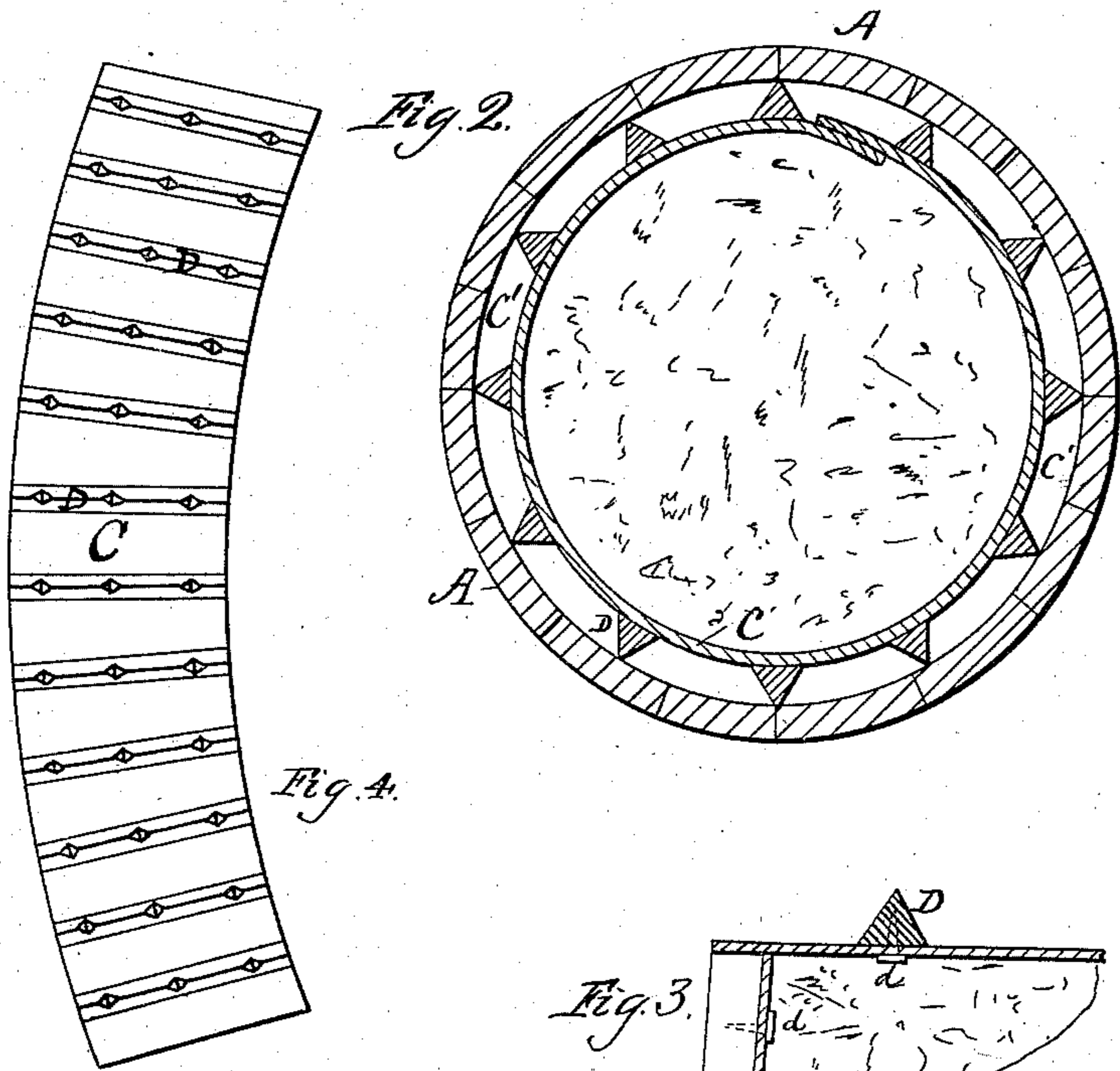
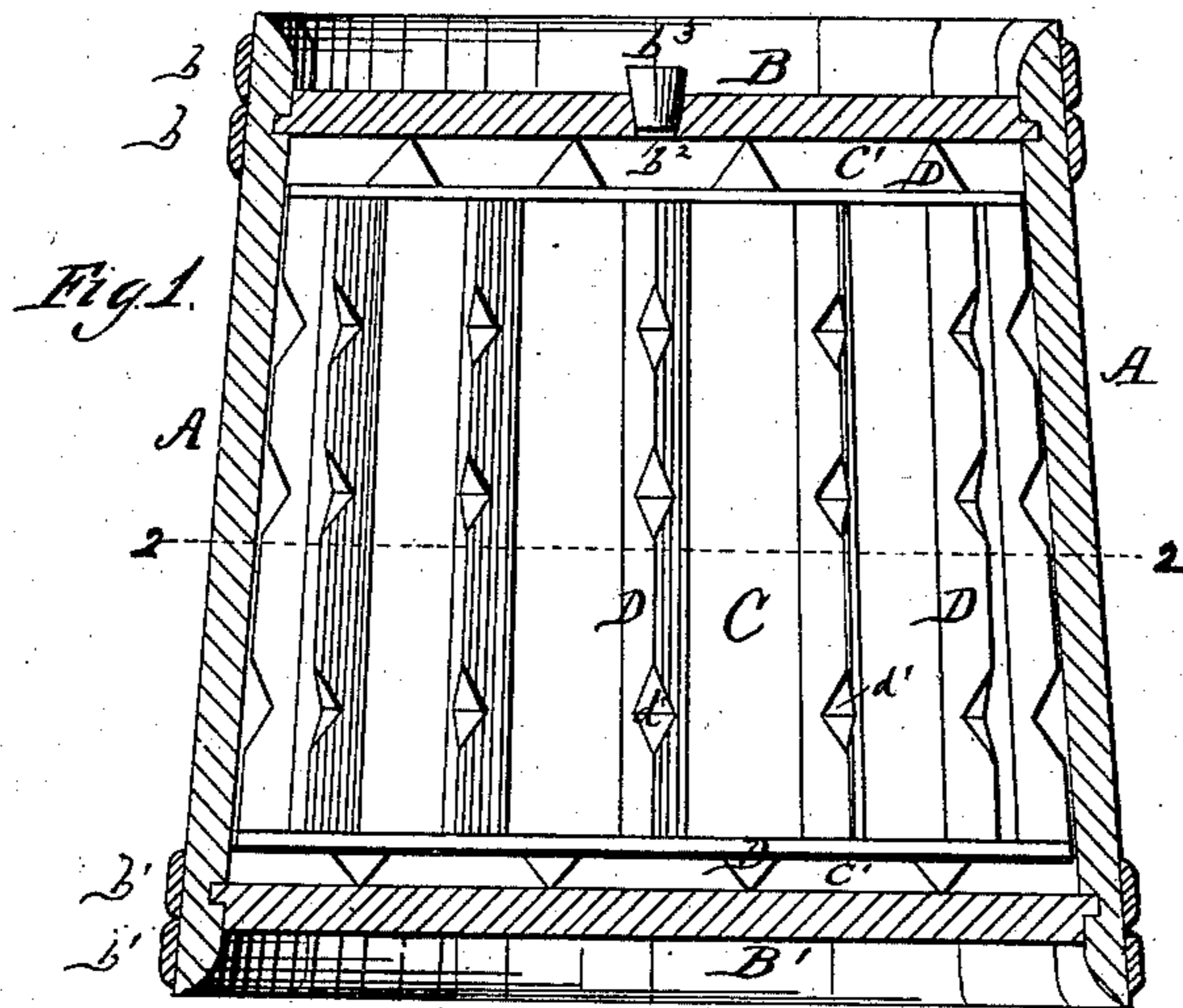


(No Model.)

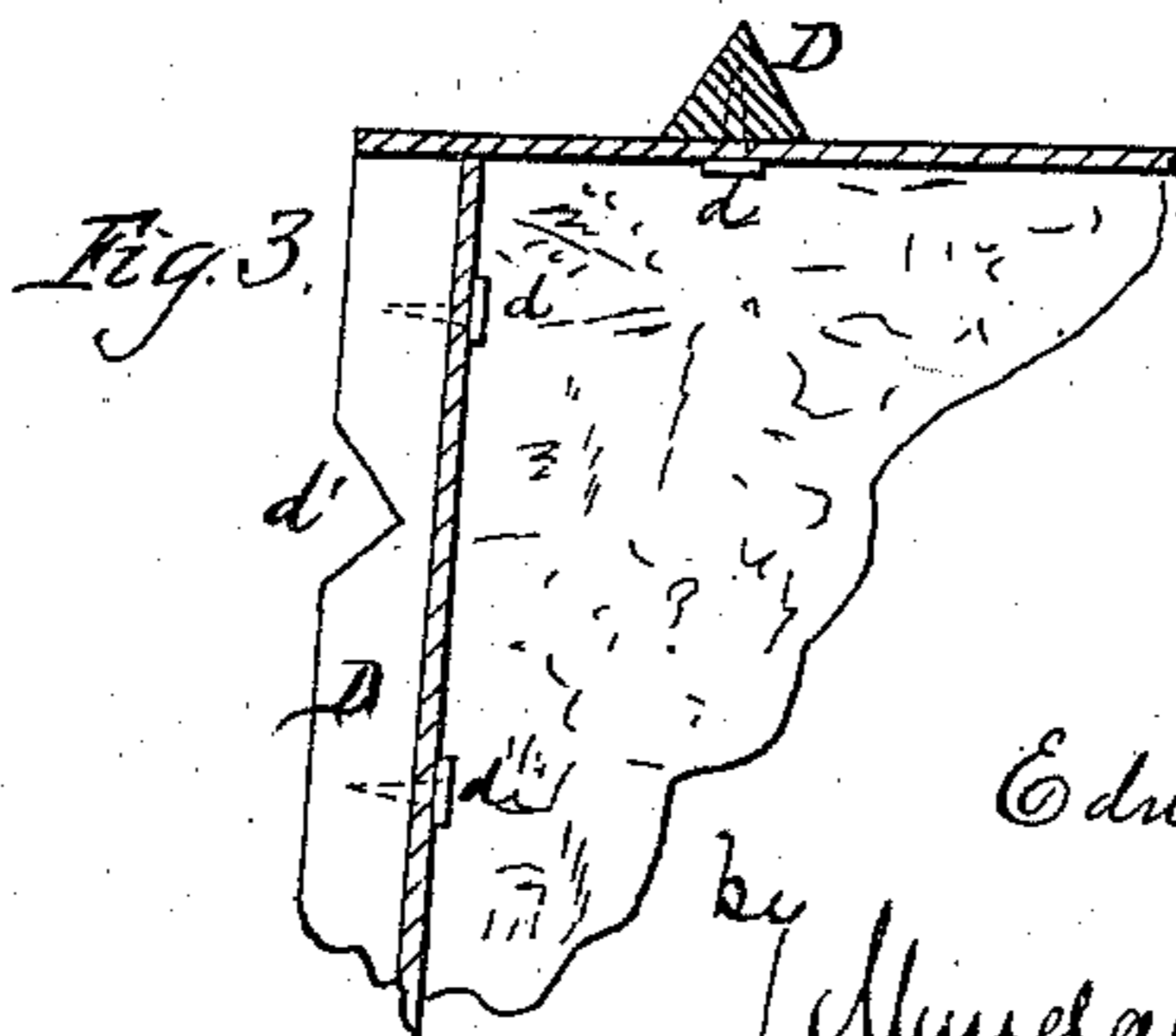
E. M. CRANDAL.
Package for Butter.

No. 241,478.

Patented May 17, 1881.



WITNESSES -
F. B. Townsend
Chas. W. Allen



INVENTOR -
Edward M. Crandal
by Munday Evans & Adcock
his attys.

UNITED STATES PATENT OFFICE.

EDWARD M. CRANDAL, OF CHICAGO, ILLINOIS.

PACKAGE FOR BUTTER.

SPECIFICATION forming part of Letters Patent No. 241,478, dated May 17, 1881.

Application filed October 26, 1880. (No model.)

To all whom it may concern:

Be it known that I, EDWARD M. CRANDAL, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful
5 Improvements in Packages for Butter, of which the following is a specification.

My invention relates to improvements in packages for the preservation and transportation of butter and other like substances.

10 The object of my invention is to provide a cheap package, which will both perfectly exclude the air from the butter and at the same time keep it cool and free from changes of temperature, and also of a strong, durable, compact form suitable for transportation; and my
15 invention consists in a tight outer wooden tub or vessel surrounding a butter-envelope made of veneering or like thin flexible board or other material, and consisting of a top and bottom and a strip to form the conical or cylindrical portion of the butter-envelope, and cut
20 so that when placed inside the tub it will conform to the shape thereof, the exterior surface of the envelope being provided with a number of notched triangular supporting strips or
25 cleats, the purpose of which is to create a space between the butter-envelope and the tub, which may be filled with brine, for the purpose of excluding the air and preserving the butter. The
30 notches in the cleats permit a free circulation of the brine around the envelope, and the parts of the envelope being loosely joined together the brine has free access to the butter.

In the accompanying drawings, which form
35 part of this specification, Figure 1 is a central vertical section of my improved package. Fig. 2 is a transverse section on line 2 of Fig. 1. Fig. 3 is a central vertical section of a portion of the butter-envelope; and Fig. 4 shows the
40 conical portion of the envelope extended, as it is before being placed in the tub.

Similar letters of reference indicate like parts.

45 In the drawings, A represents the outer tub or vessel, made of wood, of the ordinary construction, so as to be water-tight.

B and B' are the heads, and b and b' are the hoops. The brine is poured in through the bung-hole b², and b³ is the plug. The head B
50 may be removed by loosening the hoops b.

C is the conical portion of the envelope. To

its exterior surface are secured, by means of tacks or screws d', a number of triangular cleats, D, provided with notches d. The bottom C' and top C² of the envelope are provided with
55 like notched cleats. These cleats serve to support and strengthen the butter-envelope, as well as to keep it apart from the tub, so that there will be a space on all sides between the envelope and the tub. The cleats D are made
60 triangular in shape, so that only the narrow edge of the cleat will touch the outer tub, thus allowing a freer circulation of the brine or preserving liquid, and so that the butter-envelope will be lighter. It is also a cheaper construction.
65 Cleats of other shapes may be used, however, and other means than notches in the cleats may be used for insuring a free circulation of the brine—as, for example, holes in the cleats; but I prefer the construction already
70 described.

When the head B is removed the bottom C' of the envelope is first placed in the bottom of the tub with the cleats down. The conical part C is next placed in position in the tub and
75 then packed full of butter, the butter itself expanding the adjustable or expansible envelope, so that the cleats on its outer surface press tightly against the tub. The top of the envelope is next applied, and then the head B'. The
80 tub is then inverted, the plug b³ removed, and the space between the tub and the envelope filled with brine, thus driving out all the air from the butter, and surrounding it with a
85 sheet of brine or water, which excludes the air from it, and thus preserves it and keeps it cool. As the butter-envelope is thus supported on one side by the butter and on the other side
90 by brine, there is little strain upon it, and it may therefore be made of very thin material and very cheaply. The notches in the cleats, however, should not be cut too deep, as the
cleats serve to support and give strength to the envelope. The whole forms a very cheap,
95 durable, solid, and perfect package for the shipment of butter, as the brine between the envelope and the tub does not materially add to the weight of the package and to the cost
of transportation.

The package may be made of other forms
100 than that shown; but I prefer the conical form. As the butter-envelope is expansible under

pressure of the butter inside the same it at all times completely fills the tub. There is consequently no tendency whatever for the envelope to shake or move about in the tub, and thus
5 become injured, and this enables me to remove the butter from the package in a solid unbroken mass, as the envelope will expand away from the butter after being removed from the butter; or, if made conical in form, as I
10 prefer, upon the envelope being slipped out a very little from the top the cake of butter will slip out from the envelope without removing the envelope from the tub.

What I claim is—

15 1. The combination, with the outer tub, of an expansible butter-envelope and cleats for

keeping the tub and envelope apart, substantially as specified.

2. The combination of the tub and an expansible flexible butter-envelope provided with exterior notched cleats, substantially as specified. 20

3. In a butter package, the combination of the tub A, conical envelope C, top C', and bottom C², the parts C, C', and C² being provided with notched cleats D, so as to permit a free circulation of the brine around the butter and butter-envelope, substantially as specified. 25

EDWARD M. CRANDAL.

Witnesses:

EDMUND ADCOCK,
JOHN W. MUNDAY.