

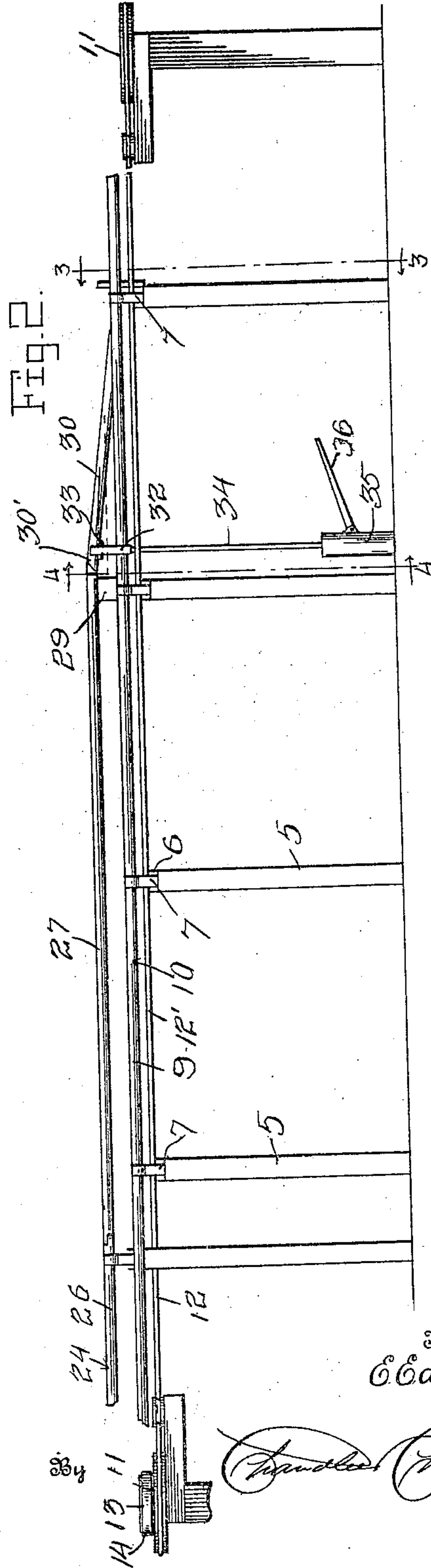
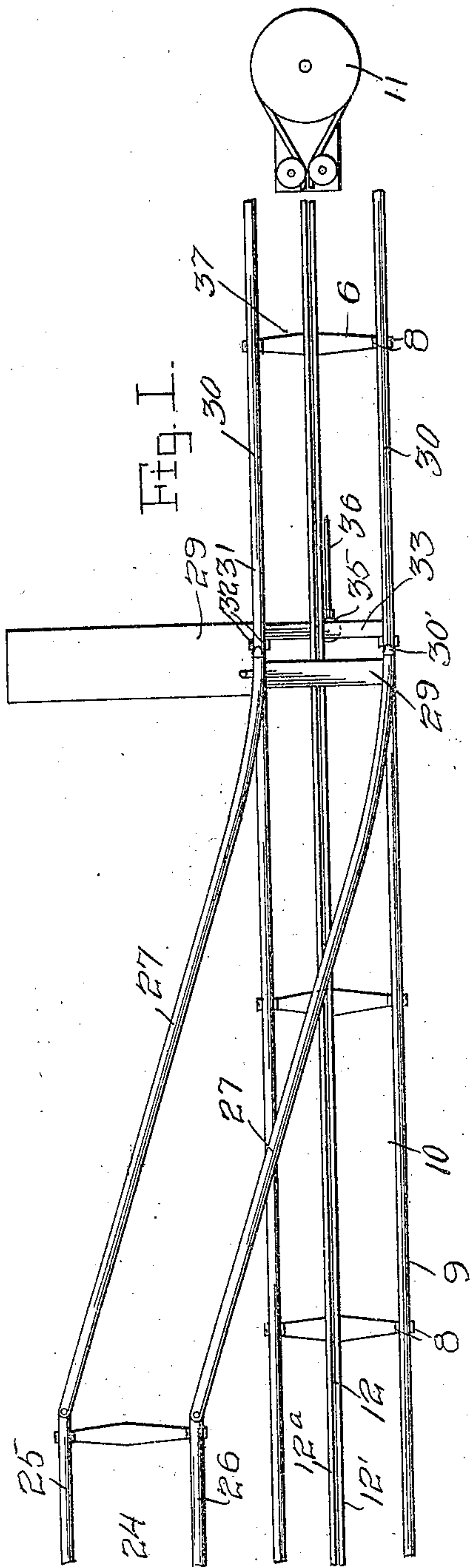
No. 810,731.

PATENTED JAN. 23, 1906.

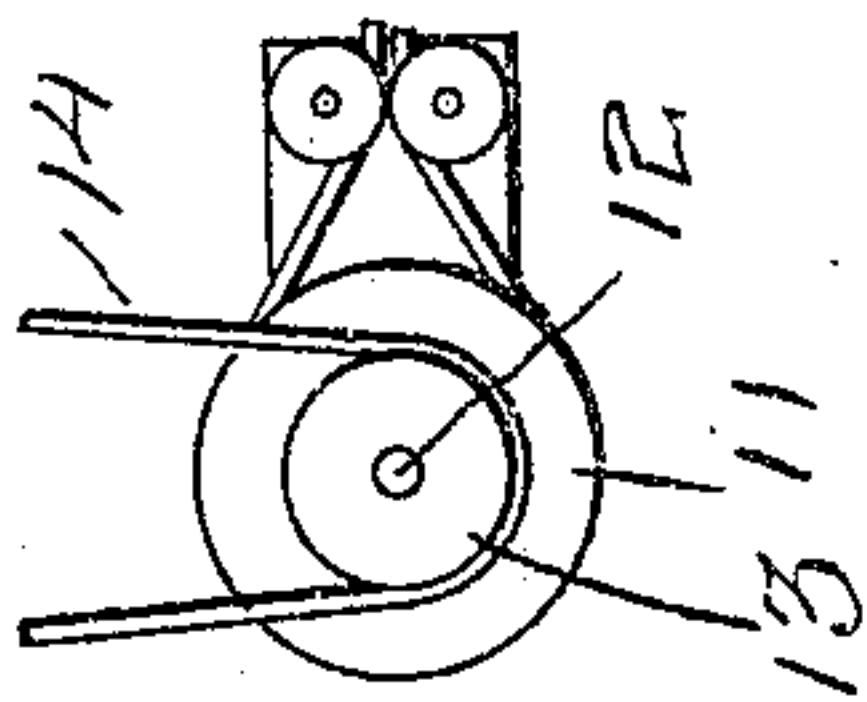
E. EDGE.
HAULAGE SYSTEM.

APPLICATION FILED JUNE 10, 1905.

2 SHEETS—SHEET 1.



Witnesses
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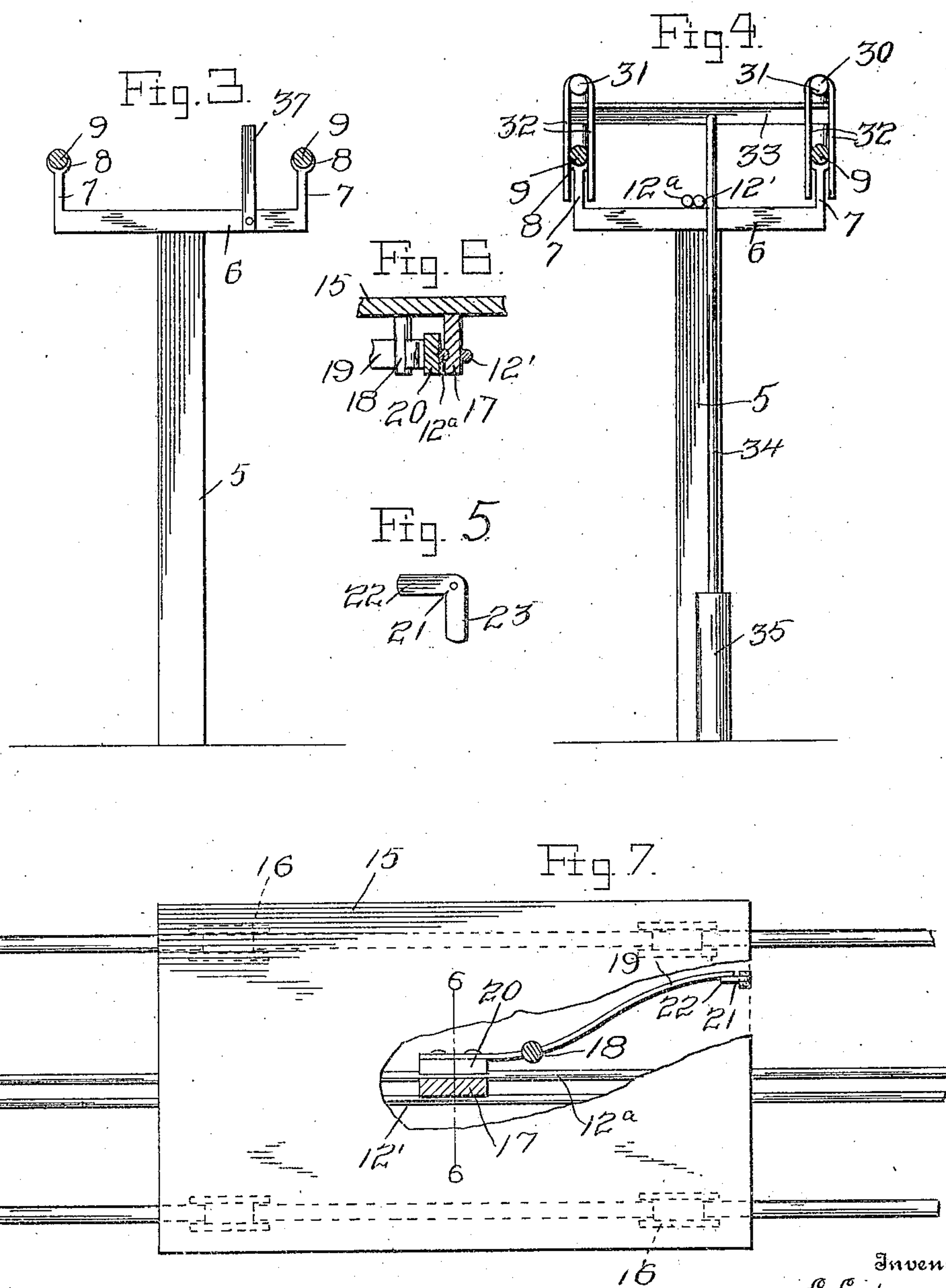
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UNITED STATES PATENT OFFICE.

EVANDER EDGE, OF RUSKIN, NORTH CAROLINA.

HAULAGE SYSTEM.

No. 810,731.

Specification of Letters Patent.

Patented Jan. 23, 1906.

Application filed June 10, 1905. Serial No. 264,633.

To all whom it may concern:

Be it known that I, EVANDER EDGE, a citizen of the United States, residing at Ruskin, in the county of Bladen, State of North Carolina, have invented certain new and useful Improvements in Haulage Systems; 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.

This invention relates to hauling systems, and more particularly to systems of this kind employing elevated tracks, and has for its object to provide such a system including a main track and switches which will be provided with means for directing cars from the main track to the switches, this means being movable into and out of operative position.

Another object is to provide a hauling system of the driven-cable type which will include means for disconnecting the cars from the cable when the cars have reached the switches upon which they are to be directed.

Other objects and advantages will be apparent from the following specification, which describes an embodiment of the present specification.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a top plan view of a portion of the tracks of the system constructed in accordance with the present invention and showing a switch. Fig. 2 is a side elevation of Fig. 1. Fig. 3 is a cross-section of the track, showing one of the supporting-uprights in side elevation and illustrating the tripping-finger. Fig. 4 is a view similar to Fig. 3, taken on line 4 4 of Fig. 2 and showing the means for raising guide-rails. Fig. 5 is a top plan view of the car, a portion thereof being broken away to illustrate the grip. Fig. 6 is a transverse section of the car, taken on line 6 6 of Fig. 5. Fig. 7 is a detail view showing the angle-lever in side elevation.

Referring now to the drawings, there are shown a plurality of supporting-uprights 5, having horizontal cross-arms 6 at their upper ends, these arms having upwardly-extending brackets 7 at their outer ends. The brackets have upwardly-directed fingers 8 at their upper ends which are spaced longitudinally of the cross-arms, and these fingers receive wires 9, occupying a common horizontal plane and forming the rails for a track 10. Located at the ends of this track there are

drums 11, with which are engaged the looped ends of a cable 12, extending between the rails, one of these drums having mounted upon the shaft 12, by which it is carried, a band-wheel 13, which receives an actuated belt 14. It will be understood that both of the drums are revoluble.

A car 15, having peripherally-grooved wheels 16, is disposed with the tracks 9 engaged in the grooves of its wheels, and this car has a depending block 17 secured thereto, which extends downwardly between the two portions 12' and 12^a of the cable 12. Depending from the car at the opposite side of the portion 12^a of the cable from the block 17 there is a pivotally-mounted stud 18, in which there is engaged a strap spring-arm 19, which extends longitudinally of the car. At its end which lies adjacent to the block 17 the spring 19 is provided with a block 20, and the spring is movable with the stud 18 to bring the block 20 into and out of engagement with the portion 12^a of the cable oppositely to the block 17, and it will be understood that by exerting outward lateral pressure against the outer end of the strap-spring the cable may be clamped between the blocks 17 and 20, which thus act as a grip. To hold the spring 19, with its block 20, in operative position against the cable, an angle-lever 21 is pivoted to the car and has an upper horizontal arm 22 and a lower vertical arm 23, and the outer end of the strap-spring may be engaged with the arm 22 to hold this spring, with its block, in operative position, and it will be seen that the angle-lever may be moved upon its pivot to release the spring 19.

A switch 24, including rails 25 and 26, lies adjacent to the main track 10 and has movable rails 27 pivoted to the ends of its rails 25 and 26, and these rails 27 are connected at their free ends by a cross-brace 29 and are movable upon their pivots to lie at times above the rails 9 of the main track and at times at one side of the main track and upon a support 29.

Guide-rails 30 are provided, each consisting of a tread portion 31, having depending side flanges 32, and these guide-rails lie normally upon the rails 9 with the rails 9 between their flanges, the ends of the guide-rails being beveled to lessen the jolt as the cars pass thereover. These guide-rails are located forwardly of the points upon the rails 9 above which the free ends of the rails 27 rest, and the rearward ends 30' of the guide-rails 30 may

be raised to meet the free ends of the rails 27, as shown. At their ends 30' the rails are connected by means of a cross member 33, to which is secured the upper end of a vertical rod 34, forming the shaft of a jack 35, provided with an actuating-lever 36, and it will thus be seen that by means of the jack the rearward ends 30' of the guide-rails 30 may be raised and lowered.

One of the cross-arms 6 is located just forwardly of the guide-rails 30, and an upwardly-extending finger 37 is carried by this cross-arm and lies in the path of movement of the vertically-extending arm 23 of the angle-lever 21, and the arrangement is such that a car moving rearwardly over the rails in the direction of the switch brings the arm 23 of its angle-lever into engagement with the finger 37 to release the spring 19, and thus disconnect the car from the cable.

In use a plurality of cars are employed in connection with the system embodying the present invention, and the system includes a number of the switches 24, the rails 27 lying normally upon the support 29 and the guide-rails 30 being normally in their lowered positions. When a car is to be directed onto a switch, the rails 27 are moved to lie above the rails 9 and the guide-rails 30 are raised. A car approaching the switch over the main track 10 first has its gripping mechanism released by the finger 37 and then passes to the switch, as will be readily understood. The fingers 37 may be located in different planes transversely of the track for the different switches, and the angle-levers 21 of different cars may be correspondingly positioned, so that the gripping mechanism of certain cars will be released only at certain switches.

What is claimed is—

1. In a system of the class described the combination with a main track and a switch-track, of rails pivoted to the rails of the switch-track for movement to lie at times at one side of the main track and at times above the rails thereof, and guide-rails disposed upon the rails of the main track and adapted for vertical movement at one end to bring said ends into and out of operative relation

to the pivoted rails for the passage of a car from the main track to the pivoted rails and the switch-track.

2. In a system of the class described the combination with a main track and a switch-track, of pivoted rails communicating at one end with those of the switch-track and movable to lie with their other ends at times above the rails of the main track and at times out of such position, vertically-movable guide-rails arranged to lie at times wholly upon the rails of the main track and at times at one end only thereupon and with their other ends in alinement with the pivoted rails and means for moving the guide-rails.

3. In a system of the class described the combination with a main track and a switch-track, of a car disposed upon the main track, a cable extending longitudinally of the main track, means for moving the cable, a grip carried by the car and engaged with the cable, a spring arranged to hold the grip in operative position, means for holding the spring with the grip in operative position, said means being movable out of operative position and a finger located adjacent to the switch and adapted for engagement of the spring-holding means to move the latter into inoperative position.

4. The combination with a car, of a cable-grip therefor comprising a depending block, a spring-arm pivoted between its ends to the car, a block carried by one end of the arm and arranged for coöperation with the first-named block to clamp the cable therebetween, an angle-lever pivoted to the car and arranged to receive the other end of the spring thereagainst to hold the spring with its block in clamping relation to the first-named block, said angle-lever being movable upon its pivot to bring its arm out of engagement with the spring.

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

EVANDER EDGE.

Witnesses:

J. S. WILLIAMSON,
J. M. CLARK.