

J. F. AMES.
PAPER BAG.
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998,319.

Patented July 18, 1911.

Fig. 3.

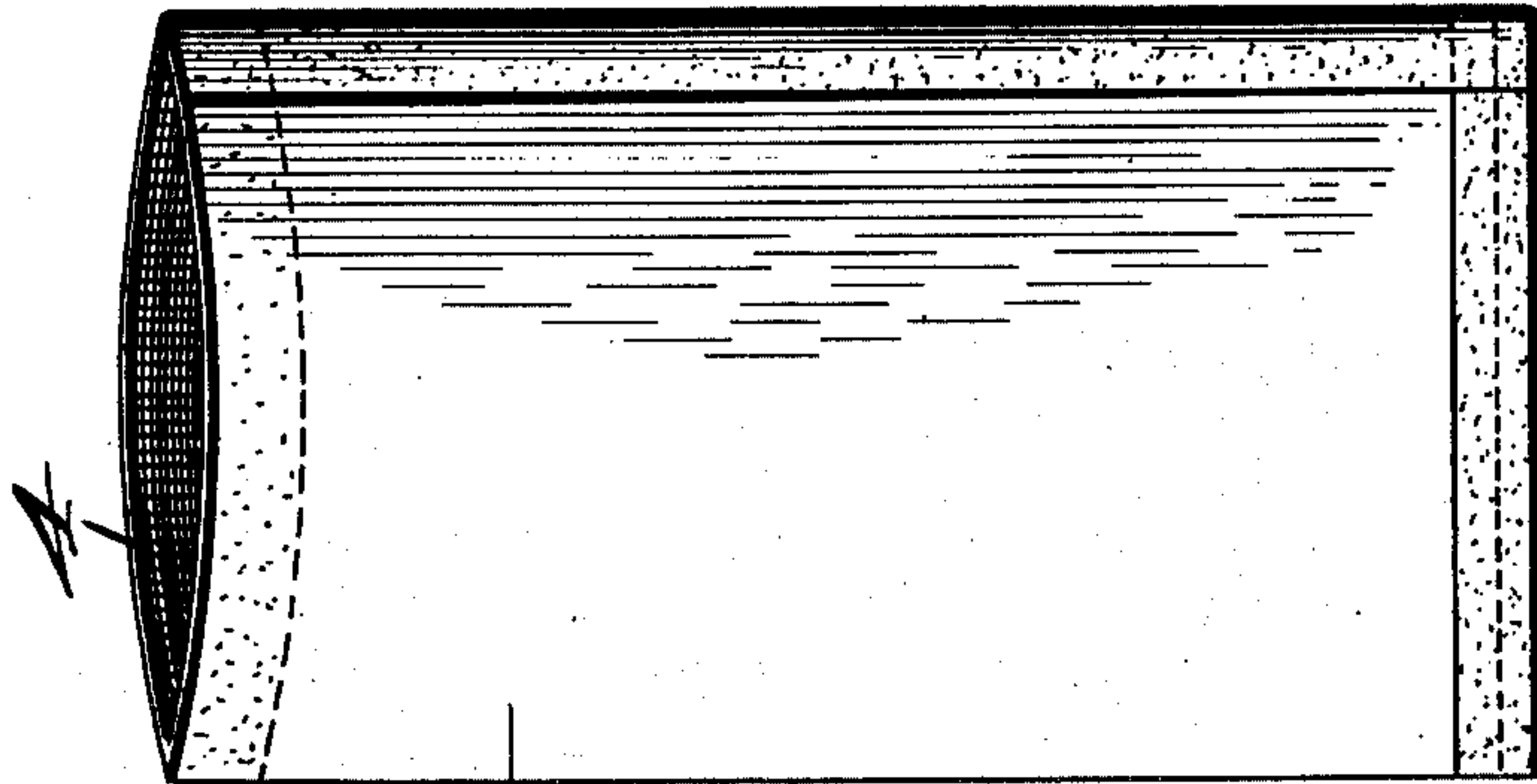


Fig. 2.

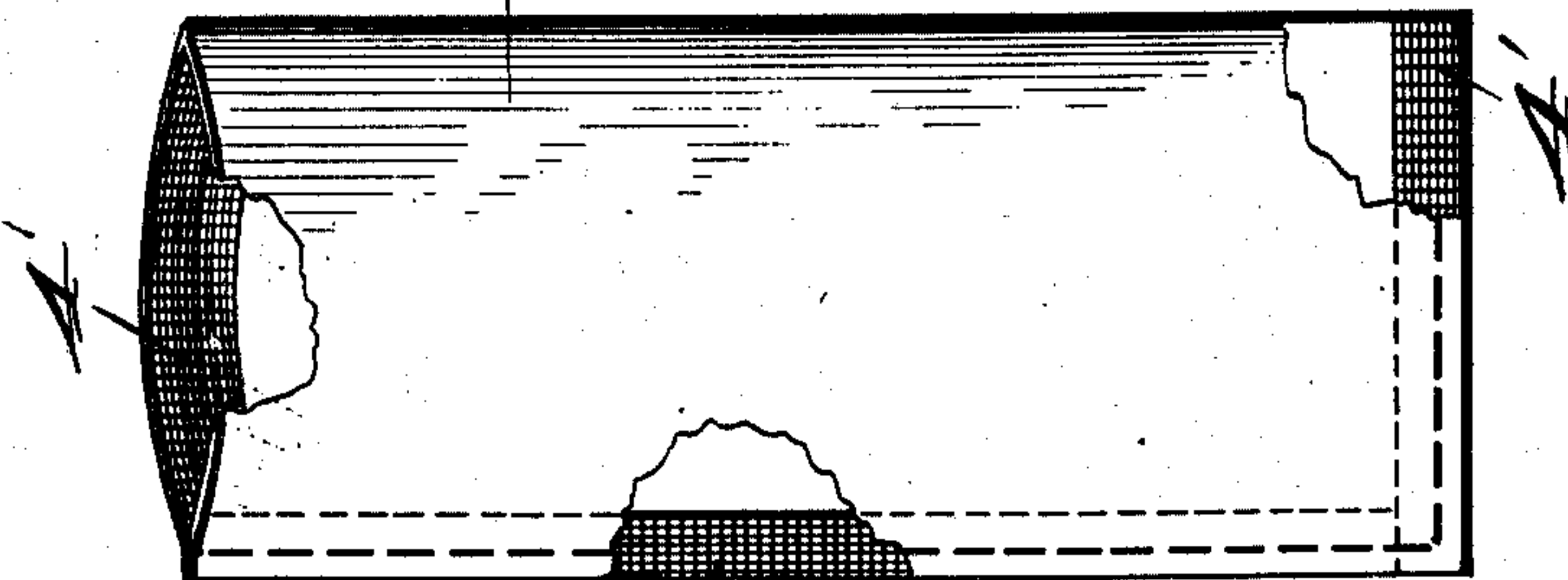
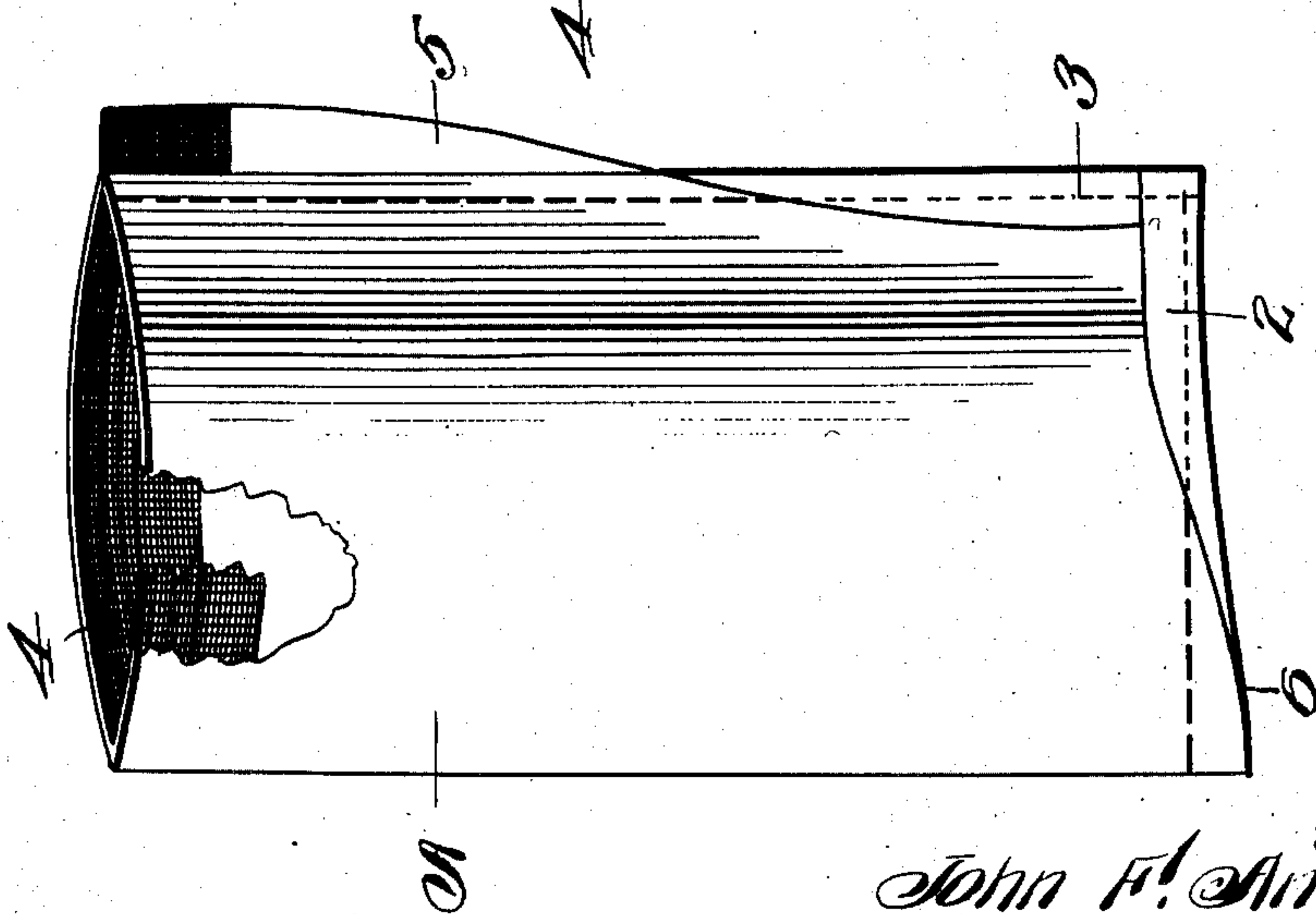


Fig. 1.



Witnesses

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UNITED STATES PATENT OFFICE.

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PAPER BAG.

998,319.

Specification of Letters Patent.

Patented July 18, 1911.

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To all whom it may concern:

Be it known that I, JOHN F. AMES, citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Paper Bags, of which the following is a specification.

My invention relates to the manufacture of paper bags.

Paper bags are now used extensively for flour, cement and other things put up in the form of original packages. It is common to fill the bag, and after being filled, to tie the mouth of the bag. In order to tie a paper bag, it requires the bag being made several inches longer than otherwise necessary, thereby resulting in the use of perhaps 20% more material than would be required if these bags could be made just the right length and sewed. It is not possible to paste the mouth of a filled paper bag, because it would not only take too long for the paste to dry, but with many substances of a deliquescent or hygroscopic nature, such as salt, the bag would soon open. Neither can the top of an ordinary bag be sewed up, because the stitches would tear the paper.

The object of the present invention is to provide a strong paper bag suitable for packaging flour, cement, salt, sugar, charcoal, etc., and which bag can be sewed, in contradistinction to pasted bags, or cloth bags.

Another object is to provide a water-proof bag, the edges of which may be pasted, if desired, and one or both ends sewed.

The invention consists of the parts and the construction and combination of parts as hereinafter more fully described and claimed, having reference to the accompanying drawings, in which—

Figure 1 is a perspective view of the bag. Fig. 2 is a like view, modified form. Fig. 3 is a view of a water-proofed bag.

In practicing my invention, I employ a suitable grade of paper, preferably tough manila; and this paper may be if desired, subjected to any suitable treatment, as paraffining, to render it water-proof.

The bag may be made up in several ways. As shown in Fig. 1, one end, as 2, and one side, as 3, are sewed up on an ordinary bag sewing machine; the inside of the mouth of the bag first having applied to it a suitable reinforcing strip of any appropriate material, as a fabric or cloth 4. In sewing the

side of the bag, one edge of the paper from which the bag is made is allowed to extend beyond the other edge, so as to form the marginal strip 5, which strip is later folded over and pasted down; as likewise is the end margin 6; thus giving a finished appearance to the bag. The reinforcing strip 4 at the mouth of the bag permits of the bag being easily sewed up on a machine, after filling.

Where a water-proof paper bag is used, it is practical, under some circumstances, simply to paste the sides and ends, applying a reinforcing strip around the mouth of the bag, so as to give sufficient body to sew through after the bag has been filled. Again, as shown in Fig. 2, the reinforcing strip 4' may be extended not only across the mouth of the bag, but down the sides and across the bottom; thus making a very strong bag which can be sewed up, and in which there is no danger of any part tearing out.

The invention comprehends essentially a paper bag which is reinforced along one or more of its edges which are to be sewed; of course, the underlying principle of which is a paper bag which can be sewed, and which bag will always be essentially a paper bag.

Under some circumstances, instead of using a cloth strip, as 4 or 4', for reinforcing purposes, I may employ an extra thickness of heavy paper, or specially treated paper; and I desire it to be understood that by a reinforcing strip of fabric, I mean anything which will perform the desired function, and which is the equivalent in this environment of the cloth strip specifically mentioned.

The chief difficulty in making a water-proof paper bag or in using a water-proofed paper for bags, is the lack of a paste strong enough to insure the pasted edges of the paper withstanding the strain. Most water-proof paper has more or less oil in it, which operates against the proper taking hold by the adhesive, and a very slight strain separates the united edges of the paper. Paper that is not water-proof can be pasted so strongly that the pasted edges or the overlapping portions of the pasted edges are stronger than the body of the paper itself.

One purpose of the present invention is the manufacture of a bag pasted at the sides and one end prior to water-proofing. After the bag is made up the whole bag may be water-proofed by the use of paraffin, oil,

varnish, or other suitable water-proofing agent, or just the edges of the bag may be water-proofed; the mouth of the bag in all cases being preferably reinforced with a strip of fabric for sewing purposes, as previously described. The essential feature of a water-proof paper bag such as last described is the water-proofing of either the edges or the whole bag subsequent to manufacture.

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

1. A new article of manufacture comprising a paper bag having a reinforcing strip permanently attached inside of the bag at its mouth end to permit of the sewing of the bag after filling, without tearing the paper.

2. As a new article of manufacture, a waterproof paper bag sewed at the edges, the edges folded over the sewed part and pasted down, and reinforcing means permanently attached to the bag at the mouth of the bag, and prior to filling and sewing, to permit the bag to be sewed up after filling.

3. A new article of manufacture comprising a paper bag made of an unwaterproofed sheet with the side edges and ends pasted, said bag having a strip of fabric of a different character permanently attached inside of the bag and at its mouth end and with the edge of the strip substantially flush with the mouth edge of the bag, said strip permitting of the sewing of the bag after fill-

ing, without tearing the paper, and said strip concealed when the bag is sewed.

4. A new article of manufacture comprising a paper bag made of an unwaterproofed sheet with the side edges and ends pasted, said bag having a strip of fabric of a different character permanently attached at its mouth end to permit of the sewing of the bag after filling, without tearing the paper, said pasted bag when completed being treated with a waterproofing composition.

5. A bag made from a sheet of paper to one side of which sheet is pasted prior to folding, a reinforcing strip of fabric disposed at one end of the bag when folded, the side edges of the sheet flanking said reinforcing strip, being folded and pasted to form a tube, and the end of said tube opposite to that containing the reinforcing strip being closed.

6. A closed sack comprising a paper body portion with a cloth reinforcing strip around the inside edge of the mouth of the bag, and a line of stitching passed through the paper body portion and cloth strip for closing the sack.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN F. AMES.

Witnesses:

CLARE H. WHITNEY,
S. A. COOK.