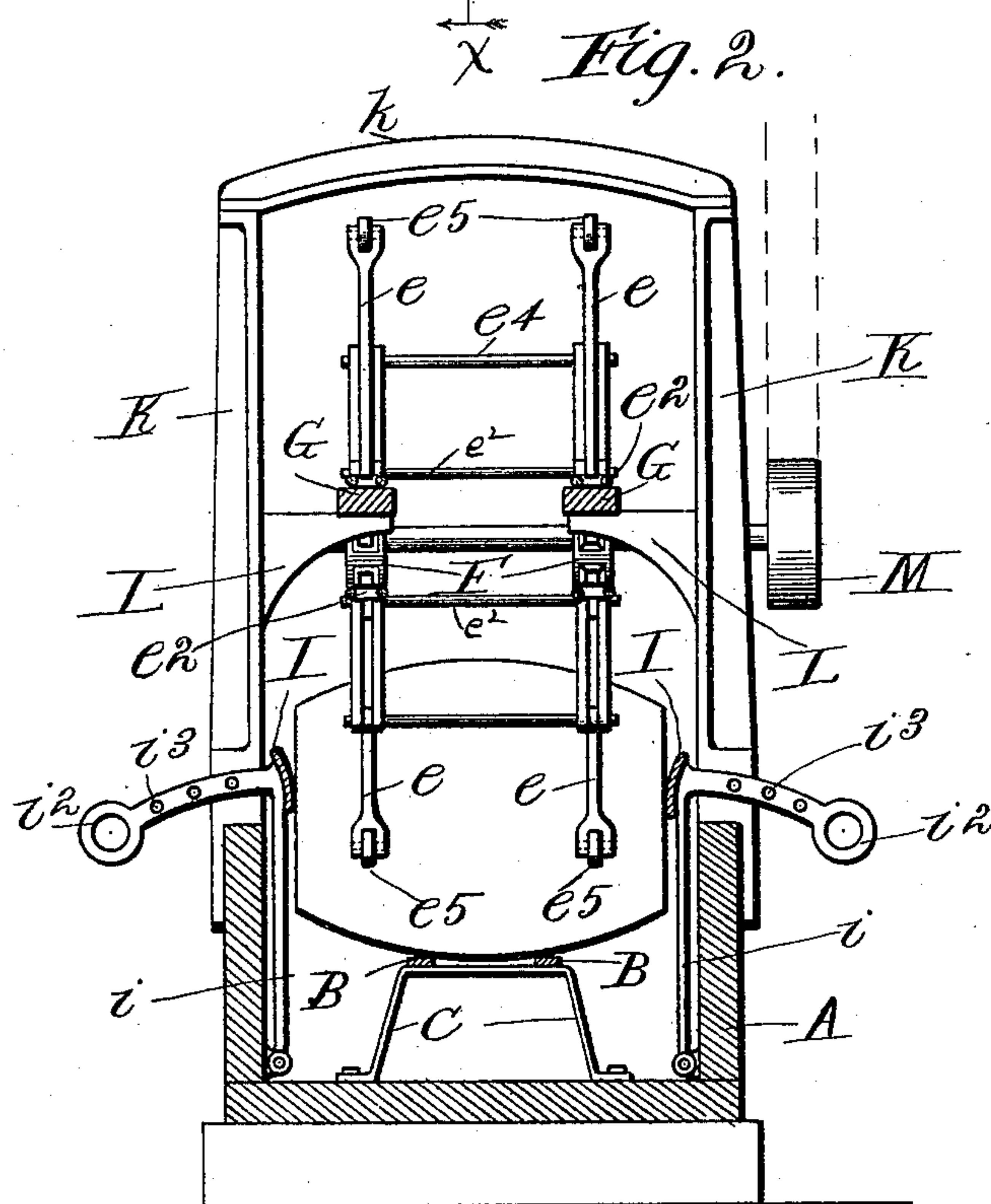
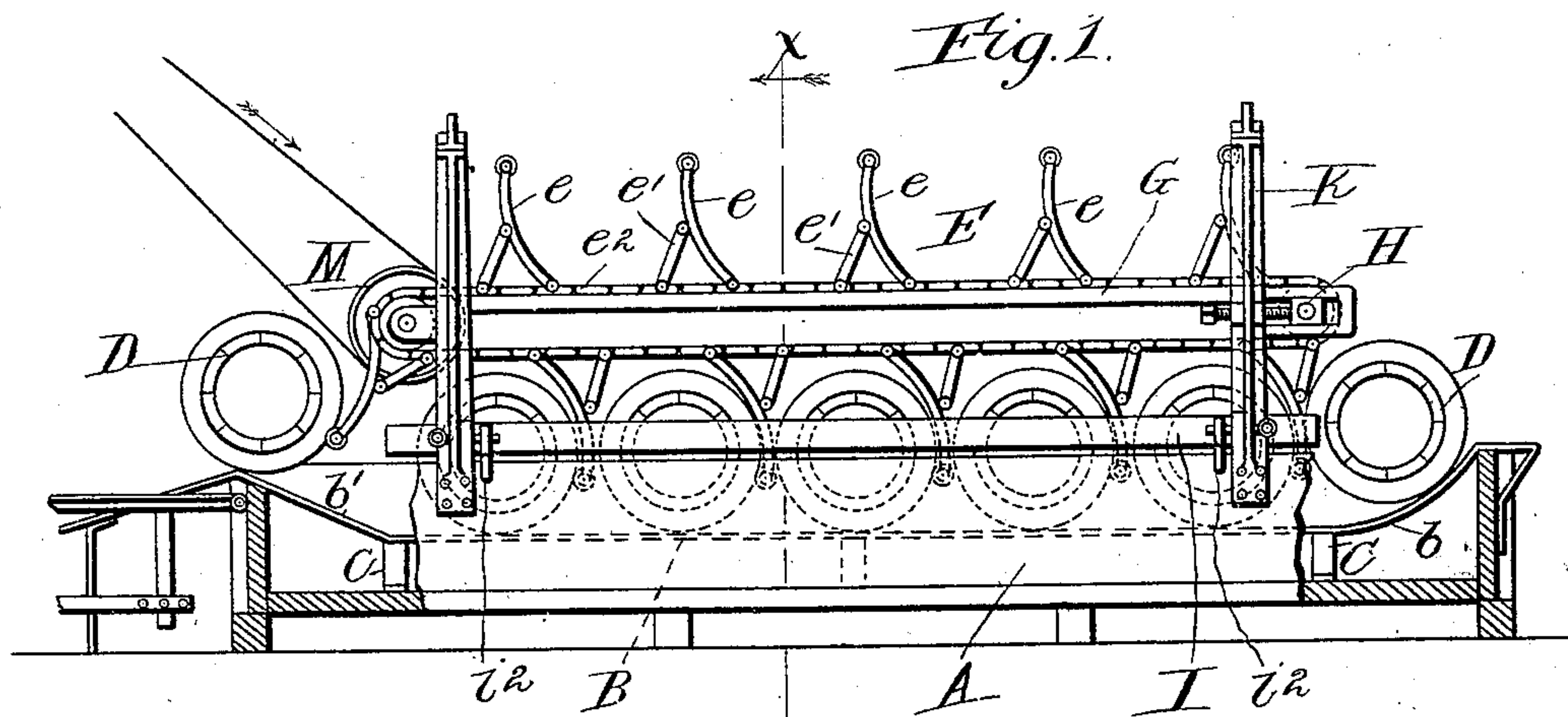


(No Model.)

C. KAESTNER.  
BARREL CLEANER.

No. 601,658.

Patented Apr. 5, 1898.



Witnesses:  
A. F. Durand.  
Margaret M. Wagner.

Inventor:  
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by Chas. G. Page Atty.



# UNITED STATES PATENT OFFICE.

CHARLES KAESTNER, OF CHICAGO, ILLINOIS, ASSIGNOR TO CHARLES  
KAESTNER & CO., OF SAME PLACE.

## BARREL-CLEANER.

SPECIFICATION forming part of Letters Patent No. 601,658, dated April 5, 1898.

Original application filed June 1, 1897, Serial No. 638,979. Divided and this application filed December 6, 1897. Serial No. 660,967. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES KAESTNER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Barrel-Cleaners, of which the following is a specification.

This application is filed as a division of my application Serial No. 638,979.

My invention relates to a construction of keg or barrel cleaner in which the kegs or barrels, while partially submerged in a body of water in a soaking-trough of suitable length, are caused to roll or move along a track from end to end of the trough by means of an endless conveyer or carrier.

Objects of my invention are to avoid the rusting and consequent undesirably premature impairment or destruction of an endless carrier arranged to pass under the water, to permit the endless carrier to both roll the kegs or barrels from end to end of the trough and also to deliver the same from the delivery end of the latter and at the same time to avoid the employment of submerged sprockets for operating or guiding the carrier-belt, and to provide a simple, effective, and convenient construction of barrel-washer, as hereinafter more particularly set forth.

In the accompanying drawings, Figure 1 is a side elevation of a barrel-washer embodying my improvement, portions of the trough being broken away for purposes of illustration. Fig. 2 is a section taken transversely through Fig. 1, on line  $x x$ , on a somewhat larger scale.

The oblong soaking-tank A is adapted to hold a suitable quantity of water and contains a track composed, for example, of a couple of rails B B, arranged upon supports C and bent upwardly at their ends, so as to provide inclines  $b b'$  respectively at the receiving and delivery ends of the trough. The kegs or barrels D are moved or rolled along this track, and the latter is arranged so that the kegs or barrels while rolling along the low portion of the track will be partially submerged in the water.

The conveying mechanism for rolling the kegs or barrels along the track comprises an endless carrier E, arranged at an elevation

above the trough, so as to be above the water-level, and provided with arms  $e$  for engaging and moving the kegs or barrels. This overhead or elevated endless carrier is arranged upon wheels or sprockets F, positioned above the level of the water within the trough, in which way the endless carrier and sprockets will be clear of the water and thereby preserved from rust and subsequent injury.

The arms  $e$  are desirably hinged or pivoted to the endless carrier and are backed by link-braces  $e'$ , which cause the arms to stand substantially perpendicular to the planes of the upper and lower leaves of the endless carrier. These links are also hinge-connected with the arms and with the endless carrier, whereby the latter can suitably flex while passing about the sprockets.

As a simple construction the endless carrier may comprise a couple of endless chains or link belts  $e^2$ , connected together by cross-rods  $e^3$ , and preferably the arms upon one chain or link belt are connected with corresponding arms on the other chain or link belt by rods  $e^4$ , which can also serve as pivots for connecting the link-braces with the arms.

The upper leaf of the endless carrier is desirably supported against sagging by a way or track composed, for example, of a couple of elevated horizontal rails G. One of the sprockets can be power-driven in any suitable way, and the endless carrier can be rendered more or less taut, as may be desired, by any ordinary adjustable belt-tightener H.

The endless carrier thus provided with arms  $e$  is suitably elevated with relation to the trough, so as to keep it clear of the water, within which the kegs or barrels are partially submerged, and also so as to permit the arms which will depend or project downwardly from its lower leaf to successively take the kegs or barrels at the receiving end of the trough and roll them along the track to an extent to also roll them up the track-incline  $b'$  at the delivery end of the trough and thereby cause them to be successively delivered from the trough at such end. To avoid injury to the kegs or barrels and to cause them to roll so as to insure washing thereof, the arms  $e$  have their ends provided with antifriction-rolls  $e^5$ , which engage the kegs or barrels.



The kegs or barrels are guided while rolling along the track by adjustable side guides I, consisting of a couple of horizontally-arranged rods or bars respectively positioned to lie adjacent to opposite ends of the kegs or barrels. These guides are upheld by swinging supports or bars  $i$ , hinged at their lower ends to the trough, and permit the guides to be readily adjusted with reference to kegs or barrels of different lengths. Said guides are provided with handles  $i^2$ , which can be adjustably connected with any suitable fixture—for example, by means of pins inserted through certain holes  $i^3$  in the handles and engaging in sockets in the fixtures.

As a preferred and desirable arrangement the trough is provided with standards K, conveniently arranged in pairs and having the standards of each pair connected by a cross-piece or brace  $k$ . With such arrangement the upper rails G can be supported by brackets L on the standards, and the latter can also provide fixtures for supporting the sprockets and a belt-wheel M on the axle of one of the sprockets. These standards can also provide fixtures to which the arms or handles  $i^2$  of the guides are adjustably attached.

What I claim as my invention is—

1. A keg or barrel cleaner comprising a soaking-trough in and along which the kegs or barrels are soaked and moved, an overhead endless carrier elevated to clear the water within the trough and provided with projecting arms which engage and move the kegs or barrels along the trough and suitable supporting means for the overhead mechanism, substantially as described.

2. A keg or barrel cleaner comprising a soaking-trough in and along which the kegs or barrels are soaked and moved, an endless carrier provided with projecting arms which are hinged to the endless carrier and arranged for engaging the kegs or barrels and moving the same along the trough, and suitable supporting means for the overhead mechanism and link-braces hinge-connected with the endless carrier and said arms, substantially as described.

3. A keg or barrel cleaner comprising a soaking trough in and along which the kegs or barrels are soaked and moved, an endless overhead carrier provided with projecting arms which successively engage and move the

kegs or barrels from the receiving end to the delivery end of the trough and also carry such kegs or barrels up an incline at said delivery end of the trough and suitable supporting means for the overhead mechanism, substantially as described.

4. A keg or barrel cleaner comprising a soaking-trough in and along which the kegs or barrels are soaked and moved, overhead mechanism for moving the kegs or barrels along the trough consisting in a couple of elevated endless chains arranged upon sprockets provided with projecting hinged arms, and link-braces connected with the chains or link belts and said arms, the latter being arranged for engaging the kegs or barrels, and suitable supporting means for the overhead mechanism, substantially as described.

5. A keg or barrel cleaner comprising a soaking-trough in and along which the kegs or barrels are soaked and moved, overhead mechanism for moving the kegs or barrels along the trough comprising endless chains or link belts F arranged upon sprockets, arms  $e$  hinged to the chain or link belts; rods  $e^4$  connecting the arms in pairs, and suitable supporting means for the overhead mechanism, and a track supporting the upper leaves of the chain or link belts against sagging, substantially as described.

6. A keg or barrel cleaner comprising a soaking-trough in and along which the kegs or barrels are soaked and moved; a track for supporting the kegs or barrels within the trough; and guides I having swinging supports and provided with arms which are adjustably connected with fixtures, substantially as described.

7. A keg or barrel cleaner comprising a trough in and along which the kegs or barrels are soaked and moved; standards K rising from the trough; an elevated endless carrier arranged upon sprockets which are supported by the said standards, and provided with projecting arms for engaging and moving the kegs or barrels, and a track arranged to uphold the upper leaf of the endless carrier, substantially as described.

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Witnesses:

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