T. J. COSENS. EXHAUSTING OR TESTING TANK. APPLICATION FILED JAN. 29, 1904.

NO MODEL. WITNESSES: Thomas James Cosens.

UNITED STATES PATENT OFFICE.

THOMAS J. COSENS, OF NEW WESTMINSTER, CANADA.

EXHAUSTING OR TESTING TANK.

SPECIFICATION forming part of Letters Patent No. 777,403, dated December 13, 1904.

Application filed January 29, 1904. Serial No. 191,150. (No model.)

To all whom it may concern:

Be it known that I, Thomas James Cosens, a citizen of the Dominion of Canada, residing at the city of New Westminster, in the Province of British Columbia, Dominion of Canada, have invented a new and useful Improvement in Exhausting or Testing Tanks, of which the following is a specification.

My invention relates to improvements in exhausting or testing tanks of that class wherein trays of filled cans are carried by conveyers through tanks of hot water, and is particularly designed as an improvement on Patent No. 668,491, issued to me on the 19th of

15 February, 1901.

In the application of above patent cases arise where it is desirable to maintain the water-level just clear of the upper edge of the cans as they are moved through the tank by 20 the conveyer. If the numbers of cans in the tank at any one time could be relied on as constant, the object could be attained by maintaining a constant volume of water in the tank that will, with the can displacement, bring the 25 level up to the desired height on the cans; but this constant uniformity in the number of cans is difficult to maintain, and it is always possible that only one or two trays of cans are in the tank, while the displacement of a 30 full charge of twenty or ten times that amount may be required to raise the water-level up to the top edge of the can.

The object of the invention which is the subject of this application is to provide a means whereby the track on which the conveyer-chain runs may be raised or lowered by the attendant to give a less or greater depth of water over it to suit the requirements of the charge passing through. The particular means by which this is accomplished is fully described in the following specification and illustrated in the drawings which accompany it.

Figure 1 is a sectional elevation of a tank so furnished, and Fig. 2 a plan of the same. Fig. 3 is a detail cross-section showing the connection between the lever and the side frame.

In the drawings the tank is represented by 2 and the conveyer, which is formed of slats 5° between two side chains, by 3, the sprocket-

wheels over which the chains of the conveyer pass at the ends of the tank being represented by 4.

Within the tank the conveyer-chains are supported on a longitudinal track-frame 6, and 55 a hinged incline 7 is provided at each end, the free ends of which inclines bear on the upper side of the longitudinal frame and permit end movement of it thereunder, while allowing the frame to be raised or lowered, as required.

The longitudinal track-frame 6 is shorter than the bottom of the tank, so as to be susceptible of end movement therein, for a reason which will be described, and the frame 6 is furnished on its under side with wedge-shaped 65 members 8, which rest on similarly-shaped supports 9 at intervals along each side of the tank-bottom, so that if the frame 6 is moved endwise in the tank it is raised or lowered on its wedge-shaped supports. This end move- 70 ment of the frame may be effected in any convenient manner; but the way in which I prefer to do it is by means of a lever or levers 11, pivotally mounted at either side of the tank, which lever engages a slot or a projection in 75 the side frame of 6. With this provision if a greater depth of water is desired over the track the lever is moved in the direction that will lower the longitudinal frame on its wedgeshaped supports, and, conversely, if a less 80 depth is desired the lever is moved in the opposite direction, and the track is thus raised.

Having now particularly described my invention, I declare that what I claim as new, and desire to be protected in by Letters Pat-85 ent, is—

1. In a device of the class described, an exhausting-tank, a conveyer movable endwise therethrough, a track-frame for the conveyer within the tank, corresponding end frames 90 each hinged at one end to the tank and having their free ends resting on the upper side of the track-frame, and means for raising and lowering the track-frame.

2. In a device of the class described, a tank, 95 a conveyer movable endwise therethrough, a conveyer track-frame having wedge-shaped portions on its under side, inclined supports on the bottom of the tank, said wedge-shaped portion adapted to rest on said inclined sup-

ports, and means for moving the conveyerframe endwise to raise or lower it.

3. In a device of the class described; a tank, a track-frame extending lengthwise along the bottom of the tank but shorter than such tank-bottom, tapered resting-pieces on the under side of said frame, correspondingly-inclined supports on the tank-bottom and a lever pivotally mounted on the inside of the tank toward the bottom and in engagement with the said frame so as to move it endwise.

4. In a device of the class described, a tank, a conveyer movable endwise therethrough, a

conveyer track-frame having wedge portions, inclined supports on said tank, said wedge portions adapted to rest on said inclined supports, and means for moving the conveyer endwise to raise and lower it.

In testimony whereof I have signed my name to this specification in the presence of two sub- 20

scribing witnesses.

THOMAS J. COSENS.

In presence of—
ROWLAND BRITTAIN,
ELLICE WEBBER.