No. 834,194. PATENTED OCT. 23, 1906.

J. W. COOPER.

ELEVATED CONVEYER.

APPLICATION FILED DEC. 11, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

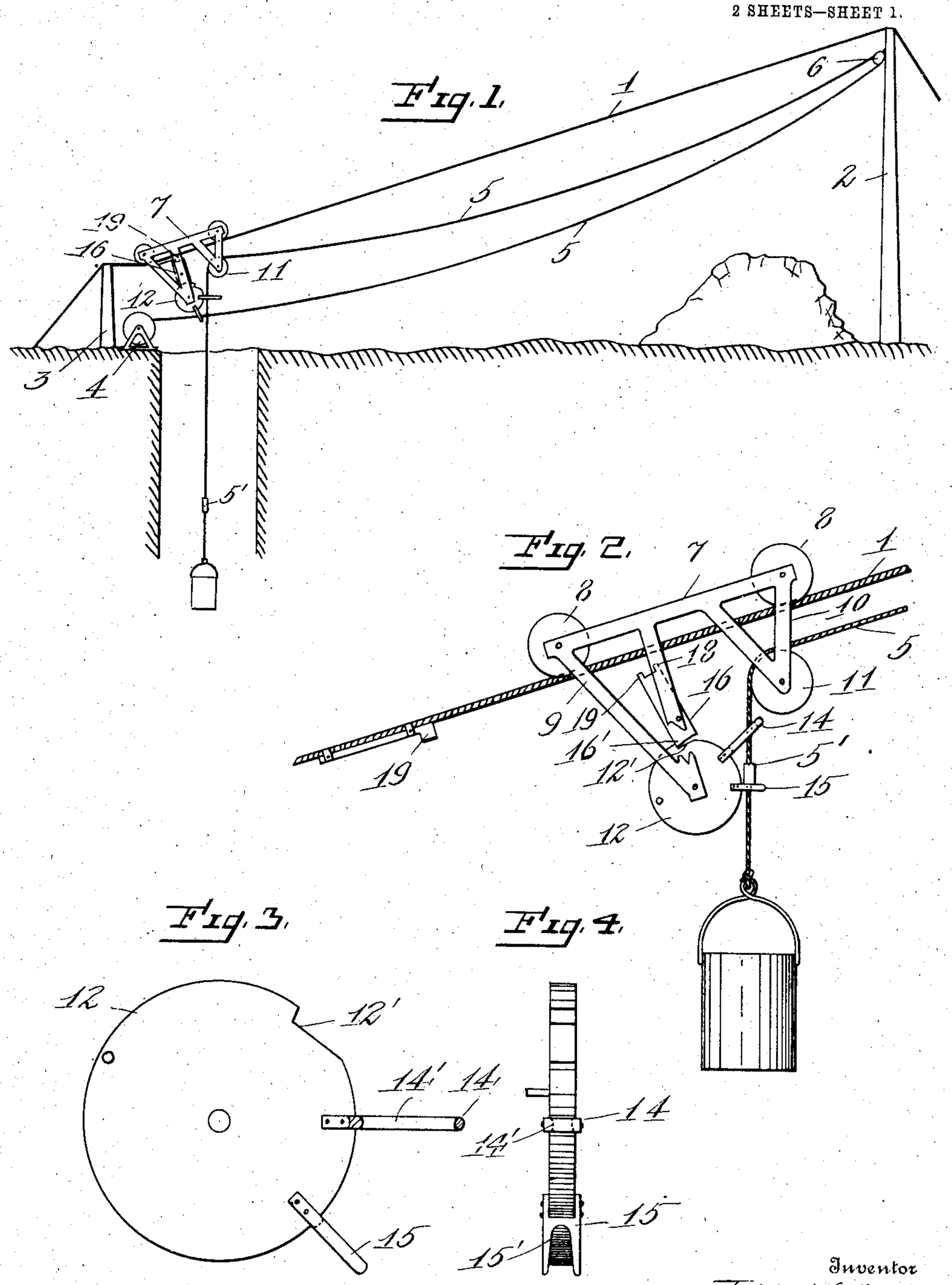

Fig. 2.

Fig. 3.

Fig. 4.

Witnesses

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2 SHEETS—SHEET 2.

Fig. 5.

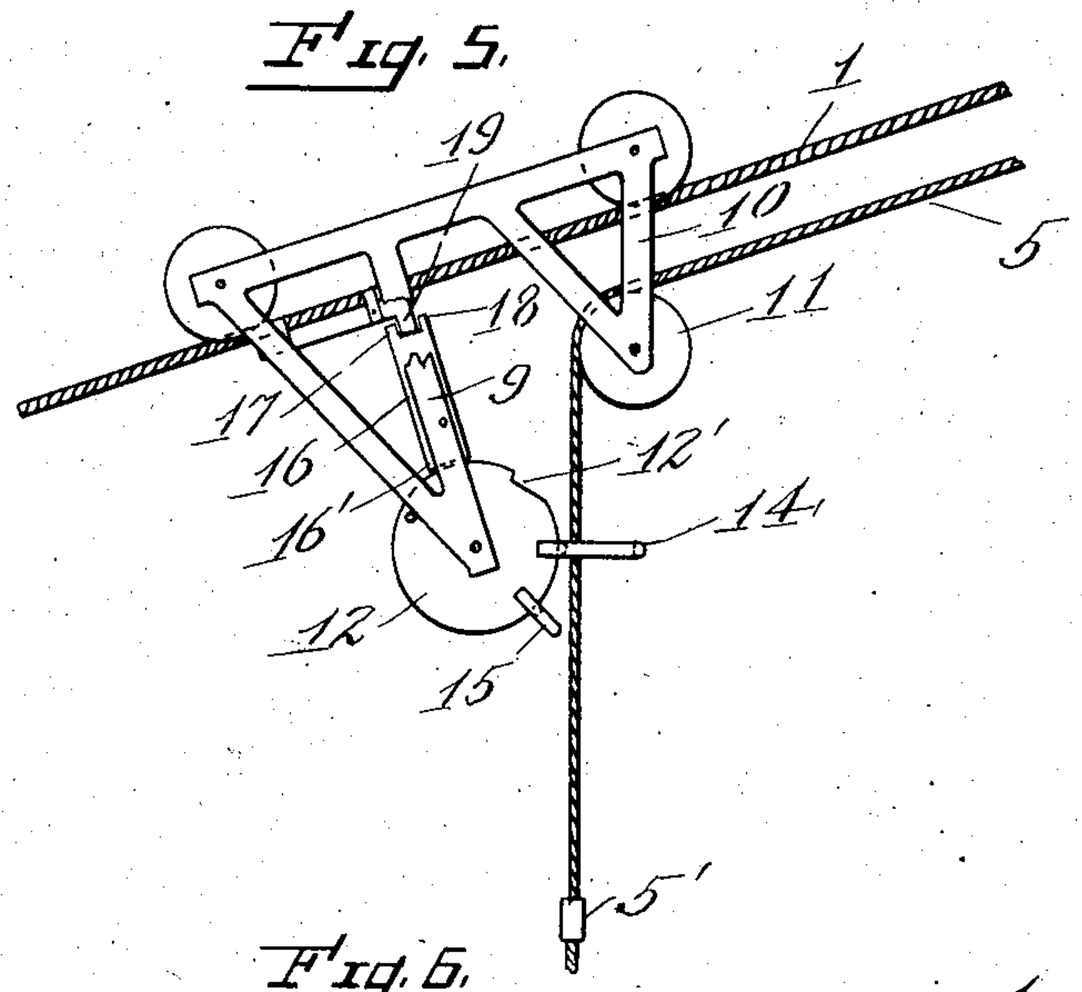


Fig. 6.

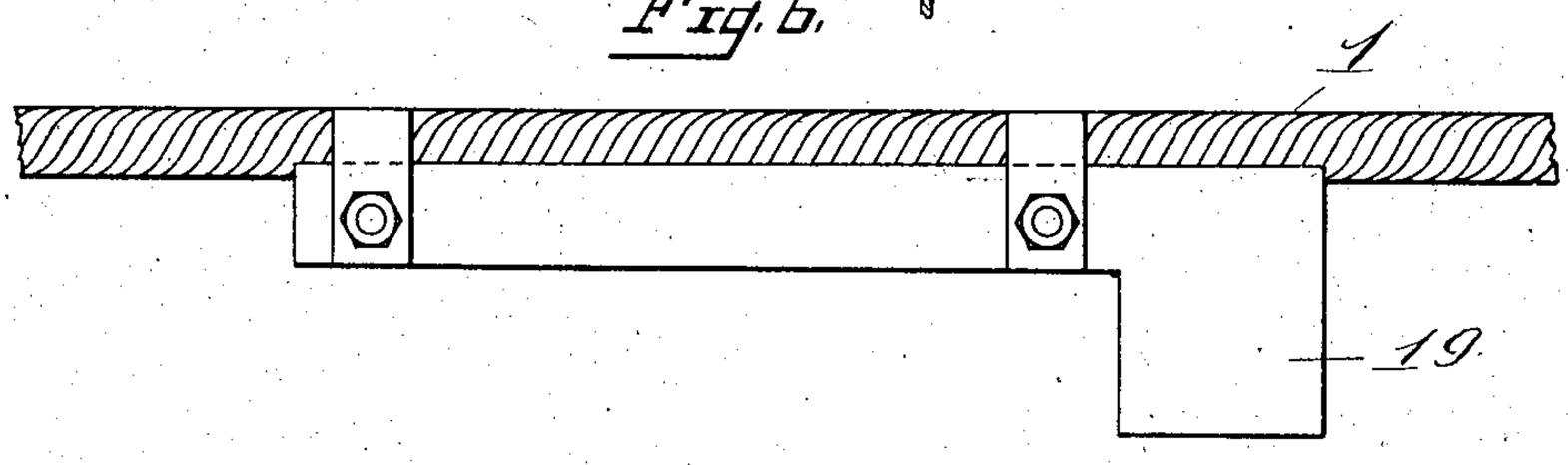


Fig. 8.

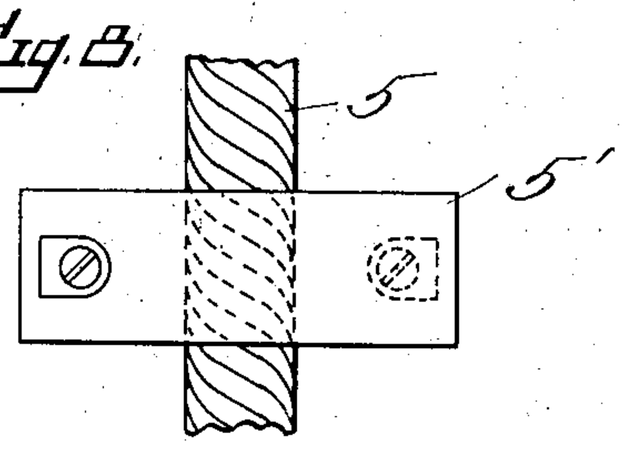
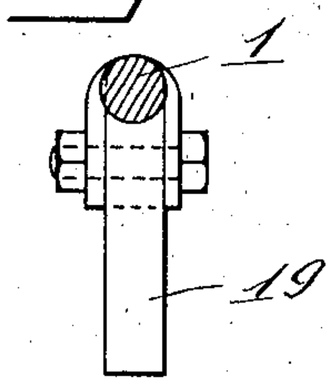


Fig. 7.



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UNITED STATES PATENT OFFICE.

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ELEVATED CONVEYER.

No. 834,194. Specification of Letters Patent. Patented Oct. 23, 1906.

Application filed December 11, 1905. Serial No. 291,240½.

To all whom it may concern:

Be it known that I, JOHN W. COOPER, a citizen of the United States of America, and a resident of the city of Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Elevated Conveyers, of which the following is a specification.

My invention relates to improvements in elevated carriers for hoisting and conveying apparatus, and has for its objects to provide simplified and improved means for securing the carrier in position for hoisting and lowering and for maintaining the load in raised position relatively to the carriage.

The above objects I attain by the constructions, combinations, and arrangements of parts as disclosed on the accompanying drawings, set forth in the following description, and pointed out in the appended claim.

With reference to the drawings, in which like reference-numerals designate similar parts throughout the several views, Figure 1 is a view in elevation of a hoisting and conveying apparatus embodying my invention, the several parts being shown in position for hoisting. Fig. 2 is a view in elevation showing the carriage with the parts of my invention in relative position for maintaining the load in raised position. Figs. 3 and 4 are detail views. Fig. 5 is a view similar to Fig. 2, but showing the parts of my invention in relative position to secure the carriage in position for hoisting or lowering; and Figs. 6, 7, and 8 are detail views.

Reference-numeral 1 indicates an inclined track consisting of a cable stretched from a mast 2 to a post 3, at the base of which is a drum 4 for winding up a rope 5, operating over a sheave 6, secured to mast 3.

7 indicates a suitable carriage provided with track-wheels, as 8, and formed with depending portions 9 and 10, upon the latter of which is mounted a sheave 11, over which the rope 5 passes from sheave 6 and serves for both hoisting and hauling.

Mounted on the depending portion 9 is a rotatable element 12, which, as shown, is in the form of a circular disk provided with radial projections 14 and 15 extending from that portion of its periphery which is adjacent to rope 5, the projection 14 being provided with an elongated aperture 14′, through which said rope passes, and the projection 15 being formed with a notch 15′, extending inwardly from its outer end, so as to receive rope 5 freely. This disk is furthermore formed with a depression 12′ in the upper portion of its periphery.

Pivotally mounted on carriage 7, intermediate the cable 1 and the disk 12, is a catch 16, which is provided with lugs 17 and 18, suitably spaced apart to embrace freely a stop, as 19, secured to said cable adjacent the point at which the load is taken up. The lower end surface of this catch is concaved in conformity with the curvature of the periphery of disk 12 and lies in close proximity thereto, so that when the catch is in position for the said lugs to embrace stop 19 and the unbroken portion of the periphery of disk 12 is presented to said end surface the disk serves to prevent movement of the catch, and thereby secure the carriage against movement. (See Figs. 1 and 5.)

The rope 5 is provided with a suitable enlargement, as 5′, which engages with the projection 14 during movement of the rope to lift the load, and thereby rotates disk 12, bringing the projection 15 into position beneath the enlargement 5′ to lie opposed to the same. This movement of disk 12 brings the depression 12′ beneath catch 16, which is then free and swings from engagement with stop 19 as the carriage starts forward, the lower corner portion 16′ of the catch entering the depression 12′, acting as a pawl to prevent reverse action of the disk when the enlargement 5′ bears upon projection 15. As the carriage returns lug 18 engages stop 19, and thereby trips catch 16, thus releasing disk 12 and bringing the lugs 17 and 18 into position to embrace said stop.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States of America, is—

In combination with a track and a stop thereon, a carriage on said track, a hoisting-rope supported on the carriage and provided with an enlargement, a rotatable element on the carriage having a depression in its edge portion and provided with a projection receiving said rope and being adapted to be engaged by the enlargement thereof to effect rotation of said element, means secured to the edge portion of said element at a point below the projection thereof and embracing

the rope after said element has been rotated, and a catch member pivoted to the carriage and having its lower portion formed to snugly engage the edge portion of said element or engage in the depression thereof and having its upper portion formed for locking engagement with said stop.

Signed at Seattle, Washington, this 28th day of November, 1905.

JOHN W. COOPER.

Witnesses:
C. T. SYLLIAASEN,
ANDREW LARSON.