

(No Model.)

2 Sheets—Sheet 1.

J. KASS.
BEER RACKING TROUGH.

No. 476,652.

Patented June 7, 1892.

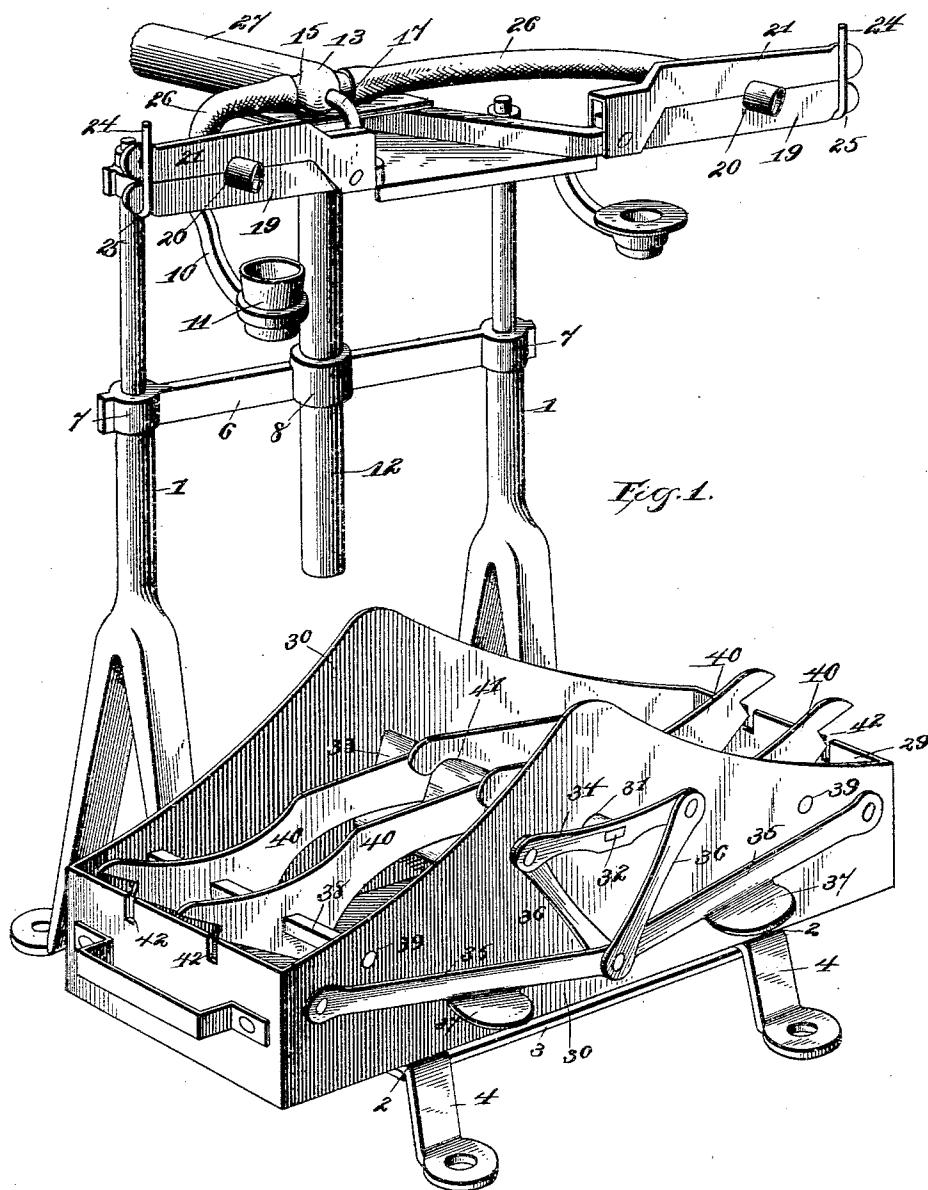


Fig. 1.

Witnesses

E. W. Wurdeman
John B. Rogers

Inventor

By *his* Attorneys,

John Kass
C. A. Snow & Co.

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Fig. 3.

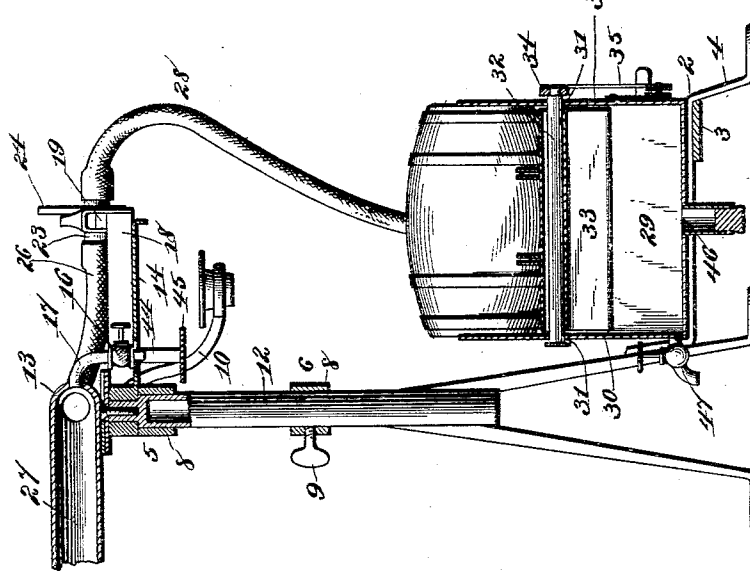
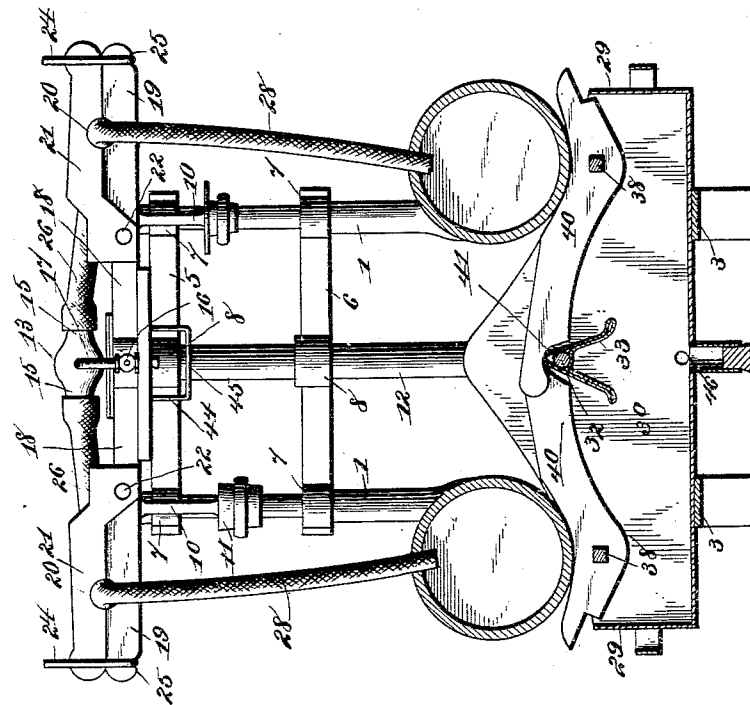


Fig. 2.



Witnesses

E. W. Gorman
Geo. H. Diggers

Inventor

By *his* Attorneys,

John Kass

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JOHN KASS, OF MENOMINEE, MICHIGAN.

BEER-RACKING TROUGH.

SPECIFICATION forming part of Letters Patent No. 476,652, dated June 7, 1892.

Application filed February 16, 1892. Serial No. 421,710. (No model.)

To all whom it may concern:

Be it known that I, JOHN KASS, a citizen of the United States, residing at Menominee, in the county of Menominee and State of Michigan, have invented a new and useful Beer-Racking Trough, of which the following is a specification.

My invention relates to beer-racking troughs for barreling beer as the same is taken from reservoirs or vats; and the objects in view are to provide an apparatus of cheap and simple construction adapted to support barrels or kegs during the operation of filling the same, to so construct the apparatus as to permit of observation of the beer during the operation and for conveniently discharging the barrel at the end of each filling and bunging, to facilitate the changing of the position of the pipe with relation to the barrel, and to prevent waste of the beer or contact of the same with the person of the operator during the operation.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective view of an apparatus constructed in accordance with my invention. Fig. 2 is a transverse section through the beer-receptacle. Fig. 3 is a longitudinal section.

Like numerals of reference indicate like parts in all the figures of the drawings.

In constructing the apparatus I employ a frame-work, and the same consists of a pair of vertical posts 1, bifurcated at their lower ends to form feet, which are perforated and bolted to the floor. To the front feet horizontal rests 2 are secured, and the same are connected by a transverse bar 3, in front of which the rests depend to form feet 4, likewise perforated and bolted to the floor. The upper portions of the standards or posts 1 are cylindrical and are connected by an upper cross-bar 5 and a lower cross-bar 6, each of which terminates at its ends in eyes 7 for receiving the standards or posts, and is provided at its center with an eye 8, the lower eye having a binding-screw 9. Above the upper cross-bar the posts have swiveled thereon arms 10, one being provided with a basket

11 for the reception of corks or bungs, and the other being adapted to support a lamp. In the central eyes 8 a vertical shaft 12 is mounted for reciprocation and rotation and may be adjusted in any of its positions through the medium of the aforesaid set-screw 9. A triangular tray or table 14 is loosely secured to the upper end of the shaft 12, and above the same there is rigidly secured a T-shaped coupling-pipe 13, having lateral branches 15, extending to opposite sides of the table 14, and provided between said branches with a faucet 16, located directly over an opening formed in the table and preferably supported by a glass tube 17, by which the beer passing through the faucet may be inspected. The opposite edges of the table 14 are provided with flanges 18, which diverge toward the front end of the table, and after reaching that point are laterally extended to form oppositely-disposed arms or bars 19, the same being provided at their upper edges and at their centers with semicircular recesses 20. Clamping-bars 21 are pivoted, as at 22, to the end of each arm and are likewise provided at their inner edges with semicircular recesses 20, which combine with those of the arms 19 to form circular openings. In these openings tubular metal couplings 23 are located, the same being clamped in position by U-shaped clamps 24, pivoted to the outer extremities of the clamping-arms 21 and swung under the outer extremities of the arms 19, which latter are beveled at their ends, as at 25, to facilitate such clamping. The rear ends of the tubular couplings are connected to the branch pipes 15 by rubber or other flexible pipe-sections 26, so that the beer coming through the main pipe 27, connected with the coupling 13, is conducted by the flexible sections to the tubular couplings and from them to flexible pipes 28, connected to the front ends of the tubular couplings and adapted at their lower ends to be entered into the bung-holes of barrels supported in the manner hereinafter described.

Mounted upon the horizontal rests 2 of the frame is an oblong tank, comprising a bottom, transverse end walls 29, and side walls 30, which are widest at their centers and have their upper edges declining from said point

and provided thereat with opposite bearings 31, in which is mounted a rock-shaft 32. This rock-shaft is provided between its bearings with a triangular-shaped cam 33 and has one
 5 end extended beyond one of its bearings and a rock-arm 34 mounted thereon. A pair of levers 35 are pivoted at their outer ends in the side wall of the tank at opposite sides of the rock-arm 34, overlap each other at their
 10 inner ends, and are connected to the extremities of the rock-arm 34 by a pair of links 36. These levers are also provided with foot-rests 37. The levers 35 may be depressed by the foot of the operator so as to cause an oscillation in either direction of the rock-shaft, in
 15 accordance with the lever depressed, and thus the rock-shaft and its cam swung to either side for a purpose hereinafter apparent.

At opposite sides of the rock-shaft 32 transverse rock-shafts 38 are mounted in bearings 39, formed in the opposite side walls of the tank, and upon these rock-shafts pairs of barrel-supporting levers or rests 40 are mounted. The inner ends of the rest-levers 40 are
 20 notched on their under sides, as at 41, and their extremities are slightly rounded, so as to readily take over and be supported by the apex of the triangular-shaped cam 33. The upper edges of the rest-levers 40 are rounded or cut away, so that each pair serves as a barrel-support. The outer extremities of the levers 40 decline, and when the levers are depressed at their outer ends take into slots 42,
 25 formed in the edges of the tank and form inclined ways over which the barrels may readily roll and be delivered from the machine.

In operation the empty barrels are placed upon the rest-levers directly over their rock-shafts 38, and the flexible pipes have their
 40 lower extremities introduced into the bung-holes of the barrels. The beer is then turned on and flows from the main pipe through the branch pipes, the couplings, and through the discharge-pipes to the barrels, the swinging
 45 head at the upper end of the machine being moved laterally to either side, so as to bring the discharge-pipes into position for ready introduction into the bung-holes of the barrels. As a barrel is filled the discharge-pipes
 50 are removed therefrom and the bungs inserted, after which the operator depresses the levers 35, thus rocking the rock shaft 32 and its triangular cam in first one direction and then the other and causing it to elevate the
 55 inner end of first one pair of rest-levers and then the other, so as to discharge the barrels at opposite sides of the machine. A glass-rest 45 is supported by straps 44 under the opening in the table 14, and upon this the
 60 operator may set a beer-glass or other receptacle and draw off some of the beer for testing purposes.

The tank is provided with a drainage-port or waste-opening 46, which is normally closed,
 65 but may be opened for the purpose of washing the tank, and is also provided with a faucet 47, by which the contents of the tank may

be drawn off as the same accumulate from the overflowing barrels.

Having described my invention, what I 70 claim is—

1. In an apparatus of the class described, the combination, with a barrel-support, of a frame at one side of the same, an adjustable shaft mounted in the frame, a coupling
 75 mounted on the shaft and provided with branches, opposite arms diverging from the shaft and provided with half-notches, clamping levers pivoted on the arms and provided with corresponding half-notches, means for
 80 clamping the levers, and pipes leading from the branches, extending through the opposite half-notches and adapted at their lower ends for introduction into the bung-holes of the barrels, substantially as specified. 85

2. In an apparatus of the class described, the combination, with a barrel-support, a frame in rear of the same, and an adjustable shaft mounted in the frame, of a coupling
 90 mounted on the shaft, a clamping-arm extending from the shaft, and a discharge-pipe connected with the coupling, passed through the clamping-arm and adapted at its lower end for connection with the bung-hole of the barrel, substantially as specified. 95

3. In an apparatus of the class described, the combination, with a barrel-support, of a rear frame-work, a vertical shaft mounted in the frame-work, a T-shaped coupling swiveled
 100 on the upper end of the shaft, a table swiveled on the shaft below the coupling and provided with oppositely-diverging arms having recesses in their upper edges, clamping-bars pivoted on the arms and having corresponding
 105 recesses, means for locking the arms and bars together, and flexible pipes leading from the branches of the coupling between the arms and bars and adapted at their lower ends for connection with the barrel, substantially as specified. 110

4. In an apparatus of the class described, the combination, with a barrel-support, of posts rising from the rear thereof, cross-bars connecting the posts and provided with central eyes, a vertical shaft mounted in the eyes,
 115 means for adjusting the same in said eyes, a T-shaped coupling swiveled on the upper end of the shaft and provided with a transparent sight-tube terminating in a faucet, a perforated table swiveled on the shaft below the
 120 coupling, a glass-support under the table, opposite arms diverging from the table, clamping-bars pivoted on the arms, metal coupling-tubes located between the arms and bars, flexible branch pipes connecting the branch pipes
 125 and couplings, swinging U-shaped clamps pivoted at their upper ends to the outer ends of the clamping-bars and adapted to be swung under the beveled ends of the bars, and discharge-pipes connected to the front ends of
 130 the coupling-tubes and adapted at their lower ends for connection with the barrels, substantially as specified.

5. In an apparatus of the class described,

the combination, with the discharge-pipe supports, of a tank, a rock-shaft passing through the tank at each side of the center thereof and provided with barrel rests or levers, a central rock-shaft for supporting the inner ends of the levers, a triangular-shaped cam depending from the center of the rock-shaft, and means for oscillating said triangular-shaped cam in either direction, substantially as specified.

6. In an apparatus of the class described, the combination, with discharge-pipes and their supports, of a tank, a central rock-shaft journaled therein, a rock-arm mounted on the outer end of the shaft, links depending from the rock-arm, a pair of foot-levers pivoted at their outer ends to the tank and at their inner ends to the links and provided with foot-plates, rock-shafts journaled in the side walls of the tank at opposite sides of the central rock-shaft, barrel-supporting levers mounted upon each of the outer rock-shafts, having their upper edges curved and their outer extremities beveled and their inner under edges recessed to take over the central rock-shaft, and a triangular cam depending from said central rock-shaft for raising and lowering

either pair of barrel-supporting levers, substantially as specified.

7. In an apparatus of the class described, the combination, with the filling mechanism, of a tank, a rock-shaft journaled in the tank, a pair of levers, forming a barrel-support, mounted on the rock-shaft, and means for raising the levers to an inclined position for discharging the barrel, substantially as specified.

8. In an apparatus of the class described, the combination, with the discharge-pipe-supporting rack or frame comprising a pair of vertical posts, of horizontal rest-bars, projecting therefrom and terminating at their front ends in feet, a tank mounted on the rest-bars, opposite rock-shafts mounted in the tank, rest-levers pivoted on the rock-shafts, and means for raising and lowering the same, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN KASS.

Witnesses:

B. S. WAITE,
Mrs. A. PHILIPPS.