Patented Apr. 9, 1901.

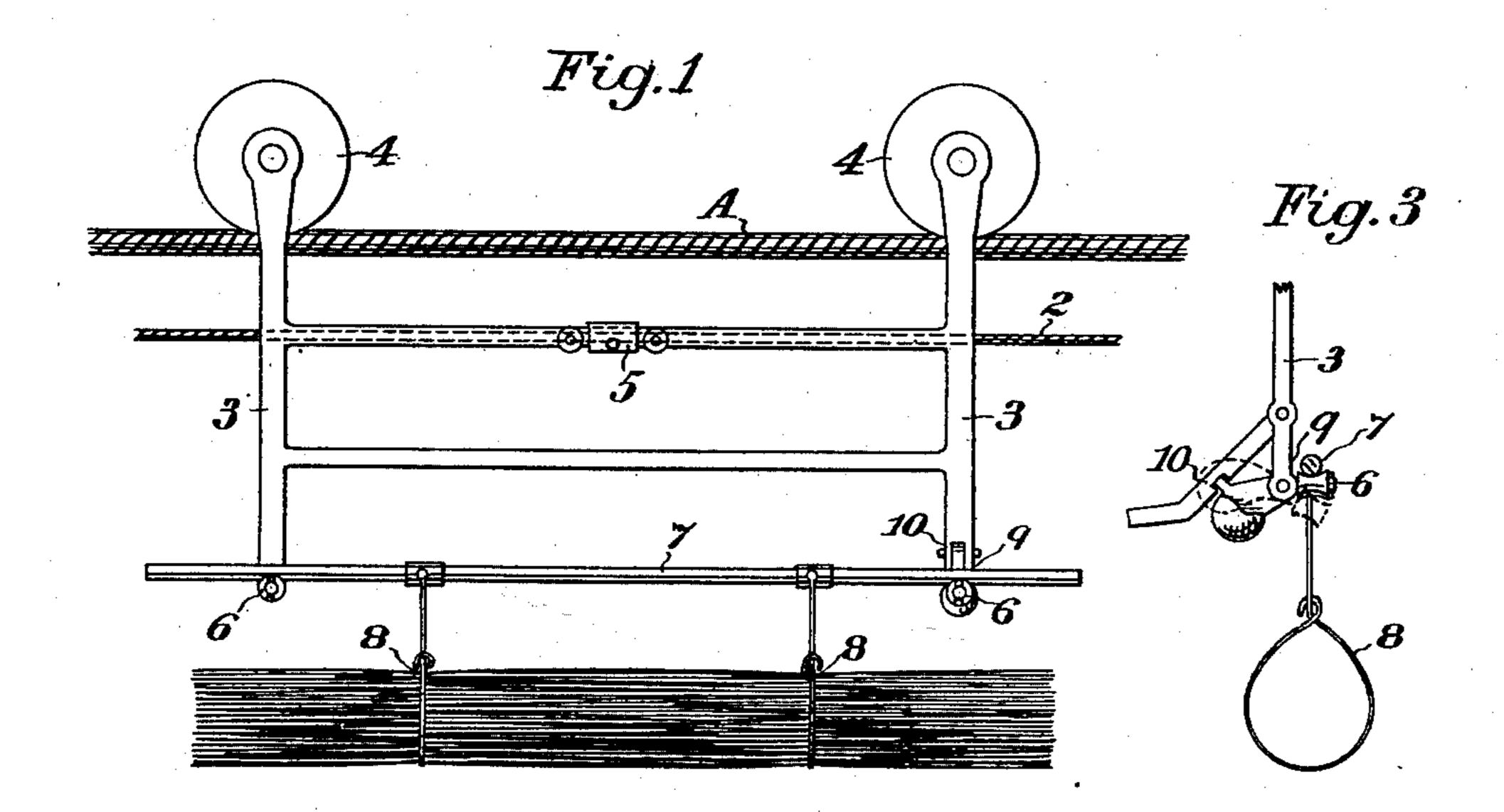
A. S. HALLIDIE, Dec'd.

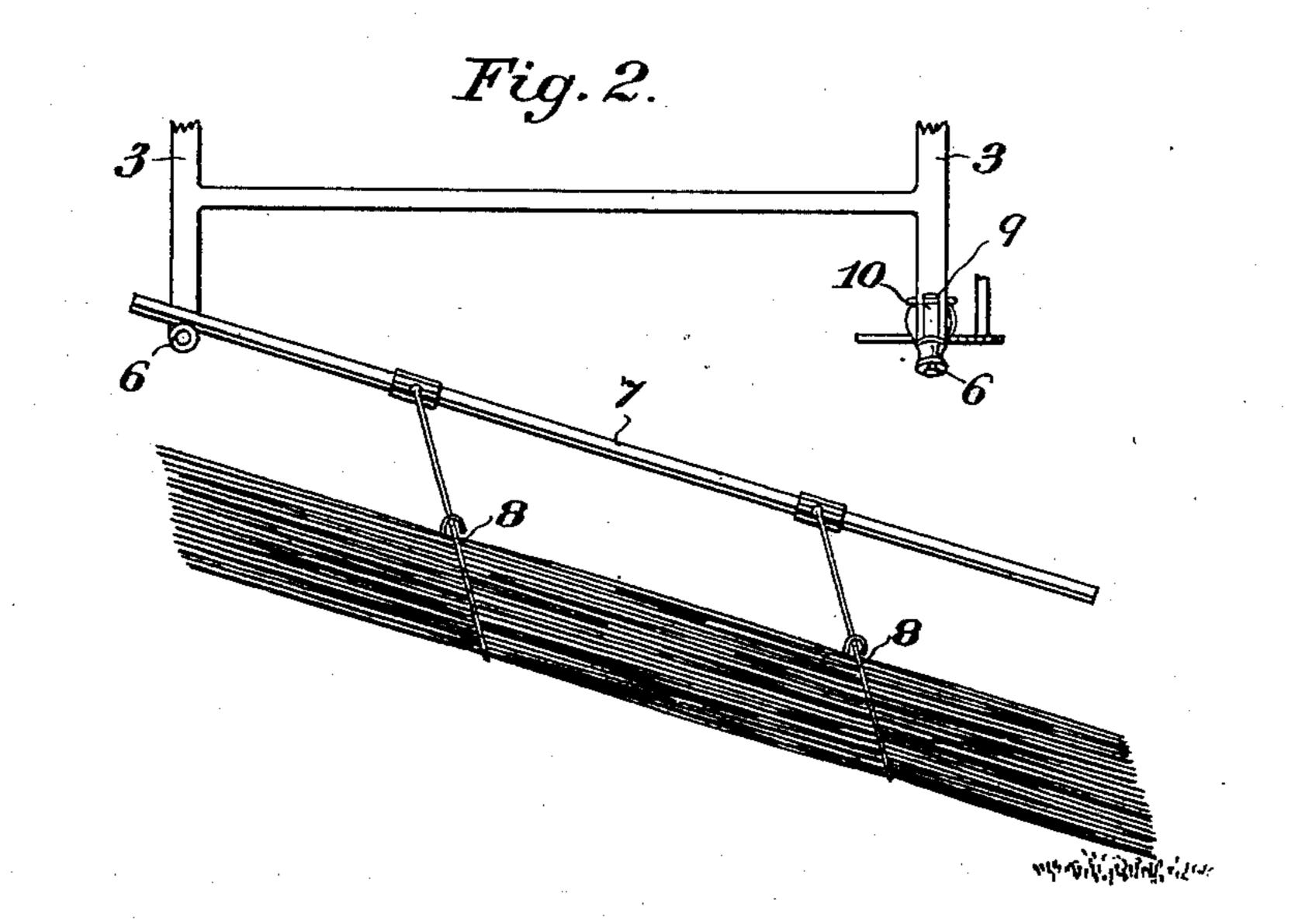
M. E. HALLIDIE, Executrix.

CONVEYER FOR ROPEWAYS.

(Application filed Sept. 24, 1900.)

(No Model.)





Witnesses, Ed Branday, Stomse

Andrew De Hallidie By Davy Strong & Co Allan

## UNITED STATES PATENT OFFICE.

MARTHA E. HALLIDIE, OF SAN FRANCISCO, CALIFORNIA, EXECUTRIX OF ANDREW S. HALLIDIE, DECEASED.

## CONVEYER FOR ROPEWAYS.

SPECIFICATION forming part of Letters Patent No. 671,591, dated April 9, 1901.

Application filed September 24, 1900. Serial No. 30,879. (No model.)

To all whom it may concern:

Be it known that ANDREW S. HALLIDIE, deceased, late of the city and county of San Francisco, State of California, did invent new and 5 useful Improvements in Conveyers for Ropeways, of which the following is a specification.

This invention relates to a conveying attachment to be used for aerial wire ropeways or tramways, and is designed for the purpose to of transporting sugar-cane and other material that can be made up into bundles or packages.

It consists, essentially, of slings in which the packages or bundles are contained, with a pole or rod from which the slings are sus-15 pended. This pole or rod is placed upon carriers suspended from the ropeway, and thus the bundle is transported to the point where it is to be delivered. The delivery is effected by an automatic unlatching device which dis-20 engages the pole from the arm, allowing the bundle to be delivered.

Referring to the accompanying drawings, bundles for transportation. Fig. 2 shows the 25 detaching to allow them to be delivered. Fig. 3 is a detail of the releasing device.

A represents a cable or standing rope, and 2 is a traveling rope, movable with relation to the standing rope, so that anything con-30 nected with the movable rope will be carried along by it.

The hangers 3 are supported by means of wheels or rollers 4, which are journaled or otherwise connected with the upper ends of 35 the hangers and adapted to rest upon the standing rope or cable. With suitable relation to the hangers are grips, as at 5, which are so placed that they may be closed to grip the traveling cable, when anything supported 40 from the hangers would be caused to move in unison with the movements of the cable. The lower end of each hanger is provided with a latched hinged arm 6, the projecting end of which is so disposed that it will support a 45 pole or rod 7. The hangers are placed sufficiently far apart to permit a bundle or package of such character as the apparatus is designed for to be suspended from the pole.

In the present case the device is illustrated 50 as being arranged for the transportation of sugar-cane from the point where it is cut to

the mill or other station where it is to be deposited; but it will be manifest that by mechanical variations well understood by those expert in the art the apparatus may be adapted 55 for transporting any form of material which it is desired to deliver at certain points. The cane, as here illustrated, is made up in sufficiently large bundles and is held together by means of slings 8, which are attached to the 60 pole at points suitable to the hangers, and when the pole is placed upon the hangers it holds the bundle suspended beneath it, so that it will be transported by the traveling cable. The device is so arranged as to au- 65 tomatically discharge the bundle at the desired station by making one or both of the pole-supports hinged or jointed or otherwise disengageable and providing a means for disengaging this support at the proper 70 point. If desired, the arm of the forward sling can remain rigid and the arm of the rear hanger be provided with a joint 9 and a latch Figure 1 shows the manner of suspending the | 10, which normally holds the arm in position. The arm may be weighted or otherwise so 75 disposed that it will when released return to its normal position and engage the latch. The end of the latch projects, so that when the apparatus arrives at the point of deposit this latch will strike a fixed arm or projec- 80 tion and will be disengaged from the supporting-arm. The weight of the bundle upon the outer end of this arm will cause the arm to tilt as soon as it is disengaged from the latch or tripping lever, and this will allow the rear 85 end of the bundle to fall to the ground or platform, the front end of the pole sliding off from its arm at the same time by the continued motion of the forward hanger. As soon as the bundle is thus delivered the weighted 90 end of the pole-supporting arm will swing into its normal position and will again engage the latch-lever and be in condition to receive another pole with its load.

The rope-grip 5 may be of any suitable or 95 well-known form which will clamp the frame of the conveyer to the hauling-rope.

What is claimed is—

1. A conveyer for ropeways consisting of hangers connected together by means of tie- 100 rods, to the upper ends of which are wheels arranged to run on a fixed cable, and having

at their lower ends hinged arms adapted to sustain a pole to which are attached slings arranged to embrace and sustain a bundle or package, and a disengaging latch mechanism attached to the hinged arms for the purpose of delivering said pole and bundle at the

delivery-point.

2. A conveyer for ropeways, consisting of a frame formed by two hangers, connected together by tie-rods, said hangers having at their upper ends wheels adapted to run on a fixed cable, and at their lower ends hinged arms arranged to sustain a pole to which slings are attached, adapted to carry a bundle, one or both of said hinged arms being furnished with a latch mechanism for the purpose of disengaging said pole and bundle at the place of delivery.

3. A tramway-conveyer, consisting of two hangers having wheels at their upper ends, adapted to run on a fixed cable, and releasable hinged arms at their lower ends adapted to sustain a pole with slings attached there-

to, on which is supported a bundle or package, the hangers being connected together by 25 a tie-rod to which is attached a grip adapted to connect said hangers to a hauling or movable cable.

4. An elevated - tramway conveyer - frame furnished at its upper member with one or 30 more wheels arranged to run on a track one of the horizontal members having attached thereto a rope-grip adapted to seize a hauling or moving rope, the lower ends of the vertical members having hinged releasable and 35 self-engaging arms adapted to sustain, transport and discharge a pole having a bundle attached thereto by means of suitable slings.

In testimony of which invention I hereunto

set my hand.

MARTHA E. HALLIDIE, Executrix of the last will of Andrew S. Hallidie, deceased.

Witnesses:

OSGOOD PUTNAM, SIDNEY M. VAN WYCK, Jr.