

(No Model.)

W. H. KNIGHT.
ELECTRIC RAILROAD.

No. 338,082.

Patented Mar. 16, 1886.

Fig. 1

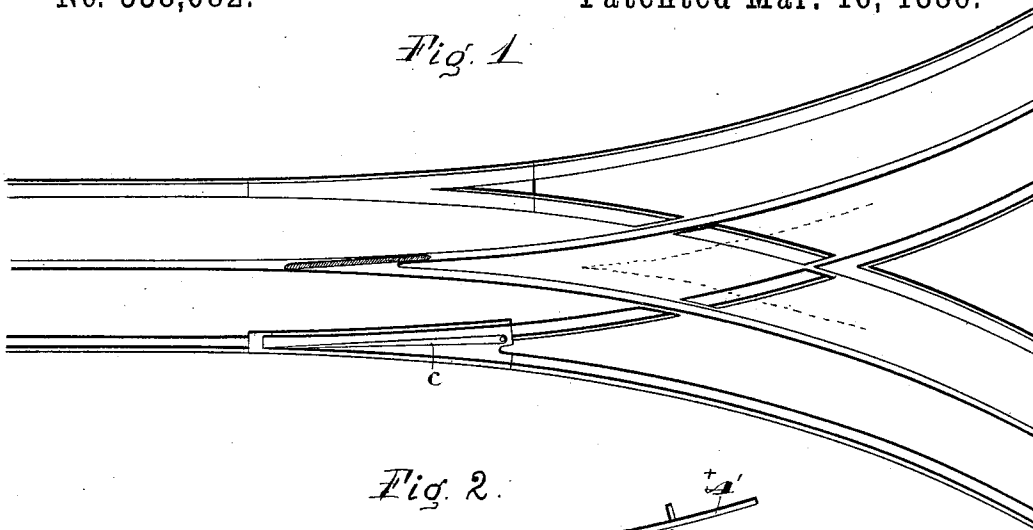


Fig. 2

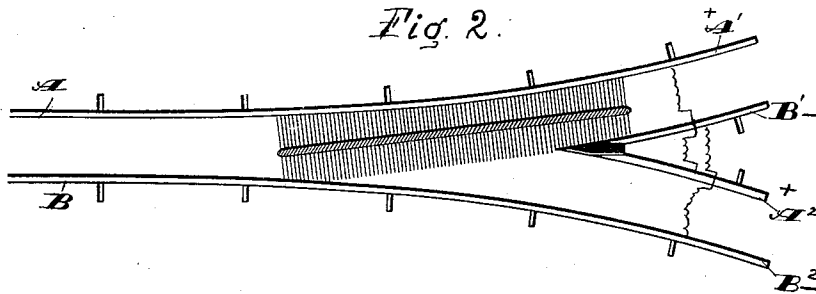


Fig. 3

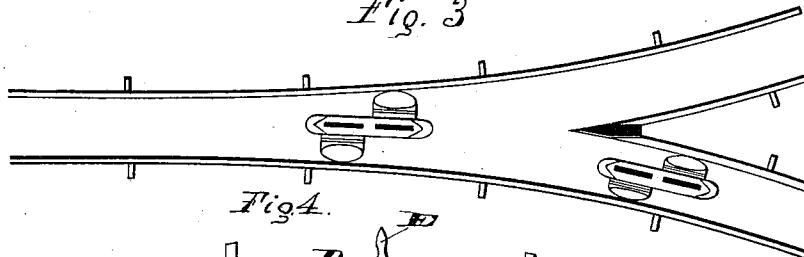
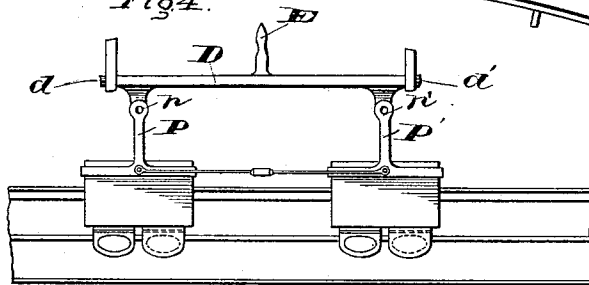


Fig. 4



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UNITED STATES PATENT OFFICE.

WALTER H. KNIGHT, OF NEW YORK, N. Y.

ELECTRIC RAILROAD.

SPECIFICATION forming part of Letters Patent No. 338,082, dated March 16, 1886.

Application filed July 10, 1885. Serial No. 171,128. (No model.)

To all whom it may concern:

Be it known that I, WALTER H. KNIGHT, a citizen of the United States, and a resident of New York, N. Y., have invented certain new and useful Improvements in Electric Railways, of which the following is a specification.

My invention consists in certain devices by means of which in an electric railway wherein one or both of the conductors are inclosed in a slotted conduit the contact device extending into said conduit to the said conductor or conductors may be guided into either one of two branch conduits.

In the accompanying drawings, Figure 1 is a plan view of the track and conduit-slot. Figs. 2 and 3 represent the main conductors and contact devices, and Fig. 4 is a side elevation of the said contact devices.

In this invention it is my object to dispense with any movable points either upon the slot or upon the conductors and yet be enabled to guide the contact-plow at will. I therefore have both the conductors and the edges of the slot stationary at the branching-point and provide means for directing the plow into the proper slot.

Various means for directing the plow and the contacts may be employed.

In Fig. 1 I have shown the track-switching point *c* somewhat in advance of the branching-point of the slot, so that the vehicle from which the plow is suspended will be turned into one branch or the other before the plow reaches the branching-point of the slot, and the plow will have a tendency to follow in the same direction with the vehicle. In the same manner the branching-point of the conductors is placed behind the branching-point of the slot. The resiliency of the brushes gives sufficient flexibility to the plow to allow it to follow the slot and conductor at the same time, though I do not limit myself to this means of gaining the desired flexibility. Instead of this arrangement, however, the arrangement illustrated in Fig. 4 may be used.

P and P' represent two plows, such as are described and claimed in an application filed by me on or about May 7, 1885. These plows are shown herein simply to illustrate this invention, and no claim upon their construction is made, nor is it intended that their appearance herein shall prejudice in any way any

claims made upon them in said pending application. These plows P P' are pivoted at the points *p p'* about two lateral axes in the manner described in said application. These axes are carried by a frame, D, which has a swinging movement about the longitudinal axis *d d'*. A handle, E, may be added to the frame so that it may be turned about the said axis and thereby force the two plows to one side or the other of the slot. When, now, the vehicle approaches the branching-point of the slot, the driver, by means of the said handle E, can throw the plows to one side or the other, so as to direct them into the proper slots. As the conductors are also fixed, it will be necessary that the contact device should be of a length sufficient to bridge any breaks that may be occasioned by the branching.

In Figs. 2 and 3, A and B represent the two main conductors. A' B' represent the corresponding conductors in one branch, while A² B² represent the corresponding conductors in the other branch.

In Fig. 2 a long contact-brush is shown, which is of a length sufficient to bridge the break between the main conductor B and its corresponding branch conductor, B'.

Instead of having one long brush, a double plow, such as is shown in Figs. 3 and 4, may be employed. By means of this double plow contact will always be maintained, one plow being in contact with the conductors while the other is passing over the break.

Having thus described my invention, what I claim is—

1. The combination, in a branching electric railway, of a branching slotted conduit parallel therewith having its edges stationary at the branching-point, an electric conductor thereon parallel with the slot and also stationary at the branching-point, a contact device extending from the vehicle of the railway into the slotted conduit to the conductor therein, and means for directing said device from the main into the branch slot.

2. The combination, in a branching electric railway, of a branching slotted conduit parallel therewith, having its edges stationary at the branching-point, an electrical conductor therein parallel with the slot and also stationary at the branching-point, a contact device

extending into said slot, and having freedom of lateral movement, with means for directing said device from main to branch slot.

3. The combination, in a branching electric railway, of a branching slotted conduit parallel therewith, an insulated conductor therein, and a contact device extending from a vehicle on the railway through the slot into the conduit, and a track-switch for directing a vehicle from the main to a branch track, the said switch being placed in advance of the branching-point of said slot.

4. The combination, in a branching electric railway, of a branching slotted conduit parallel therewith, a branching insulated electric conductor inclosed therein, and a flexible contact device extending through the slot to the conductor, the branching of the slot being in advance of the branching of the conductor.

5. The combination, in a branching electric railway, of a vehicle thereon, a branching slotted conduit parallel therewith, an insulated electric conductor inclosed therein, a contact

device extending from said vehicle through the slot to the inclosed conductor, and means for switching the vehicle from main to branch track before the contact device passes from main to branch conduit.

6. The combination, in a branching electric railway, of a branching slotted conduit parallel therewith, an insulated electric conductor inclosed in each branch conduit, an insulated electric conductor terminating in a contact device and extending from a vehicle on the railway through the slot to the inclosed conductor, with means for directing the said conductor from main to branch conduit before its contact device passes from main to branch conductor.

In testimony whereof I sign this specification, in the presence of two witnesses, this 30th day of June, 1885.

WALTER H. KNIGHT.

Witnesses:

G. RENAULT,
HERBERT KNIGHT.