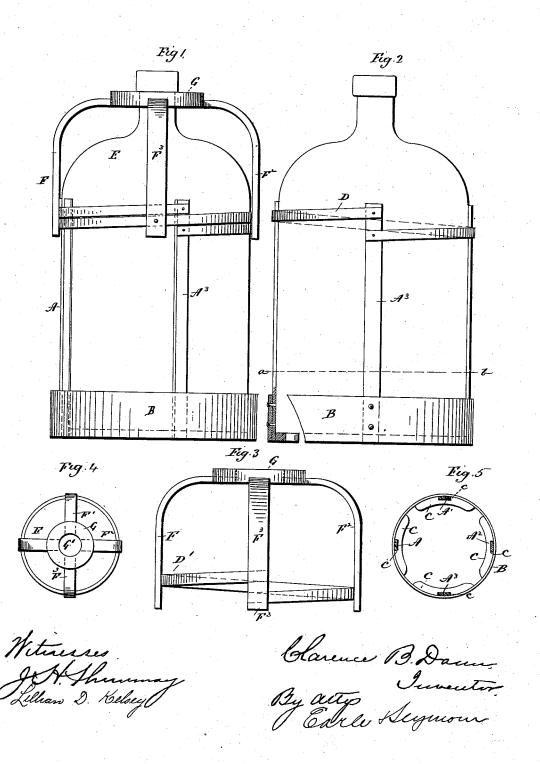
C. B. DANN. DEMIJOHN CRATE.

No. 524,193.

Patented Aug. 7, 1894.



## UNITED STATES PATENT OFFICE

CLARENCE B. DANN, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE DANN BROS. & CO., OF SAME PLACE.

## DEMIJOHN-CRATE.

SPECIFICATION forming part of Letters Patent No. 524,193, dated August 7, 1894.

Application filed April 23, 1894. Serial No. 508,653. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE B. DANN, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Demijohn-Crates; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, 10 and which said drawings constitute part of this specification, and represent, in-

Figure 1, a view in elevation of one form which a demijohn crate constructed in accordance with my invention may assume, being 15 shown as applied to a demijohn; Fig. 2, a view showing the lower section of the crate with the demijohn in it; Fig. 3, a detached view in side elevation of the upper section of the crate; Fig. 4, a detached plan view of the 20 upper section of the crate drawn on a reduced scale; Fig. 5, a view on the same scale, of the lower section of the crate in horizontal section on the line a-b of Fig. 2.

My invention relates to an improvement in 25 demijohn-crates the object being to provide a simple, compact, cheap, durable and conven-ient crate, adapted to be readily applied to or removed from a demijohn or kindred vessel.

With these ends in view, my invention con-30 sists in a skeleton sectional crate, the skeleton sections whereof are adapted to be fastened together.

My invention further consists in a skeleton sectional crate, the skeleton sections whereof 35 are adapted to be connected together on the screw principle.

My invention further consists in certain details of construction and combinations of parts as will be hereinafter described, and 40 pointed out in the claims.

In carrying out my invention, as herein shown, the crate is composed of a skeleton upper and a skeleton lower section, adapted to be connected together on the screw principle. I prefer the screw principle construction on account of its simplicity and convenience, but do not limit myself to it.

The lower section of the crate is composed of four uprights A, A', A<sup>2</sup>, and A<sup>3</sup>, secured at

inner face of a wide circular band B, which is reinforced by four segmental braces C, each of which is notched midway of its length, as at c, to receive the lower end of one of the uprights. The said braces are arranged so 55 that their lower faces will be flush with the lower edge of the band, and they combine therewith to form a bottom for the crate. The upper ends of the said uprights are united by means of a single hoop D corresponding 6c in diameter to the diameter of the band B. The respective ends of the hoop are secured to the upright A3, and separated from each other by a distance a little greater than the width of the hoop. It will be understood that 65 the diameters of the band and hoop are a little greater than the diameter of the demijohn  $ar{\mathbf{E}}$ , which is seated upon the said braces.

The upper section of the crate comprises four bowed uprights F, F', F<sup>2</sup> and F<sup>3</sup>, having 70 their upper ends inserted into and secured in radial grooves e formed in a horizontally arranged ring or head G, the central opening G' whereof is adapted in diameter to receive the neck of the demijohn. The lower ends 75 of the said uprights are connected together by means of a single hoop D', corresponding in diameter to the hoop D before mentioned, and having its ends attached to the upright F<sup>8</sup> with a space between them a little greater 80 than the width of the hoop.

By following the construction above described, I produce two skeleton crate-sections adapted to be coupled and uncoupled on the screw-principle.

To crate a demijohn with my improved crate, the sections thereof are separated, and the demijohn set into the lower section, after which the upper section is set over the top of the demijohn and adjusted so that its hoop 90 D' will rest upon the hoop D of the lower section, with the lower end of the hoop D' in line with the opening between the two ends of the hoop D. The upper section of the crate is then rotated upon the lower section, 95 causing the lower end of the hoop D' to enter between the ends of the hoop D, whereby the two sections will be drawn together on the screw principle by virtue of the inclinations 50 their lower ends at equi-distant points to the of the ends of the hoops due to separating 100 them as described. A quarter turn of the upper section on the lower section will secure the two sections together, so that the demijohn may be handled with safety, but if desired the upper section may be put through an entire rotation on the lower section, and a firmer union of the two sections secured. A demijohn thus crated may be handled with safety, and without any fear of separating the two sections of the crate. If the demijohn is broken, the crate remains unimpaired to receive another demijohn, so that crates may be used over and over again.

It is apparent that sections of the crate 15 might be connected in some other manner than as shown and described, though I prefer the screw principle on account of its sim-

plicity.

I would therefore have it understood that 20 I do not limit myself to the exact construction herein shown and described, but hold myself at liberty to make such changes and alterations therein as fairly fall within the spirit and scope of my invention.

I am aware, however, that a carboy having a removable skeleton cap to fit over the neck of the vessel is old, and also that it is old to inclose a bottle in two shells coupled and uncoupled on the bayonet-joint principle.

30 Having fully described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. A demijohn crate consisting of an upper section, having at its lower end a horizontally arranged hoop, the ends of which are separated, and a lower section having at its upper end a horizontally arranged hoop, the ends of which are separated for co-action with the separated ends of the hoop of the upper section for coupling the two sections together, 40 substantially as set forth.

2. A sectional demijohn crate, comprising an upper and a lower section, the lower section consisting of uprights, a band to which the lower ends of the same are attached, and 45 a hoop connecting their upper ends and having its ends separated, and the upper section consisting of bowed uprights, a ring or head to which their upper ends are secured, and a hoop secured to their lower ends with its ends 50 separated for co-action with the separated ends of the hoop of the lower section, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscrib- 55

ing witnesses.

CLARENCE B DANN.

Witnesses:

FRED C. EARLE, LILLIAN D. KELSEY.