

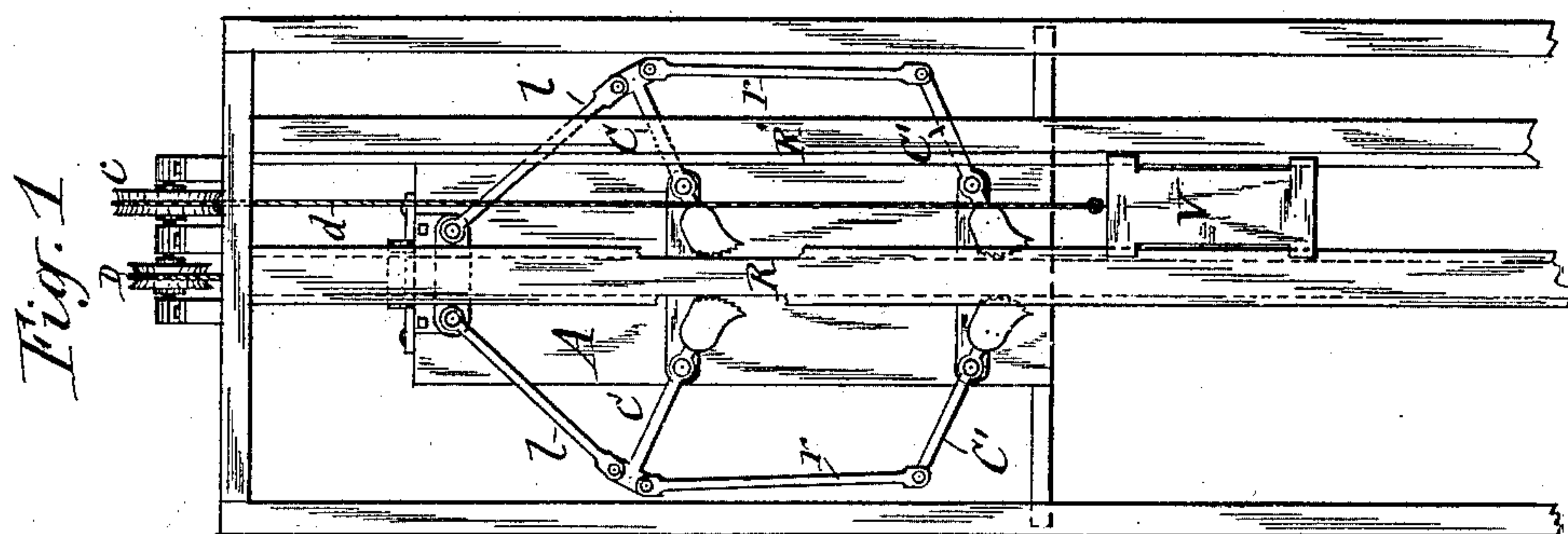
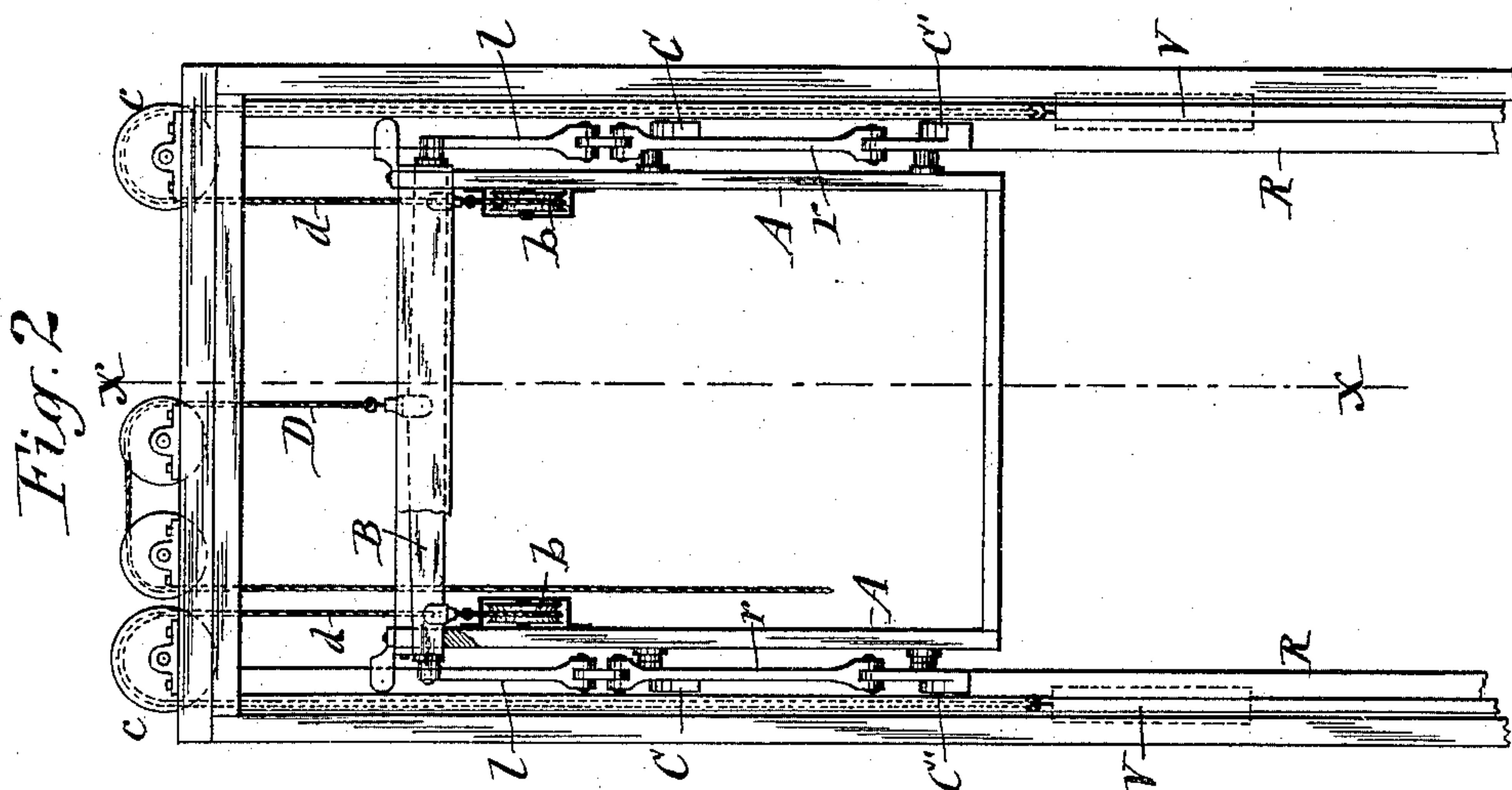
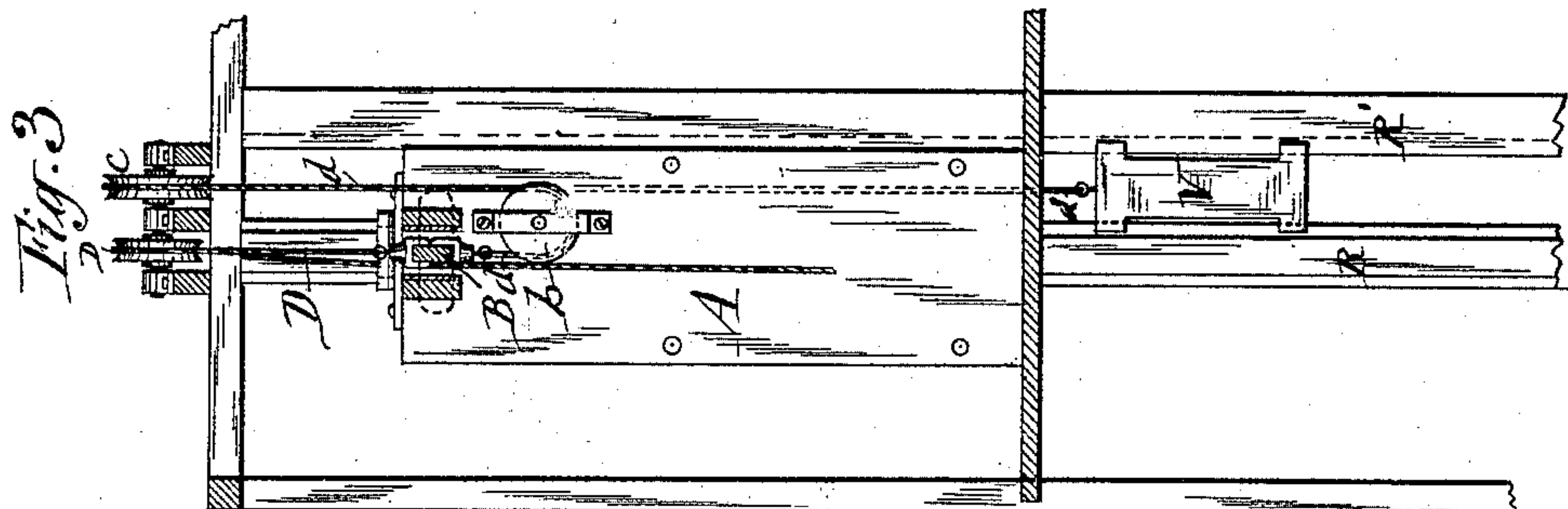
(No Model.)

D. P. VAN COURT.

ELEVATOR.

No. 390,535.

Patented Oct. 2, 1888.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

DANIEL P. VAN COURT, OF MOHAWK, NEW YORK.

## ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 390,535, dated October 2, 1888.

Application filed June 18, 1888. Serial No. 277,447. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL P. VAN COURT, of Mohawk, in the county of Herkimer, in the State of New York, have invented new and  
5 useful Improvements in Elevators, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of elevators in which the car has its head-beam connected thereto movable vertically and the safety-clutch mechanism connected with the head-beam, so as to be operated automatically thereby.

15 My invention consists in the combination, with the elevator-car, movable head-beam, and clutch mechanism connected with said head-beam, of devices hereinafter described, and specifically set forth in the claim.

20 In the annexed drawings, Figure 1 is an external side view of an elevator-car equipped with my improvements. Fig. 2 is a front elevation of the car; and Fig. 3 is an internal side view of the same, taken from line  $x x$  in Fig. 2  
25 toward the left.

Similar letters of reference indicate corresponding parts.

A denotes the car-frame, which may be of any suitable construction.

30 B designates the head-beam or lift beam, which is arranged movable vertically on the car-frame and has connected to it the hoist-cable D.

I pivot two pulleys,  $b$ , to the inner sides of  
35 the upper portion of the car-frame beneath the head-beam B, and pivot pulleys  $c c$  to suitable supports at the upper end of the elevator shaft or tower, and in connection with these pulleys I employ cables or chains  $d$ , each of  
40 which is connected at one end to the head-beam B and extended around the lower portion of one of the pulleys  $b$ , thence around the top portion of one of the pulleys  $c$ , and connected at its free end to the counter-weight  
45 V, which slides between vertical guide-rails R and R' in the usual manner.

The ends of the head-beam project through the sides of the car-frame and are connected with the safety-clutch mechanism on the exterior of the car-frame. Said clutch mechanism  
50 may be of any suitable and well-known form.

For exemplification of the operation of my invention in connection with the clutch mechanism I have shown the latter in the annexed drawings in a form similar to that shown in  
55 the patent to F. C. Roberts, Serial No. 360,483, dated April 5, 1887; and it consists of clutch-arms C and C', pivoted to the car-frame, and having one end adapted to grip the guide-rail R, and coupled together at the opposite end by  
60 a rod,  $r$ , and connected with the head-beam B by a link,  $l$ , as shown in Fig. 1 of the drawings.

The operation of my invention is as follows: In case the hoisting-cable D is broken or accidentally detached from the head-beam B during  
65 the movement of the car, the head-beam is drawn down by the counter-weight V, and this downward movement of the head-beam throws the clutch-arms C C' into engagement with the rail R, so as to arrest the descent of the car.  
70

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In combination with the elevator-car, its movable head-beam, and clutch mechanism  
75 connected with said head-beam, a pulley pivoted to the car beneath the head-beam, a pulley pivoted to the upper end of the elevator-shaft, a cable connected at one end to the head-beam and extended around the pulley on the  
80 car and thence around the pulley in the elevator-shaft, and a counter-weight attached to the free end of said cable, substantially as described and shown.

In testimony whereof I have hereunto signed  
85 my name, in the presence of two witnesses, at Mohawk, in the county of Herkimer, in the State of New York, this 14th day of June, 1888.

DANIEL P. VAN COURT. [L. S.]

Witnesses:

H. J. COWIE,

JOHN MCCHESENEY.