

No. 886,764.

PATENTED MAY 5, 1908.

W. J. CHANCE.
ELEVATED CARRIER.
APPLICATION FILED JULY 15, 1907.

2 SHEETS—SHEET 1.

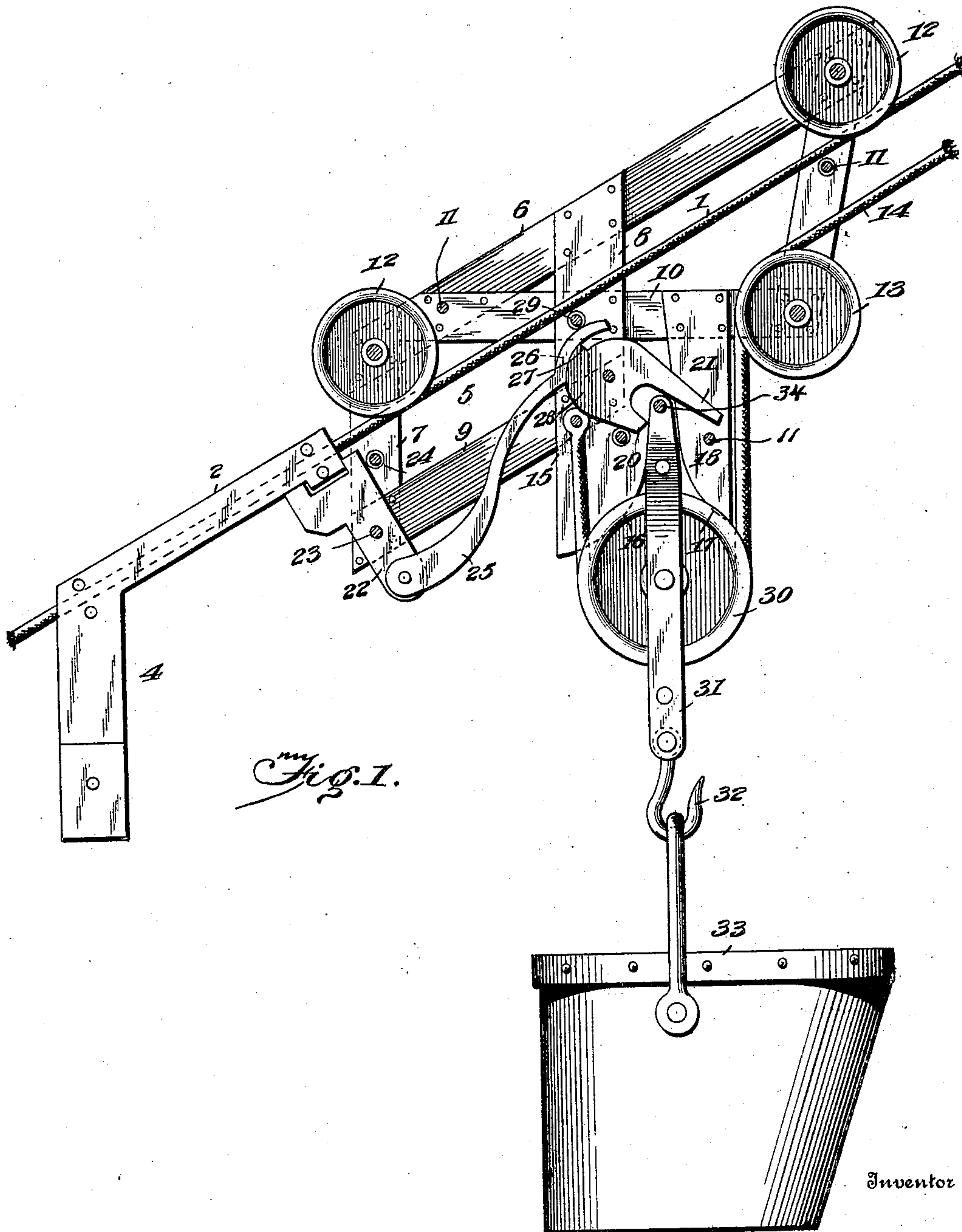


Fig. 1.

Inventor

Witnesses

C. H. Davis

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By

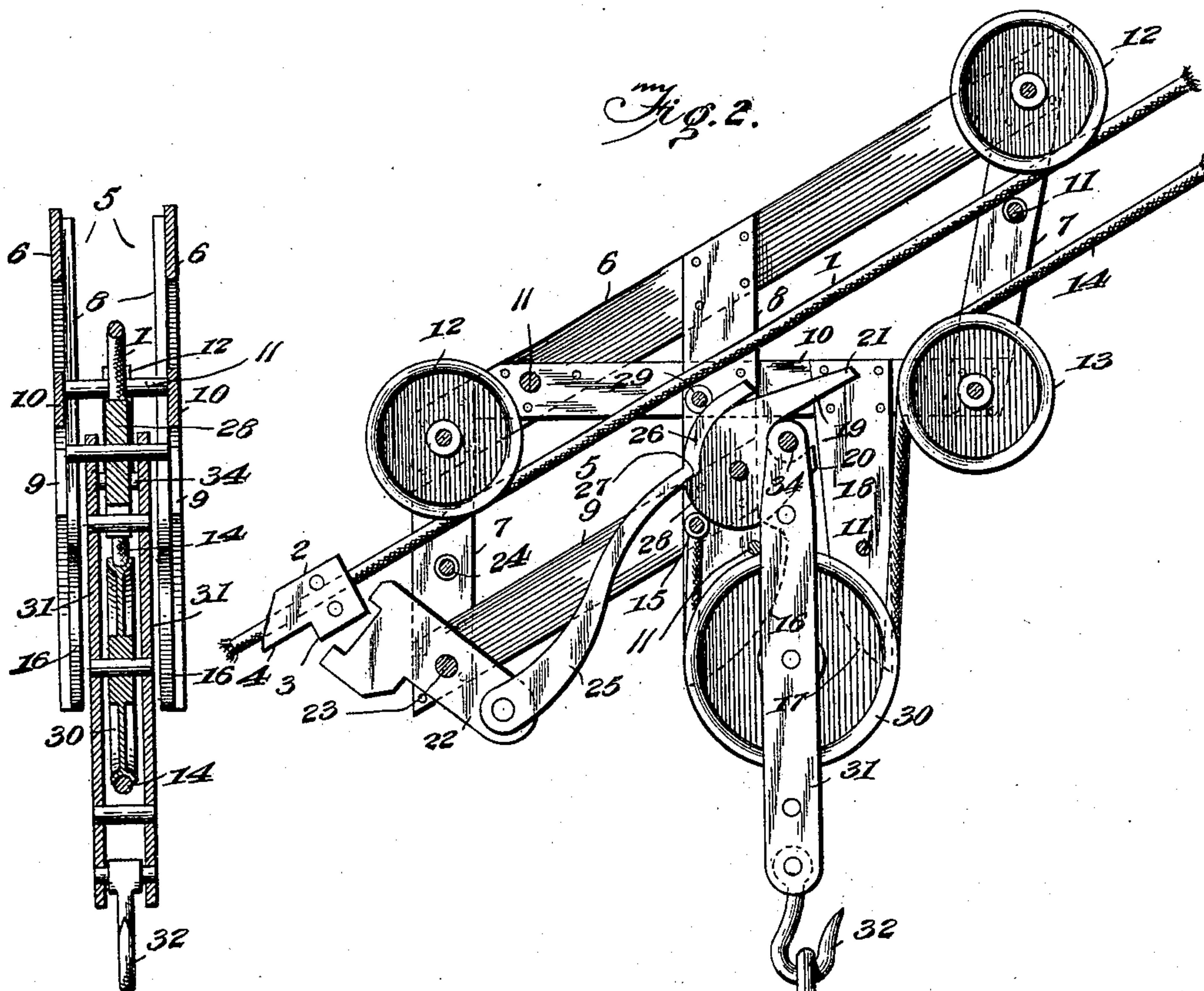
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2 SHEETS—SHEET 2.



my Fig. 3

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UNITED STATES PATENT OFFICE.

WILLIAM JEFFERSON CHANCE, OF DAWSON, YUKON TERRITORY, CANADA.

ELEVATED CARRIER.

No. 886,764.

Specification of Letters Patent.

Patented May 5, 1908.

Application filed July 15, 1907. Serial No. 383,789.

To all whom it may concern:

Be it known that I, WILLIAM JEFFERSON CHANCE, a citizen of the Dominion of Canada, residing at Dawson, in the Yukon Territory and Dominion of Canada, have invented certain new and useful Improvements in Elevated Carriers, of which the following is a specification.

My invention relates to improvements in elevated carriers, and has for its object the provision of an aerial or overhead conveyer system which will be automatic in its operation, which will be of simple and durable construction and which will be practical and efficient in every particular.

Another object of my invention is the provision of an automatic hoisting and conveying apparatus which may be adapted for a great variety of purposes such as hay conveyers, excavating systems, for coaling ships at sea, and for many other like uses.

With the above and other objects in view my invention consists of a track or cableway, a carrier adapted to travel thereon, a hoisting sheave supported by the carrier, means for automatically locking the carrier at predetermined points on the trackway, and automatic means for releasing the hoisting sheave to lower the load at such predetermined points.

My invention further consists of an elevated carrier embodying certain other novel features of construction, combination and arrangement of parts substantially as disclosed herein and as illustrated in the accompanying drawings, in which:

Figure 1, is a side elevation of my improved tumbler carrier, with the parts shown in the release or non-supporting position, the near side of the carrier frame being removed to more clearly illustrate the parts. Fig. 2, is a like view of the device with the parts in the load-supporting position. Fig. 3, is a vertical sectional view taken through the carrier and sheave frame.

My invention is particularly adapted for use where the cable or track is placed at an incline, as on the side of a hill for instance, and it is illustrated as such in the accompanying drawings. It will be understood, however that I do not limit myself to the use of an inclined trackway, as the invention may as well be adapted for a straight or irregular track.

In the drawings: The numeral 1 designates the cable or track upon which at the desired

point is bolted or otherwise secured the stop or abutment block 2, having the depending latch portion or lug 3, at its forward end, and the depending counter-weighted extension 4, at its rear end, which serves to retain the stop block in the proper upright position.

The carrier frame consists of two side members 5, each member comprising a top bar or rail 6, depending end bars 7, an intermediate longer depending bar or plate 8, a short lower bar 9, connected between the rear end bar and the intermediate bar 8, and a diagonally arranged bar 10, extending from the rear end of the upper bar to the lower depending end of the front bar. These two side members are secured together in spaced relation by the spreaders or spacing bolts 11, and by reason of the braced construction, the carrier frame is light, compact and very strong. Sheaves 12, are journaled in the upper ends of the frame between the side members, which engage the cable or track and form the roller supports for the carrier.

A load sheave 13, is journaled in the front lower end of the carrier frame, preferably at the juncture of the diagonal braces with the front depending braces 7, over which passes the hoisting rope or cable 14, the stationary end of the cable being anchored to the spreader or securing bolt 15.

The forward edge of the depending bar or plate 8, is rounded or curved inwardly and upwardly as at 16, to form a guiding edge, and a complementary guiding edge 17, is formed on the oppositely disposed depending guide plate 18, the depending portions of the two plates thus forming a gradually narrowing guiding passage. At the head of this guiding passage between the guiding plates, is pivoted the tumbler 19, which is formed with a supporting hook extension 20, which when the tumbler is in the upright supporting position, extends across the opening between the guide plates. As shown in the drawings, one of the spreaders of the carrier frame may be utilized to serve as an abutment, to limit the lower movement of the tumbler. When the tumbler is in this lower or non-supporting position, the upper leg or portion 21, of the tumbler extends across the guiding opening.

A latch member 22, is pivoted at 23, in the rear portion of the frame, the upper portion of the latch having a jaw recess therein to engage the lug or tooth 3, on the end of the bumper. The movement of the latch is lim-

ited by means of the abutment or spreader 24. A dog 25, is pivoted to the lower end of the latch, the upper end of the dog being curved as at 26, for engagement with the 5 curved rear edge of the tumbler. The dog is also formed with an angular bend or point 27, near the upper end thereof which acts as a pawl to engage the angular shoulder 28, on the back of the tumbler and thus hold the 10 tumbler locked when it is in the upright or supporting position. A spreader or abutment 29, serves to hold the dog in close engagement with the back of the tumbler, and to reduce the friction to a minimum, this 15 guiding abutment may be in the form of a roller.

The hoisting sheave 30, is journaled in the sheave frame 31, the sheave frame or strap carrying a hook 32, at its lower end for con- 20 nection with a bucket or conveyer 33, and the frame at its upper end is formed with a cross pin or supporting stud 34, which is adapted to pass up between the guiding plates depending from the carrier frame and 25 be engaged by the hook of the tumbler. The upper end of the sheave frame may also be in the form of a loop to pass over the hook of the tumbler.

In the operation of lowering the load upon 30 the cable, the carrier passes down the cable until the latch on the rear end of the carrier frame contacts with the tooth on the bumper or stop block, and the jaw opening in the latch makes locking engagement with the 35 bumper tooth. The latch thus locks the carrier stationary upon the cable and by the same movement draws the pawl on the dog from engagement with the angular shoulder on the tumbler thereby releasing the tumbler. 40 The weight on the sheave frame draws the tumbler down, the sheave frame then being free to fall to deposit the load in the proper place. A reverse procedure is gone through with in hoisting the load and carrying to a 45 different location.

From the foregoing description taken in connection with the drawings, the operation and advantages of my invention will be readily understood and appreciated, and it 50 will be apparent that I have provided a prac-

tical and satisfactory tumbler carrier which fully accomplishes all the results herein set forth as the objects of my invention.

I claim:

1. The combination with a carrier frame, 55 of a supporting tumbler pivoted in said frame, an abutment, a latch pivoted in the frame adapted to interlock with the abutment, and a link pivoted to the latch, said link serving as a dog to engage the tumbler 60 and hold the same locked until the latch engages the abutment, whereby the dog is actuated to release the tumbler.

2. The combination with a carrier frame, 65 of a supporting tumbler pivoted therein, an abutment a sheave frame supported by the tumbler, the upward lift of the sheave frame serving to set the tumbler in supporting position, a latch pivoted in the frame adapted to interlock with the abutment, and a link pivot- 70 ed, to the latch, the link serving as a dog to engage and hold the tumbler locked.

3. The combination with a trackway, of a carrier frame, comprising side members, a supporting tumbler pivoted between the side 75 members, a projection on the rear face of the tumbler, a sheave frame supported by the tumbler, a latch pivoted in the frame, and a link pivoted to the end of the latch, said link serving as a dog to engage the projection on 80 the tumbler and lock the same.

4. The combination with a trackway and an abutment, of a carrier frame comprising side members, a supporting tumbler pivoted 85 between said side members, a projection on the rear face of the tumbler, a sheave frame supported by the tumbler, a latch to engage the abutment, guides depending from the frame to guide the upward movement of the sheave frame, and a link pivoted to the end 90 of the latch and serving as a dog to engage the projection on the rear face of the tumbler and lock the same.

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

WILLIAM JEFFERSON CHANCE.

Witnesses:

ETTA DE PENCIER,
FRED G. CRISP.