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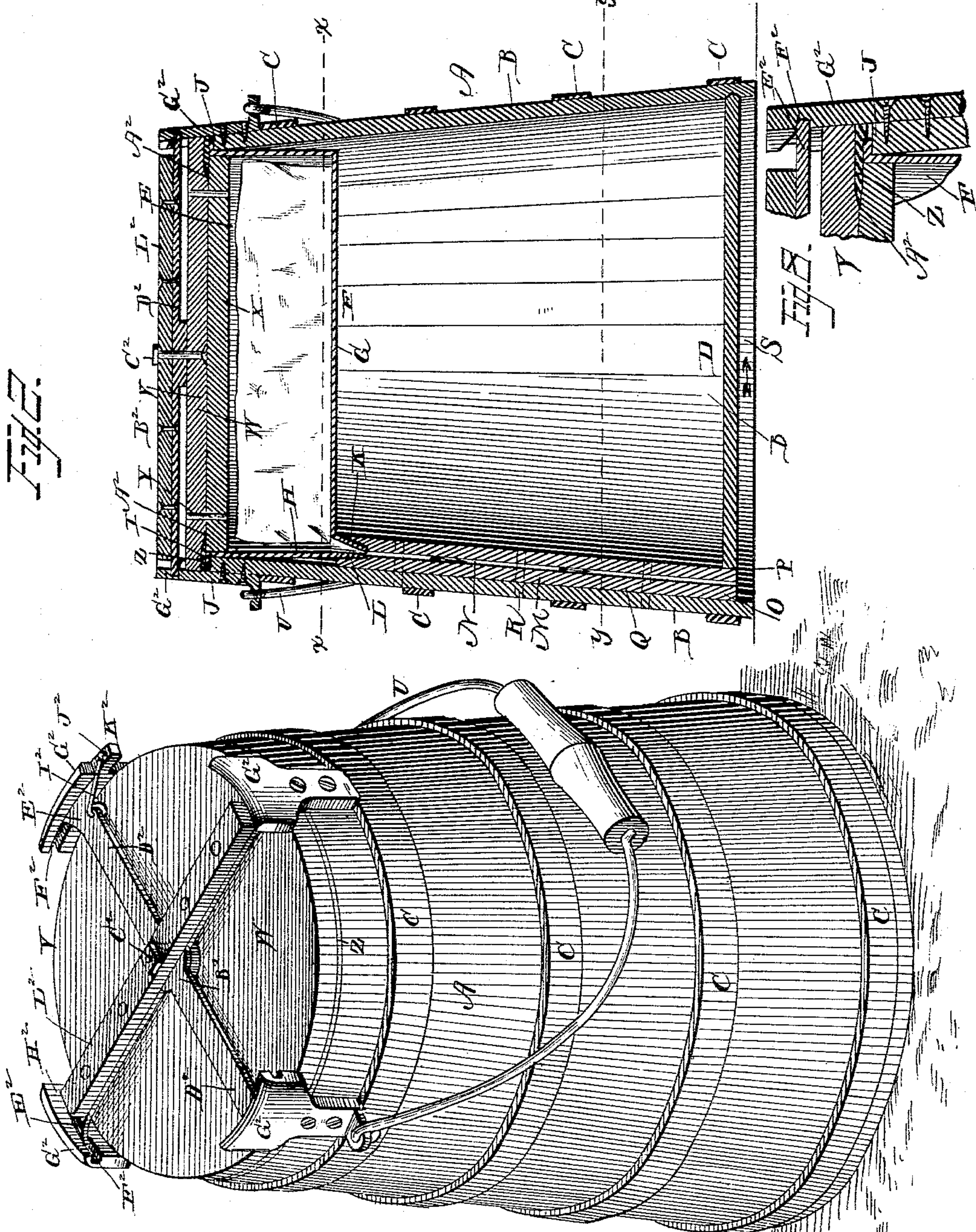
2 Sheets—Sheet 1

O. P. JOHNSON.

REFRIGERATING PACKAGE FOR SHIPPING AND PRESERVING BUTTER,
OYSTERS, &c.

No. 300,476.

Patented June 17, 1884.



WITNESSES
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INVENTOR
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(No Model.)

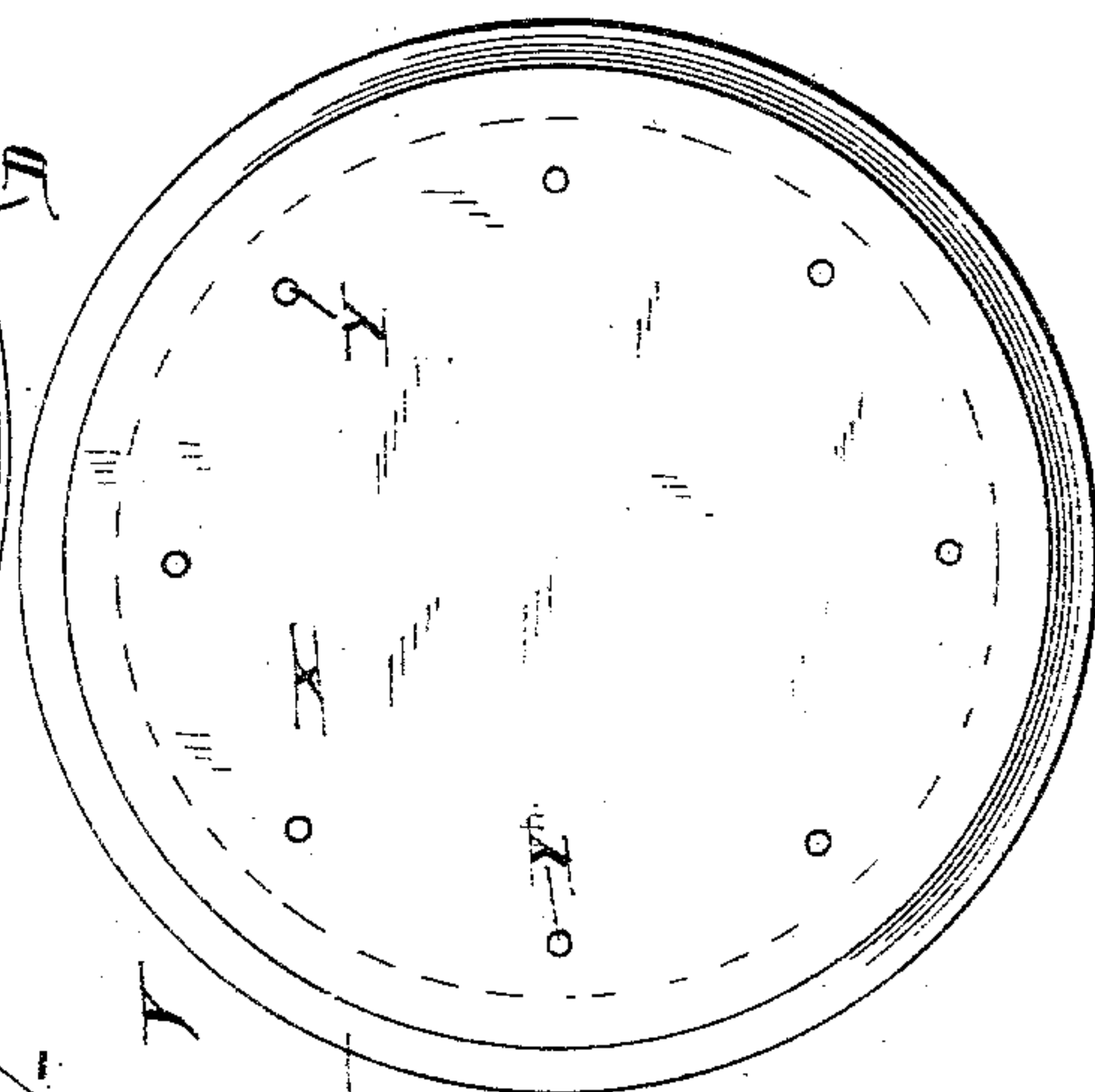
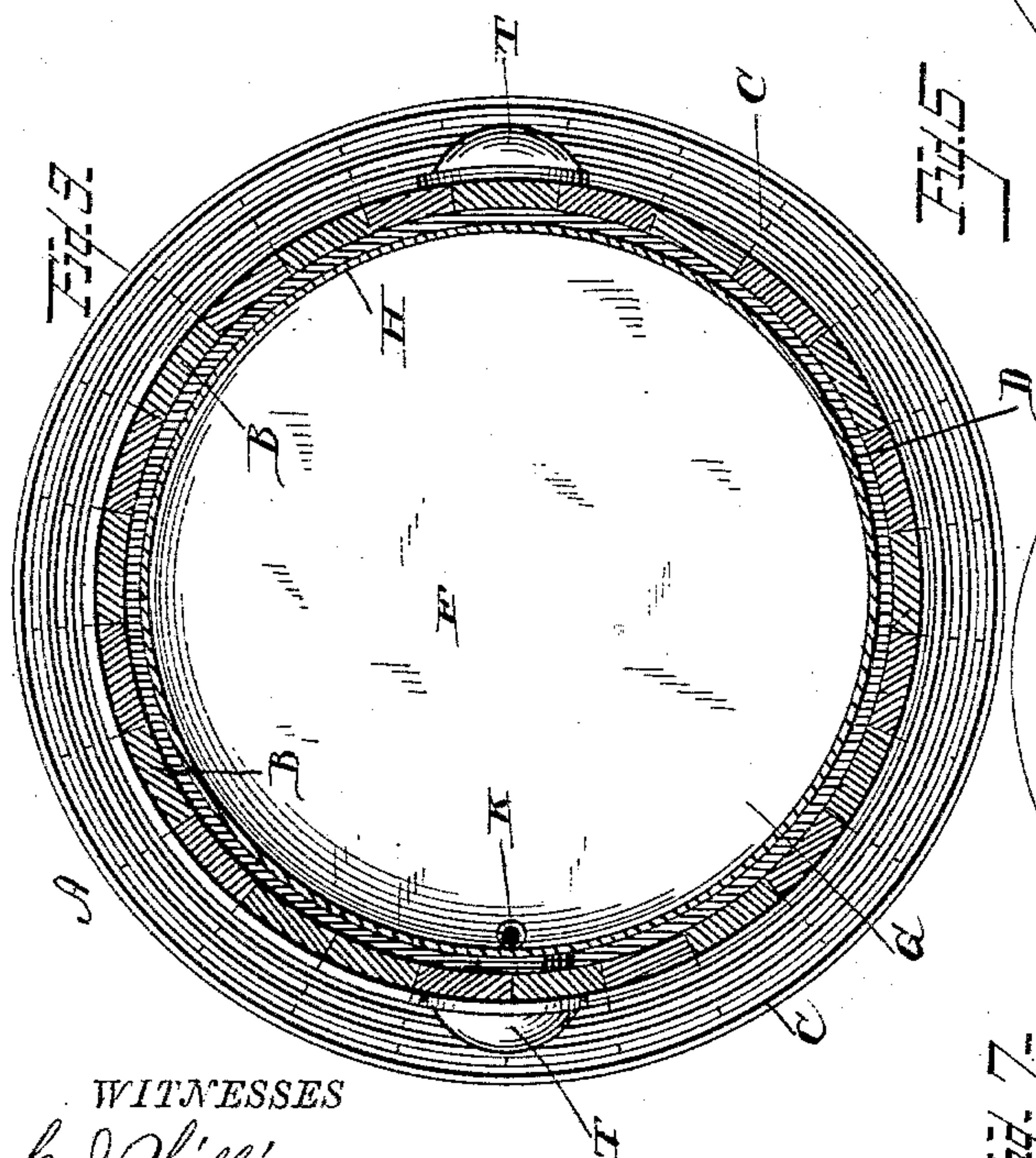
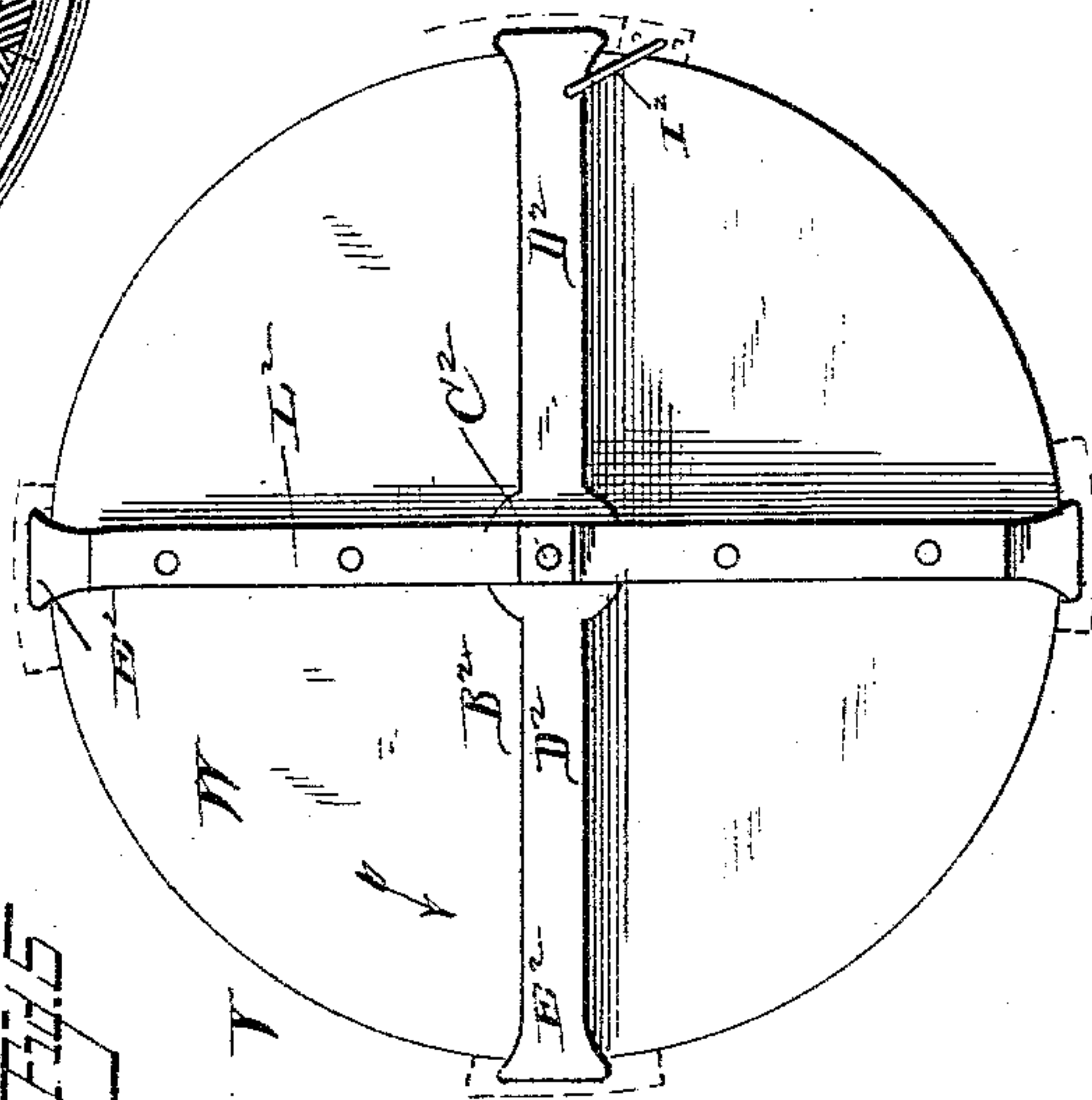
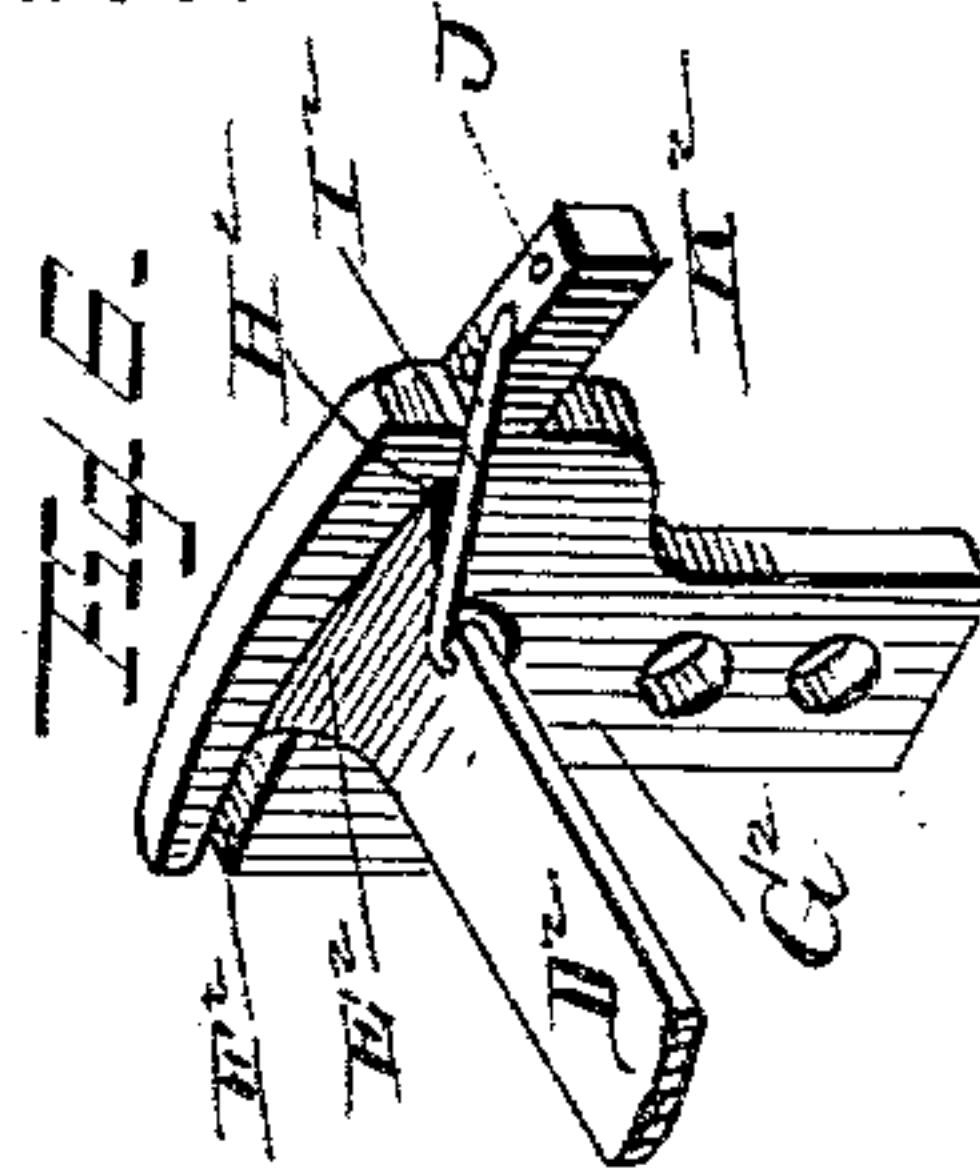
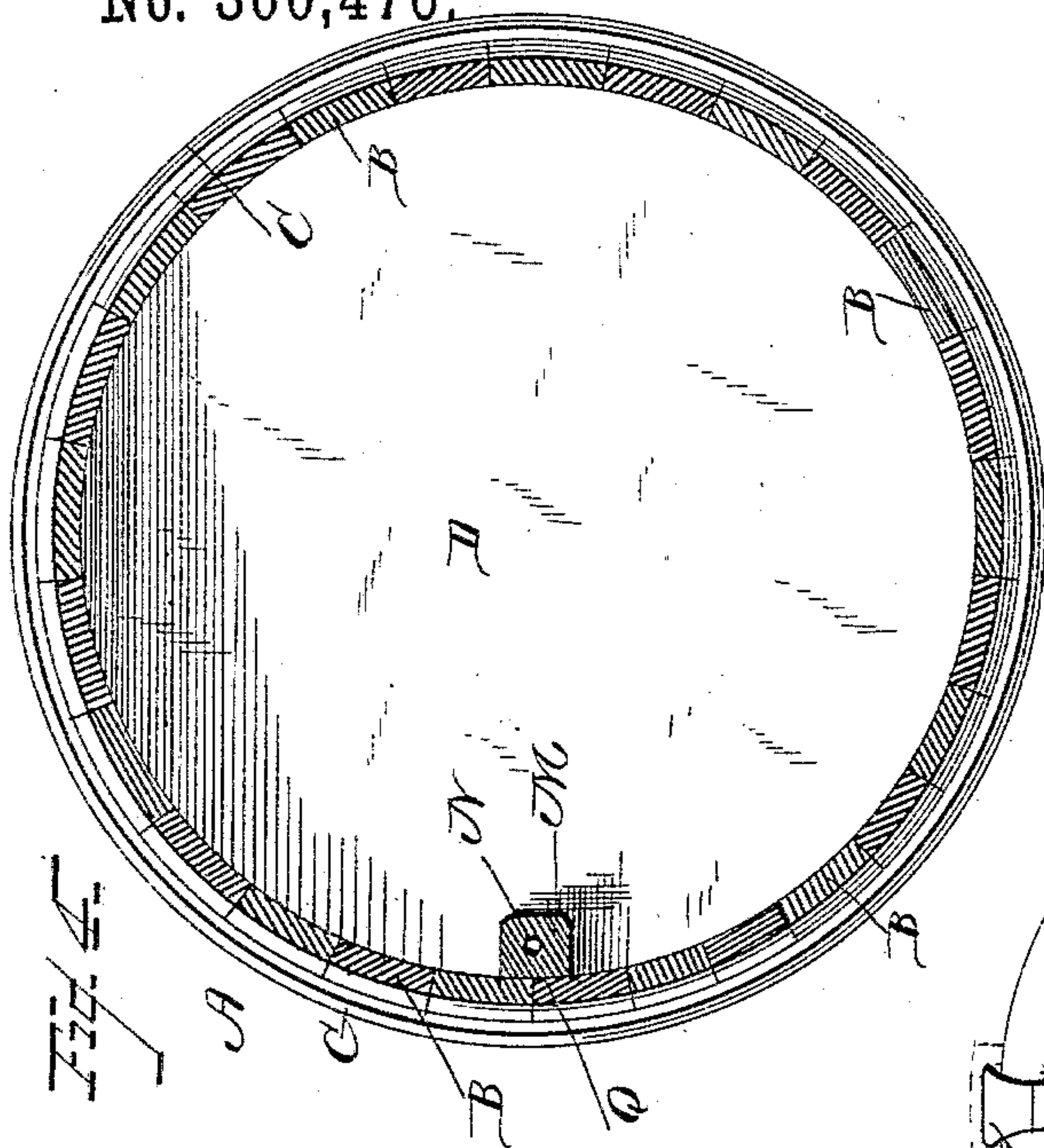
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WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

OLIVER P. JOHNSON, OF WASHINGTON, DISTRICT OF COLUMBIA.

REFRIGERATING PACKAGE FOR SHIPPING AND PRESERVING BUTTER, OYSTERS, &c.

SPECIFICATION forming part of Letters Patent No. 300,476, dated June 17, 1884.

Application filed August 23, 1883. (No model.)

To all whom it may concern:

Be it known that I, OLIVER P. JOHNSON, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Packages for Shipping and Preserving Butter, Oysters, &c.; and I do 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 the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to packages for shipping and preserving butter, oysters, fish, game, and all perishable commodities; and its object is to provide a package of this class possessing superior advantages in point of simplicity, inexpensiveness, durability, and general efficiency.

My invention relates especially to that class of shipping and preserving packages that comprise in their construction a compartment for ice, mechanism for conducting the drip of the same from the package, and mechanism for securely binding the top in air-tight position; and it consists in certain improvements in the construction, arrangement, and operation of parts, substantially as will be hereinafter more fully set forth.

In the drawings, Figure 1 is a perspective view of my improved package as adapted for shipping oysters and the like. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a horizontal sectional view thereof on the line *x*, Fig. 2. Fig. 4 is a horizontal sectional view on the line *y y*, Fig. 2. Fig. 5 is a top view of the package. Fig. 6 is a detail perspective view of the end of one of the arms of the spider or top clamping-plate and of the grooved plate that receives said end. Fig. 7 is a bottom view of the head. Fig. 8 is a detail sectional view of the joint between the cover and edge of the body.

Corresponding parts in all the figures are denoted by the same letters of reference.

Referring to the drawings, A designates the body of the package, which is preferably formed, in the usual manner, of staves B, secured by hoops or bands C, and converging to-

ward the top. The body A has a bottom, D, and an open top or mouth, E.

F is a removable pan or vessel, that comprises a bottom, G, and sides H, that are preferably perpendicular. This pan F conforms approximately to the interior shape of the body A, and fits down in the mouth thereof, and the top edge of its sides H is provided with an outwardly-projecting circumferential horizontal supporting-flange, I, which conforms to the top edge, J, of the staves B, and is of about half the width of said edge J, as shown. The body A is preferably formed of wood, while the ice-vessel F can be formed of sheet metal and have its flange I formed by bending the top edge over. This pan F, as will be observed, closes the mouth of the body A by extending across the same, and, by reason of its width, can contain one or more large and solid pieces of ice, when the ice will melt less rapidly than if it were broken up into comparatively small pieces to be placed and contained in its pan or receptacle.

To carry off the drip of the ice, the pan F is provided at a suitable point in its bottom G, and at the edge thereof, with a downwardly-projecting tubular extension, K, that forms a conducting-pipe, and preferably converges toward its lower end. This pipe K is received by a corresponding flaring mouth or recess, L, in the top of a block or strip, M, through which extends a perforation, N, from the mouth L to its bottom end. The said block M has preferably an angular exterior, and has its bottom end, O, fitted neatly in a corresponding opening, P, cut in the bottom D of the body A. By reason of its angular exterior the block M cannot turn or become displaced in said opening P; but, to further secure it from vertical displacement, its outer edge, Q, is made to conform to the interior contour of the body A, and the block is secured against the latter by means of nails or screws R. The block M comes up flush with the bottom G of pan F, and thereby serves as an auxiliary support therefor, and the pipe K, fitting in the top of said block M, serves as a means to prevent lateral displacement or strain on the lower portion of the pan. The channel K N will afford a convenient means of exit to the dripping from the ice in the

pan, and the cold air descending in said channel from physical laws will preclude the possibility of hot air from the outside ascending into the ice-pan. The bottom ends of the staves B preferably extend a short distance below the bottom disk, D, so that a space, S, will be formed under said bottom when the package is set in position on the floor or ground, as in transportation in cars, &c. The bottom orifice of the channel N opens into this space, and the cold air descending from the channel will fill the said space, so that a cold-air chamber is provided under the bottom for the further protection or preservation of the contents of the package, which ordinarily rest directly on the bottom D.

When the package is designed only for butter, ears or handles T T may be provided for lifting, as shown in Fig. 3; but when it is designed for oysters and like heavy commodities I prefer to provide a bail, U, as shown in Fig. 1.

V designates the top or cap piece of my improved package. It is formed of two disks, W X, that are secured together by pins or screws Y, with the grain of the wood preferably in opposite directions to secure greater strength. The bottom or inner disk, X, has a less diameter than the top disk, W, and fits down in the mouth of pan F, while the top disk extends out over the top edge of staves B. An annular gasket, Z, covers the under side of this projecting portion of disk W, said gasket being secured in position by binding its inner edge, A², between the disks of the cover. When the cover is clamped down, as hereinafter specified, the gasket Z binds on the flange I and effects a tight joint.

B² is a spider-plate, that is centrally pivoted by a pin or bolt, C², on top the cover V, and comprises four radial arms, D², that are preferably widened at their outer ends to effect a broad clamping-edge, E². The ends E² are received by grooves F² in the inner faces of castings or plates G², that are secured to the outside of the body A and project above the cover V. These grooves are inclined so that, as the spider-plate B² is turned to guide its ends E² into said grooves, the ends of the arms will be guided downwardly to securely bind the cover V down in position. These grooves F² do not extend entirely across the face of the casting, but are preferably formed with a stop-shoulder, H², at their lower end, to limit the movement of the ends E² and prevent said ends from passing entirely through the groove. One or more of the ends E² are provided with a hook, I², that is adapted to be engaged in any one of a series of holes or recesses, J², in the top edge of a shoulder, K², projecting from the side of the casting having the shoulder H². This hook serves to retain the ends E² in position in the grooves F². The spider-plate B² is below the plane of the top edge of the castings G², and a transverse block, L², is preferably riveted or otherwise secured on top the plate B², to bring

the same to the plane of the castings G². Therefore, when one package is placed on top another, the block L² will form a rest for the top package, so that the latter will not rest below the castings and be liable to damage or break the same from off the package. This block L² also affords a hold to the hand in operating the plate B².

The operation and advantages of my invention will be readily understood. The package can be readily filled by removing the ice-pan and cover, and will afford a large and unobstructed space for the contents. The pan can then be replaced and filled with ice, after which the cover is to be firmly secured down in position.

This package will retain its contents in fresh and solid condition by reason of the ice-chamber above and cold-air space below, and the drip of the ice is carried off without permeating or interfering with the contents in any way.

I claim as my invention—

1. The combination, in a shipping and preserving package, of a body, a block secured vertically against the side of the same on its interior, and provided with a longitudinal drip-channel, and an ice pan or vessel extending across the top portion of the body, and supported on said block, and provided with a drip-opening registering with the channel in the supporting-block, substantially as and for the purpose set forth.

2. The combination of the body of the package, a block secured inside the body against the sides thereof, and provided with a longitudinal perforation terminating at its top in a mouth or recess, and an ice-pan extending across the top portion of the body, and provided with a tubular extension or pipe in its bottom edge that enters said mouth, to convey the drip and retain the pan from lateral displacement, said pan being removable; substantially as set forth.

3. The combination, with the body of the package having an ice pan or vessel in its top portion, and provided with an angular opening in its bottom at its side, of a drip-block having a corresponding bottom end fitted in said opening, and provided with a longitudinal drip-channel, said block being secured vertically against the side of the body, substantially as set forth.

4. The combination of the body of the package having the open mouth, sides, and bottom formed with the opening at its side, the drip-block fitted in said opening and secured vertically against the interior sides of the body, and provided with a longitudinal perforation terminating in a mouth or recess at the top, and the ice pan or vessel supported in the mouth of the body by an annular lateral flange at its top edge, and provided with the tubular extension at its side edge, substantially as and for the purpose set forth.

5. As an improvement in shipping and pre-

5 serving packages, a body having its sides extending down below its bottom to form an enclosed cold-air space, and provided with a closed interior ice-chamber, and with a drip-
10 conducting channel extending down from the ice-chamber and opening into the said cold-air space, which is filled by the cold air descending from said channel, the contents being placed between the ice-chamber and the
15 bottom forming the top of the air-space, substantially as set forth.

6. The combination, with the body of the package having a series of plates or castings projecting above the edge of its mouth, and
15 provided with a simple inclined groove in their inner faces, of the cover having a centrally-pivoted plate formed with integral radial arms having flat outer ends, which enter the inclined grooves and are guided downwardly
20 thereby to clamp the cover, substantially as set forth.

7. The combination, with castings or plates having a groove in their inner faces, and provided with a shoulder having a series of holes
25 or recesses, of clamping plates or arms pivoted and adapted to enter said grooves, and provided at their end with a hook adapted to engage said holes, substantially as and for the purpose set forth.

30 8. The combination of the castings or plates having a groove in their inner faces, the cover, a spider-plate pivoted thereto, and having radial arms to enter said grooves, and hooks se-

cured at the end of said arms to engage the castings and retain the arms in position, substantially as set forth. 35

9. The combination of the body of the package, the castings or plates projecting above the top edge thereof, and formed with inclined grooves in their inner faces, and with a shoulder having holes or recesses, the cover-disk, 40 the spider pivoted thereon, and having a series of radial arms adapted to enter the grooves, and hooks pivoted on the ends of the arms and engaging said holes, substantially as and for 45 the purpose set forth.

10. The herein-described casting or plate having an inclined groove in its face and provided with a shoulder at the lowermost end of said groove, having holes or recesses, substantially as and for the purpose set forth. 50

11. The combination of the castings or plates projecting above the cover of the package, the spider-plate having radial arms engaging said castings, the spider being on a lower plane than 55 the castings, and a transverse strip secured across the spider-plate to bring the same up to the plane of the top edge of the castings, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in 60 presence of two witnesses.

OLIVER P. JOHNSON.

Witnesses:

J. REED LITTELL,
GEO. K. PETTY.