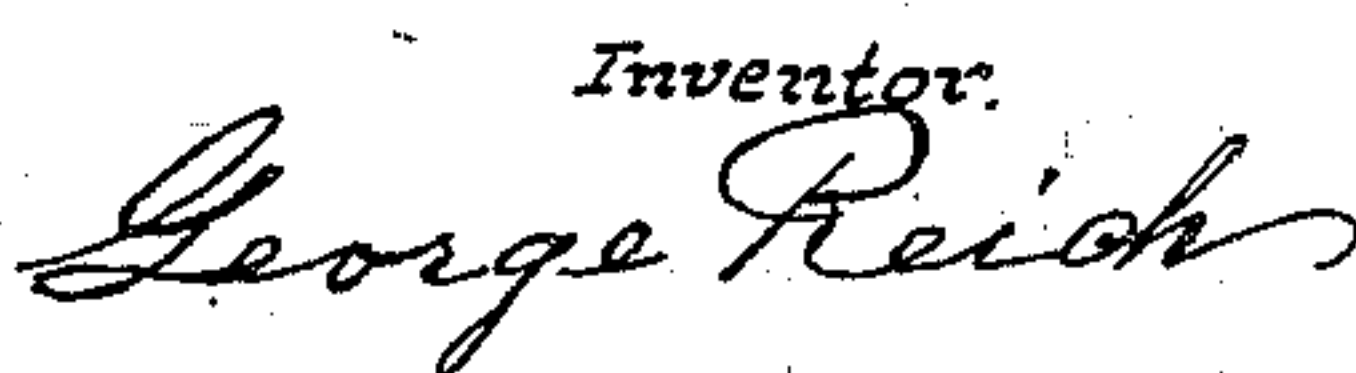


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UNITED STATES PATENT OFFICE.

GEORGE REICH, OF AMSTERDAM, NEW YORK.

LIQUID-CONVEYER.

SPECIFICATION forming part of Letters Patent No. 556,025, dated March 10, 1896.

Application filed September 14, 1895. Serial No. 562,537. (No model.)

To all whom it may concern:

Be it known that I, GEORGE REICH, a citizen of the United States, residing at Amsterdam, in the county of Montgomery and State of New York, have invented certain new and useful Improvements in Liquid-Conveyers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, Figure 1 is a side elevation of the track and carrier. Fig. 2 is a side view of carrier. Fig. 3 is a transverse section at line 1 in Fig. 2. Fig. 4 is an enlarged vertical section at line 2 in Fig. 3.

The object of my invention is to automatically convey liquids in open vessels or glasses from one point to another in a room or store without danger of spilling; and it consists in means for elevating carriers to one or more inclined tracks and discharging said carriers from the elevating device upon a track extending from one part of a room or store to another; also, in means for gradually retarding the velocity and eventually arresting the momentum of the carriers in the vicinity of the terminus of the track; also, in means for preventing lateral sway of the frame of carriers while moving on the track.

Referring to the drawings, in Fig. 1 C is the ceiling of a room. D are hangers secured to the ceiling C. A is an inclined rail or track connecting by means of a hinge H at each extremity with a curved section of bar or rail similar in form and dimensions to said rail A, but curved with concavity of curvature upward, the whole, when curved sections A' and A² are elevated, forming one continuous track upon which a movable carriage B is adapted to move. Said rail A is supported at suitable intervals by brackets or hangers D.

A series of springs s s, secured to the sides of terminal-section rail A², project therefrom and are adapted to impinge against friction or steadying rollers r r attached to the carriage-frame b b', and more clearly shown in enlarged vertical section, Fig. 4.

Only one line of track A is shown in Fig. 1, the elevated portion or end of which is indicated as suspended at a point over a counter in a room and leading downward thence to the farther extremity of an adjoining room. A second line of rail A is, as shown, led through the rooms, inclining downward toward the counter, and is adapted to return the carriage B to said counter.

The terminus-section A² of track A is curved upward for the purpose of effectually arresting the velocity of a loaded carriage B should the momentum be such as not to be overcome by the impingement of the springs s s.

In Fig. 2 is shown an enlarged side view of a section of the track or rail A² provided with its springs s s and the carriage B resting upon the rail A².

I construct the frame b b' of the carriage B substantially of the form shown in Figs. 2 and 3, wherein b and b' are the hangers supporting a tray f, to which they are securely attached. The hangers b and b' are formed or cast of metal and provided with bosses b², adapted to receive pins d, upon which the pulleys or rollers a freely revolve.

The hangers b and b' have offsets at c, which are provided with lugs c', to which friction or steadying rollers r are pinned. (See Figs. 2, 3 and 4.)

A handle h is secured to the upper curved portion of the hangers b' and serves as a part of the frame of the carriage B.

The tray f is made of wood or metal, or a combination of both, and is provided with compartments e', adapted to receive and hold various-sized vessels g, in which the liquids are carried.

The operation of my invention is as follows: The carriage B, after receiving its load, is put in place upon the movable section A', which is shown in a depressed position by the dotted lines in Fig. 1. By means of a pulley attached to ceiling C and a chain or cord E passing over the pulley and fastened to the free extremity of section A' said section A' is then elevated and the carriage B discharged therefrom onto the main track A, over which it travels by its specific gravity. Upon arriving at the section A² the lateral bearing-rollers r of the carriage B impinge against the

first of a series of springs s , depressing them into the slots s' cut in rail A^2 to receive them. The pressure of the first of the series of springs s against the rollers r partially re-
5 tards the velocity of the moving carriage, and its movement is gradually diminished as the different series of springs are met, depressed and passed over. Should the velocity of the carriage B be so great as not to be arrested
10 in its course over the entire series of springs r , the upward curved section A^2 will impede its movement without sudden jar and return the carriage B to the lowest curvature in the track. The extreme end of curved section A^2
15 is shown in Fig. 1 as resting on a bracket D ; but it may be constructed so as to be easily detached from the bracket D to permit of depression, as shown at A' .

This invention is especially designed to
20 convey beer or other fluids served as drinks from a bar or counter to guests or patrons on the premises.

Having described my invention, what I

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

The combination with the carrier B provided with friction-rollers, of the rail or track A , hangers D supporting said rail or track, one end of the rail or track being slightly elevated above the opposite end and provided at
25 the high end with the movable section A' hinged to the main portion of the track, a cord E for raising and lowering section A' , the track being provided at its low end with
30 a section A^2 , said section A^2 being provided 35 with springs s against which the friction-rollers on the carrier bear when the carrier runs onto said section, substantially as described.

In testimony whereof I affix my signature 40 in presence of two witnesses.

GEORGE REICH.

Witnesses:

JOHN FEA,

W. DAVIDSON JONES.