

No. 708,942.

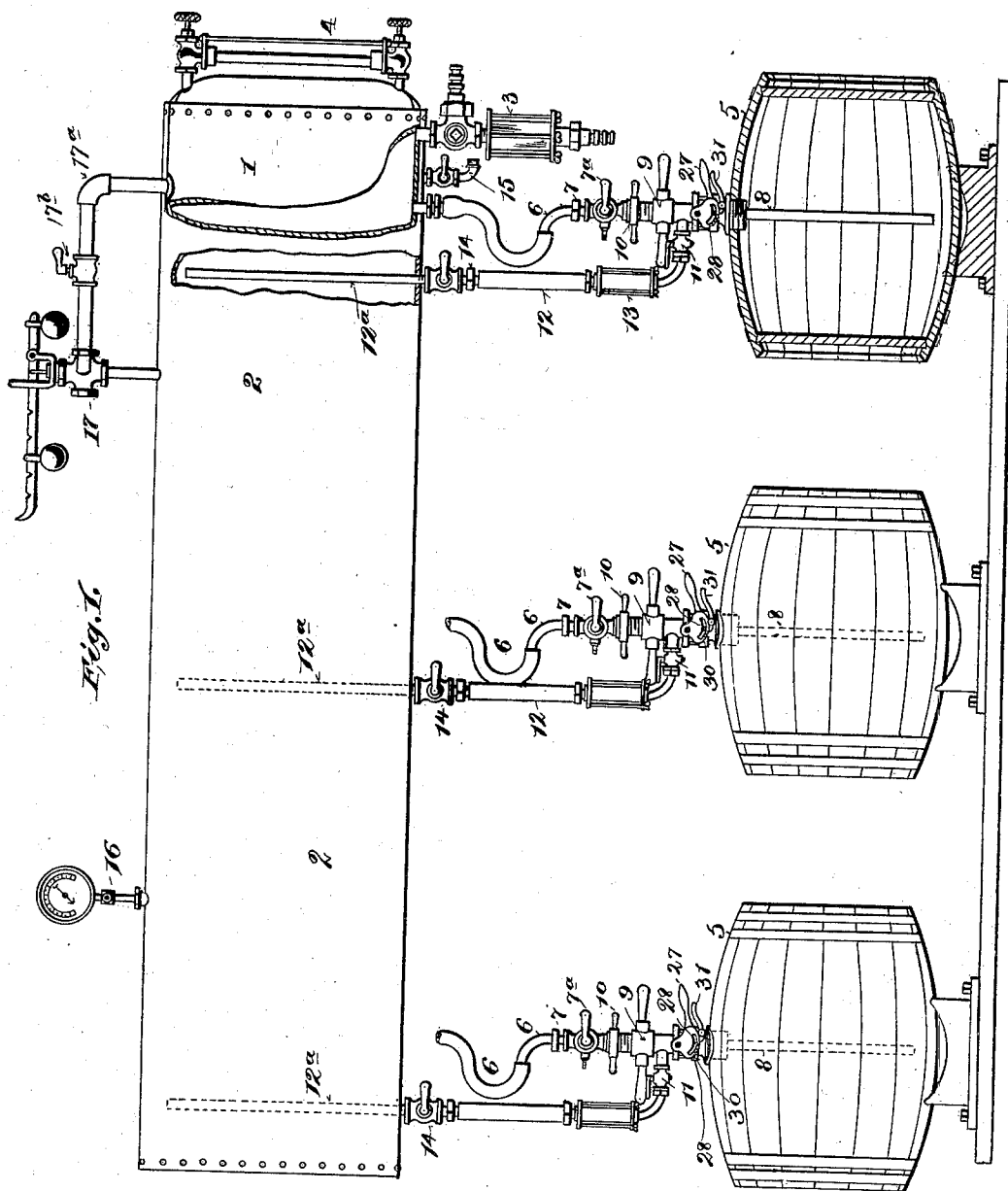
Patented Sept. 9, 1902.

H. TORCHIANI.
APPARATUS FOR RACKING-OFF BEER.

(Application filed Nov. 9, 1901.)

(No Model.)

2 Sheets—Sheet 1.



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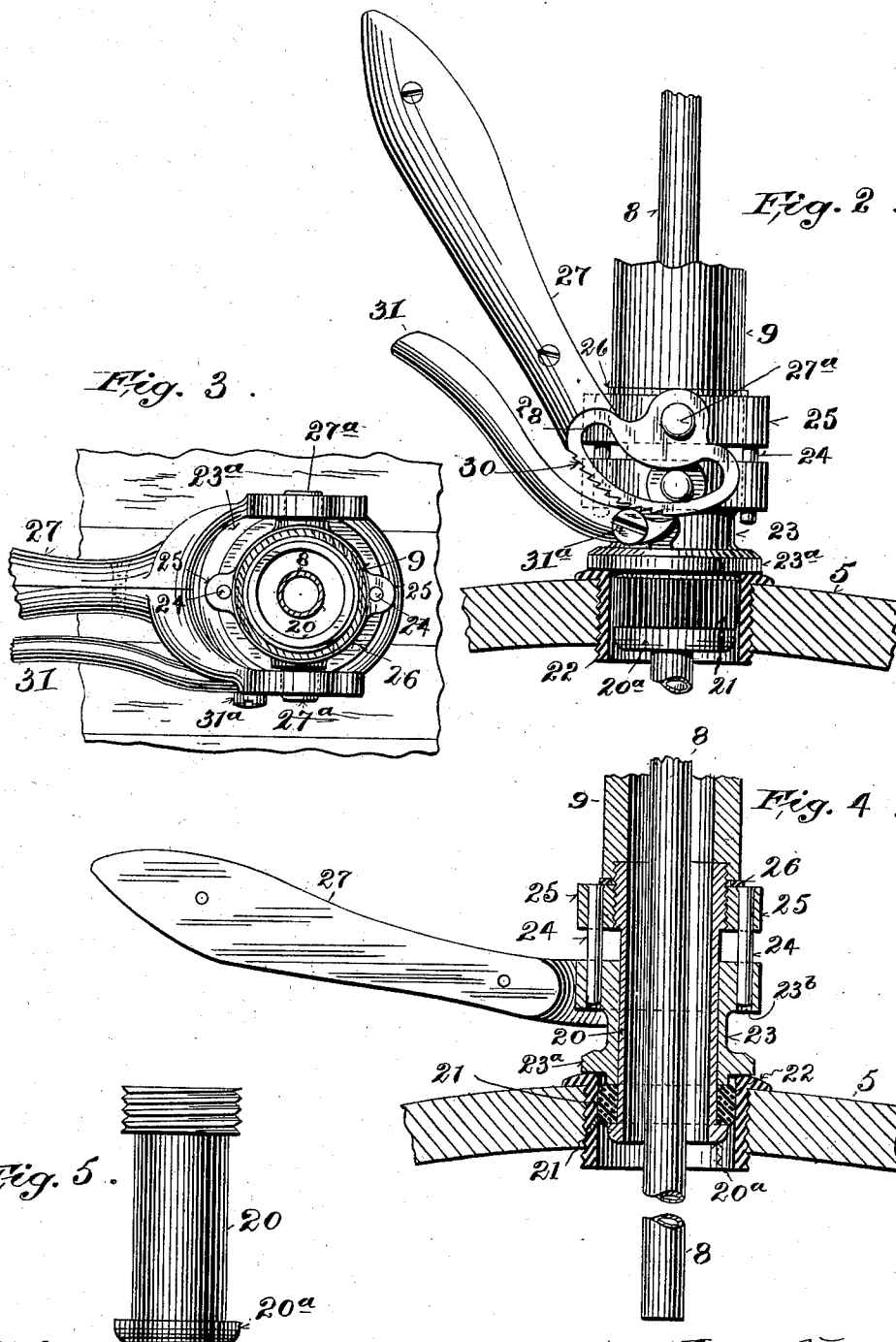
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UNITED STATES PATENT OFFICE.

HARRY TORCHIANI, OF BROOKLYN, NEW YORK.

APPARATUS FOR RACKING OFF BEER.

SPECIFICATION forming part of Letters Patent No. 708,942, dated September 9, 1902.

Application filed November 9, 1901. Serial No. 81,653. (No model.)

To all whom it may concern:

Be it known that I, HARRY TORCHIANI, a citizen of the United States, and a resident of New York city, borough of Brooklyn, State of New York, have invented certain new and useful Improvements in Apparatus for Racking Off Beer, of which the following is a specification.

My invention relates to apparatus for filling barrels, kegs, or the like with fermented liquids, such as beer; and one of the objects of the invention is to collect the foam that arises in a barrel or keg being charged and prevent it from passing into another barrel or keg that is being charged; and another object of the invention is to provide improved means for firmly connecting the racking-off faucet with a barrel or keg and for readily disconnecting it therefrom; and to these ends my invention comprises the novel details of improvement that will be more fully hereinafter set forth, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part hereof, wherein—

Figure 1 is a partly-broken side elevation of an apparatus embodying my improvements. Fig. 2 is an enlarged side elevation, partly broken, of the devices for connecting the charging or racking-off faucet with a barrel or keg. Fig. 3 is a plan view thereof. Fig. 4 is a vertical section through Fig. 2, and Fig. 5 is a detail of one of the tubes shown in Figs. 2, 3, and 4.

In the accompanying drawings similar numerals of reference indicate corresponding parts in the several views.

In the arrangement I have shown for collecting the foam that arises in barrels or kegs that are being charged I provide a pair of receptacles or cylinders 1 2, which are preferably placed side by side, as shown at Fig. 1, wherein the receptacle 2, to which the cock 15 is attached, is shown as of a larger diameter than the receptacle 1, arranged directly in front thereof, one of which receptacles, as 1, is to be connected with the beer or liquid supply, and the receptacle 2 is designed to receive the foam, &c., from the barrels or kegs.

3 indicates a sight-gage connected with receptacle 1 and to be connected with the source of supply in well-known manner, and 4 is a

gage also connected with receptacle 1 for indicating the height of the liquid therein.

From the receptacle 1 extends a pipe or hose 6 to be connected with the barrel or keg 5 to be filled, and in the example shown the pipe 6 connects with a casing of the racking-off faucet 7, from which depends a pipe 8, and surrounding the pipe 8 is a casing 9, to which the pipe 8 is firmly connected, as by a bushing or clamping nut 10, and from the casing 9 extends a valve-controlled by-pass 11. The bore of the casing 9 is larger than the pipe 8, so that foam, &c., from the barrel or keg 5 can pass along the outside of said pipe to the by-pass 11.

The parts 6, 7, 8, 9, 10, and 11 may be constructed substantially as shown in either of the patents issued to me on May 8, 1894, No. 519,513, or on April 14, 1896, No. 558,438, to which reference is made for a more detailed description of said parts.

The by-pass 11 is connected with receptacle 2 by a hose or pipe or connection 12, preferably having a sight-glass 13 and a valve 14, the pipe 12 being shown connected with the bottom of said receptacle. Within the receptacle 2 is a pipe 12^a, connected with hose 12 and projecting upwardly within said receptacle to a point near the top of the same. Receptacle 2 is shown provided with a draw-off cock 15, a pressure-gage 16, and a suitable safety-valve 17, which may also be connected with receptacle 1 by a pipe 17^a, having a cock 17^b. If desired, a counter-pressure may be maintained within either receptacle 1 or 2 or both simultaneously by connecting the safety-valve 17 with an air-compressor or the like or otherwise.

As shown in the drawings, the receptacles 1 2 are adapted to have several of the charging devices connected with the same for the purpose of charging several barrels or kegs simultaneously, and, as indicated in the drawings, said devices are all substantially alike. One or more barrels or kegs may be connected with the receptacles 1 2 by the racking-off devices described, the pipes 8 extending down into said barrels, and the liquid is allowed to flow into receptacle 1 to a suitable height, which is preferably below the top of the pipe 12^a. One or more valves 7^a are then opened,

and as the liquid or beer flows into the barrel or barrels the air and foam arising therein will pass up through the casing 9 and out through the by-pass valve 11 and through pipes 12 and 12^a into receptacle 2, and as the pipes 12^a in said receptacle have their ends near the top of the same the foam will collect in said receptacle, and the foam from one barrel or keg will thus be prevented from flowing over into the adjacent barrel or keg connected with the same receptacle. When required, the foam collected in the receptacle 2 can be drawn off through the cock 15. By maintaining the level of the beer in receptacle 1 below the upper ends of the pipes 12^a it will be seen that fresh beer cannot be lost by passing through the pipes 12^a into receptacle 2.

In my patents above named packings or bushings are shown for making a tight fitting between the casings of the racking-off devices and the bung-hole of the barrel or keg; but in the arrangements therein shown there is danger of the casing becoming disconnected from the barrels or kegs, and thereby spilling the liquid. In my present improvements I have provided improved means for firmly and quickly connecting the casings 9 with the bung-hole of the barrel or keg 5, and these devices are more clearly shown in Figs. 2, 3, 4, and 5. For this purpose I provide a tube 20, which has at or near its lower end a flange or extension 20^a, and 21 is a gasket or washer surrounding said tube and lying above the flange 20^a. The tube 20 and its gasket 21 are adapted to enter the bung-hole of the barrel or keg, which is preferably provided with a bushing 22, secured thereto. The upper end of the tube 20 is shown secured to the lower end of the casing 9 by screw-threads, the tube 20 thus forming an extension of the casing 9 below the by-pass 11 and providing a passage around the pipe 8. Upon the tube or extension 20 is mounted a sliding sleeve 23, which is adapted to bear upon the gasket 21 to act with the flange 20^a for expanding the gasket to tightly fit in the bore of the bushing 22. The sleeve 23 has a flange 23^a to rest upon the bushing 22 or the barrel, and to keep said sleeve from rotating the same may be provided with guides, consisting of one or more apertures 23^b to receive pins 24, carried by the tube 20, the pins being shown secured to a ring 25, attached to said tube. A washer 26 may be interposed between the casing 9 and the ring 25 to make a tight joint. To cause the tube 20 and sleeve 23 to expand the gasket 21, I have shown a lever or handle 27, pivotally supported by tube 20, as by pivots 27^a, secured to the ring 25 and receiving the forked arms of the lever, and the handle or lever 27 is shown provided with a cam or a cam-groove 28, which receives a pin or stud 29 from sleeve 23, whereby as the handle or lever 27 is operated the parts 20 and 23 will be moved relatively to each other to expand or release the gasket or

washer 21. To hold the gasket 21 under expansion, I provide the handle 27 upon the periphery of its pivoted end with a rack 30 and a pawl or dog 31, pivotally supported by the sleeve 23, as at 31^a, adapted to engage said rack 30.

In using the improvement just described the pipe 8 is inserted into the barrel or keg, and the tube 20, sleeve 23, and gasket or washer 21 are pushed into the bushing 22, so that the flange 23^a rests upon the same, and then the lever or handle 27 is depressed, whereupon its cam-groove 28, acting with the pivot 27^a while the flange 23^a is held down upon bushing 22 will cause tube or extension 20 to rise and expand the gasket or washer 21 into firm contact with the bushing 22, and the dog 31 may then hold the parts in such position. A firm connection between the racking-off faucet and the barrel or keg is thus made and leakage is prevented, and by merely lifting the dog from engagement with the teeth 30 the pressure on the gasket 21 will be relieved and the devices can be removed from bushing 22.

Having now described my invention, what I claim is—

1. The combination of a racking-off faucet, a flanged tube connected therewith, a gasket or washer surrounding said tube, a sliding sleeve mounted on said tube and provided with a flange to engage a bushing and adapted to act on said gasket or washer, a ring connected with said tube, a guide interposed between said tube and sleeve, a handle or lever pivotally carried by said ring and having a cam-groove, a projection from said sleeve engaging said groove, and means for locking the handle or lever in the operative position, substantially as described.

2. An apparatus for the purpose specified comprising a tube adapted to be connected to a racking-off faucet provided at one end with a flange, a gasket disposed upon said tube adjacent to its flanged end, a sleeve slidably arranged upon said tube and provided with a stud and a flange adapted to engage a bushing, a ring fixed upon the upper end of said tube above said slidable sleeve, means carried by said ring and engaging said slidable sleeve whereby to hold the same against rotary movement, a lever pivotally mounted upon said ring, a cam-groove arranged in the pivoted end of said lever and engaging the stud on said slidable sleeve, a rack, and a pawl adapted to engage said rack whereby to lock said lever to its adjusted position and hold the gasket expanded within a bushing, substantially as specified.

3. An apparatus for the purpose specified comprising a tube adapted to be connected to a racking-off faucet provided at its lower end with a flange, a resilient gasket disposed upon said tube adjacent to its lower end, a slidable sleeve disposed upon said tube above said gasket and provided at its upper end with vertical apertures and an outwardly-project-

ing stud, and at its lower end with a flange adapted to engage a bushing, a ring fixed upon the upper end of said tube above said slidable sleeve, pins depending from said ring
5 and extending into the vertical apertures in said slidable sleeve, a lever pivotally mounted upon said ring, a cam-groove arranged eccentrically in the pivoted end of said lever and engaging the outwardly-projecting stud on
10 said slidable sleeve, a segmental rack ar-

ranged upon the periphery of the pivoted end of said lever, and a pawl pivoted on said slidable sleeve adapted to engage said segmental rack whereby to hold said lever to its adjusted position and the gasket expanded within a
15 bushing, substantially as specified.

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