

No. 614,204.

Patented Nov. 15, 1898.

F. A. EMERICK.
CRATE FOR BOTTLES, DEMIJOHNS, &c.

(Application filed Apr. 9, 1898.)

(No Model.)

Fig. 1.

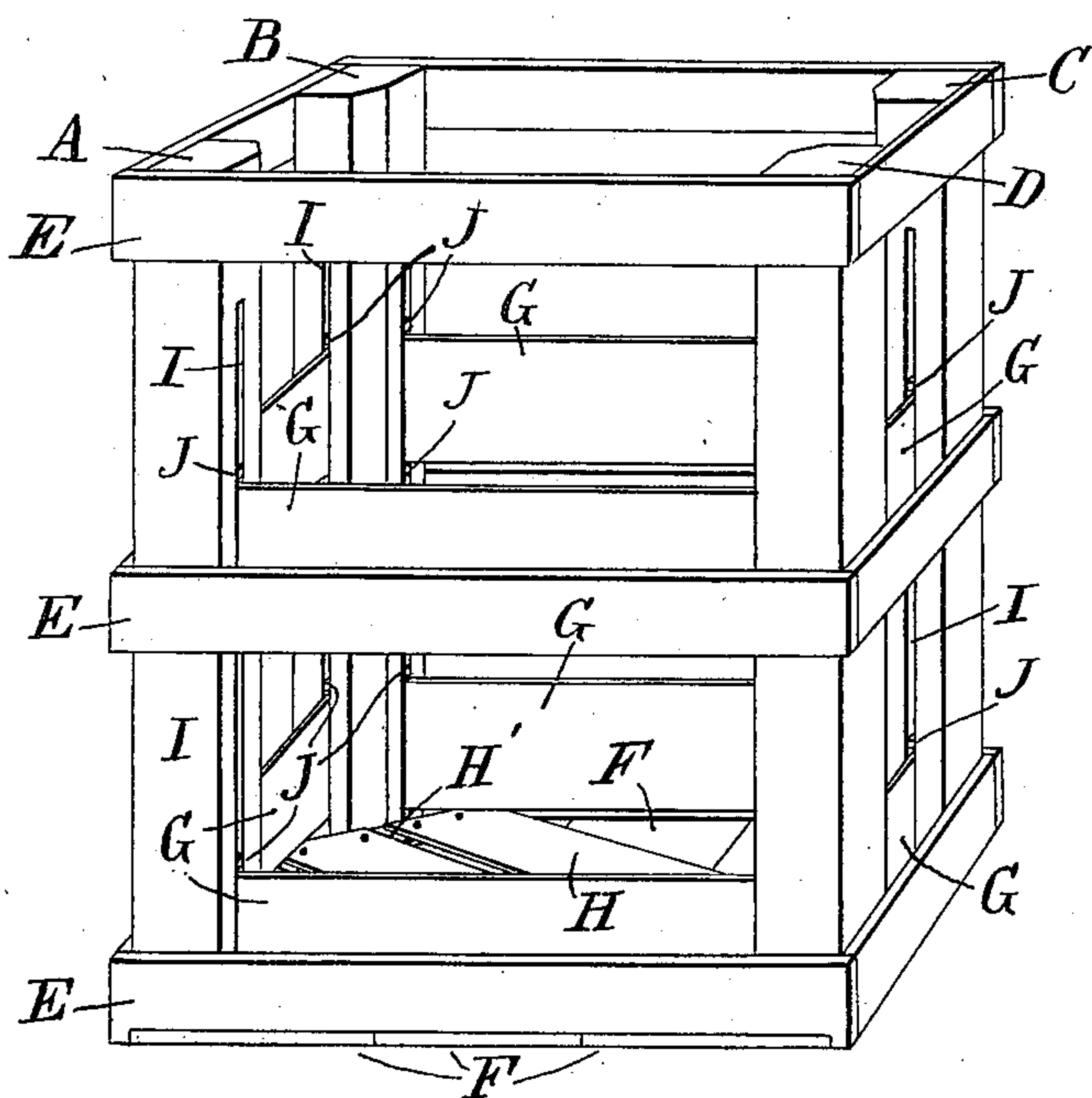


Fig. 2.

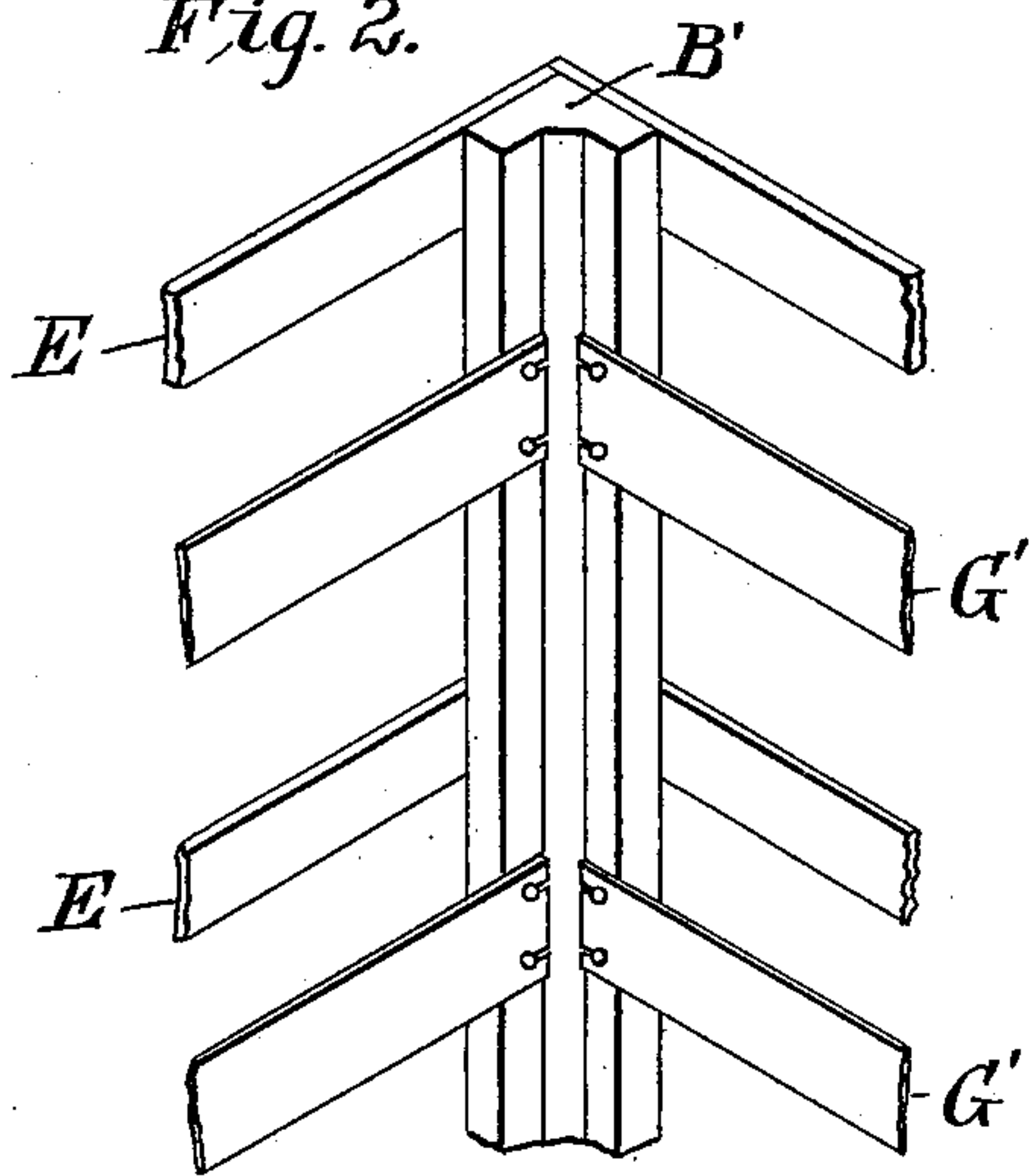
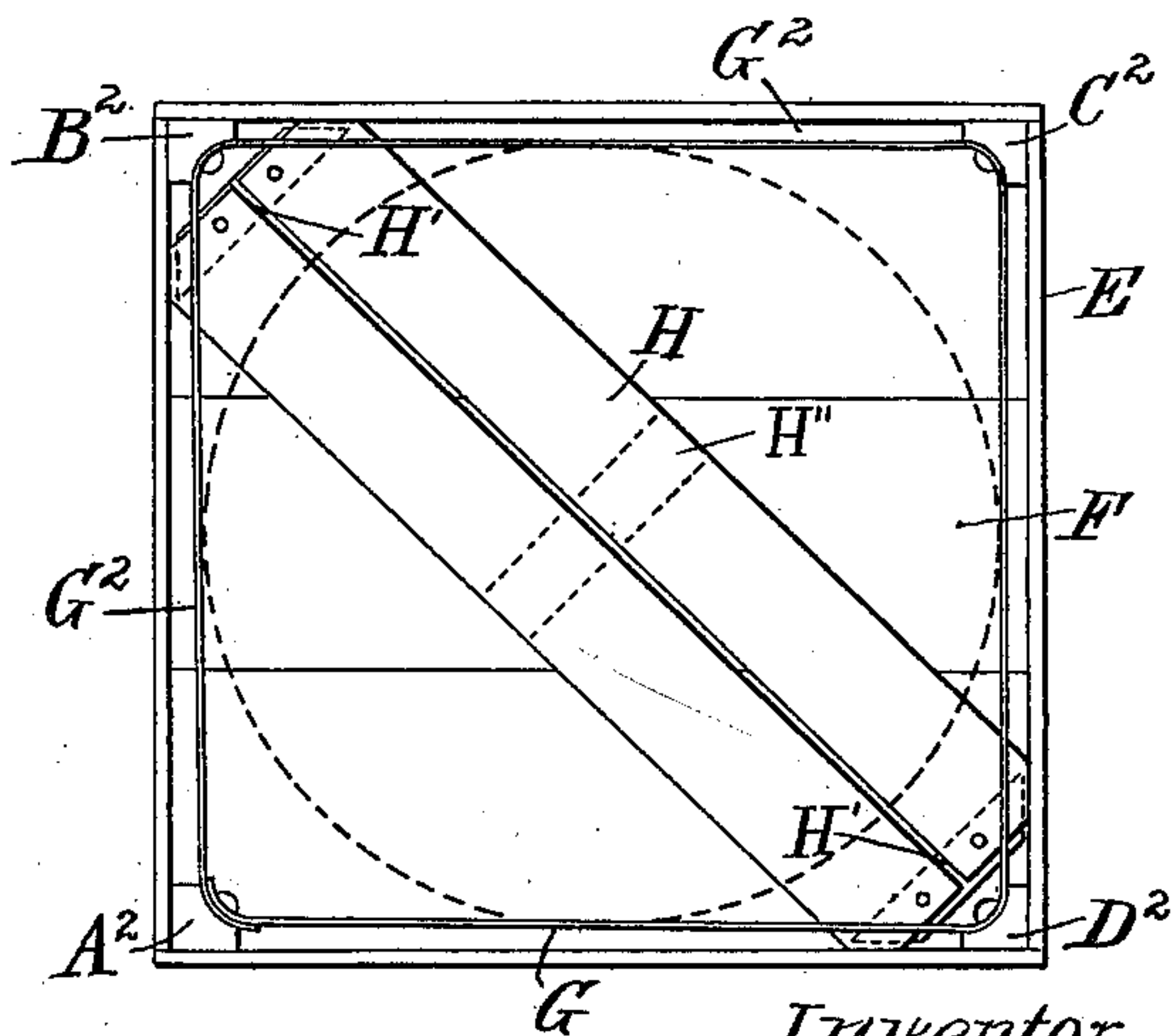


Fig. 3.



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CRATE FOR BOTTLES, DEMIJOHNS, &c.

SPECIFICATION forming part of Letters Patent No. 614,204, dated November 15, 1898.

Application filed April 9, 1898. Serial No. 676,983. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK A. EMERICK, a citizen of the United States, and a resident of Oswego, in the county of Oswego and State of New York, have invented a certain new and useful Crate for Bottles, Demi-johns, &c., of which the following is a specification.

This invention relates to crates used for the protection of bottles, demi-johns, and like receptacles of a fragile nature during transportation, storage, and handling. Crates have heretofore been constructed for like purposes; but generally where any attempt has been made to protect the receptacle from shocks and breakage it has been ineffectual or the means employed have been wanting in simplicity and durability.

The object of this invention is the construction of a crate which shall be simple and durable and in which the receptacle will be protected not only from damage in putting it into the crate, but from damage by shock in handling it when crated.

The invention therefore consists in the construction and formation of a crate substantially as hereinafter fully described, and set forth in the claims.

In the accompanying drawings, which form a part of this specification, Figure 1 represents in perspective the preferred form of crate. Fig. 2 represents a portion of a crate embodying a modification of the invention, and Fig. 3 shows in plan a crate embodying the invention in still another form.

The frame of the crate, in the main, is like that of crates heretofore used for like purposes and consists of the corner-posts A, B, C, and D, the horizontal slats or strips E, secured thereto, and the bottom F, secured at its ends to the lowermost slats E and to the lower ends of the corner-posts.

One feature of novelty resides in the horizontal flexible resilient strips, which are located upon the inner faces or angles of the corner-posts at a little distance inward from the slats E, such resilient strips being shown at G in Fig. 1, at G' in Fig. 2, and at G² in Fig. 3.

Another feature of novelty resides in the bridge H at the bottom of the crate, which is formed of one or more thin flexible resilient strips, supported at a little distance from

the bottom by means of blocks or abutments placed under their ends, as indicated at H', or under their centers, as indicated by dotted lines at H''.

The horizontal resilient strips, to give the best results, must extend uninterruptedly from post to post, and in the preferred form are so supported at the posts that they can respond readily to any lateral bend at their middles. The preferred manner of supporting said strips is seen in Fig. 1, wherein the corner-posts are vertically grooved, as by a saw-kerf, and the ends of the strips G are loosely inserted in said grooves and held in place vertically by means of pins or other form of stops, such as are indicated at J, the said grooves being represented at I.

Instead of grooving the corner-posts as just described they may be formed substantially as shown in Fig. 2, and the slats G' notched at their ends and nailed or screwed to the posts in a manner such that the heads of the screws or nails will hold them in place and yet allow them to move freely thereupon in response to lateral pressure at their middle.

The slats G or G' may be of any material having the desired resiliency, but are preferably made of wood. Metal strips may be used in the manner just described; or each series of strips may be merged into one, like G², as shown in Fig. 3, in which case the resultant strip may be nailed or screwed to the posts, as indicated.

The bridge H is designed to furnish a cushioning-support for the receptacle contained in the crate, and to produce the best effect it is placed diagonally across the bottom. The position of the receptacle in the crate is indicated by the dotted circle in Fig. 3. This bridge may be nailed to the bottom of the crate, or it may be retained in place simply by the insertion of its corners under the lowermost strips G, as indicated in Figs. 1 and 3.

As will be readily seen from the drawings, any shock that the crate may receive on its bottom or sides will be cushioned in its transmission to the contained receptacle by means of the flexible resilient strips under it and at the sides thereof.

Another advantage of the flexible lateral supporting-strips in a crate for a glass receptacle resides in the fact that such receptacles,

even though distorted, as they frequently are, may still be readily inserted without the necessity of remodeling the crate or without having to keep on hand crates of varying sizes.

5 Other modifications in the manner of supporting the resilient or cushioning strips may be made without departing from my invention.

The invention claimed is—

10 1. A crate for bottles, demijohns or like receptacles having horizontally-disposed resilient strips upon some of which such receptacle may rest and by others of which it may be laterally sustained, all of said strips being located at a distance inwardly from the bottom 15 and from the walls of the crate respectively and the laterally-disposed strips being uninterrupted between corner-posts so that their middles shall furnish a substantial support 20 to the receptacle.

2. In a crate, the combination with the corner-posts, of horizontal resilient strips loosely held at their ends to said posts and extending uninterrupted from one post to the next 25 whereby they may readily yield laterally and yet furnish a substantial support at their middles.

3. In a crate, the combination with the corner-posts vertically grooved on adjacent faces, 30 of horizontal resilient strips loosely held at their ends in said grooves.

4. A crate consisting of the grooved corner-

posts, the slats E, the bottom F, the resilient strips G, loosely held by their ends in the grooves of the corner-posts, and the bridge 35 H, extending diagonally across the bottom and having its corners under the lowermost of the strips G, substantially as and for the purpose set forth.

5. In a crate for bottles, demijohns and the 40 like, the combination with the corner-posts and the rigid uniting-slats all secured together to form a rigid crate or casing, of the auxiliary resilient strips or slats loosely fastened to said posts at the inside of the crate and extending 45 uninterrupted from post to post to be directly engaged at their middle by the bottle or demijohn.

6. In a crate for bottles, demijohns and the 50 like, the combination with the exterior structure, of auxiliary resilient wooden slats or strips loosely supported at their opposite ends within the outer walls of the crate and engaged by the bottle or demijohn at the unin- 55 interrupted and unsupported middle portion between their points of support.

Signed at Oswego, in the county of Oswego and State of New York, this 4th day of April, A. D. 1898.

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Witnesses:

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