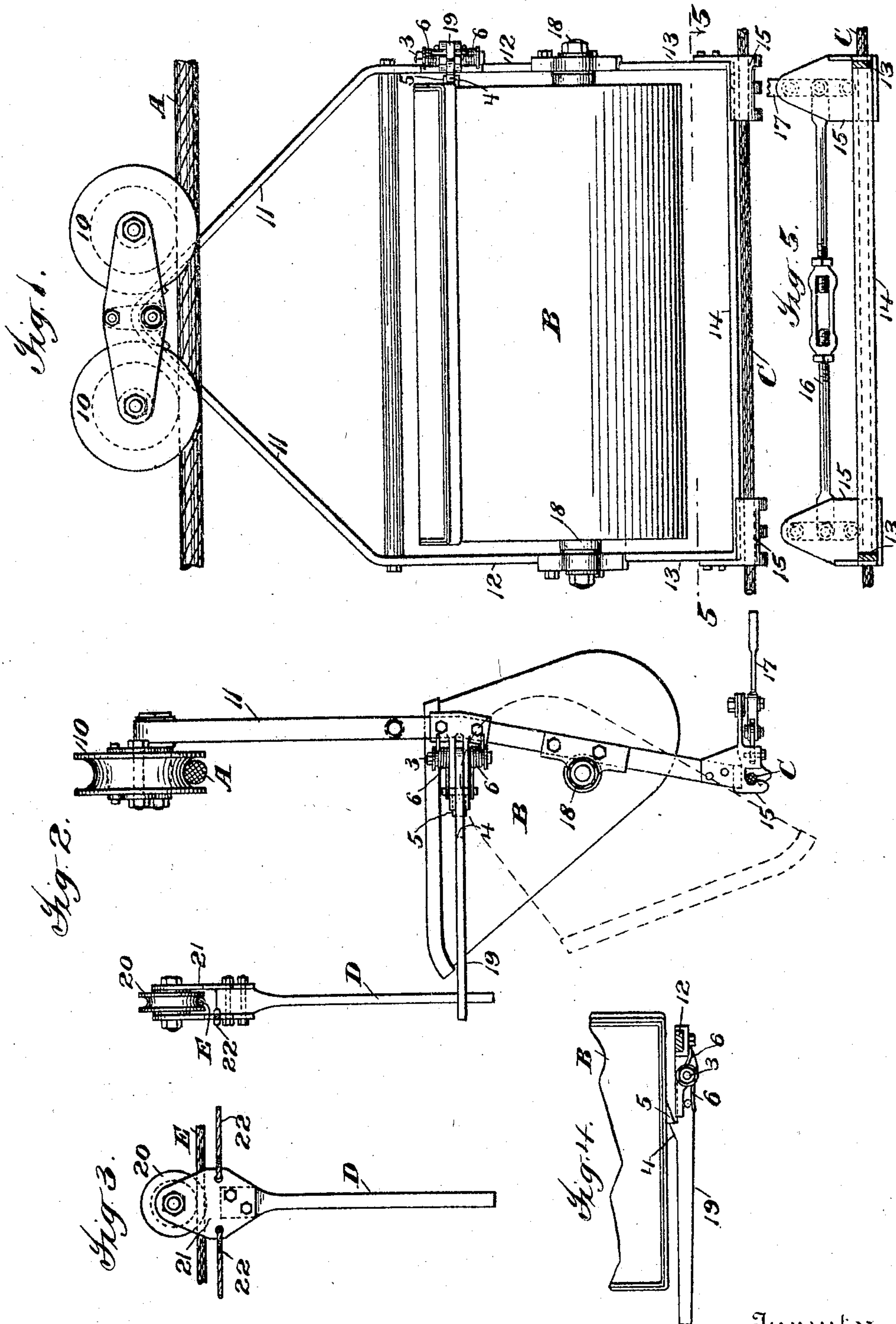


No. 795,786.

PATENTED JULY 25, 1905.

S. A. COONEY.
 TRAMWAY BUCKET SYSTEM.
 APPLICATION FILED MAR. 28, 1905.



Witnesses
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UNITED STATES PATENT OFFICE.

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TO JOHN A. ROEBLING'S SONS COMPANY, OF TRENTON, NEW JERSEY,
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TRAMWAY BUCKET SYSTEM.

No. 795,786.

Specification of Letters Patent.

Patented July 25, 1905.

Application filed March 28, 1905. Serial No. 252,545.

To all whom it may concern:

Be it known that I, SEBERN ALLEN COONEY, a citizen of the United States, residing at New York city, county of New York, and State of New York, have invented certain new and useful Improvements in Tramway Bucket Systems, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

This invention relates to that class of tramways in which a bucket is moved along a stationary cable or way from which it is suspended by a moving cable to which the bucket is gripped, the bucket being run to the desired point along the stationary cable or way and then automatically dumped.

The invention consists in an improved tramway system in which the bucket is gripped to the moving cable below the bucket and in improved devices for automatically dumping the bucket.

In the accompanying drawings, forming a part of this specification, in which a tramway bucket system is shown embodying all the features of the invention as applied in their preferred form, Figure 1 is a side view of the bucket with its stationary and moving cables. Fig. 2 is an end view of the same. Fig. 3 is a side view of the preferred tripping device. Fig. 4 is a detail of the bucket-catch. Fig. 5 is a horizontal section on the line 5 of Fig. 1, showing the grip in plan.

Referring to said drawings, A is the stationary cable or way on which the automatic bucket B is suspended by wheels 10 and loop 11, formed by a continuation of the side frames 12, in which the bucket is pivoted. The side frames 12 have extensions 13 below the bucket connected by cross-bar 14, which carry the grip 15, by which the bucket-frame is gripped to and released from the moving cable C. This grip 15 may be of any suitable construction and either single or double, but preferably is a double grip, as shown, so as to hold the bucket-frame at opposite ends and keep it in line with the moving cable, the two parts of the grip being shown as connected by link 16, so that both parts of the grip are operated together by the grip-handle 17. As the particular construction of this grip forms no part of the present invention, it need not be described.

The bucket B is hung in the side bars 12,

forming the bucket-frame, by pivots 18, and the bucket is made of such form as to swing for dumping when loaded and the catch released from the position shown in full lines to that shown in dotted lines in Fig. 2 and to return automatically to the position shown in full lines when empty.

The bucket B is held in the filling position (shown in full lines in Fig. 2) by the catch, which is shown as formed on catch-arm 19, pivoted on bar 12 at 3 and carrying catch projection 4, which is pressed into position to engage catch projection 5 on the bucket by coiled springs 6, these catch projections 4 5 being so formed as to pass each other on the return of the bucket to filling position, the catch 4 then being thrown in by the springs 6 to engage catch 5 and hold the bucket, the catches being disengaged to release the bucket for dumping by moving the arm 19 sidewise against the tension of springs 6. The arm 19 projects beyond the front line of the bucket and is engaged for releasing the bucket by trip-bar D, which may be positioned at the desired point in any suitable manner, but preferably is suspended from a stationary cable E by wheel 20 on trip-carrier 21. This carrier 21 is moved along the cable E and secured in the desired position by small cables or ropes 22, running in opposite directions from the carrier and secured to the stationary cable-supports or other fixed parts of the system.

The operation of the system will be clear from the drawings without an extended description, it being understood that the trip D will be positioned at the desired point along the cable A by slackening one of the cables 22 and drawing in the other and then securing the cables to hold the trip in place and that the buckets will be dumped successively as the arm 19 passes the trip D, moving to the left in Fig. 1 and returned to position automatically after passing the trip D.

The use of the moving cable below the bucket, so as to be gripped at the bottom of the bucket-frame, secures important advantages over constructions heretofore in use, especially in connection with the switching of the bucket from one line to another, the cables being thus placed at the top and bottom of the bucket-frame, so that there is no obstruction of the bucket by cables in using several connecting bucket-lines.

It will be understood that the invention is not limited to the detail form or construction of the parts illustrated, but that these may be varied widely within the invention as defined by the claims.

What I claim is—

1. In a tramway bucket system, the combination with a stationary cable or way, and a bucket suspended therefrom, of a moving cable below the bucket, and a grip connecting the bucket-frame with the moving cable.

2. In a tramway bucket system, the combination with a stationary cable or way, of an automatically-dumping bucket suspended therefrom, a moving cable below the bucket, a grip connecting the bucket-frame with the moving cable, a catch-arm for releasing the bucket, and a trip engaging the catch-arm.

3. In a tramway bucket system, the combination with a stationary cable or way, of an automatically-dumping bucket suspended there-

from, a moving cable below the bucket, a grip connecting the bucket-frame with the moving cable, a catch-arm for releasing the bucket, a stationary trip cable or way, a trip-bar movable on said trip cable or way for engaging the catch-arm, and means for securing the trip-bar in the desired position.

4. The combination with a stationary cable or way A, of an automatically-dumping bucket suspended therefrom, catch-arm 19 for releasing said bucket, stationary trip-cable E, suspended trip-bar D and trip-carrier 21, and connections for adjusting said carrier on the cable E.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

SEBERN ALLEN COONEY.

Witnesses:

J. A. GRAVES,

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