A. DASZKO & A. BIELECH.

TROLLEY.

APPLICATION FILED OCT. 9, 1912.

1,054,092. Patented Feb. 25, 1913.

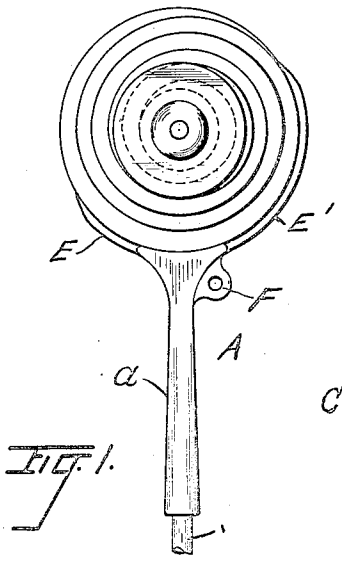

Fig. 1.

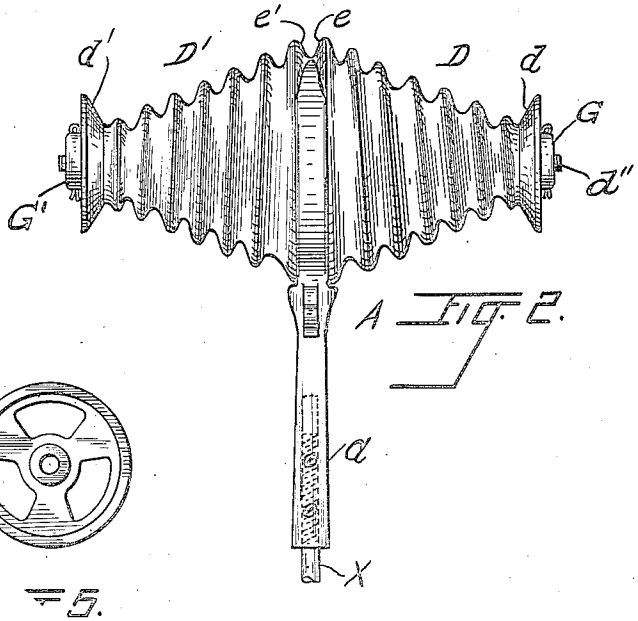

Fig. 2.

Fig. 5.

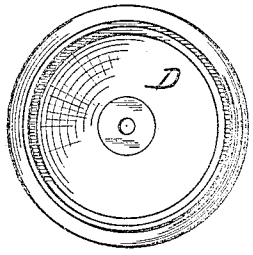

Fig. 4.

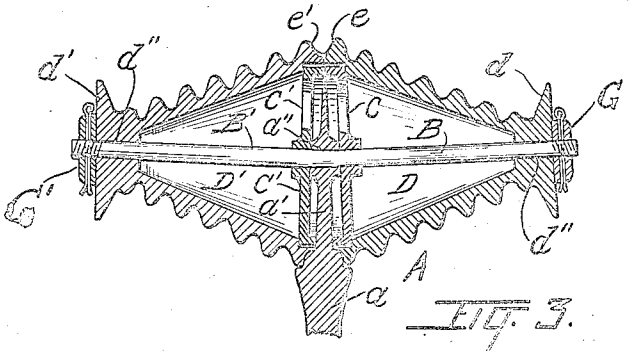

Fig. 3.

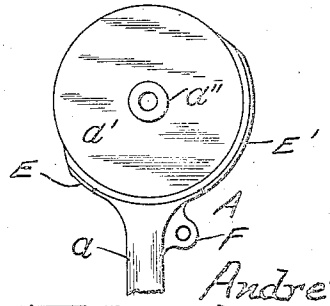

Fig. 6.

WITNESSES:

O. L. Quem

Thomas J. Morgan Jr.

INVENTORS:

Andrew Daszko, and

Andrew Bielech,

By

Charles Turner Brown

ATTORNEY.

UNITED STATES PATENT OFFICE.

ANDREW DASZKO AND ANDREW BIELECH, OF CHICAGO, ILLINOIS.

TROLLEY.

1,054,092. Specification of Letters Patent. Patented Feb. 25, 1913.

Application filed October 9, 1912. Serial No. 724,745.

To all whom it may concern:

Be it known that we, ANDREW DASZKO and ANDREW BIELECH, subjects of the Emperor of Austria-Hungary, and residents of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Trolleys, of which the following is a specification.

This invention relates to devices which are attached to the free end of poles, called trolley poles, the said trolley poles being attached to the top or upper deck of cars which are propelled by electric motors.

To those skilled in the art it is well known that trolleys become disengaged from the wire or cable with which they are engaged, and that it is necessary to replace said trolley on said wire before the car can be propelled by said motor.

The object of this invention is to obtain a trolley which will, when the wheel thereof becomes disengaged from the overhead wire, automatically return to engagement therewith, to obviate the necessity of the conductor, or other person in charge thereof, manually returning said trolley to said wire.

Further objects of this invention are to obtain a trolley which is durable, simple in construction, not liable to get out of order or break, and which is not of any considerable weight.

In the drawing Figure 1 is a side elevation of a device embodying this invention. Fig. 2 is a rear elevation of said device. Fig. 3 is a longitudinal sectional view of the device. Fig. 4 is an end elevation of one of the rotating elements forming the trolley wheel of the device, exposing the interior thereof to view. Fig. 5 is a side elevation of a supporting wheel, forming an element of the device. And Fig. 6 is a side elevation of the base of the device, said base forming the supporting member of the movable parts and shaft of said device.

A reference letter applied to designate a given part is used to indicate said part throughout the several figures of the drawing, wherever the same appears.

A is the base, and comprises the hollow stem a, in which the end of the trolley pole on which the device is secured may be inserted; and the web a' to which the shafts B, B′ are secured. Web a' is provided with hub a'' through which said shafts extend. The lower edge of the web a' is considerably thicker than the upper edge thereof, as is well illustrated in Fig. 3, and the shafts B, B′ are perpendicular to the side faces of said web. Said shafts consist of a single piece of shafting which is inserted through the hub a'', and then bent so as to be at right angles to the faces of the web a'.

C, C′ are supporting wheels which rotate freely on the shafts B, B′, respectively.

D, D′, are hollow cone shaped members which are, respectively, provided with right and left hand spiral grooves on the outer faces thereof. At the smaller end of member D there is the flange d, and at the smaller end of member D′ there is the flange d'. Flanges d, d' are designed to insure the engagement of said members D, D′, with the trolley wire in case the said members jump, or become disengaged from the said wire. d'' are the bearings of the smaller ends of said members D, D′, on the shafts B, B′, and said bearings rotate freely on said shafts. The larger ends of said members D, D′, are supported on the supporting wheels C, C′, respectively, and said wheels revolve freely on said shafts B, B′.

E is a rib on the forward edge of the web a' and E′ is a like rib on the rear edge of said web. Ribs E, E′, cover so much of the larger ends of the members D, D′, as are not substantially in contact with each other; and the purpose of these ribs is to receive thereon the trolley wire when the trolley is not in position so that said wire is not in contact with the exposed faces e, e' of said members D, D′.

F is an aperture which is adapted to receive the end of a cord or rope.

G, G′ are nuts on the ends of shafts B, B′, respectively. The ends of shafts B, B′ are respectively provided with screw threads g, and said nuts G, G′ are provided with corresponding screw threads. H are cotter pins which are put through apertures provided therefor in said nuts G, G′ and shafts B, B′, in the ordinary way of securing nuts to shafts and bolts to prevent the turning thereof after adjustment.

We claim:—

1. A trolley consisting of a base provided with a hollow handle, a web wedge shaped in cross section, with the thicker portion of said web adjacent to said handle, and with ribs extending from said handle partially around the periphery of said web, in combination with a shaft secured in said

web, with the parts of said shaft which project beyond said web at right angles to the faces thereof, cone shaped members respectively provided with right and left hand spirals and provided with circular faces on the larger ends thereof, said cone shaped members hollow, and rotatably mounted on said shaft, and supporting wheels (C C') inserted in the larger ends thereof, said supporting wheels rotatably mounted on said shaft, and means to secure said cone shaped members on said shaft and close to contact with said web.

2. The combination of a trolley roller consisting of a two part hollow cone shaped cylinder provided with right and left hand spiral grooves on the periphery thereof and provided with circular faces on the larger ends thereof, respectively, in combination with a head adapted to fit on one end of a trolley pole, said head provided with a partition extending between the larger ends of the two parts of the trolley, and said partition wedge shaped in its vertical section, with a shaft rigidly secured in said partition midway of the ends of said shaft, and said ends respectively set perpendicular to the plane of the face of said partition which is adjacent thereto, bearing wheels respectively fitting into the larger ends of the cone shaped parts of said trolley and rotatably mounted on said shaft, and the smaller ends of said cone shaped parts rotatably mounted on said shaft, nuts on the ends of said shaft, and means to secure said nuts from turning.

ANDREW DASZKO.
ANDREW BIELECH.

In the presence of—
STEPHEN JANOWICZ,
CHARLES TURNER BROWN.