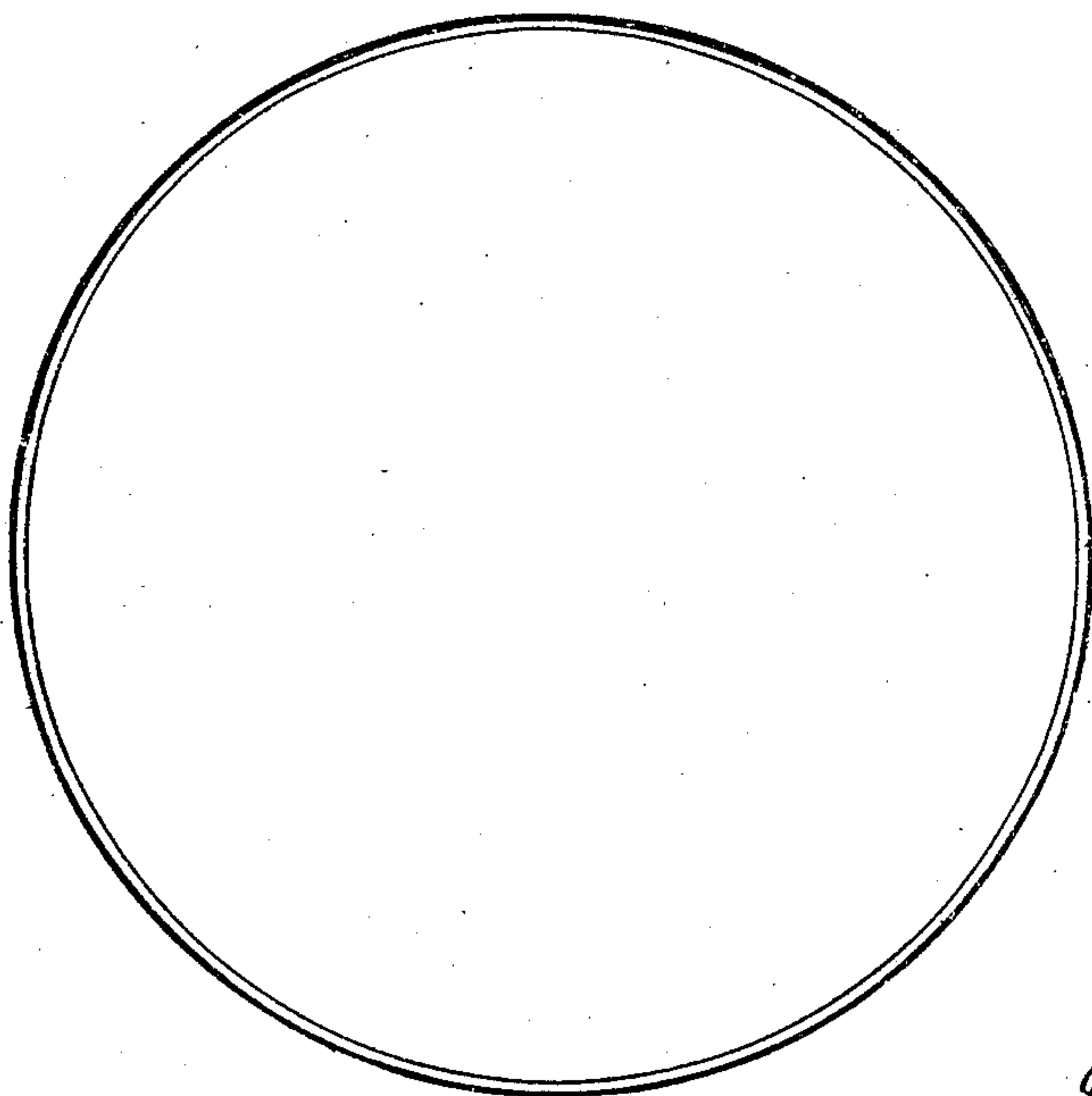
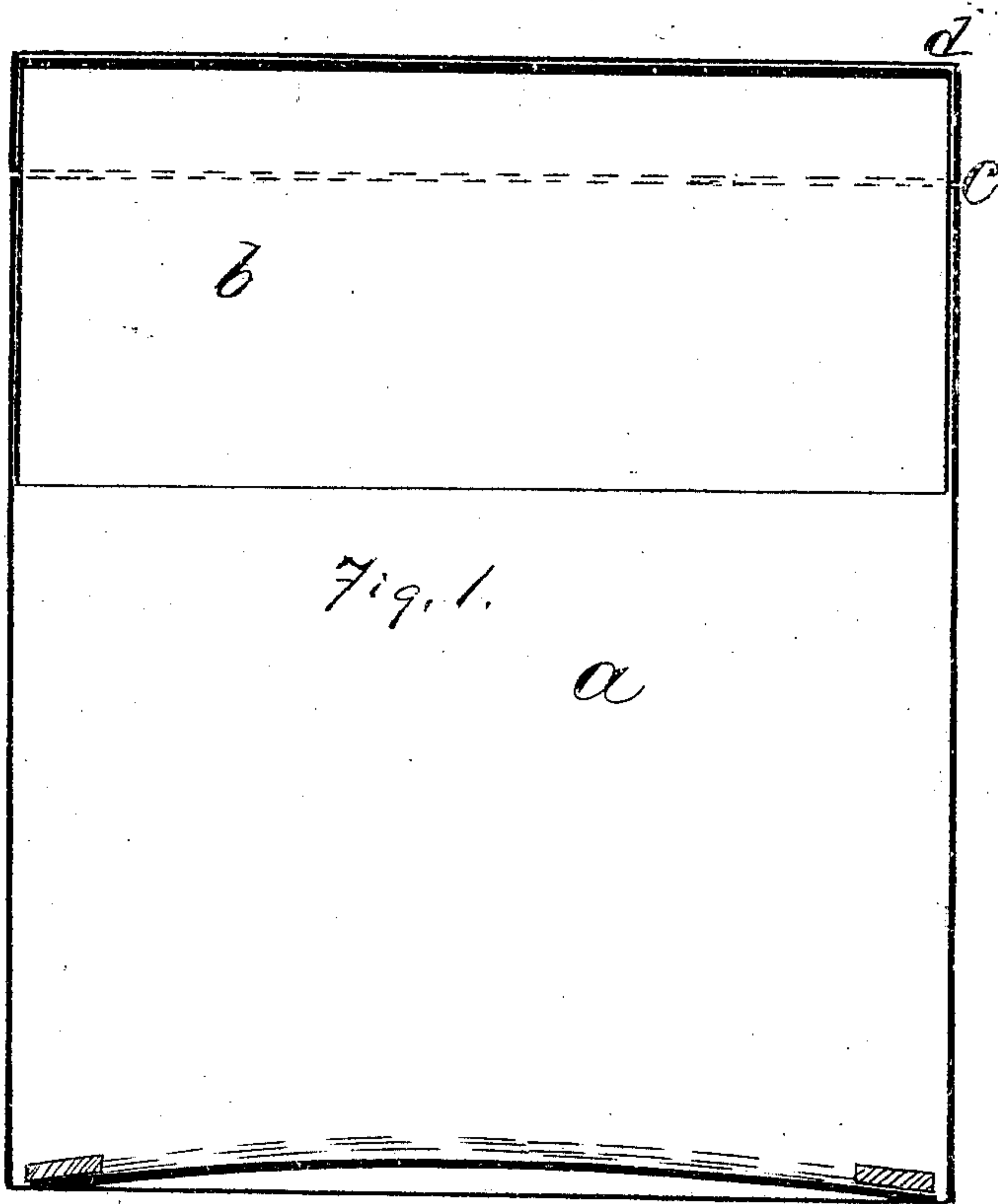


*J. D. Smedley,*  
*Paper Box.*

*No. 76110.*

*Patented Mar 31 1868.*



*Witnesses:*  
*Jas. H. Cooley*  
*Wm. K. Wells*

*Inventor:*  
*John D. Smedley*

# UNITED STATES PATENT OFFICE

JOHN D. SMEDLEY, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN BOXES AND BAGS FOR PACKING BUTTER, &c.

Specification forming part of Letters Patent No. **76,110**, dated March 31, 1868.

*To all whom it may concern:*

Be it known that I, JOHN D. SMEDLEY, of the city of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Boxes and Bags as an article of manufacture; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, making a part of this specification.

The nature and object of this invention are to produce a box or bag, made of thick or thin paper, or any similar material prepared in a particular way, for the purpose of packing or wrapping butter, lard, or any material desired to keep and preserve them pure and free from any impurities that may surround them, and also to facilitate the handling of them.

I make the box or bag, using thick or thin paper, as I wish, complete and entire before treating it, with all the printing, figuring, ornamenting, and designing on before placing it in the drying-oven. I then prepare a bath, made substantially as follows: I take stearic acid and hard-pressed lard stearine, in about equal parts, add from two to ten per cent. of bees-wax and paraffine each, a little gum-copal, about one-half of one to one per cent., and heat to about 350° Fahrenheit. The box or bag, when made and complete, is placed in an oven heated to about a boiling heat, where it remains sufficiently long to become thoroughly dried. It is then removed from the oven and immersed in the bath, where it remains sufficiently long to become thoroughly impregnated with the melted material of the bath. It is then removed from the bath and placed in an oven heated to within 75° to 100° as much as the bath. This causes all the material of the bath adhering to the surface of the box or bag to drip off, and leaves the body of the box or bag thoroughly impregnated with the material forming the bath; but the surface is freed from it, and any objections that might arise from the material adhering to the surface are removed.

In making the box or bag I prefer to use common paste rather than glue to unite the different parts before placing in the oven for drying or immersing them in the bath. When glue is used, by immersing the box or bag

in the bath the parts joined by the glue come apart. When common paste is used this does not occur.

For some purposes, particularly for greater safety, I line my box, treated in the manner described herein, with a lining of paper, also treated in the manner herein described. I make a bag of the paper to conform to the inner shape of the box and slip it in.

Figure 1 represents a vertical section of one form of my box.

*a* is the body, and *b* is the cover. The cover is made to slip on the outside of the box. On the inside of the cover of the box there is left a crease, *d*, Fig. 1, extending around the cover next to the rim, and into which the edge of the body of the box fits. The bottom of the box can be made like the top, with a crease around the edge, into which the edge of the body of the box fits. This makes it stronger. The box, being thus made, is filled with lard, butter, or whatever is desired to be put in.

The box thus made and filled is sealed in the following manner: I take white wax and lard stearine in varying quantities, but generally I use about equal parts, and mix and melt them, and in a melted condition fill the crease in the cover, and, when this preparation is slightly chilled, the cover is placed on the box, and the edge of the body of the box penetrates this sealing-cement and makes a hermetically-sealed box. This method of sealing does not prevent the cover being readily removed. It can be easily done, and without injury to the box or cover, and when replaced the joint is tight and prevents any ingress of air or odors.

Any containing-vessel can be lined with paper prepared in the manner herein described, in which articles in bulk or in packages can be packed, and will preserve them from moisture on sea-voyages or when in any damp place.

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

1. The process of preparing paper boxes and paper bags for the purpose of packing lard, butter, or fluids of an oleous character, in the manner as herein described.

2. As a new article of manufacture, a paper

box or bag, when constructed and prepared in the manner and for the purpose herein described.

3. Hermetically-sealing paper boxes, when constructed and prepared as herein described, by means of creases *d* and a mixture of wax and stearine, substantially as herein set forth.

4. Lining a containing-vessel to hold packages of perishable substances with a paper bag, when constructed and prepared in the manner herein set forth.

5. Packing butter, lard, &c., in containing-vessels, either in bulk or packages, when said containing-vessels are lined with paper or its equivalent prepared in the manner herein described.

JOHN D. SMEDLEY.

Witnesses:

JAMES A. COWLES,  
WM. K. WELLS.