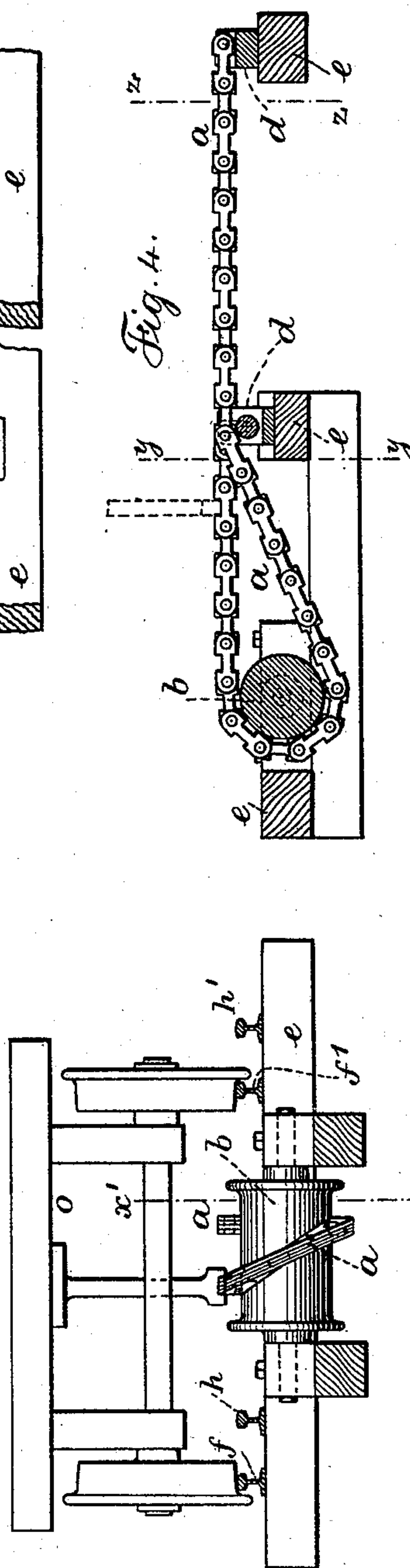
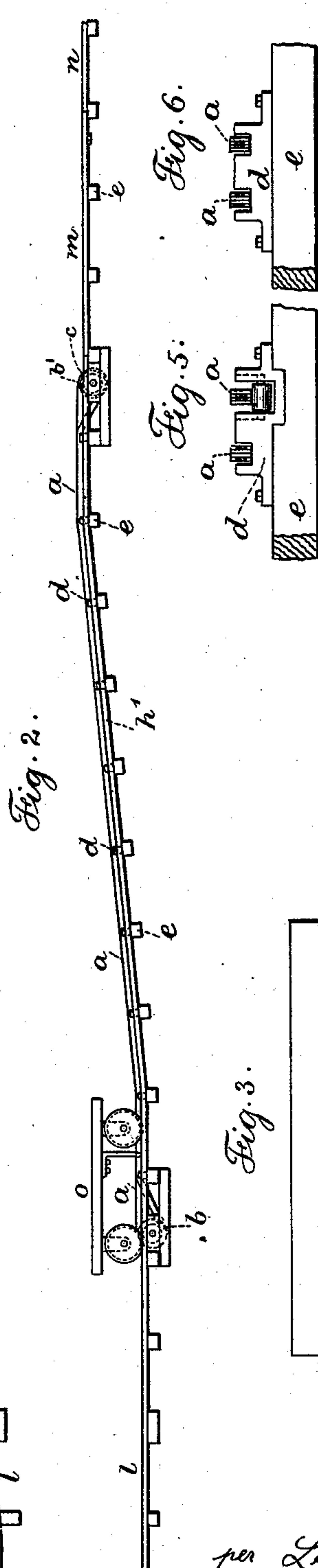
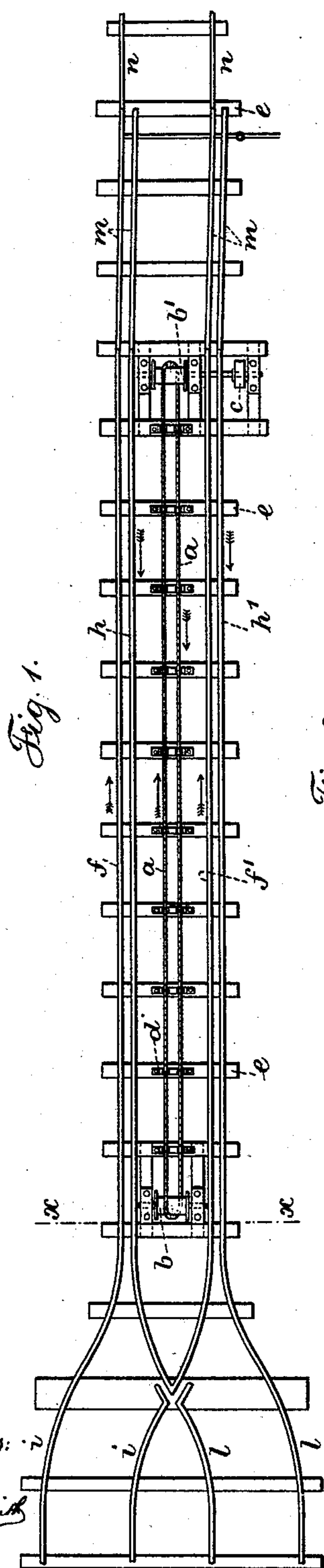


(No Model.)

C. W. HUNT.  
CABLE RAILWAY.

No. 540,058.

Patented May 28, 1895.



Witnesses: ·  
J. Staib  
Chas. H. Smith

Inventor:  
Charles W. Hunt  
per Lemuel W. Ferrell atty.



# UNITED STATES PATENT OFFICE.

CHARLES W. HUNT, OF WEST NEW BRIGHTON, NEW YORK.

## CABLE RAILWAY.

SPECIFICATION forming part of Letters Patent No. 540,058, dated May 28, 1895.

Application filed August 24, 1891. Serial No. 403,547. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES W. HUNT, a citizen of the United States, residing at West New Brighton, in the county of Richmond and State of New York, have invented a new and useful Improvement in Cable Railways, of which the following is a specification.

An endless chain or cable has been made use of for drawing a car up an incline on one track or lowering the car down the incline upon another track.

My present invention is made with reference to rendering the tracks compact so as to occupy but little space, one rail of one track being between the two rails of the other track, and with this arrangement the different portions of the chain or cable are central to the respective tracks, and the approaches to these tracks are either by two separate tracks converging to the aforesaid rails, or by one track and a switch.

My improvement is especially applicable to tracks in factories or yards, to places where there are short lines and grades from one elevation to another or to places where cars have to be transferred from point to point, or over bridges, &c.

In the drawings, Figure 1 is a plan view of my improvement. Fig. 2 is an elevation of the same, and Fig. 3 is an enlarged cross-section on Fig. 1 at the line  $xx$ . Fig. 4 is an elevation at the section line  $x'x'$  of Fig. 3, and Figs. 5 and 6 are detailed views at the cross-section lines  $yy$  and  $zz$ , respectively, of Fig. 4. Figs. 3 to 6, inclusive, are in larger size.

$a$  represents the endless cable composed of wire rope or links. I prefer links of the form shown with notched opposite edges.

The cable  $a$  runs over pulleys  $b, b'$ , whose shafts are suitably journaled and power is applied to a pulley  $c$  on one shaft. The pulleys  $b, b'$  are of sufficient width to allow the cable to pass around them, and the cable is of sufficient length for one portion to be brought up to the same plane as the other portion.

The cable  $a$  passes around the respective pulleys  $b, b'$  and it draws in a straight line from one to the other except where the cable rises, as indicated in Fig. 4, and passes over a guide roll in one of the guide blocks  $d$  and it passes over a similar roller as it descends to the

other pulley ( $b$ ), and these guide blocks  $d$  are placed upon the ties, and the notches in these guide blocks are adapted to guide the respective parts of the chain or cable, so that one portion of the chain or cable is central or nearly so between the rails  $f$  and  $f'$  composing one track, and the other part of the chain or cable is central or nearly so between the rails  $h, h'$  composing the other track. I have represented by the arrows the track  $f, f'$  as the up track and the track  $h, h'$  as the down track, and the separate tracks  $i$  and  $l$  are represented as converging to the rails  $f, f'$  and  $h, h'$  respectively, and the switch rails  $m$  are represented as movable so as to bring either track to coincide with the track  $n$ . I have represented a car at  $o$  with a downwardly projecting arm, the end of which is adapted to engage the chain  $a$ , such chain being represented as made of links with heads forming recesses or notches for the lower end of the arm to engage, as the car is moved along and the arm comes into contact with the links of the chain, so that the car may be moved up the incline upon the track  $f, f'$  or may be lowered down the incline upon the track  $h, h'$ .

It is to be understood that the arm upon the car  $o$  projects downwardly and is central or nearly so in order that the end of the arm may engage the proper part of the chain as the car is run from the track  $i$  upon the rails  $f$  and is drawn up by the chain, or as the car may be run over the switch or rails to the track  $h, h'$  and engage the descending portion of the chain to lower the car down such track to the track  $l$ .

I claim as my invention—

The combination with the parallel lines of rails forming two tracks for cars moving in opposite directions, of an endless cable composed of notched links, pulleys around which the cable passes and means for driving one of such pulleys and guide blocks having grooves or ways for both portions of the cable to lie in while moving in opposite directions, substantially as set forth.

Signed by me this 18th day of August, A. D. 1891.

CHAS. W. HUNT.

Witnesses:

HAROLD SERRELL,  
WILLIAM G. MOTT.