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Patented Oct. 16, 1900.

F. KNOBELOCH.  
PACKAGE.

(Application filed Feb. 18, 1899.)

(No Model.)

2 Sheets—Sheet 1.

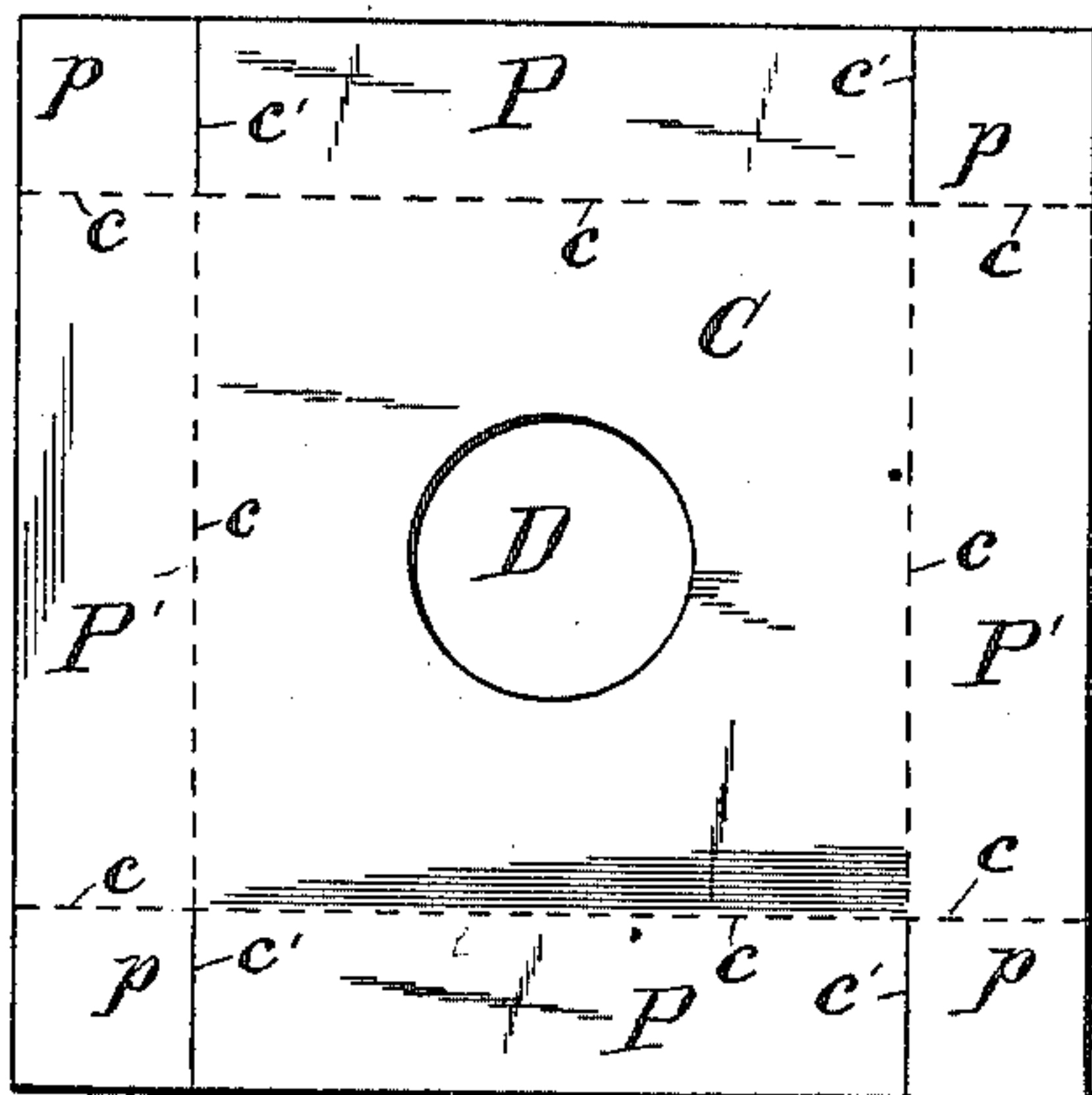


Fig. 1.

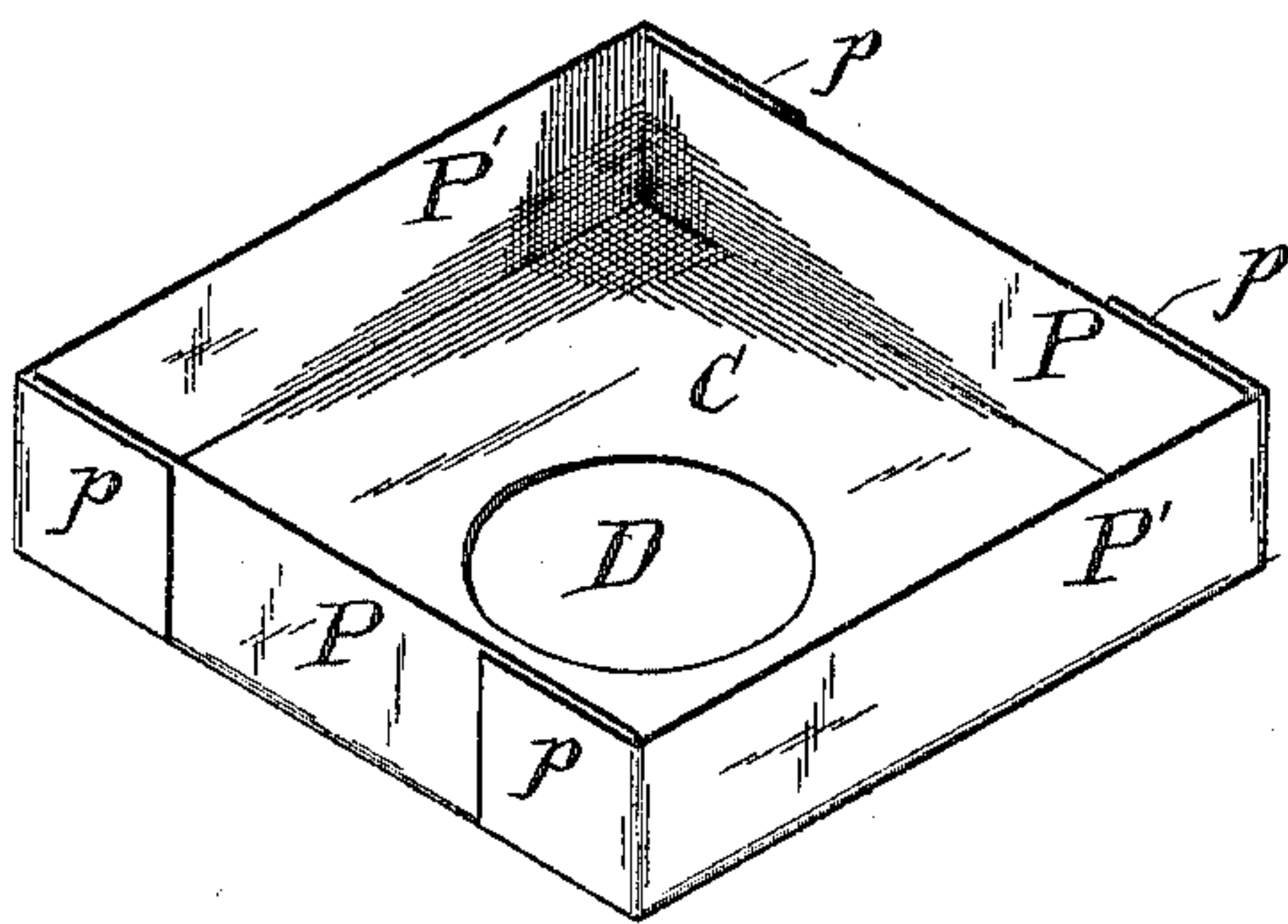


Fig. 2.

Witnesses.  
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PACKAGE.

(Application filed Feb. 18, 1899.)

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2 Sheets—Sheet 2.

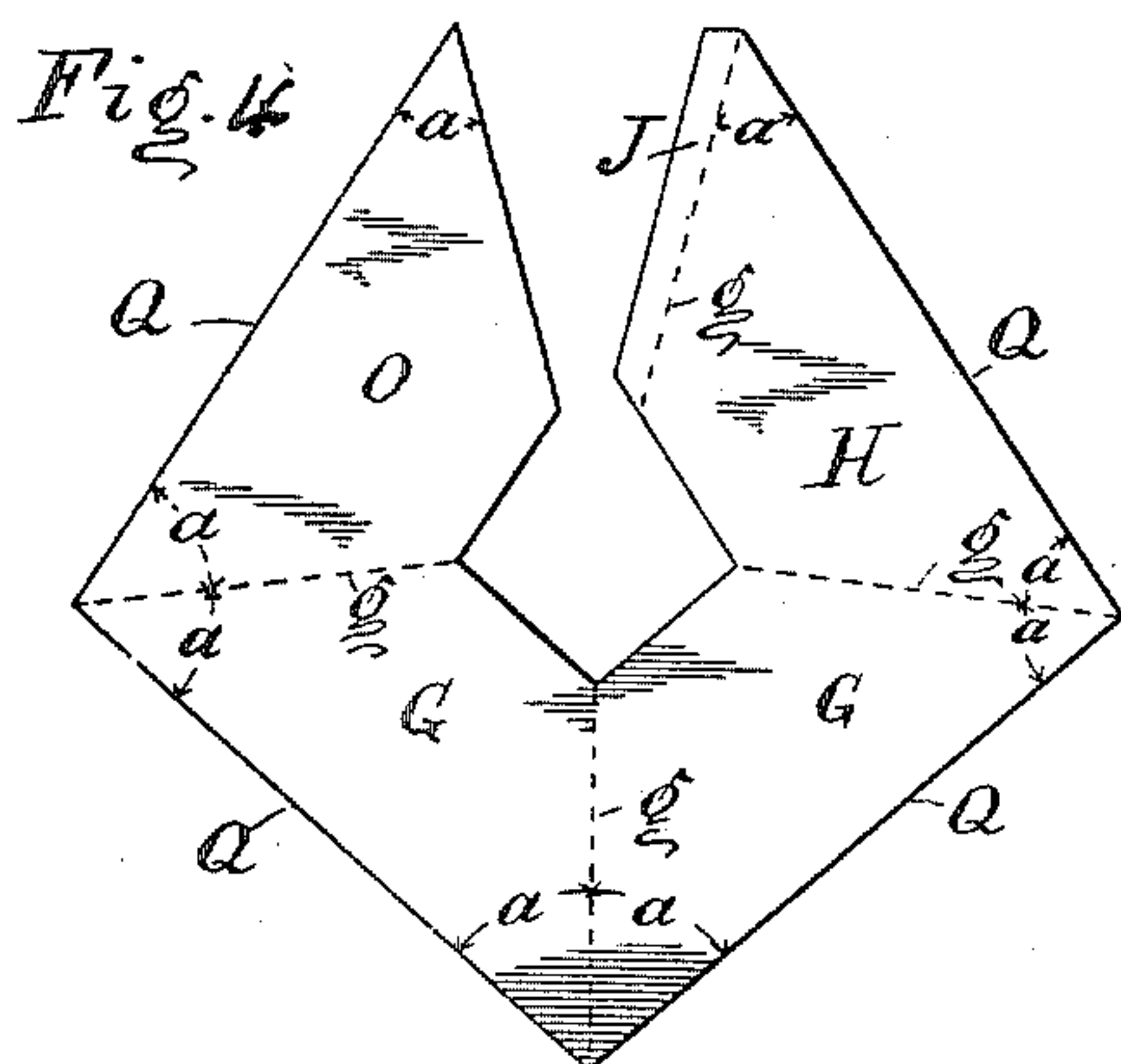


Fig. 5.

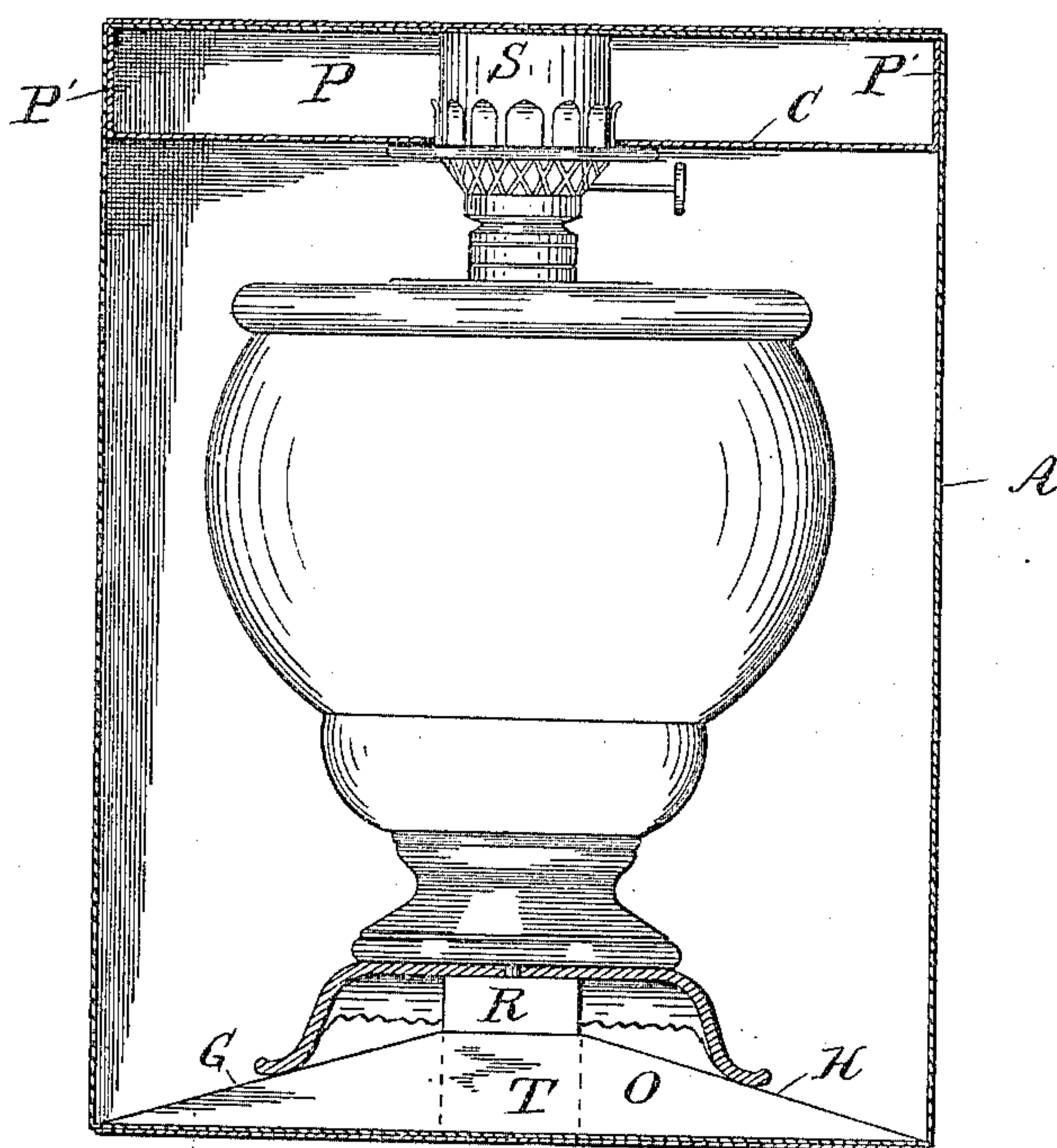
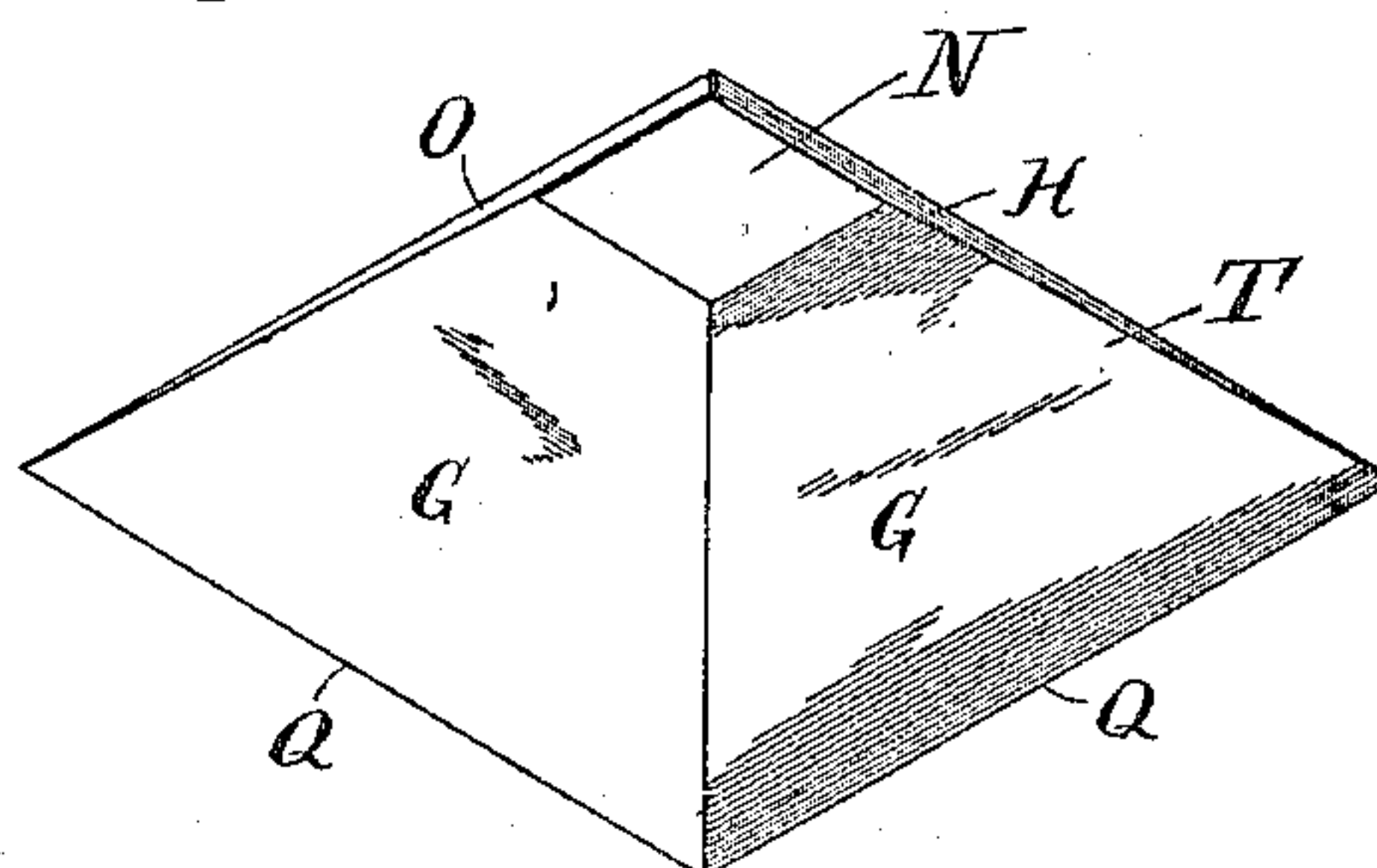


Fig. 3

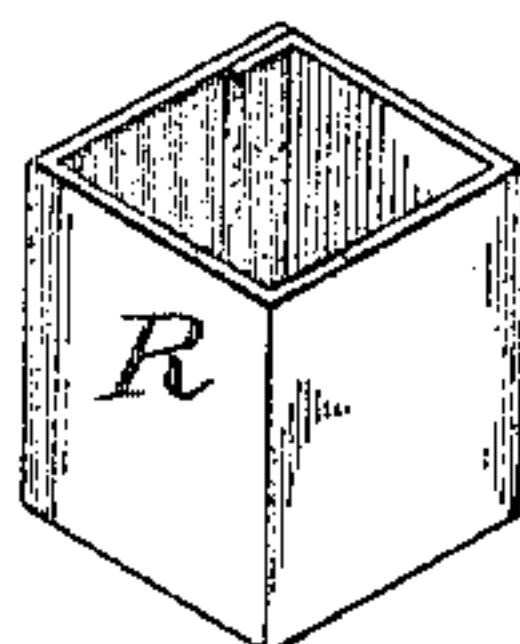


Fig. 6

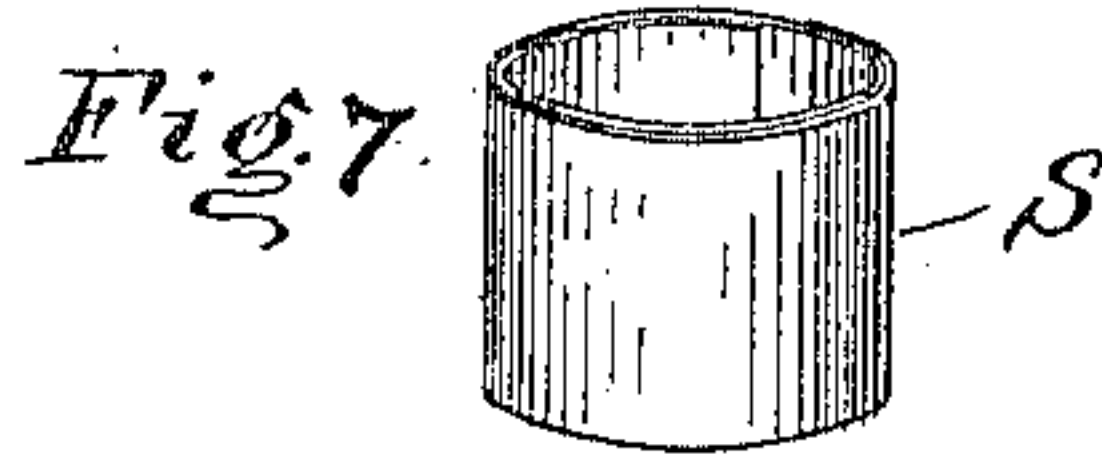


Fig. 7

Witnesses.

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# UNITED STATES PATENT OFFICE.

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## PACKAGE.

SPECIFICATION forming part of Letters Patent No. 659,931, dated October 16, 1900.

Application filed February 18, 1899. Serial No. 706,043. (No model.)

*To all whom it may concern:*

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

My invention relates to an improvement in boxes or packages for shipping fragile goods—such as lamp-globes, lamps, and the like—made of glass which are usually now shipped by packing them in hay or straw or excelsior. To pack these articles in the ordinary way is expensive and is attended with much risk and makes a heavy awkward package, whereas by means of my improvement they are packed for shipment with safety, economy, and in a light convenient package.

In the accompanying drawings, Figure 1 is a top plan view of the blank cut and scored to form the brace or guard, of which Fig. 2 is a perspective view. Fig. 3 is a vertical section of another package containing a lamp. Fig. 4 is a top plan view of a blank cut and scored to form another brace. Fig. 5 is a perspective view of the same. Fig. 6 is a perspective view of a hollow rectangular tube. Fig. 7 is a perspective view of a hollow cylindrical tube.

The package consists first of an outer box or inclosure A, made of pasteboard or similar material, of a thickness corresponding with the weight of the article to be packed. A very light material can be used for a comparatively-heavy article by reason of the fact that the stiffness of the material and the bracing feature of its rectangular shape, together with the supplemental braces, will enable it to resist very considerably pressure or banging; but of course I do not limit myself to any particular material or weight of material. The outer box may be made of wood, if desired; but I find it equally efficacious and less expensive to make it of strawboard or paper.

In the drawings, B is a globe which it is desired to pack for shipment, so that it will not be broken and so that it can be handled in the package without risk, and it must be placed

in the package so that no part of it touches any part of the wall of the package which is liable to receive a blow or come in contact with any outside substance.

C C are braces within the outer box A and are the only parts that touch upon the globe. These braces or diaphragms C, I prefer to make in the form shown in Figs. 1 and 2. A square piece of pasteboard is scored at the dotted lines *c c* and cut at the solid lines *c'* and is then folded in the form shown in Fig. 2, the corner-flaps *p* overlapping the sides P and the ends of the sides P being flush against the other sides P' at the corners, making it very stiff and firm. In the center of this brace C is an opening D, the size and shape of this opening depending upon the size and shape of the article to be packed. It must be large enough to permit a portion of it to extend through the opening and small enough to have the edges of the opening pressing firmly against the body of the globe B, as illustrated in the drawings. Two of these are used, one at the bottom and one at the top, and being put in place, as shown in the drawings, the ends F of the box A are closed over and against the upper edges of the sides P P and P' P' of the brace C, holding them firmly and securely in place. The depth of the sides P P and P' P' should be such that when the ends F F are closed down the body of the brace C will be pressed firmly against the globe B, so as to hold it securely in place and prevent its moving in any direction. It will readily be seen that the globe B is held, as it were, suspended within the box A, no part of it coming in contact with the walls of the box A, and only a blow sufficiently hard to crush in the box A would reach the globe B, and I have found that a delicate glass globe thus packed is perfectly secure and that the package can be thrown across the room or subjected to any banging, provided it is not sufficient to crush the walls of the outer box A.

Of course the apertures in the braces C C can be multiplied or changed to adapt them to any form of fragile article to be packed, and in the drawings I have illustrated the package arranged for a glass lamp having legs. The openings in the lower brace C are made so as to receive these legs and hold the



bottom of the lamp securely, while the opening or openings in the top brace C are adapted to receive the upper part of the lamp, whatever its shape, and hold it securely suspended.

5 As it is frequently necessary to change the brass legs that are on a lamp—for instance, to replace an expensive set by a cheaper one—and as the legs of different sets vary in length and shape, I have shown in Figs. 3,  
10 4, and 5 another form of brace for the bottom of the lamp in the form of a truncated pyramid T. In Fig. 4 the blank is shown cut and scored in the proper manner, the dotted lines indicating the scores. The angles  
15  $\alpha$  between the scores  $g$  and the edges Q of the faces are large or small, depending upon the height of truncated pyramid desired, and the edges Q are just long enough to fit snugly within the box or package. In forming the  
20 brace from the blank the faces O G G H are folded along the scores  $g g g g$  in such a way that the flap J is brought under or over the edge of the face O, and said flap J is glued or otherwise fastened to the upper or under  
25 surface of the face O. A truncated pyramid is thus formed, as shown in Fig. 5.

I have provided a hollow rectangular tube R, made in any convenient manner and of suitable material, as shown in Fig. 6, designed  
30 to fit snugly within the opening N of the truncated pyramid. The box or package may be provided with several of these rectangular tubes of various heights, so as to accommodate lamps with legs of various lengths.

35 Fig. 3 shows a lamp packed with the truncated pyramid at the bottom. The footpiece of the lamp is in section, showing the under part of said footpiece resting on the hollow rectangular tube R and the feet resting on  
40 the faces of the truncated pyramid T. The tube R rests on the bottom of the box, as shown by the dotted lines. It will be readily seen that if the legs are longer or spread out at a larger angle they will still rest on the  
45 faces of the pyramid, but farther down. The tube R must be of such a length that the lamp will bear evenly upon it and upon the four faces of the truncated pyramid.

50 Instead of supporting the lamp at its upper end by the brace C alone it is preferable to use in addition a hollow cylindrical tube S, made in any convenient manner and of suitable material—for instance, cardboard—of  
55 such a diameter that it will fit in the gallery for the foot of the lamp-chimney, the other end resting against the top of the box. These additional parts—viz., the hollow cylinder S and the hollow rectangular tube R—serve to  
60 take part of the strain from the brace C and the truncated pyramid T and carry it directly to the top and bottom of the box. Of course the tubes R and S may be used or omitted, as the conditions require.

65 In describing and illustrating my package I have shown it in the form of a rectangular box, designed more especially for lamps, lamp-globes, and the like; but of course I do

not limit myself to any particular form of package or to any particular article to be packed. I prefer to use for the outer box, 70 when strawboard or paper material is used, the construction shown in my Patent No. 546,767, in which the top and bottom are double and interlock; but any other box may be used.

75 Instead of a rectangular box one of cylindrical or other form may be used, and in this case a truncated cone or other shape to conform to the shape of box would be used instead of the truncated pyramid and a cylindrical or correspondingly-shaped tube would  
80 replace the rectangular one. The brace C would likewise be circular or polygonal in form. The shape of the article to be packed might be such that a rectangular tube would  
85 be required at the top or another truncated pyramid or cone instead of the brace C.

The various parts may be used separately or in any and various combinations, depending upon the form of the article to be packed. 90

Having thus described my invention, what I wish to claim by Letters Patent is—

1. In a package for holding fragile articles, a brace in the form of a truncated pyramid or its equivalent, whose base rests upon the  
95 top or bottom of the package, and whose faces bear against the feet or other projections of the article to be packed, and thus serve to hold it securely in place, substantially as shown and described. 100

2. In a package for holding fragile articles, a brace in the form of a truncated pyramid or its equivalent, whose base rests upon and is the size and shape of the top or bottom of  
105 the package, and whose faces bear against the feet or other projections of the article to be packed, and a rectangular tube which fits within the truncated pyramid and bears at one end against the top or bottom of the pack-  
110 age and at the other, against the body of the article to be packed, substantially as and for the purpose described.

3. In a package for holding fragile articles, a brace consisting of a main flat portion arranged to fit upon the article to be packed,  
115 provided with sides at an angle to the bottom, the edges of which press against the outer wall of the package, and a tube designed to fit within an opening in said brace, and bear at one end against the top or bottom of the  
120 package, and at the other against the article itself, the two together thus serving to hold the article in place, substantially as and for the purpose described.

4. In a package for shipping fragile articles, 125 a brace having a base resting against the ends and walls of the package, and sides or faces at an angle to said base, said brace also bearing against the article to be shipped, and a tube designed to fit within an opening in said  
130 brace, said tube bearing against the article to be packed at one end and at the other against the top or bottom of the package, the tube and brace together serving to hold the



article in place, substantially as and for the purpose described.

5 In a package for holding lamps, a brace consisting of a main flat portion with a hole for the burner, and sides at an angle with said main flat portion, said sides bearing against the walls and top of said package; a hollow cylinder which fits within the gallery of the burner and bears against the top of  
10 the box, a brace in the form of a hollow truncated pyramid, whose base bears against the walls and bottom of said package and whose

faces support the feet of the lamp, and a hollow rectangular tube which fits snugly within the truncated pyramid and bears at one end upon the bottom of the package, and at the other against the under side of the foot of the lamp, substantially as and for the purpose described. 15

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Witnesses:

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