J. N. DAVIS.

PAPER VESSEL.

APPLICATION FILED FEB. 12, 1906.

906,780. Patented Dec. 15, 1908.

2 SHEETS—SHEET 1.

Fig. 1.

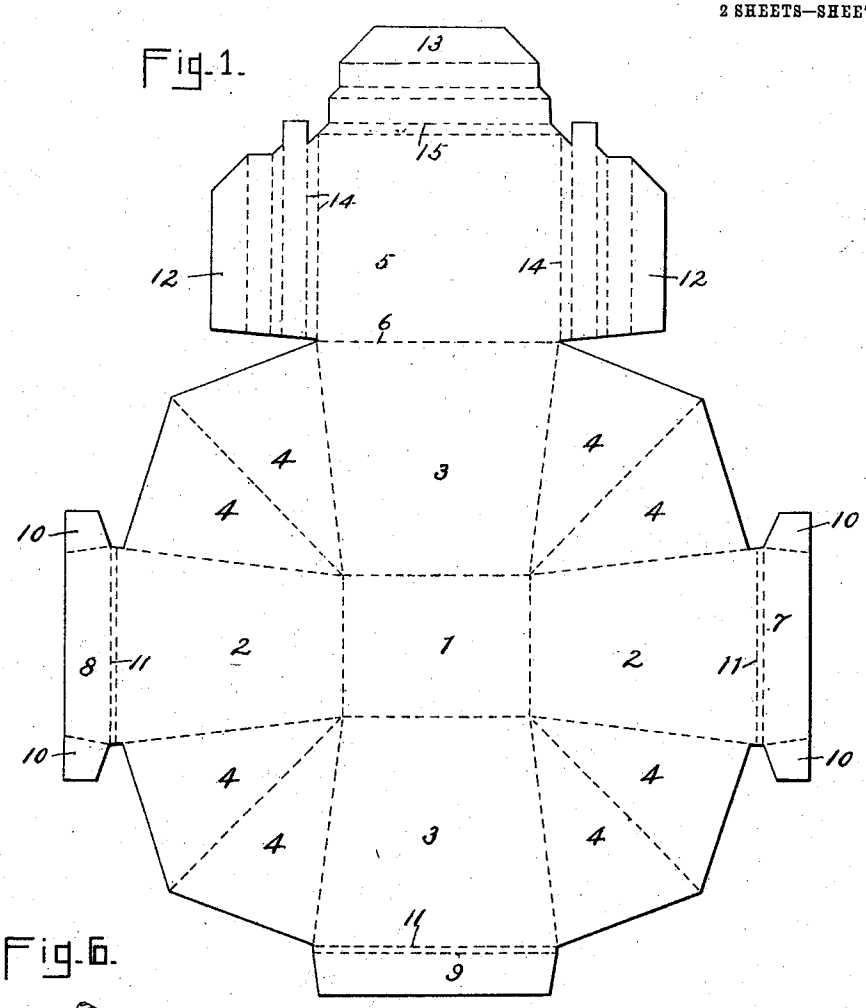


Fig. 6.

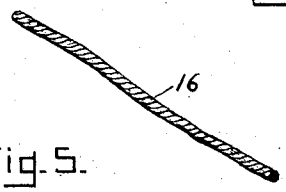


Fig. 7.

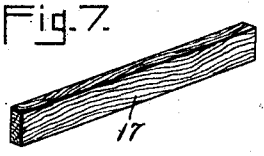
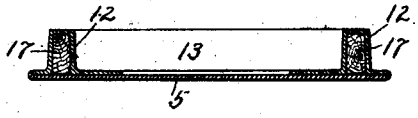


Fig. 5.



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2 SHEETS—SHEET 2.

Fig. 2.

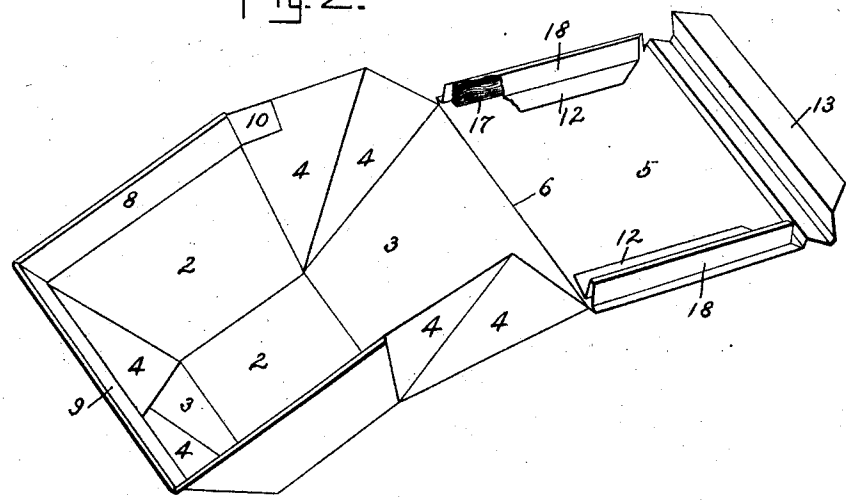


Fig. 3.

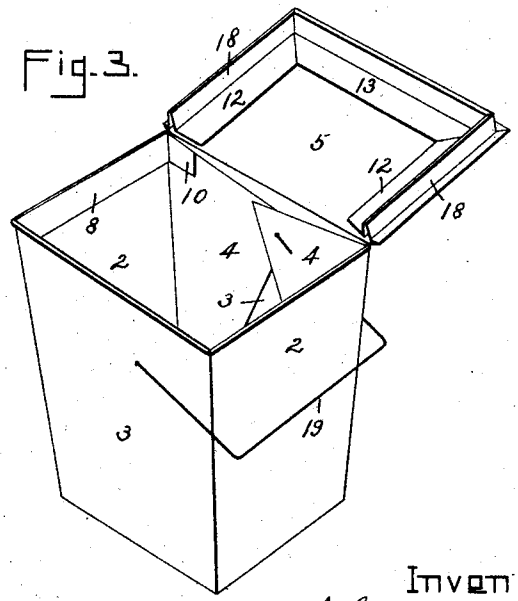
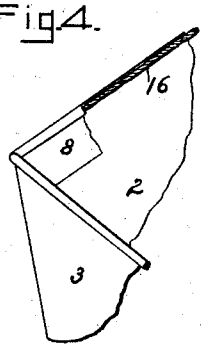


Fig. 4.



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UNITED STATES PATENT OFFICE.

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PAPER VESSEL.

No. 906,780. Specification of Letters Patent. Patented Dec. 15, 1908.

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To all whom it may concern:

Be it known that I, JOHN N. DAVIS, a citizen of the United States, residing in Dayton, county of Montgomery, and State of Ohio, have invented certain new and useful Improvements in Paper Vessels, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My improvements relate to paper vessels for grocers' use, designed more particularly for liquid and semiliquid contents, and various other commodities purchased in retail quantities, and the special purpose of my invention is to provide a paper vessel in which the upper edge or rim of the pail shall be suitably stiffened and reinforced to form a solid substantial rim, and in which the lid or cover, which may be either integral with the blank, or attached thereto in any suitable way, shall be constructed with a depending flange suitably stiffened and reinforced in order that the lid when closed shall fit snugly and tightly on the pail, without the necessity of providing any means for fastening or securing the lid in place.

In the drawings Figure 1 is a plan view of the blank, from which the paper vessel is constructed. Fig. 2 is a perspective view of same in the process of construction. Fig. 3 is a perspective view of the paper vessel complete, and ready for use. Fig. 4 is a perspective view of one corner of the upper portion of the vessel. Fig. 5 is a transverse section of the lid. Figs. 6 and 7 are perspective views of the stiffening or reinforcing material employed for the rim of the vessel and the flanges of the lid.

A blank of suitable paper material is cut and scored as shown in Fig. 1 to form the vessel and the lid, in which 1 is the bottom, 2—2 and 3—3 the side walls, and 4—4 the usual folds between the side walls, which in the present construction are folded inside the vessel to allow the erection of the side walls 2—2 and 3—3.

5 is the cover integral with one of the side walls of the blank, with a score line 6 to serve as a hinge for the lid.

The walls 2—2 and the wall 3 opposite the lid extensions are provided with extensions 7, 8 and 9, and the extensions 7 and 8 are provided with flaps 10 separated from the extensions 7 and 8 by score lines, and double score lines 11—11 are provided between the extensions and the body of the vessel. The lid portion 5 of the blank is provided with side extensions 12—12, and an end extension 13 and a series of score lines 14—14 for the side extensions, and 15—15 for the end extension of the lid are provided as shown in Fig. 1. A coating of glue is applied to all of these extensions 7, 8, 9, 12—12, and 13, and in folding the blank the folds 4—4 are brought inside to overlap each other along the inner surface of the walls 3—3 or 2—2, where they are later secured by the bail handle, or suitable staples.

In order to properly stiffen the rim of the vessel, strips of cord or other suitable material 16 are provided of a length to fit along the double score lines 11—11 of the blank, and the extensions 7, 8, and 9 are then folded over these pieces of cord, leaving for the extensions 7 and 8 the flaps 10—10 to be bent at right angles and secured to the adjacent folds 4.

In order to construct the lid with a suitable stiff depending flange, I provide the strips 17 rectangular in shape, and of very stiff card board, wood, or other suitable material, and these strips are located in position, and the side and end extensions of the lid portion are folded around these strips as shown in Fig. 2, leaving the outermost portion of the lid extension to be folded along the body of the lid, and secured thereto as hereinafter described. The paper blank having thus had the glue applied to the several extensions, and being folded as above described, the body of the pail and the lid portion are subjected to the pressure of a heated mold, and die, of the proper shape, which softens and renders adhesive the glue and presses the various folded parts tightly into place, so that a rigid rim is formed for the vessel, and a solid and substantial depending flange for the lid. The bail 19 is then secured to the side walls in the usual way, and the vessel is ready for use.

By reason of the fact that a solid rim is formed by the reinforcing strips 16, and a substantial flange 18 depending from the lid when the cover or lid is closed and pressed into place, the lid will remain locked in place by the frictional pressure between the flange of the lid and the mouth of the vessel, so that no other fastening means for the cover or lid is required.

It is not essential that the lid portion should form an integral part of the vessel blank, as it will be evident that the lid can be separately formed as described, and then secured by a suitable flap or extension on its inner edge to one of the walls of the vessel.

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

1. In a paper vessel made from a blank of suitable paper material, cut and scored to fold into bottom and side walls with overlapping folds between the sides, the combination with strips of reinforcing material, of extensions on the three side walls folded over the reinforcing material to form a stiff rim for the vessel, and a cover therefor secured to the remaining side wall, with a depending flange thereon, of a size to engage snugly within the rim of the vessel, and to hold the cover in place.

2. In a paper vessel made from a blank of suitable paper material, cut and scored to fold into bottom and side walls with overlapping folds between the sides, the combination with strips of reinforcing material, of extensions on the three side walls folded over the reinforcing material to form a stiff rim for the vessel, and a cover therefor secured to the remaining side wall, additional strips of reinforcing material, and side and front extensions on the cover folded over the additional reinforcing strips to form a stiff depending flange for the cover, of a size to engage snugly with the stiff rim of the vessel to hold the cover in place.

3. In a paper vessel made from a blank of suitable paper material, cut and scored to fold into bottom and side walls with overlapping folds between the sides, folded internally along two of said side walls, the combination with strips of reinforcing material, of extensions on the three side walls folded over the reinforcing material, to form a stiff rim for the vessel, and a cover therefor secured to the remaining side wall with a depending flange thereon of a size to engage snugly within the rim of the vessel, and to hold the cover in place.

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Witnesses:
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