

J. STRANGE.
METHOD OF MAKING PAPER RECEPTACLES.
APPLICATION FILED AUG. 3, 1914.

1,198,596.

Patented Sept. 19, 1916.
3 SHEETS—SHEET 1.

Fig. 1

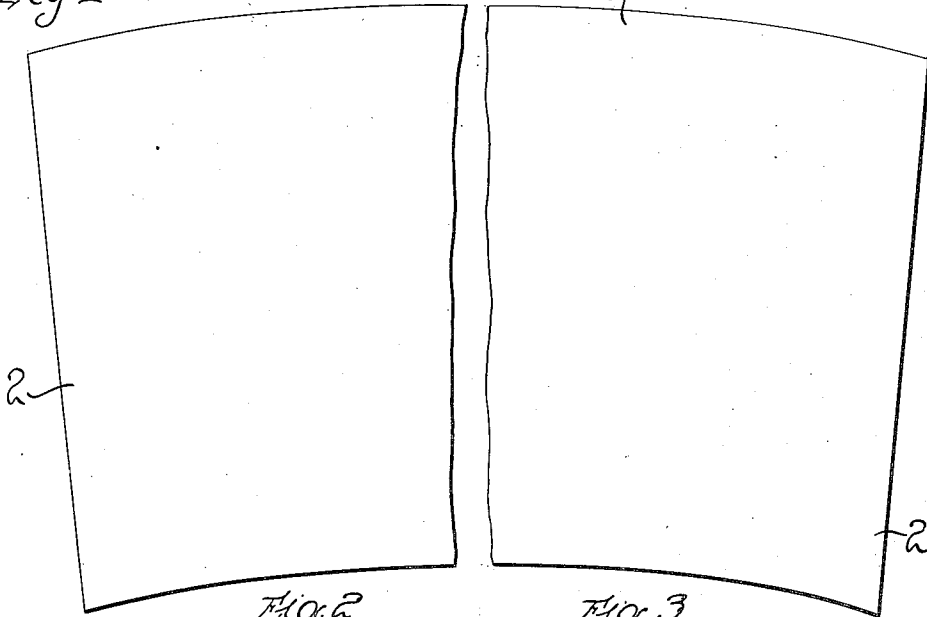


Fig. 2

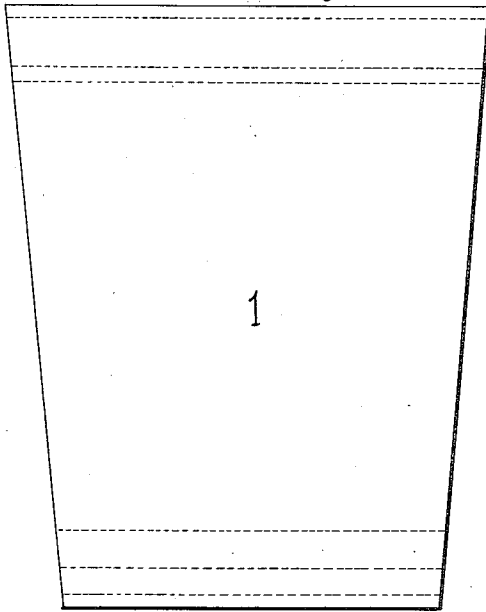
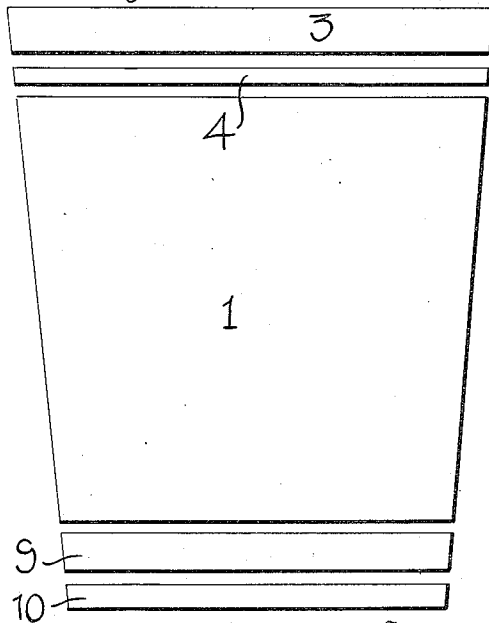


Fig. 3



Witnesses
Robert M. Sutphen.
Edith Payne.

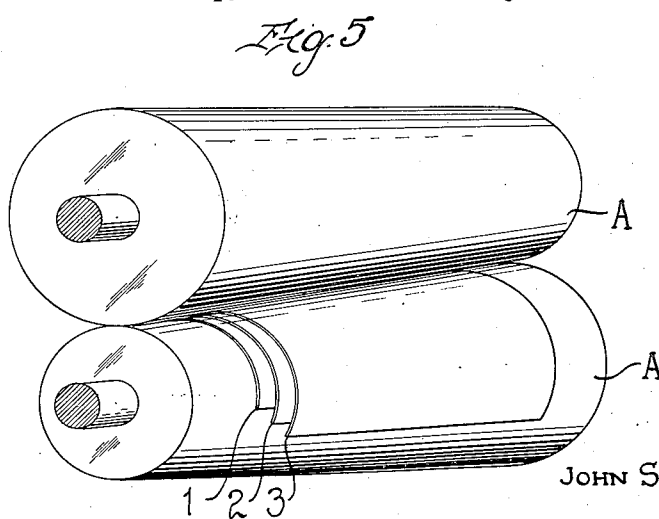
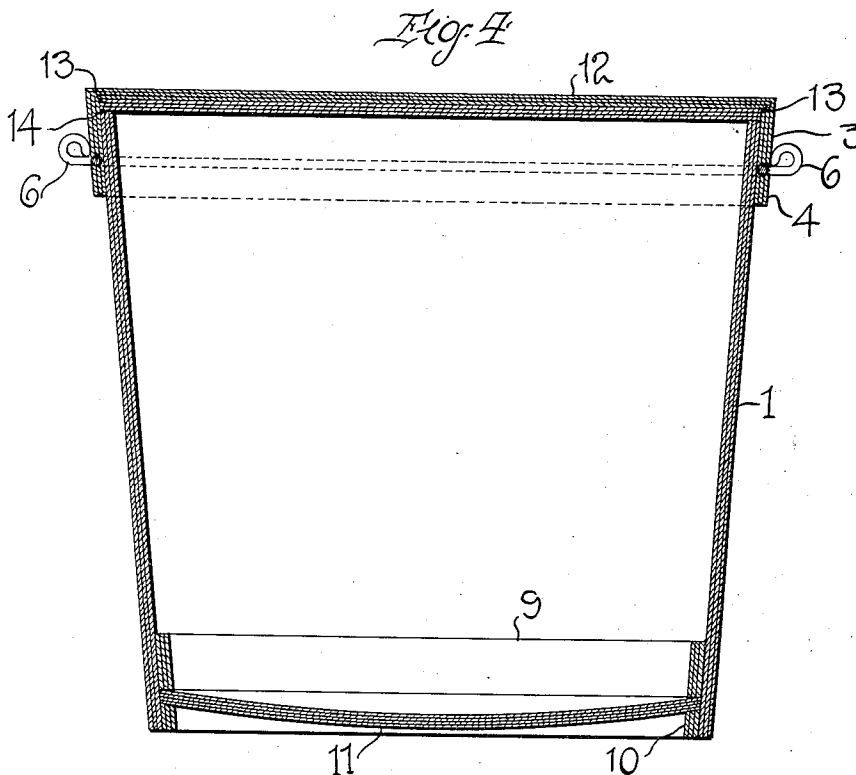
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3 SHEETS—SHEET 3.

Fig. 6

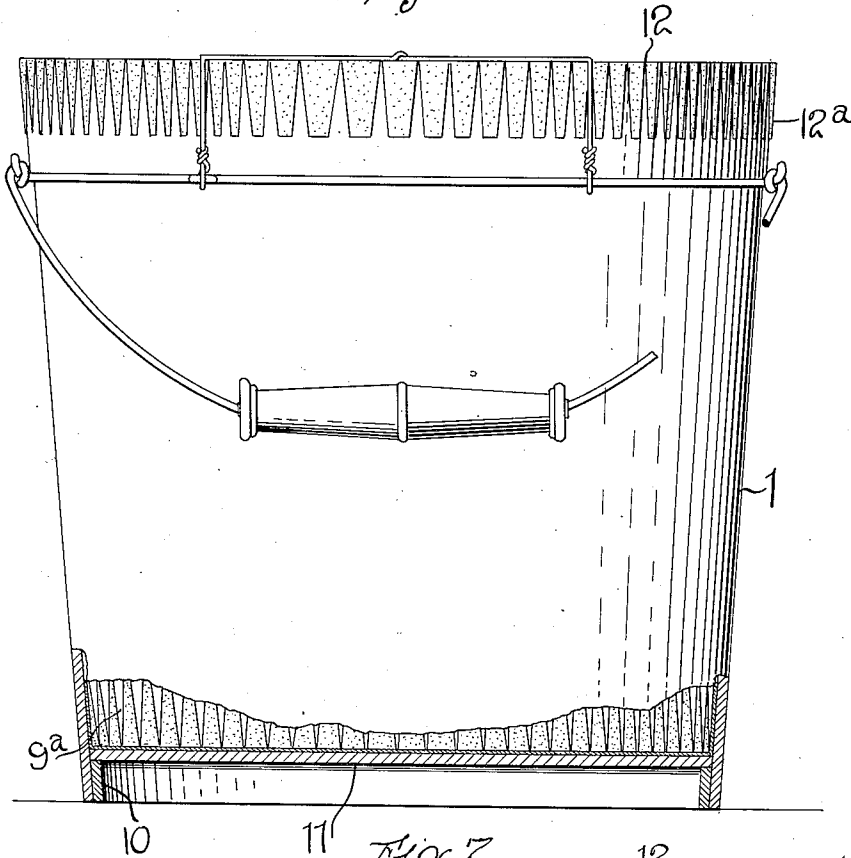


Fig. 7

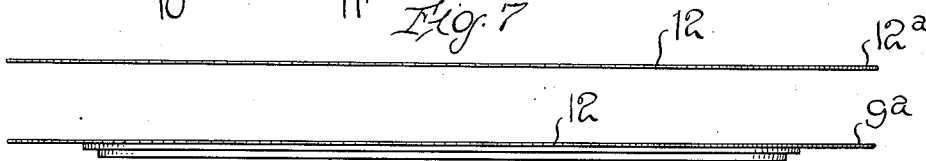


Fig. 8

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UNITED STATES PATENT OFFICE.

JOHN STRANGE, OF NEENAH, WISCONSIN.

METHOD OF MAKING PAPER RECEPTACLES.

1,198,596.

Specification of Letters Patent. Patented Sept. 19, 1916.

Application filed August 3, 1914. Serial No. 854,689.

To all whom it may concern:

Be it known that I, JOHN STRANGE, a citizen of the United States, residing at Neenah, in the county of Winnebago and State of Wisconsin, have invented certain new and useful Improvements in the Method of Making Paper Receptacles, of which the following is a specification.

My invention relates to an improvement in the method of making buckets or other similar articles constructed of paper, and is designed to provide a cheap bucket for holding either a liquid or dry material without danger of contamination, either from the odors of wood or the salts resulting from the contact of the contents with metals.

The object of the invention is to provide a new method for forming vessels of several layers of an inodorous and tasteless paper. Furthermore, the object of my invention is to provide a new method of making buckets which is impervious to moisture and which absolutely prevents leakage or escape of any fluid or semi-fluid substance contained therein through the walls of the bucket.

With these and other objects in view the invention consists in the novel method as hereinafter described and claimed.

In describing my invention reference will be had to the accompanying drawings, forming part of this specification, wherein corresponding parts are indicated by similar reference characters in the several views, and in which:

Figure 1, is a plan view of the blank which forms the body of the bucket. Fig. 2 is a view in elevation of a paper bucket or pail. Fig. 3 is a view in elevation showing the strengthening hoops severed from the ends of the blank. Fig. 4 is a vertical section of an improved pail constructed in accordance with my improved method. Fig. 5 is a diagrammatic view showing the breaking of the joints of the several layers as formed over a roller. Fig. 6 is a view in elevation of a pail having the lower portion broken away showing a modified form of connecting the bottom and cover to the body portion. Fig. 7 is a sectional view showing a single layer used for either cover or bottom. Fig. 8 is a sectional view showing a cover or bottom comprising several layers.

A series of blanks, 1, which form the body of my improved bucket consist of a piece of card or straw board cut the required width,

length and radius, and coated with cement, glue or other adhesive. The blank is then rolled firmly upon a conical shaped drum, A, of a size that permits the edges, 2—2, to abut firmly together and not overlap, and upon this blank any number of blanks may be secured in a proper manner, and with breaking joints so that one joint will not be immediately over the joint of the subsequent layer.

After the blanks are thoroughly dry, I sever from the larger end two narrow portions, 3 and 4, which form hoops. The hoop, 3, is then passed over the body of the pail until its upper edge is a little above the edge of the body of the bucket. By cutting off the upper end of the blanks, after the same have been permitted to dry, I obtain a hoop of the exact size as that of the pail. I then provide a wire hoop, 5, having four or more loops, 6—6, which form ears for the bail, and strengthening wires which cross the cover and secure the same on the body portion. I cut from the lower end of the body portion hoops, 9 and 10. The hoop 9 may be inserted within the body portion to prevent the bottom, 11, from being forced upward, or the bottom, 11, may consist of one or more layers and formed with an extended overlapping portion 9^a, which is notched and pasted firmly to the inside of the pail, as shown in Fig. 6, the hoop 10 being secured beneath the bottom to support the same and to add additional strength to the pail.

The bottom, 11, when used in connection with the hoop 9, is cut somewhat larger in diameter than the body of the pail so that when inserted it will be given a concave shape, but when secured by the notched extended portion it is cut approximately the same diameter.

The hoop 10 is somewhat narrower in width than the hoop 9 and is inserted within the body portion, but below the bottom, thereby forming a support for the same. It is to be noted that by my improved method of construction I do not weaken the body portion by cutting out a groove for the edge of the bottom to fit therein, but secure and provide the support for the same through the medium of the hoops and notched extension of the bottom, which are secured to the body portion of the pail above the plane of the bottom.

In assembling the several parts, the hoop, 3, is inserted over the body portion until

the upper edge is somewhat higher than the edge of the body portion and the hoops suitably secured to the same. The wire hoop, 5, is then placed over the body portion until it abuts against the lower edge of hoop 3, then the hoop 4 is forced up against the wire hoop, 5, or if desired, the hoop 4 may be omitted and staples used to secure the same to the body. By this arrangement the wire hoop is securely held in position.

I also provide a cover, 12, consisting of one or more layers and having abutting shoulders, 13 and 14, which abut against the upper edge and also seat firmly upon the upper edge of the body portion of the pail. The cover, 12, may also be provided with notched extensions, 12^a, which are secured by an adhesive to the body of the pail as shown in Fig. 6.

It is believed that my improved method of making paper pails or buckets together with the construction of the completed article will be fully understood from the foregoing description.

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

1. The method herein described of manufacturing paper buckets, said method com-

prising the making of blanks of the required width, length and radius, suitably coated with an adhesive substance and firmly rolled upon a conical shaped drum, whereby the joint of one layer will not be immediately over the adjacent layer, the severing of hoops from the ends of the thus formed conical shaped structure, securing the hoops upon the conical member for securing the end in position, substantially as described.

2. The method herein described of manufacturing paper buckets, said method comprising the making of a plurality of blanks of the required length, width and radius, coating the same upon one side with an adhesive substance and firmly rolling it on a conical shaped drum, whereby the joints of one layer will not be immediately over the joints of the adjacent layer, and severing a series of hoops from each end of said conically formed member and securing the hoops upon the conical shaped member for securing the end in position.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN STRANGE.

Witnesses:

PAUL STRANGE,
J. H. LANANDOWSKI.