

(Model.)

L. D. CAILLAT.

MANUFACTURE OF PASTEBOARD BOXES.

No. 270,740.

Patented Jan. 16, 1883.

Fig. 5.

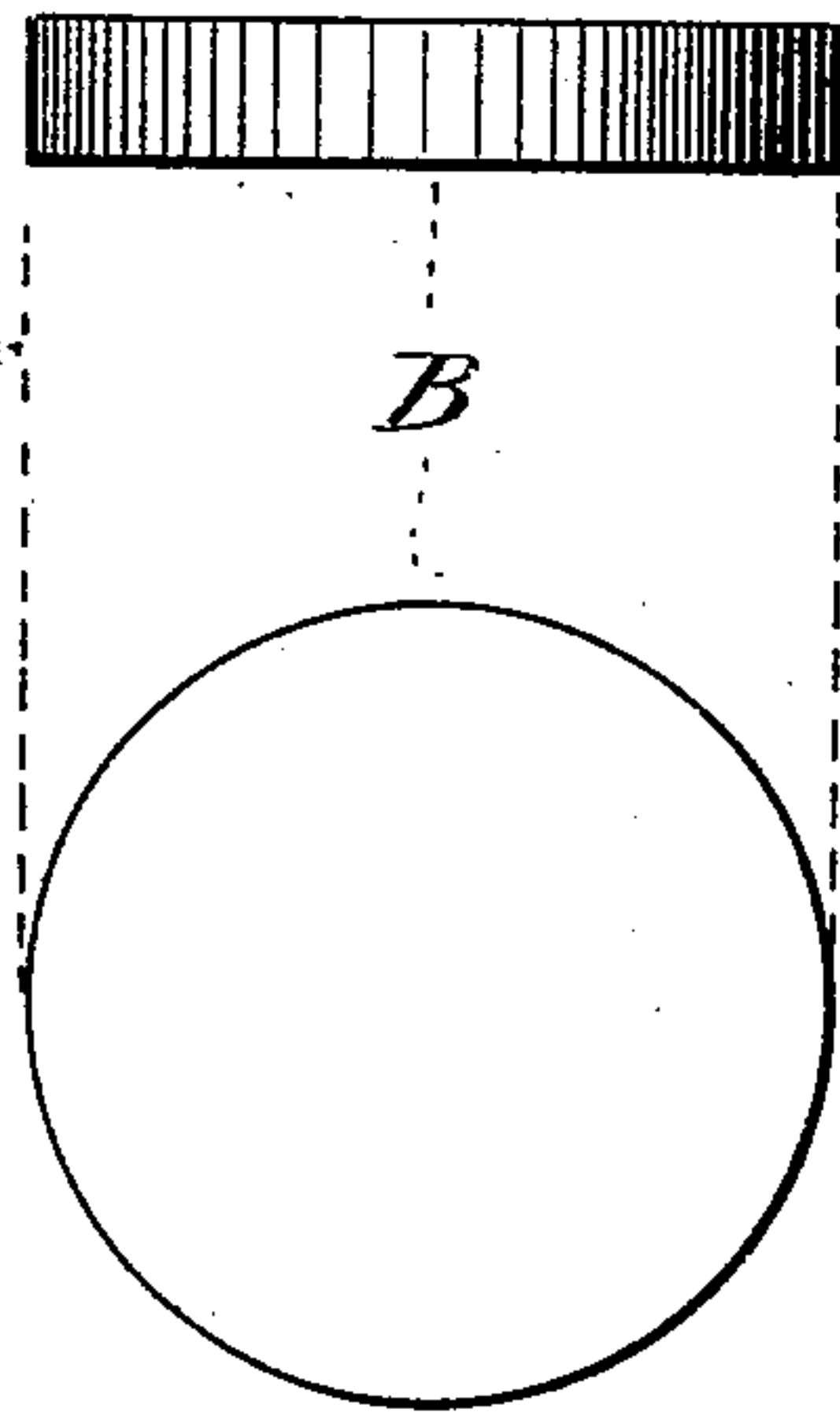


Fig. 6.

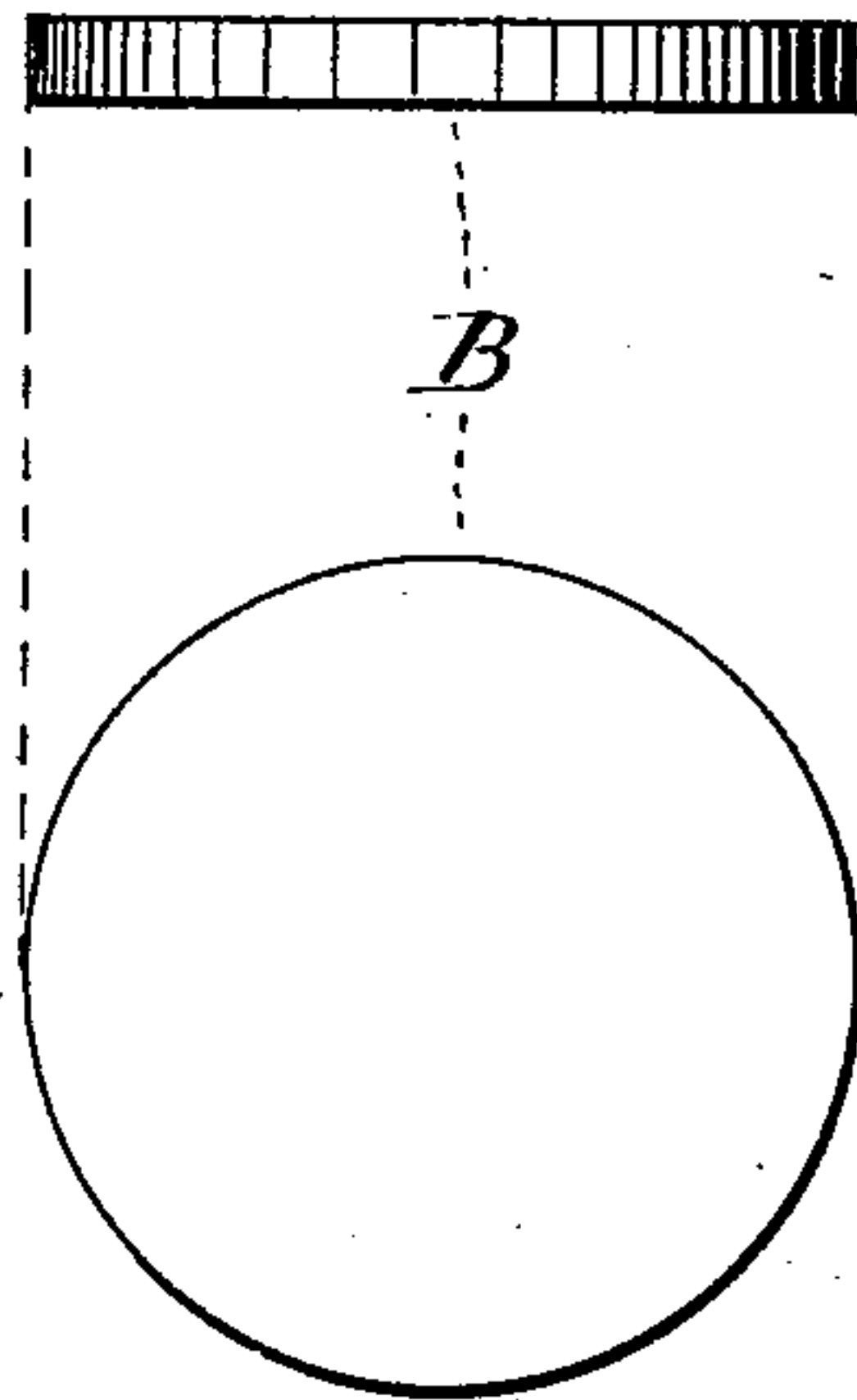


Fig. 3.

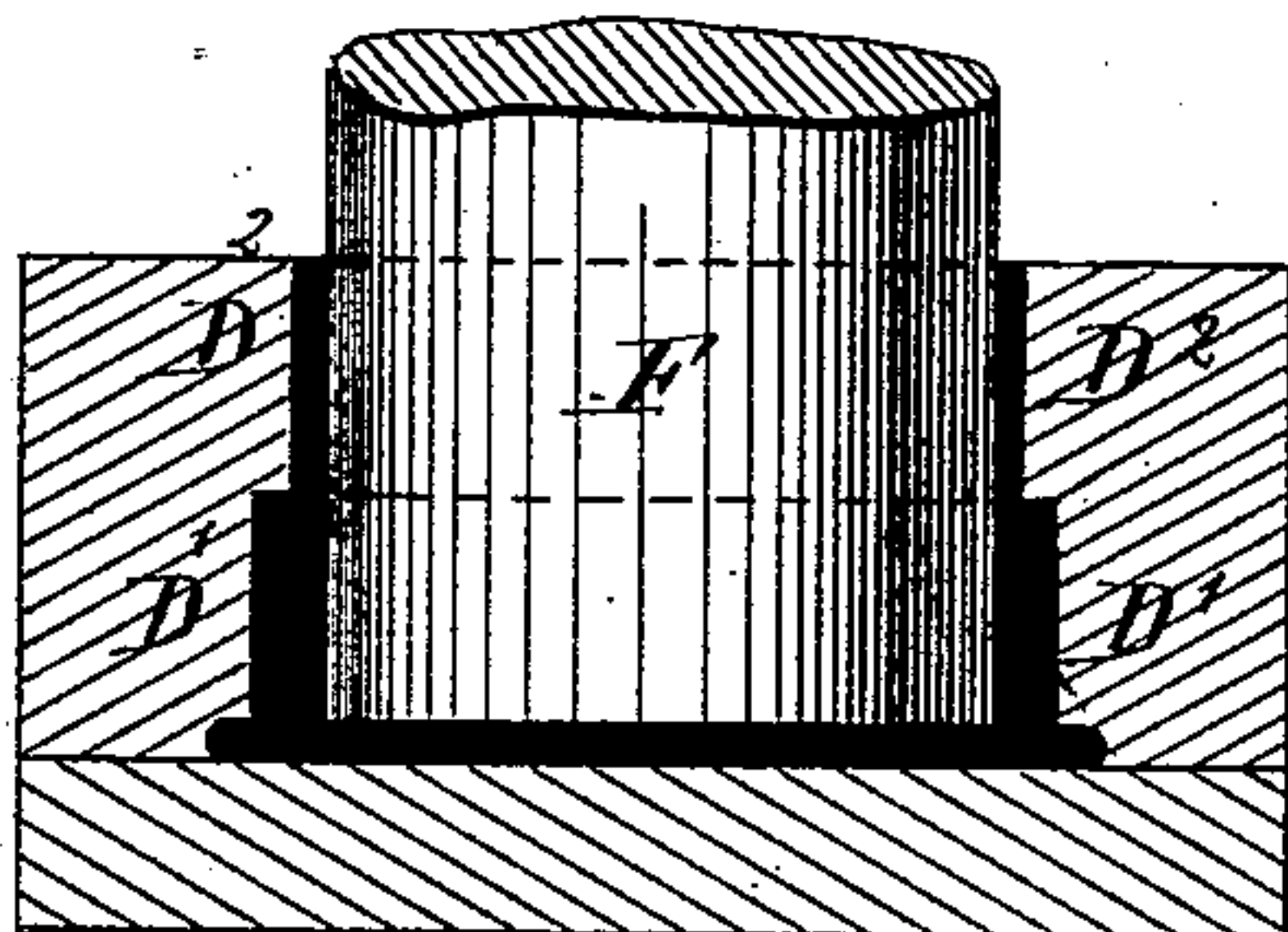


Fig. 4.

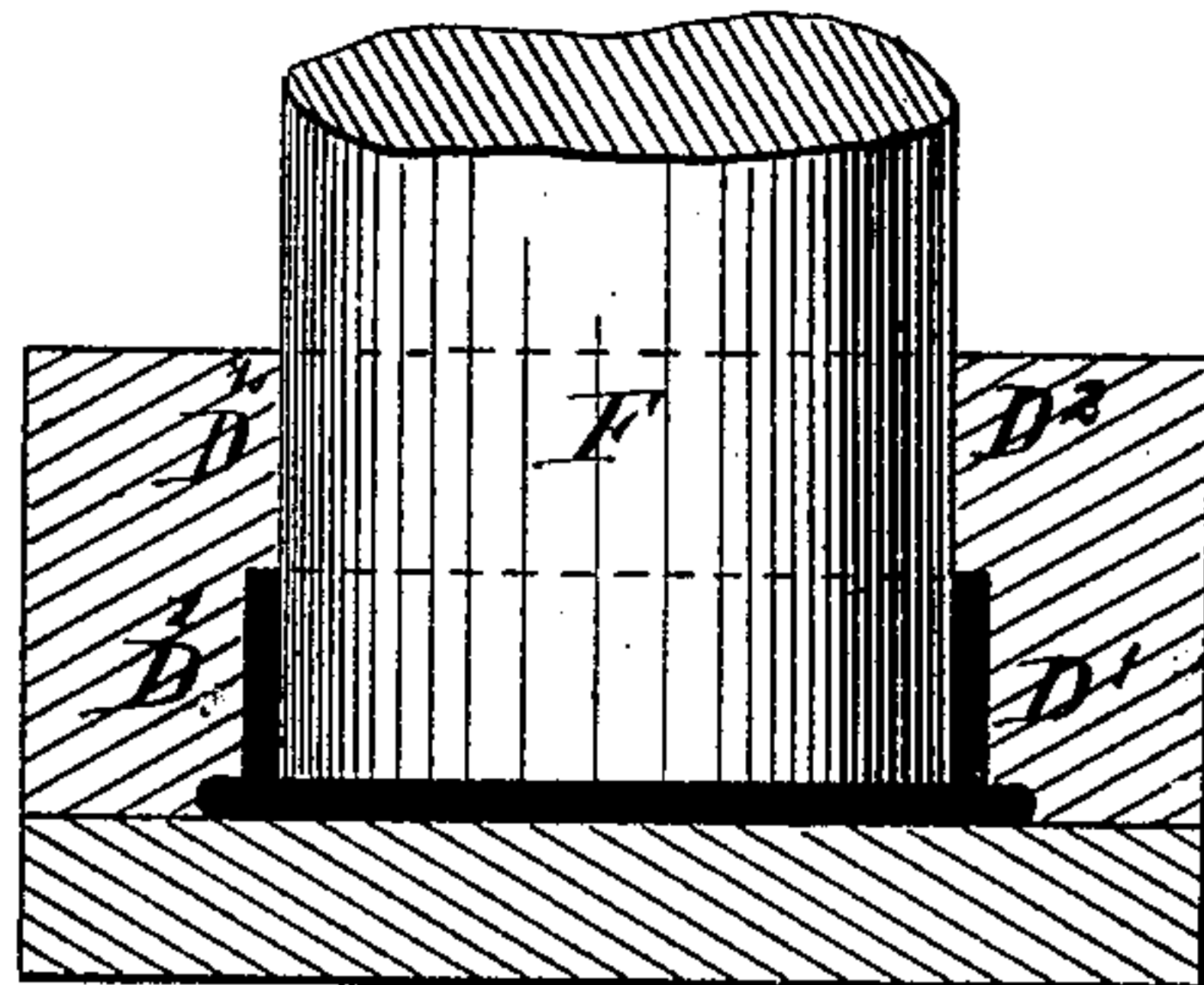


Fig. 2.

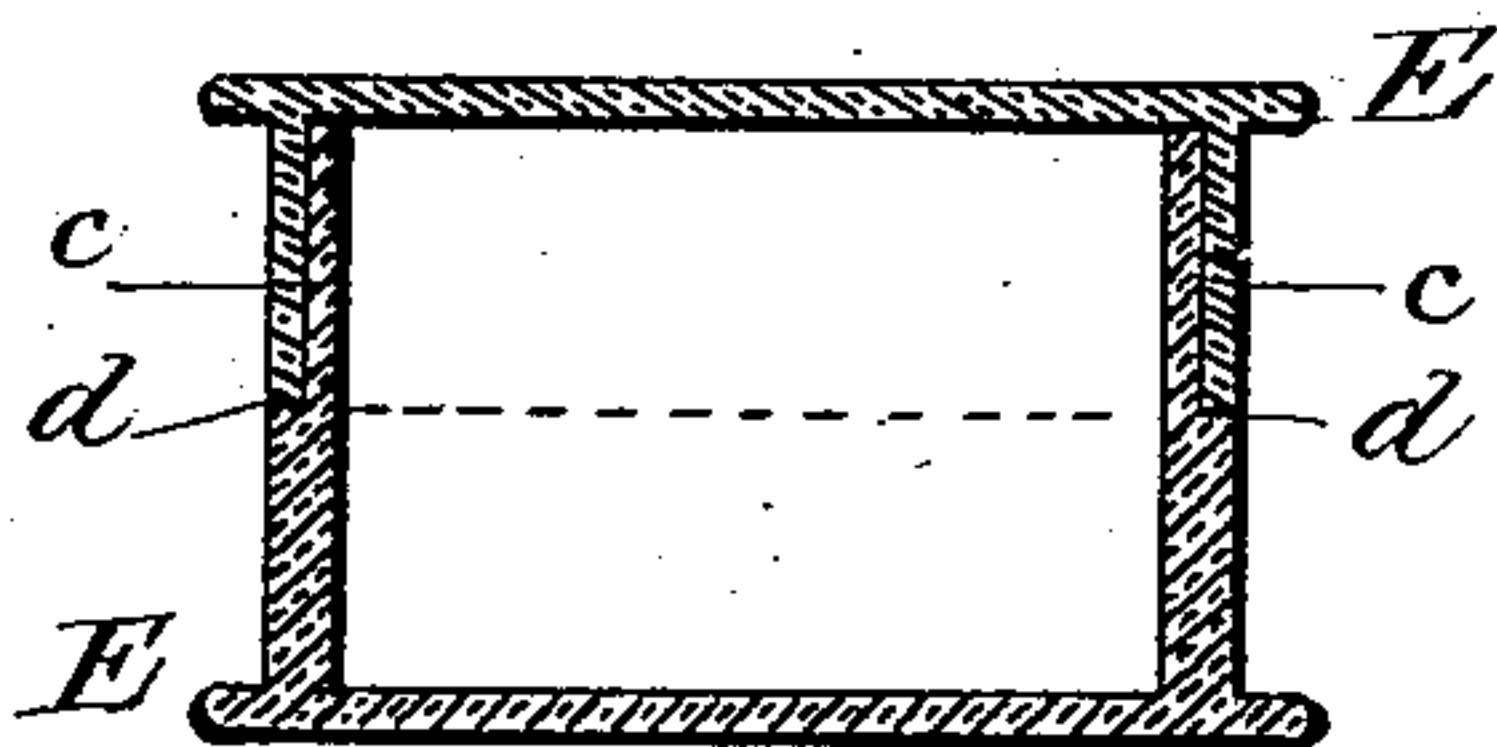
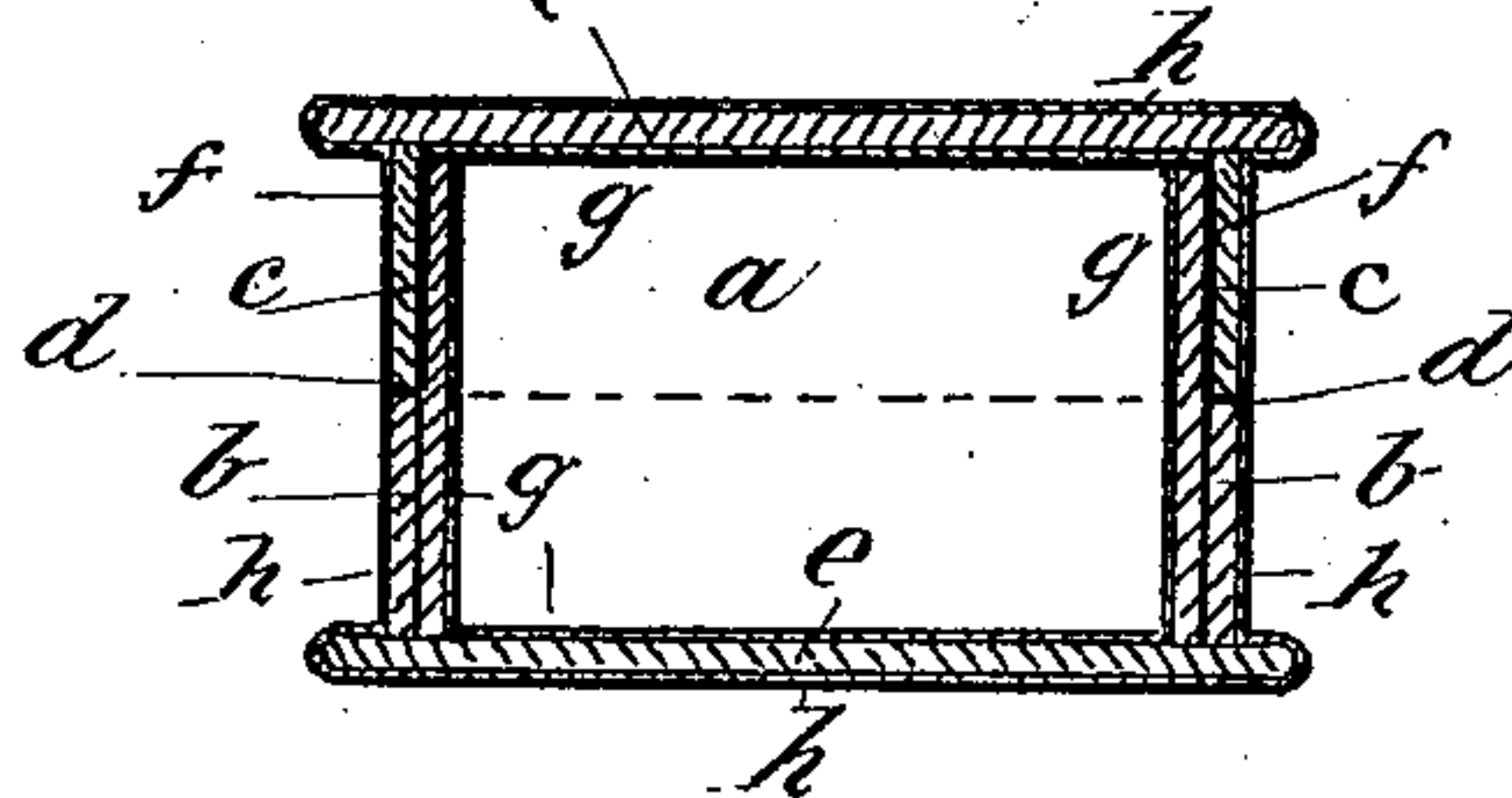


Fig. 1.



Witnesses
William E. Gault
W. T. Currier

Inventor
Louis D. Caillat
per Henry M. Coe
his atty.

UNITED STATES PATENT OFFICE.

LOUIS D. CAILLAT, OF PARIS, FRANCE.

MANUFACTURE OF PASTEBOARD BOXES.

SPECIFICATION forming part of Letters Patent No. 270,740, dated January 16, 1883.

Application filed November 27, 1882. (Model.) Patented in France August 5, 1882; in Belgium August 9, 1882; in England August 9, 1882, and in Germany August 15, 1882.

To all whom it may concern:

Be it known that I, LOUIS DIEUDONNÉ CAILLAT, a citizen of France, residing at Paris, Department of the Seine, Republic of France, have invented certain new and useful Improvements in the Manufacture of Pasteboard Boxes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

The object of this invention is to manufacture boxes provided with a seat for the lid from a single piece of paper-board, straw-board, or pulp or wood, or other pulp or paste, substantially as hereinafter more fully described, and as specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical section of a box constructed as usual, and having a seat for the lid. Fig. 2 is a like section of a box constructed according to my invention; Figs. 3 and 4 show in section a die and followers for making my improved boxes, and Figs. 5 and 6 show in elevation and plan a blank for a cylindrical box and its lid.

Like letters of reference indicate like parts in the above figures of drawings.

Boxes having a portion of their body enlarged to form a throat and seat for the lid have heretofore been made of several pieces—namely, a strip, *a*, that constitutes the body of the box; a strip, *b*, that constitutes the enlargement thereof, so as to form a throat, *c*, and a seat, *d*, for the lid, and a disk, *e*, that forms its bottom. The lid, also, of this class of boxes is usually made of two pieces—a disk, *e'*, that forms its top, and a strip, *f*, that forms its throat. These several parts of the box and lid are united by means of strips of paper, or by means of a lining, *g*, and outside covering *h*.

The object of this invention is to make the box and lid each of a single piece, and preferably with projecting top and bottom.

I am aware that boxes are made from paper or straw board, or from pulp or other paste or stock, of a single piece by compression; but such boxes are, so far as I know, devoid of the

enlargement *b*, forming a throat, *c*, and a seat, *d*, for the lid.

I am also aware that lids have been made for boxes by compression of a single piece, and I do not desire to claim such, broadly.

In carrying out my invention I take for a cylindrical box a cylindrical blank, *B*, of paper or straw board or pulp, of sufficient thickness to obtain the box. This is softened by moistening it and placed in a die, *D*, Fig. 3, of appropriate form, having the enlarged cavity *D'* and the throat *D²*. The box is then shaped by compression, by means of the follower *F*, of uniform diameter. The lid of the box is also made in a die of appropriate form, and by compression by means of a follower.

In order to impart to the box and lid a better finish, I prefer in practice to form the same with a top and bottom projecting slightly beyond the body of the box and lid, and forming an annular flange, *E*, at the bottom of the box and at the top of the lid, as shown. In order to do this by compression, a two-part die, *D*, is used, as shown, so that when the box or lid is completed they may be removed from the die. It is evident that the same die may be used for forming both the box with its flanged bottom, enlarged body, and throat and the lid with its flanged top, using for the latter a blank of the same horizontal diameter as that used for the box, but of less vertical diameter, and a follower of greater diameter than that of the follower used for forming the box—namely, of a diameter equal to that of the box and its throat, as shown in Figs. 3, 4, 5, and 6.

Of course it will be understood that I do not limit myself to cylindrical boxes exclusively, as any other form of box provided with a throat and seat for the lid may be made equally as well, and such boxes and lids may be ornamented by any of the well-known means employed in the arts for such purposes. They may be painted after they are made, or the board or pulp or paste from which they are made may be suitably stained or dyed while being made, or such boxes may be otherwise ornamented.

Having thus described my invention, what I claim is—

1. A paper box formed of a single piece and having part of its body of increased exterior diameter to form a throat and seat for the re-

ception of the lid, said box being of uniform interior diameter, and having a bottom projecting beyond the enlarged portion of the body to form a flange around the same, as set forth.

- 5 2. A paper box formed of a single piece and having a portion of its body of increased diameter to form a throat and seat for the lid, and a bottom projecting beyond the enlarged portion of said body to form a flange around the
10 same, in combination with a lid formed also of

a single piece, and having its top projecting beyond the neck or body of such lid to form a flange around the same, substantially as described.

In testimony whereof I affix my signature in 15 presence of two witnesses.

LOUIS DIEUDONNÉ CAILLAT.

Witnesses:

ROBT. M. HOOPER,

E. PAGE.