or it may be cut slightly short of the same, so as to be left unsewed, as may be preferred. For most uses I consider it preferable to sew the paper into the seams.

The bag provided by my invention is to be

distinguished from bags made of a compound material of paper and woven fabric cemented together. In my bag the intermediate layer of paper is not cemented to the outer and inner layer of the woven fabrics, nor united thereto, except at the sewed seam. Hence in my bag each of the three layers constitutes in effect a separate or distinct bag to the extent that any two of the layers might be cut away, and yet a bag would remain. The purpose of my invention would be entirely or largely defeated if the layers were united together by glue, cement, or the like, as is the case with such compound fabrics.

What I claim is—

1. A bag consisting of two thicknesses of woven fabric forming outer and inner bags, combined with a sheet of paper between them and uncemented to them, forming an intermediate bag.

2. A bag consisting of a continuous piece of woven fabric, folded double with a sheet of paper between its thicknesses, and sewed together, whereby the bag is formed of inner and outer layers of fabric and an intervening thickness of paper, the paper being uncemented to the fabric.

3. A bag consisting of a continuous piece of woven fabric, folded double with a sheet of paper between its thicknesses, and sewed together at its abutting edges to form one side and the bottom of the bag, the sewed seam uniting both layers of fabric and the intervening layer of paper.

4. A bag consisting of a continuous piece of woven fabric, folded double with a sheet of paper between its thicknesses, and sewed together at its abutting edges to form one side and the bottom of the bag, a fold in the fabric forming the top or mouth of the bag, whereby the bag is formed of inner and outer layers of fabric and an intervening thickness of paper.

5. A bag consisting of a continuous piece of woven fabric larger than four times the area of the bag to be made, folded together to reduce it to an area approximately four times that of the bag, then folded again with a sheet of paper inclosed between its layers, and again folded together with the inclosed paper, and sewed together, whereby the bag is formed of inner and outer layers of fabric and an intervening thickness of paper.

6. A bag consisting of a continuous piece of toweling fabric, folded double with a sheet of paper between its thicknesses, and sewed together, whereby the bag is formed of inner and outer layers of fabric and an intervening thickness of paper, and the fabric is adapted by ripping its seams to constitute a towel.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

WILLIAM N. GREEN.

Witnesses:

SAMUEL J. SULLIVAN,
OTTO C. BRUHLMAN.