J. S. HAZARD.

STAND FOR CRATED BOTTLES.

APPLICATION FILED MAR. 31, 1915.

1,166,833.

Patented Jan. 4, 1916.

2 SHEETS—SHEET 1.

Fig. 1.

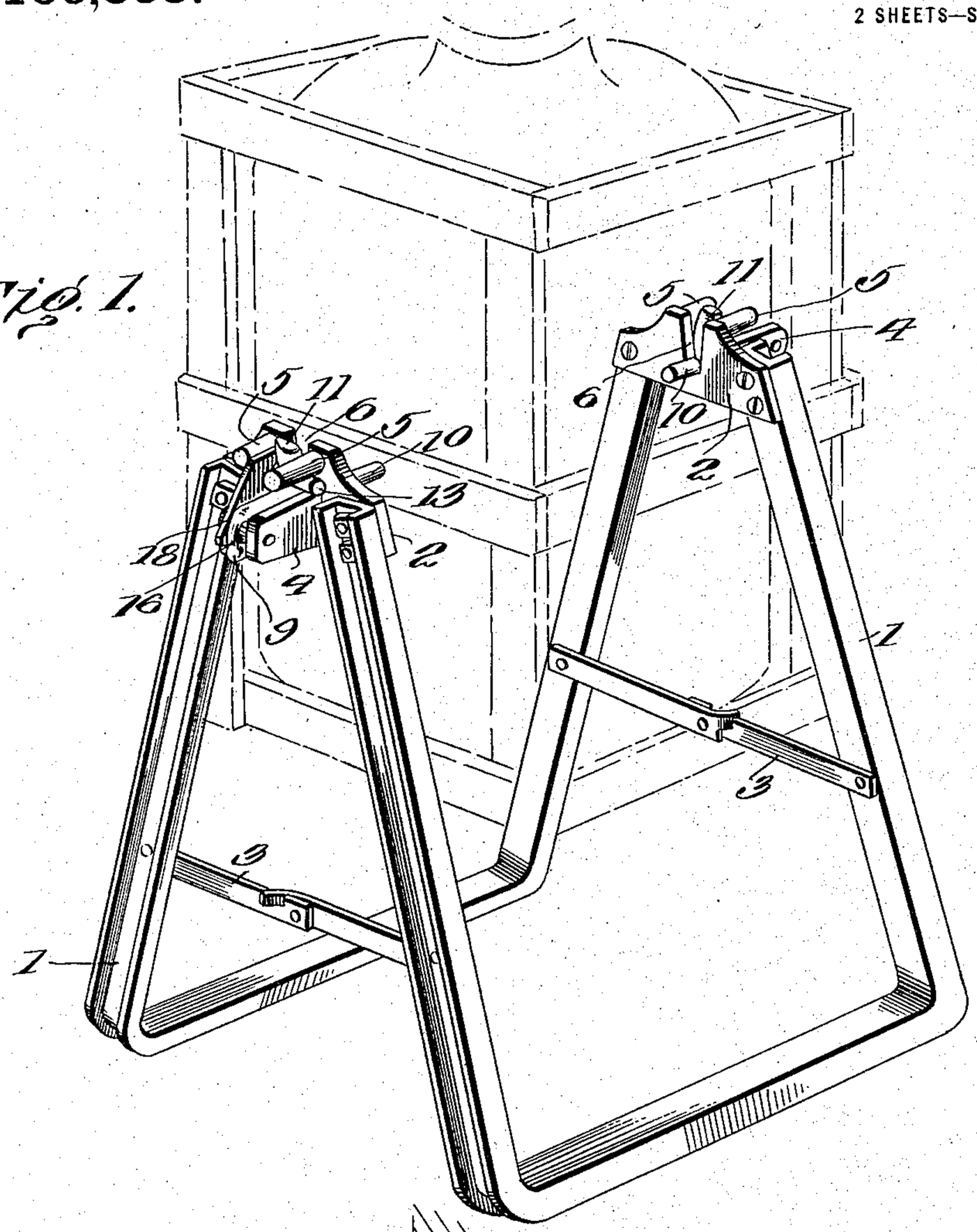
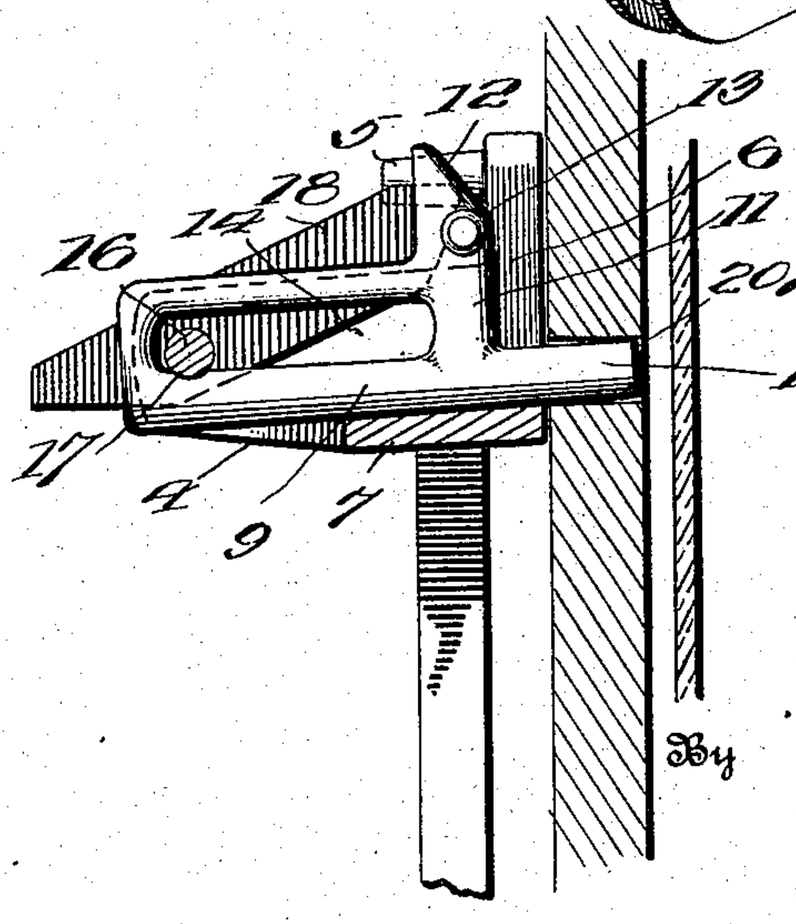


Fig. 2.



Inventor

James S. Hazard

By

Attorneys

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

J. S. HAZARD.

STAND FOR CRATED BOTTLES.

APPLICATION FILED MAR. 31, 1915.

1,166,833.

Patented Jan. 4, 1916.

2 SHEETS—SHEET 2.

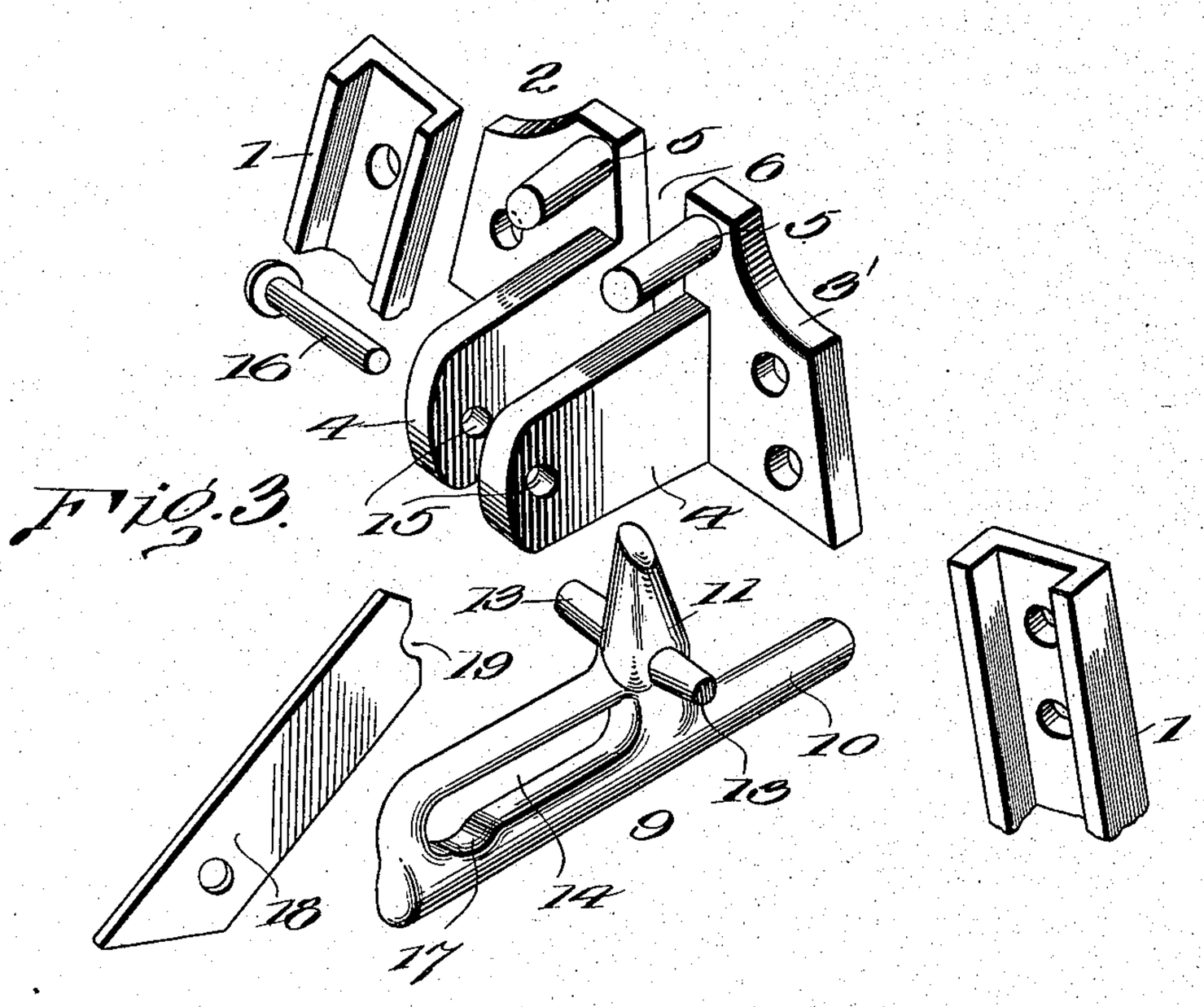


Fig. 3.

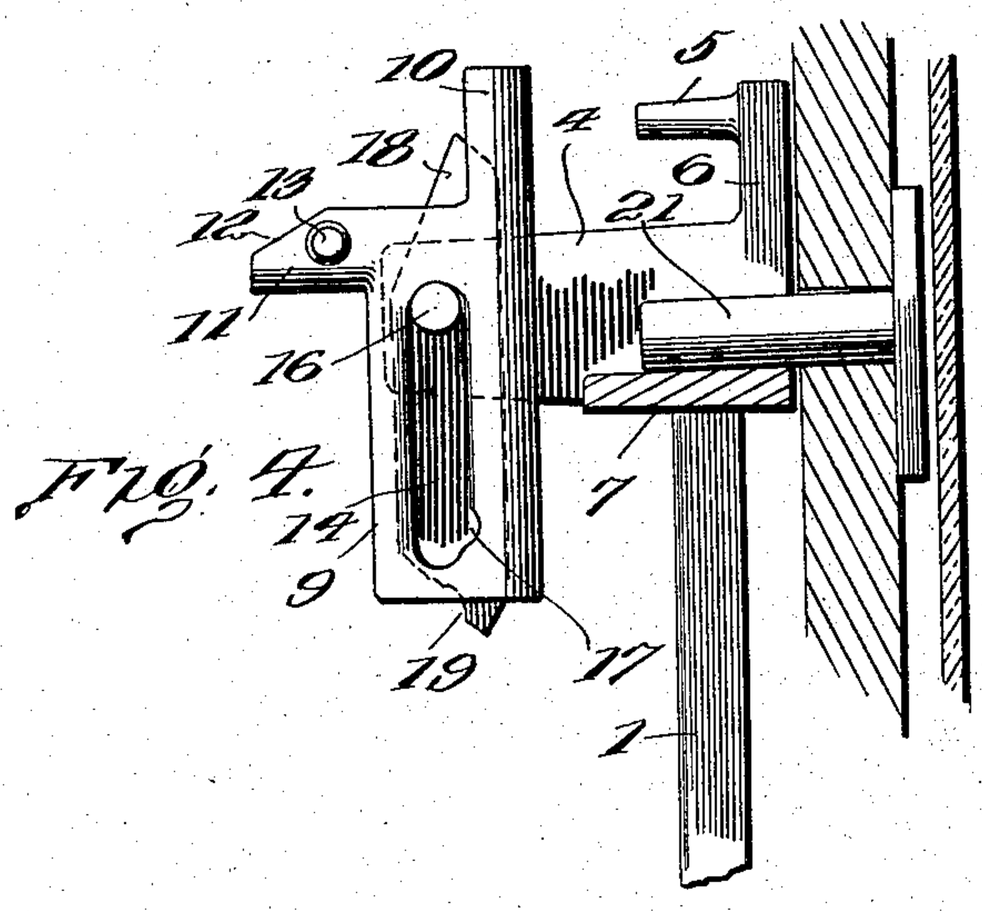


Fig. 4.

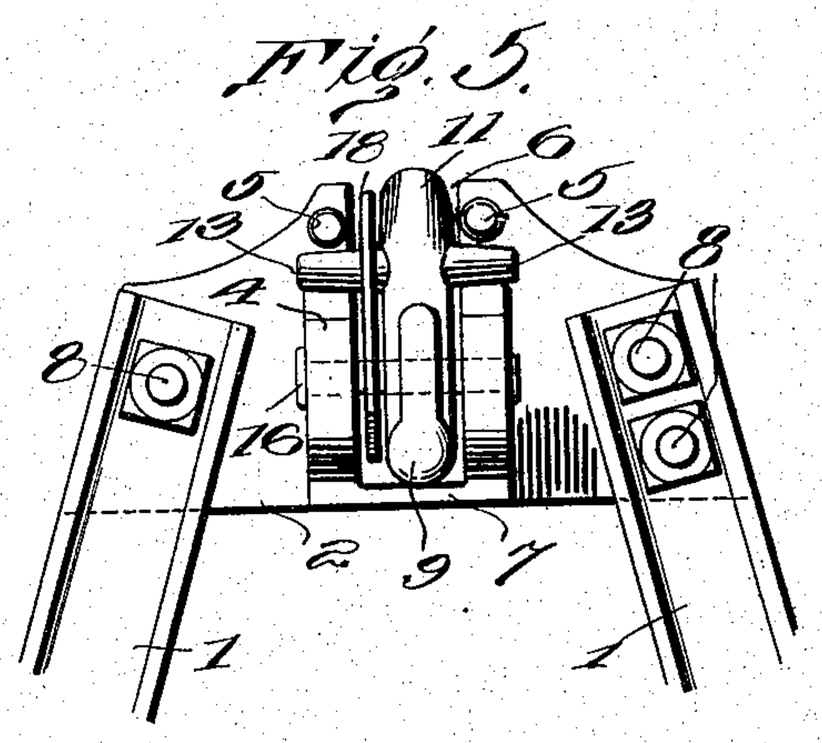


Fig. 5.

Inventor

James S. Hazard

By

Attorneys.

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES S. HAZARD, OF NEWPORT, RHODE ISLAND.

STAND FOR CRATED BOTTLES.

1,166,833. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed March 31, 1915. Serial No. 18,371.

To all whom it may concern:

Be it known that I, JAMES S. HAZARD, a citizen of the United States, residing at Newport, in the county of Newport and State of Rhode Island, have invented certain new and useful Improvements in Stands for Crated Bottles, of which the following is a specification.

This invention relates to stands for carboys, demijohns and other large crated bottles, and the object of the invention is to provide a simple, inexpensive, strong and durable stand by the use of which large crated bottles containing liquid may be supported in such position that they may be readily tilted so as to discharge all or a portion of their contents.

The crates placed around large glass bottles are now most generally provided with projecting trunnions or pins at diametrically opposite points which are intended to be engaged in suitable bearings in the upper ends of a stand or supporting frame so that the bottle may be easily tilted when it is desired to draw off a portion of the fluid contents. These projecting pins or trunnions are objectionable to a great many dealers and other persons using such bottles for the reason that they are in the way when shipping the bottles and necessitate a loss of space. I overcome this objection by the use of my device, which provides a trunnion or pivot upon the stand adapted to engage a socket in the crate, and this trunnion or pivot bolt is so mounted that it may be easily withdrawn when it is desired to support a crate having a laterally projecting trunnion or pin thereon, the frame being so constructed that it will receive and accommodate the pin or trunnion upon said crate.

One object of the invention, therefore, is to provide a device which may be efficiently used in connection with either form of crate, and a further object of the invention is to provide means to prevent premature or accidental release of the pivot bolt or trunnion when it is projected to engage a socket in the crate.

The several stated objects of the invention, and such other incidental objects as will appear from the following description are attained in mechanism of the character illustrated in the accompanying drawings, and the invention resides in certain novel features which will be particularly pointed out in the claims following the description.

In the drawings: Figure 1 is a perspective view of my improved stand or support, showing it arranged to engage a crated bottle, the crate being provided with sockets to receive the trunnions or bolts provided on the stand; Fig. 2 is a vertical sectional view, taken through the upper end of the stand, showing the bolt in engagement with a socket in the crate; Fig. 3 is a perspective view showing the several working parts disassembled but approximately in their relative positions; Fig. 4 is a view similar to Fig. 2, but showing the device arranged to support a crate having projecting trunnions; and Fig. 5 is a side view of the device, showing the parts arranged in the same manner as in Fig. 2, the crate, however, being omitted.

In carrying out my invention, I preferably employ two substantially U-shaped frames 1 which may be conveniently formed of channel-iron and have their upper ends pivoted to heads 2. The bights or cross bars of the U-shaped frames will constitute the legs of the stand, the legs being connected by toggle links or latches 3 adapted to interlock when the stand is set up for use to thereby prevent spreading of the legs and consequent collapse of the stand, as will be readily understood. As shown most clearly in Fig. 3, the heads 2 consist each of a casting comprising a vertically disposed plate 3′ having laterally extending parallel lugs or wings 4 projecting from one side, the said wings being of less height than the plates and smaller lugs or pins 5 projecting from the plates above the said wings and in spaced relation thereto. Said wings and lugs are provided adjacent the central transverse plane of the plate 3, and between the said lugs and wings the plate is divided or notched, as indicated at 6, the lower end of the notch or space 6 being bridged by a floor or web 7.

Near their ends, the plates 3 are provided with suitable perforations to receive the bolts 8 whereby the frames 1 are secured to the heads, and in the present drawings I have shown one of the frames as secured to the heads by two bolts whereby a rigid connection will be formed, while the other frame is secured to the heads by a single bolt so as to have a pivotal movement thereon. The

frame tends to stand more firmly if only one leg is pivotally mounted, but it will be understood, of course, that no departure from the invention would be involved in pivoting both legs.

Slidably mounted between the wings 4 is a pivot bolt or trunnion 9 which is constructed with a cylindrical projecting portion 10 at one end and at the inner extremity of said cylindrical projecting portion is an upstanding lug, standard or thumb piece 11, the said finger piece being beveled, as shown at 12, at its upper end so that the thumb or finger of the operator may be inserted between the latch and the crate when it is desired to withdraw the bolt from engagement with the crate. On the sides of the thumb piece 11 are lugs 13 which are adapted to ride upon the upper edges of the wings 4, and the lugs or pins 5 above the same thereby serve to prevent vertical movement of the bolt if it be attempted to move the device from place to place by lifting the crate. At the side of the thumb piece 11 remote from the cylindrical projection 10, the bolt is constructed with a longitudinal slot 14 through which, and perforations 15 in the wings 4, a retaining pin or bolt 16 is inserted to prevent the bolt being entirely released from the head of the device and also to support the same when it is turned to a vertical position, as shown in Fig. 4.

In the lower wall of the slot 14 is a recess or notch 17 which will be brought into engagement with the retaining pin or bolt 16 when the pivot pin or trunnion is engaged in the socket of a crate, and this engagement of the retaining pin and the notch serves to hold the slidable bolt or trunnion in its operative position. To further guard against premature release or withdrawal of the pivot bolt or trunnion, I provide the latch or keeper 18 which is pivotally mounted upon the retaining pin 16 and is arranged between the side of the slidable pin or bolt and the adjacent wing 4 of the head, the end of the latch or keeper more remote from its pivotal point being provided with a notch or recess 19 adapted to engage one of the lateral lugs 13, as will be readily understood upon reference to Figs. 1, 2 and 5.

It is thought the use and advantages of my device will be readily understood from the foregoing description, taken in connection with the accompanying drawings.

When the crate to be supported is provided with sockets in its sides, as shown at 20 in Fig. 2, the device is arranged as illustrated in said figure. The pivot bolt or trunnion is moved forward between the wings 4 so as to rest on the web or floor 7 and project through the recess or notch 6 into engagement with the adjacent socket. The latch 18 is then swung upwardly so that the recess or notch 19 will engage the adjacent pin or projection 13 and thereby hold the bolt or trunnion in its projected position. Both sides of the device being thus arranged, the crate will be supported so that it may be easily tilted when it is desired to decant the contents. When the bottle is emptied, the latch 18 is swung to the position shown in Fig. 4, and the bolt or trunnion 9 is then slid outwardly and permitted to hang in the depending position by the engagement of the inner or upper end of the slot 14 with the retaining pin 16, as shown in Fig. 4. The crated bottle will then be unsupported and may be readily withdrawn.

If it be desired to support a crate provided with trunnions or pivot pins, as shown at 21 in Fig. 4, such crate is simply lifted into position with the said trunnions or pins over the recesses or notches 6 so that a slight downward movement will bring the trunnions into position upon the webs or floor 7 by which they will be supported and upon which they will be rocked.

It will thus be readily seen that I have provided a stand which may be used to support either style of crate and which may be quickly adjusted to conform to existing conditions. When the bolt and latch mounted upon the head of the device are not in use, as indicated in Fig. 4, they will be out of the way of the pivotal support of the crate but, at the same time, will be held against loss. When the socketed crate, illustrated in Figs. 1 and 2, is supported in the stand, the weight of the crate upon the projecting end of the pivot bolt or trunnion will throw the outer end of the same positively into engagement with the retaining pin 16 which will thereby aid the latch 18 in preventing outward movement of the bolt or trunnion and also act with the upper edges of the wings 4 and the lugs or projections 13 to prevent the bolt or trunnion giving way under the weight of the crate. The bolt and its latch may be readily slid into or out of its operative position and the parts may be very quickly and cheaply produced and easily assembled. As the latch and the bolt are independently mounted although they are arranged close together and coöperate, it will not be necessary to supply an entirely new device should either the latch or the bolt be broken or so badly damaged as to become useless.

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

1. A device for the purpose set forth comprising a supporting frame, and heads secured to the upper end of the frame at the opposite sides thereof, said heads being provided with vertical notches having open upper ends and horizontally disposed webs bridging the lower ends of said notches.

2. A device for the purpose set forth comprising a supporting frame, heads secured

to the upper end of the frame at the opposite sides of the same and provided with notches having open upper ends, and webs closing the lower ends of said notches and pivot bolts loosely mounted in the heads and adapted to rest upon said webs and project inwardly beyond the same to engage a crate.

3. In a device for the purpose described, the combination of a supporting frame, heads secured to the frame at the opposite sides of the same and having recesses or notches provided with open upper ends and webs bridging the lower ends of said notches, and pivot bolts slidably mounted in the heads and adapted to rest upon said webs.

4. A device for the purpose set forth comprising a frame, heads secured to the frame at the upper end of the same and at the opposite sides thereof, said heads being provided with pivot receiving openings, and pivot bolts slidably mounted in the heads to project through the said pivot receiving openings and pivotally mounted in the heads to depend therefrom when withdrawn from said openings.

5. In a device for the purpose set forth, the combination of a supporting frame, heads secured to the sides of the said frame and having pivot-receiving openings, wings projecting laterally outward from the heads, and spaced lugs above said wings, pivot bolts slidably and pivotally mounted between the said wings and adapted to extend through the pivot-receiving opening and provided with lateral projections to engage between the said wings and the said lugs, and means for holding the said pivot bolts projected through the pivot receiving openings.

6. The combination of a supporting frame, heads secured to the opposite sides of the same and provided with pivot-receiving openings, wings on the outer sides of the heads at opposite sides of said openings, and retaining lugs at opposite sides of said openings above said wings, pivot bolts slidably mounted between the wings and adapted to project through the pivot-receiving openings and provided with pins arranged to ride upon the upper edges of the wings and engage beneath the said lugs, and latches mounted adjacent said pivot bolts and adapted to engage the pins thereon to hold the pivot bolts projected through the pivot-receiving openings.

7. The combination of a supporting frame, heads secured to the frame and provided with pivot receiving openings and with outwardly extending wings at opposite sides of said openings, a pivot bolt mounted between the said wings and having a cylindrical pivot projection at one end adapted to extend through the pivot receiving opening and provided at its opposite end with a longitudinal slot, a retaining pin inserted through the wings and said slot, and means for holding the pivot bolt projected through the pivot receiving opening.

8. The combination of a supporting stand, heads secured thereto and provided with pivot receiving openings, pivot bolts mounted in said heads and adapted to project through the said pivot receiving openings, said bolts being provided with longitudinal slots having recesses in their lower walls at their outer ends, retaining pins fitted in the heads and extending through said slots and adapted to be engaged by said recesses, and means for holding the said pivot bolts projected through the pivot receiving openings.

9. The combination of a supporting stand, heads secured to the stand and provided with pivot receiving openings, pivot bolts mounted in the heads and adapted to extend through the pivot receiving openings, thumb pieces formed on the bolts and having beveled upper ends to facilitate withdrawal of the bolts from the pivot receiving openings, and latches mounted on the heads and engaging the bolts to hold them projected through the pivot receiving openings.

10. A device for the purpose set forth comprising a frame, heads secured to the frame and provided with pivot-receiving openings, pivot bolts mounted on the heads and adapted to project through said openings, means on the heads to prevent withdrawal of the bolts when they are projected through said openings, and means to retain the bolts out of engagement with the said openings when they are withdrawn therefrom.

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

JAMES S. HAZARD. [L. S.]

Witnesses:
DUNCAN A. HAZARD,
F. M. ALLAN.