

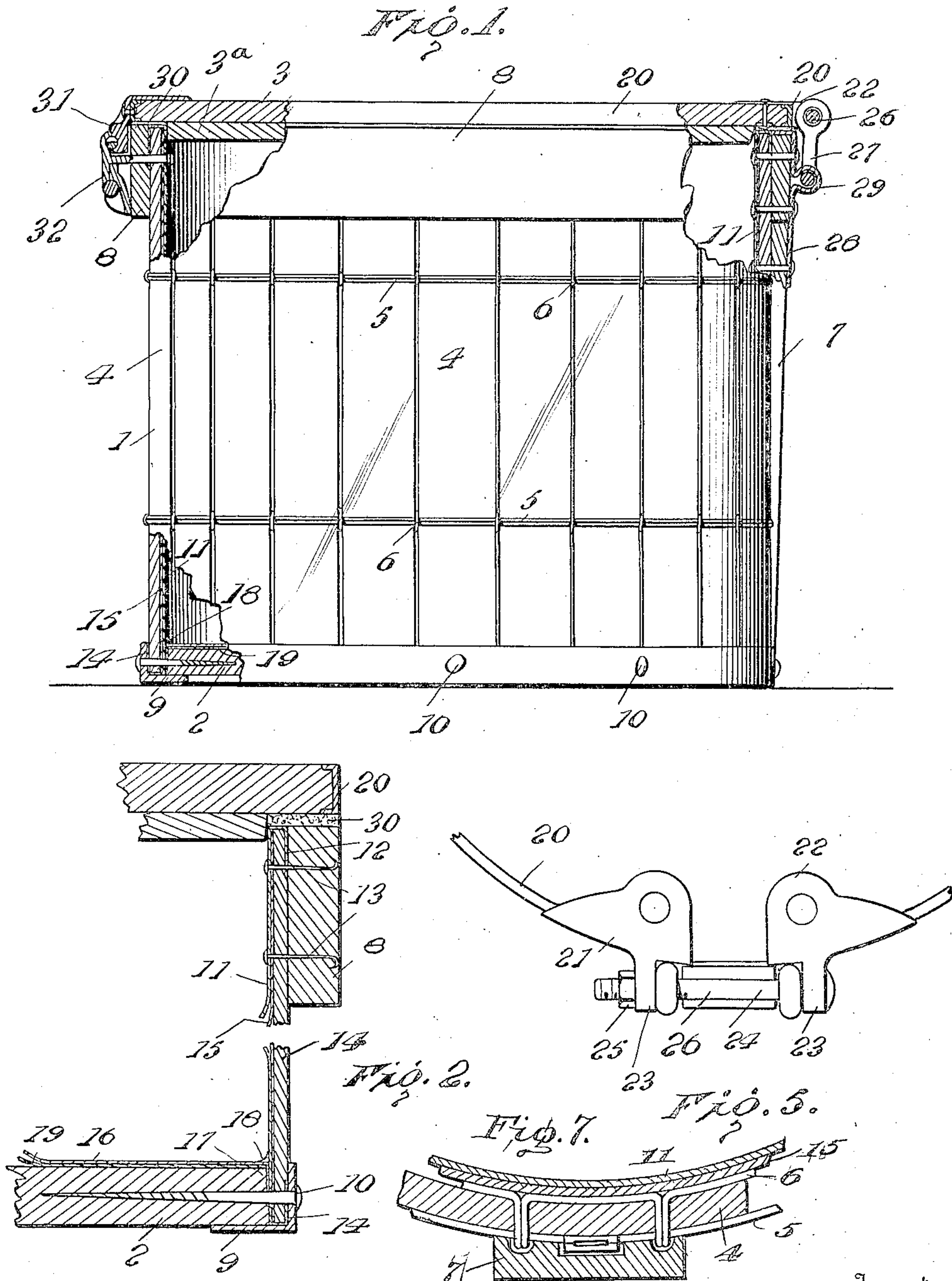
No. 865,705.

PATENTED SEPT. 10, 1907.

E. F. HULBERT.
CRATE.

APPLICATION FILED JUNE 18, 1906.

2 SHEETS—SHEET 1.



Inventor

E. F. Hulbert

Witnesses

Johnnie
W. Woodson

By

W. A. Roney Attorney

No. 865,705.

PATENTED SEPT. 10, 1907.

E. F. HULBERT.
CRATE.

APPLICATION FILED JUNE 18, 1906.

2 SHEETS—SHEET 2.

Fig. 3.

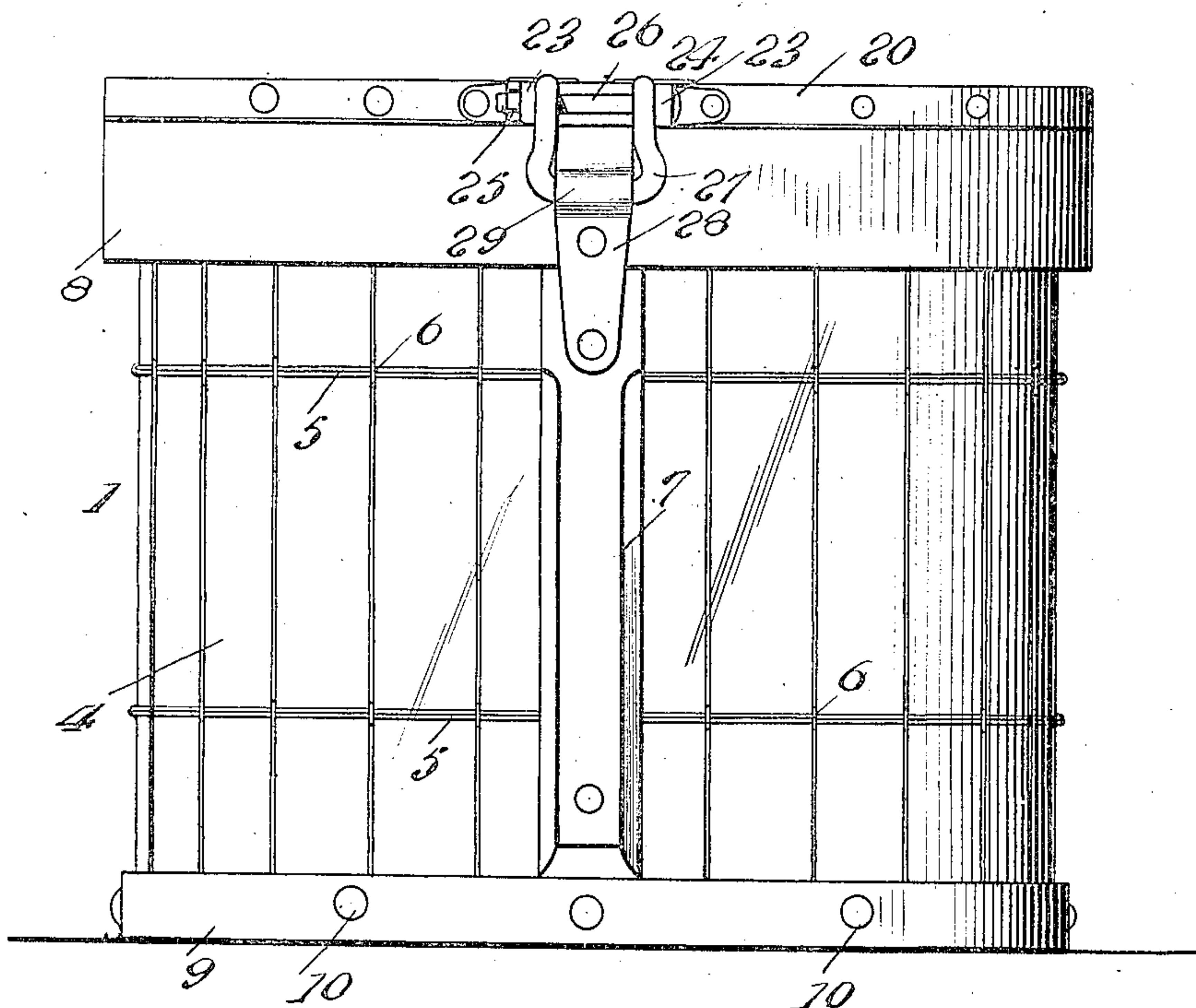
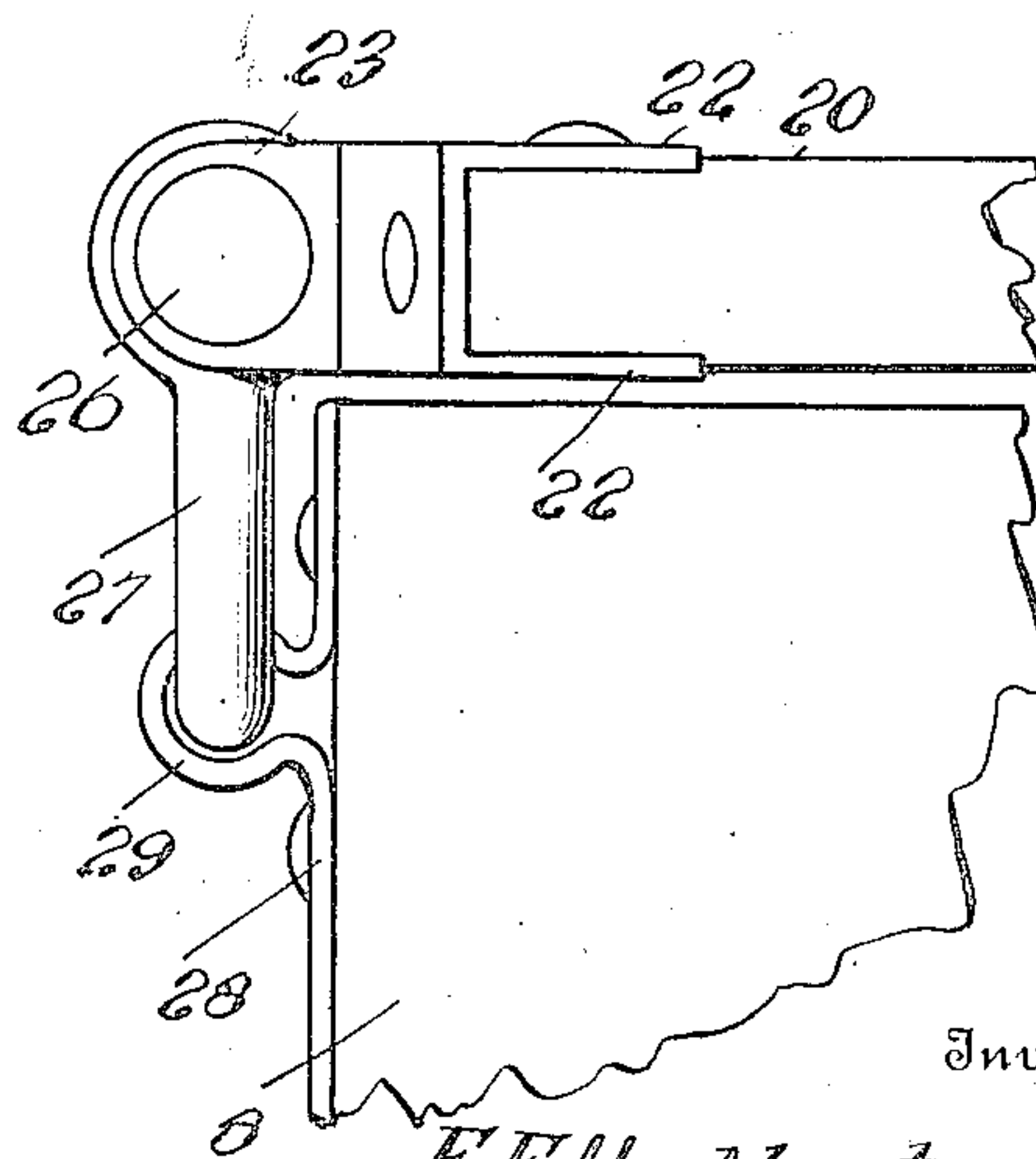


Fig. 4.



Inventor

E. F. Hulbert

Witness

Wm. H. Woodson

By

Wm. H. Woodson, Attorneys

UNITED STATES PATENT OFFICE.

EDWIN F. HULBERT, OF KENOSHA, WISCONSIN.

CRATE.

No. 865,705.

Specification of Letters Patent.

Patented Sept. 10, 1907.

Application filed June 18, 1906. Serial No. 322,315.

To all whom it may concern:

Be it known that I, EDWIN F. HULBERT, a citizen of the United States, residing at Kenosha, in the county of Kenosha and State of Wisconsin, have invented certain new and useful Improvements in Crates, of which the following is a specification.

This invention contemplates certain new and useful improvements in shipping packages, and is particularly adapted as a refrigerating package for the transportation of oysters or other perishable commodities.

The object of my invention is to provide an improved construction of device of this character which will result in the essential characteristics of strength and durability, combined with lightness and simplicity of construction, as well as efficiency of operation for the purpose for which it is primarily designed.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the accompanying drawings, in which;

Figure 1 is a side view of my improved crate, parts being broken away or in section: Fig. 2 is a detail vertical section of one side of the crate. Fig. 3 is a rear elevation. Fig. 4 is a detail elevation of the hinge connection. Fig. 5 is a top plan view of the hinge connection. Fig. 6 is a horizontal sectional view through a portion of the body of the crate; Fig. 7 is a similar view, the section being taken along the line of one set of truss wires, in order to illustrate the joins of the ends of the said wires, covered and protected.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawing the numeral 1 designates the body of the package which is substantially circular in horizontal section.

2 designates the bottom of the receptacle, and 3 the lid or cover which is provided with a fillet 3^a on its lower side.

The body 1 comprises a series of vertical slats 4 slightly bowed transversely so as to produce a substantially circular structure when assembled and said slats are secured together by means of truss wires 5 extending around the circle of slats and by tie wires 6 secured to said truss wires in the spaces between every two slats, the tie wires extending around the inner sides of the slats as shown, and the ends of the truss wires are joined together at the rear of the structure and preferably covered by means of a stiffening slat or rib 7 which extends vertically as shown.

At its upper end the body 1 is provided with an encircling hoop 8 preferably of elm or similar strong wood, the ends of which are joined together and riveted.

At its lower end the body is provided with an encir-

cling hoop 9 angular in cross section as shown and preferably of metal. The horizontally extending portion of the bottom hoop 9 extends underneath the bottom board 2, and preferably I employ drive screws 10 to secure said hoop in place, said drive screws extending through the vertical portions of the hoop and through the body portion 1 into the bottom board 2.

As the present embodiment of my invention is particularly designed as a shipping package for the storage of a perishable commodity surrounded by a refrigerant, the said package is lined around the inside of the body portion 1 by metallic sheathing 11 such as galvanized iron. Such sheathing extends upwardly and outwardly over the upper edge of the body portion 1 and thence downwardly some distance around the outer side of the body portion as indicated at 12, the said downwardly extending upper end 12 being interposed and clamped between the outer sides of the slats and the inner circle of the upper hoop 8. Clenching nails 13 preferably extend through said sheathing, the upper series of nails extending through the body portion of the sheathing and through the downwardly extending end 12 thereof. At the bottom also the sheathing 11 extends around the edge of the body portion and thence upwardly as indicated at 14, the drive screws 10 penetrating the same as indicated in the drawings. Insulating paper 15 or the like is interposed between the sheathing 11 and the inner sides of the wooden slats 4, said paper preferably terminating at both top and bottom at the ends of the slats. To complete the sheet metal inner receptacle, bottom sheathing 16 is employed said bottom sheathing extending entirely across the bottom and downwardly around the outer edge of the bottom board and being interposed and clamped between said edge and the slats 4. By this means the proper solder seam 18 may be effected at the juncture of the bottom portion 16 of the sheathing with the body portion 11 thereof. Insulating paper 19 is also preferably interposed between the bottom sheathing 16 and the bottom board 2 such paper lining preferably terminating at the margin of said board.

The covering or lid 3 of my improved package is encircled by a channeled metallic hoop 20 the ends of which are located at the rear of the package and are respectively secured to angular brackets 21 that are provided with upper and lower leaves 22 embracing the edge of the lid. Each bracket 21 is provided with a projecting knuckle 23, and a pintle 24 extends through apertures in said knuckles and is provided with a nut 25 so that by tightening up said nut the two brackets may be drawn together and thereby tighten the hoop 20 about the lid 3 and prevent warping. In addition to this binding function, the pintle 24 serves as a support for the toggle hinge 27 which is U-shaped as shown and has its ends pivotally mounted on said pintle while its cross bar is pivotally mounted within a bearing 29

formed by buckling the intermediate portions of a strap hinge 28 that is secured to the body of the package and preferably directly to the strengthening rib 7.

At a substantially diametrically opposite point the cover or lid 3 is provided with a keeper 31 designed for engagement with the locking casing 32 the detail features of which form no part of the present invention and are described and claimed in a companion application for Letters Patent, executed of even date herewith.

If desired a layer 30 of felt may be interposed between the body portion of the package and its lid or cover, to assist in excluding heat from the oysters or similar commodity stored in the package.

Having thus described the invention what is claimed as new is:

1. A shipping package of the character described, comprising a body portion composed of a series of vertical slats arranged substantially in a circle, a clamping hoop secured around the upper end of said body portion, a bottom for said body portion, an angular hoop secured around the lower ends of said slats and extending underneath said bottom, truss wires connecting said slats together, the ends of the truss wires being joined, a vertically extending strengthening rib secured to said body portion and covering the joins of said truss wires, and tie wires secured to said truss wires.

2. A package of the character described, comprising a body portion composed of a series of vertical slats, arranged substantially in a circle, a clamping hoop secured around the slats at the upper ends thereof, a lower hoop L-shaped in cross section encircling the lower ends of the slats, a bottom supported by the horizontal portion of the lower hoop, sheathing extending along the inner wall of the body portion, said sheathing extending outwardly over the upper edge of the body portion and thence downwardly between the upper hoop and the outer wall of the slats, and also extending outwardly along the lower edge of the body

portion and thence upwardly, being interposed between the slats and the two members of the L-shaped lower hoop, and a bottom sheathing having its edge extending downwardly and interposed between the edge of the bottom and the first named sheathing, there being provided a seam at the juncture of the bottom sheathing with the body sheathing.

3. A package of the character described, comprising a body portion composed of a series of vertical slats, arranged substantially in a circle, a clamping hoop secured around the slats at the upper ends thereof, a lower hoop L-shaped in cross section encircling the lower ends of the slats, a bottom supported by the horizontal portion of the lower hoop, sheathing extending along the inner wall of the body portion, said sheathing extending outwardly over the upper edge of the body portion and thence downwardly between the upper hoop and the outer wall of the slats, and also extending outwardly along the lower edge of the body portion and thence upwardly, being interposed between the slats and the two members of the L-shaped lower hoop, bottom sheathing having its edge extending downwardly and interposed between the edge of the bottom and the first named sheathing, and an insulating lining for the body sheathing and the bottom sheathing.

4. A shipping package of the character described, comprising a body portion and bottom and a lid designed to close the upper end of the body portion, a hoop encircling the edge of the lid, brackets secured to the ends of said encircling hoop, each bracket being provided with an apertured knuckle, a pintle mounted in said knuckles and provided with a nut screwed thereon and adapted to draw the said brackets together, a U-shaped toggle having its upper ends pivotally mounted upon said pintle, and a strap secured to the body portion and provided with a bearing in which the cross bar of said toggle is journaled.

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

EDWIN F. HULBERT. [L. S.]

Witnesses:

D. J. FLANAGAN,
E. A. BYRNE.