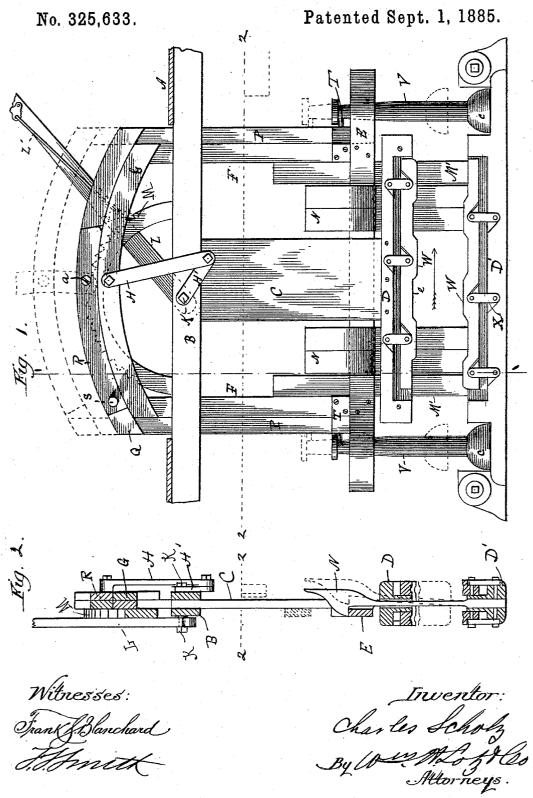
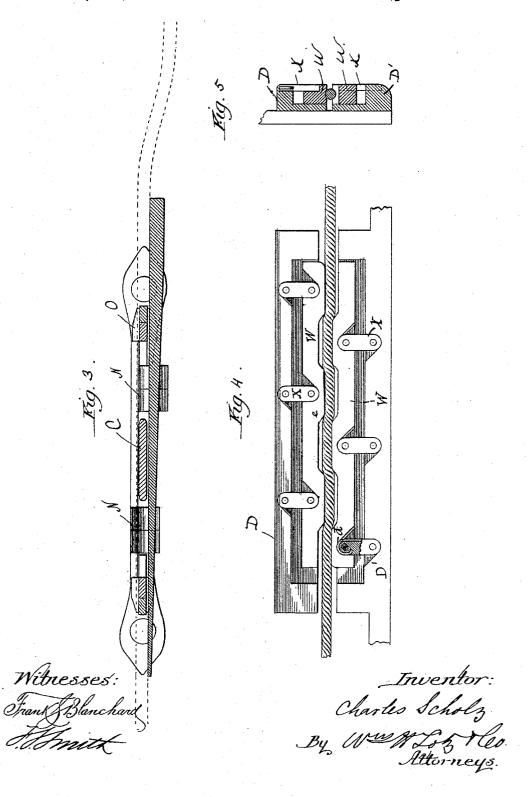
C. SCHOLZ. GRIP FOR CABLE RAILWAYS.



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No. 325,633.

Patented Sept. 1, 1885.



UNITED STATES PATENT OFFICE.

CHARLES SCHOLZ, OF CHICAGO, ILLINOIS.

GRIP FOR CABLE RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 325,633, dated September 1, 1885.

Application filed June 16, 1885. (No model.)

To all whom it may concern:

Be it known that I, CHARLES SCHOLZ, a subject of the Emperor of Germany, residing at Chicago, in the county of Cook and State 5 of Illinois, have invented certain new and useful Improvements in Cable Railways, of which the following is a specification, reference being had therein to the accompanying draw-

My invention relates to certain improvements

in cable-grips.

The object of the invention is principally to render certain the disengagement of the grip and cable when the change from one cable to 15 another is necessary; and to the accomplishment of that end it consists of certain novel devices and combination of devices, as will be described and claimed.

Reference will be made to the accompanying 20 drawings, in which Figure 1 is a side elevation of the grip; Fig. 2, a section on line 11; Fig. 3, a section on line 22, and Figs. 4 and 5 details

of parts.

Like letters refer to like parts in each view. A represents the flooring of the car, and B one of the beams thereof, there being a suitable opening in the flooring for the operation of certain of the parts.

Mortised into beam B is a vertical piece, 30 C, which at its lower end is secured to the stationary part D of the grip proper. Suitably situated at a point slightly above this part D is a bar, E, to the opposite ends of which uprights F are secured. These up-35 rights pass up through openings formed in beam B, and are connected at their upper ends by a curved cross-piece, G.

At or about the center of piece G there is secured an arm, H, which at its lower end is 40 pivoted to one end of an arm, H', the opposite end of the latter arm being secured to a bolt,

K, passed through beam B.

Secured to the opposite end of bolt K is a lever, L, carrying a dog, L', adapted to mesh 45 with a segmental rack, M, mounted upon beam B. By this arrangement of parts it will be seen that, supposing the lever to be in the position shown in full lines, Fig. 1, if it is turned so that the dog will engage with the 50 rack at its opposite side or end, the arms H H' will operate to force cross-piece G, uprights

F, and cross-bar E upwardly or toward sta-

tionary part D of the grip.

Secured to bar E are two posts, M', which extend downwardly and are connected with 55 the movable part D' of the grip, connection being thus made to raise said part D' with bar E. Two sets of spring-arms, N, are also mounted upon part D', said arms being provided on their upper ends with enlarged 60 heads adapted to rest upon bar E, the length of such arms being sufficient to allow this.

At a point in the track-groove slightly in advance of the point where one cable is to be left and another taken up there is a wedge- 65 shaped piece, O, inserted. The heads of spring-arms N move in the track-groove, and as they strike this piece O they are forced from their hold on bar E, and the lower part of the grip allowed to fall to the position it 70 occupied before being raised through the medium of the lever and the intermediate connections described.

Uprights Paresituated beside those marked F, said uprights resting upon bar E, and con- 75 nected at their upper ends by a curved crossbar, Q, said bar occupying a position directly

above the bar G.

An arm, R, is pivoted to cross-bar Q, as at a, Fig. 1, and its long end is provided with a 8c handle or stud, S. By raising the long end of this arm to the position shown in dotted lines, Fig. 1, its short end presses on bar G, and serves to raise bar Q and its uprights, as indicated.

At a point near the lower end of each upright P there is provided a stud, T, resting under the head of an upright, V, said upright passing up through openings in bar E, and resting at their lower ends upon the movable 90 part D' of the grip. At the lower end of each there is provided an enlargement, c. These uprights are raised by the connections described, and as they are raised their heads c raise the cable from the grip and leave the 95 car entirely free. After the spring-arms have been released from their hold on bar E it will be understood that by raising the movable part of the grip they may be carried back to TOO their original position.

The grip proper consists of two bars, W, pivoted in parts D D' by arms X, the arbors of which are provided with springs d, adapted to hold the bars in the position shown in Fig. 1, but at the same time allow of a certain give to such bars when the cable is seized to 5 prevent a sudden jar. Each bar W is cut away slightly at points e, each cut-away portion of one bar being in a line with a corresponding projection on the other, the cable being by this arrangement firmly seized and 10 held.

What I claim is—

1. The combination, with a two-part grip and mechanism for operating the same, of spring-arms to hold the parts together, and 15 suitable mechanism for releasing such arms when desired.

2. The combination, with a two part grip and mechanism for operating the same, of spring arms secured to the movable part of

the grip, and provided with enlarged heads 20 adapted to rest upon a cross-bar, and a wedge located in the track-groove, as set forth.

3. The combination, with suitable operating mechanism, of a grip consisting of two frames, each provided with a longitudinal bar 25 hung upon suitable arms, as set forth.

4. The combination, with suitable operating mechanism, of a grip consisting of two frames, each provided with a notched longitudinal bar hung upon suitable arms, around 30 the arbors of which suitable springs are passed, as set forth.

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

CHARLES SCHOLZ.

Witnesses:

M. J. CLAGETT, LOUIS NOLTING.