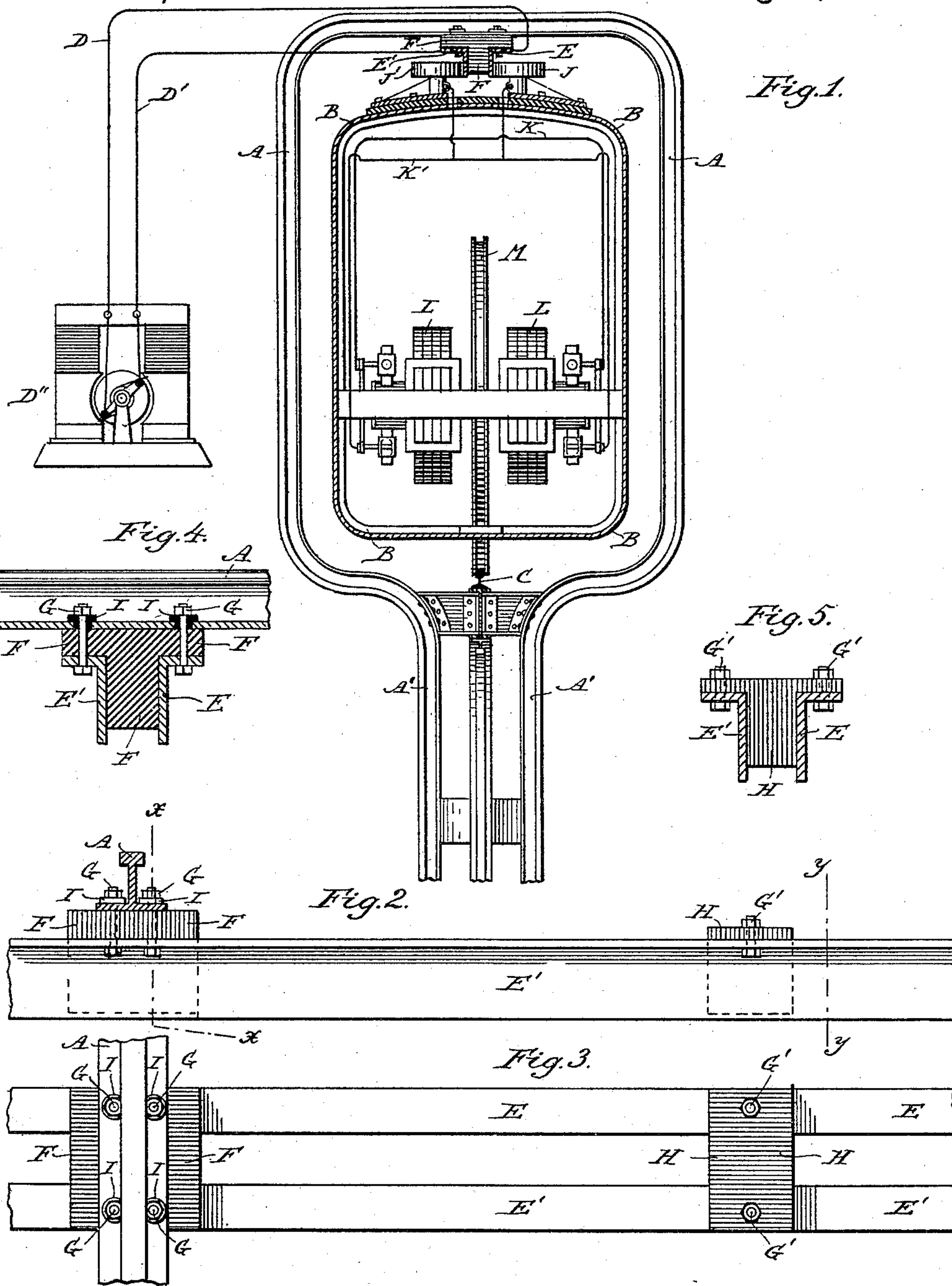


(No Model.)

E. M. BOYNTON.
ELECTRIC CONDUCTOR.

No. 457,106.

Patented Aug. 4, 1891.



WITNESSES:

D. C. Reusch.

H. H. Boynton

INVENTOR

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UNITED STATES PATENT OFFICE.

EBEN MOODY BOYNTON, OF WEST NEWBURY, MASSACHUSETTS, ASSIGNOR
TO THE BOYNTON BICYCLE RAILWAY COMPANY.

ELECTRIC CONDUCTOR.

SPECIFICATION forming part of Letters Patent No. 457,106, dated August 4, 1891.

Application filed December 15, 1890. Serial No. 374,670. (No model.)

To all whom it may concern:

Be it known that I, EBEN MOODY BOYNTON, of West Newbury, county of Essex, and State of Massachusetts, have invented certain new and useful Improvements in Electric Conductors, of which the following is a full and clear specification.

My invention relates to the use of the overhead guide-beam of a bicycle-railroad for the purpose of an electric conductor. By constructing said beam of two separate metallic rails electrically insulated one from another, I can utilize one of them for the outgoing and the other for the return current. Suitable contacts, either rollers or brushes, conduct the current from one of the overhead rails to the motor or motors and from the same back to the other rail.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents an end view of an elevated bicycle structure with a car in section, also, in a general way, indicating the electric connection with the generator. Fig. 2 is a side view of the overhead guide-beam and conductor. Fig. 3 is a plan view of the same. Fig. 4 is a cross-section of Fig. 2, taken on line X X. Fig. 5 is another cross-section of Fig. 2, taken on line Y Y.

In the drawings, A A is the arch supporting the overhead compound guide-beam and conductor E E'.

A' A' is the supporting-column.

F F is a block of insulating material fastened to the arch, and to which again the overhead guide is attached, thus insulating the conductors E E' from the arch A A.

It is the intention to send the outgoing current from the generator D'' through the conductor D to the rail E, and from here through the contact-roller J and the wire K'' to the motor. After leaving the motor the current returns through the wire K to contact-roller J' to rail E', and further through D', back to the generator.

Figs. 2, 3, and 4 show in detail the method of insulating the rails E E' from the arches A A by means of the insulating-block F F. The bolts G G, that connect the arch A, block F, and rails E E' are insulated from A by insertion of the washers I I, made of insulating material.

To insure the united action of the two rails E E' as a guide, they are at intervals connected by insertion of separators H H, bolted to the rails with the bolts G' G'. These separators are also made of insulating material, so that the two rails, electrically, are entirely independent of one another.

I do not confine myself to any particular section of this overhead guide-beam, but intend to use any suitable section, as the same is capable of many variations within the scope of my invention, which, essentially, is to provide a device that shall guide the bicycle-car and also serve as conductor for conveying the electric current. Neither do I confine myself to any particular form of the contacts for bringing the current from the rails down to the motor, as I may for this purpose utilize the guide-rollers themselves, as shown in Fig. 1, or a pair of separate contact rollers or brushes, as may seem to be the most serviceable.

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

As a means for guiding a bicycle-car and conveying the electric current to the motor in same, a compound overhead beam consisting of two rails, one of which carries the outgoing and the other the returning current, said beams being insulated one from another and from their supports, substantially as herein shown and described.

Signed at New York, in the county of New York and State of New York, this 12th day of December, A. D. 1890.

EBEN MOODY BOYNTON.

Witnesses:

D. C. REUSCH,
W. H. BOYNTON.