

No. 652,039.

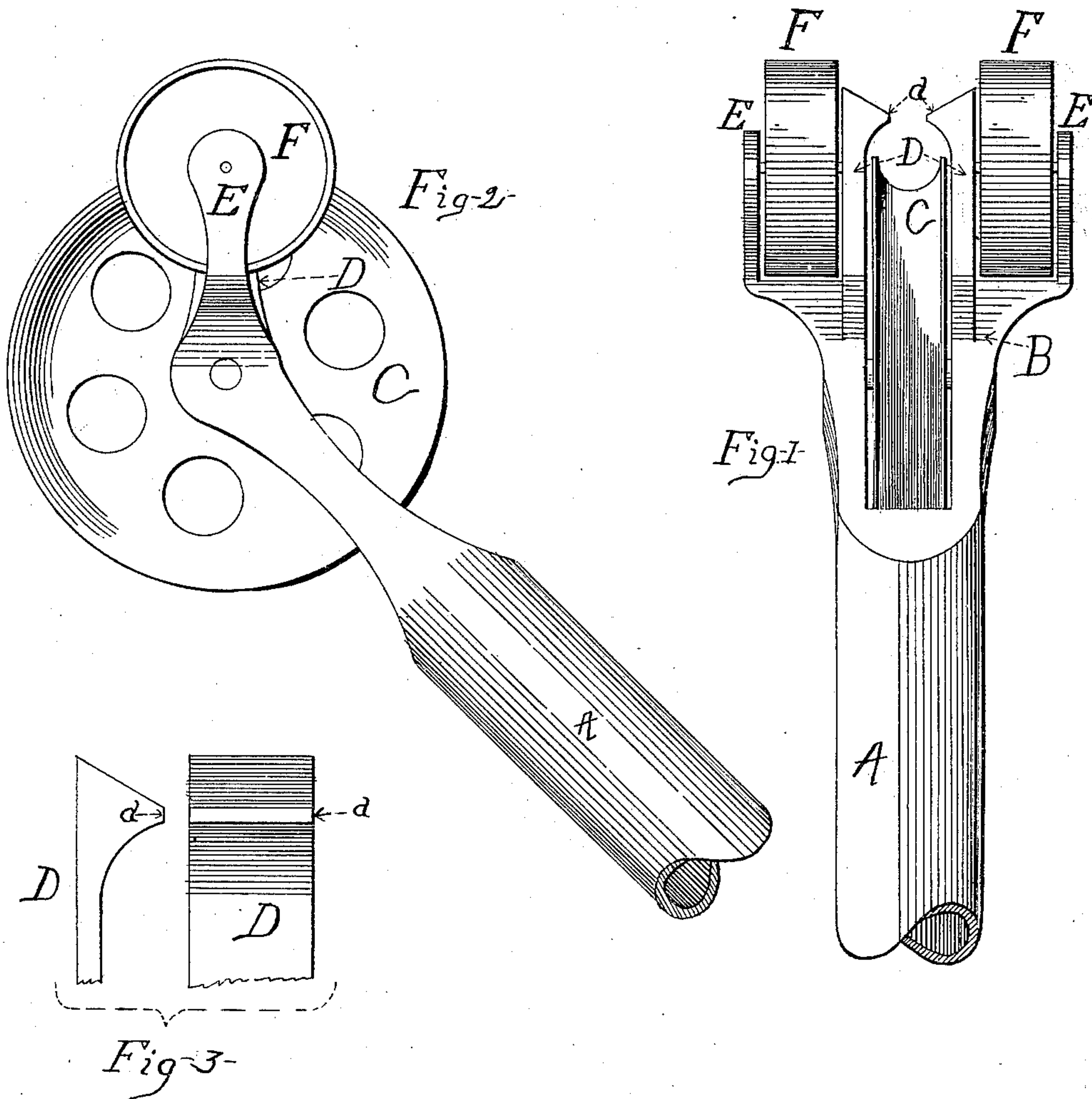
Patented June 19, 1900.

G. W. PERRY.

TROLLEY.

(Application filed Feb. 8, 1900.)

(No Model.)



Witnesses

G. W. Perry Jr.
B. M. Lough

Inventor

George W. Perry
per
W. V. Lough
Atty

UNITED STATES PATENT OFFICE.

GEORGE W. PERRY, OF PEORIA, ILLINOIS.

TROLLEY.

SPECIFICATION forming part of Letters Patent No. 652,039, dated June 19, 1900.

Application filed February 6, 1900. Serial No. 4,290. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. PERRY, a citizen of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Trolleys; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in trolleys by means of which many of the objectionable features attendant upon the use of the ordinary trolley and wheel are overcome without cumbering the mechanism and without adding materially to the cost of the usual appliances.

The object of my invention is to provide constructive means in connection with the trolley appliances that will serve as a guide and an aid in the adjustment of the trolley-wheel in contact with the wire and when so adjusted the same means serving to prevent dislodgment of the trolley from the wire, and incidentally the providing of a guard-wheel for contact with crossing wires along a trolley system.

My invention consists in the formation of the trolley-wheel support with vertical extensions from the body thereof in pairs—one on each side of the trolley-wheel—and carrying between the members of each pair a small roller or smooth-surfaced wheel journaled therein. The main function of such projections is served by those next adjacent to the trolley-wheel, which extend close alongside of the edges thereof and somewhat beyond the same and are curved over the edges of the trolley-wheel, forming a rib on each projection, which approach each other, leaving just space enough between and just above the trolley-wheel to permit the entrance of the trolley-wire, the upper edges of the projections being tapered toward the rib formation and leading to the opening over the trolley-wheel, which tapering faces serve to aid in deflecting the wire into the opening and upon the wheel.

That my invention may be more fully understood, reference is had to the accompanying drawings, in which—

Figure 1 is a plan view of a trolley-support-

ing frame formed with my devices and made a part thereof. Fig. 2 is a side elevation of the device. Fig. 3 shows side and front views, respectively, of guard-lugs, showing the detailed formation thereof.

In carrying out my invention I have sought to provide an improved and more efficient trolley structure without adding to the cost, and for that reason I purpose to narrow the trolley-wheel down to just sufficient thickness to carry the wire and to dispense with the usual very much extended flanges and to provide a simple and shallow concaved bearing for the wire. By dispensing with the deep flanges, which are in practice so destructive to the wire on account of frequent contact therewith, I protect the trolley-wire system to a great extent. Also by providing small rollers at the head of the trolley-wheel and on either side thereof I am able to pass crossing wires with great ease and with little attendant jar, as the small rollers or wheels when striking the wires turn readily and do not catch, as is usual with the ordinary trolley appliances, and, furthermore, the small rollers or wheels greatly facilitate in traveling curves that lead from a continuous line, as the rollers pass readily from the straight line-wire to the curved trolley-wire.

In the drawings, A is a ferrule projection from the trolley-frame B, which is purposed to connect with the trolley-pole. In the trolley-frame B is journaled the trolley-wheel C.

D D are upwardly-projecting fingers bearing close up alongside the trolley-wheel and extending beyond it a short distance, and as they pass beyond the outer edge of the trolley-wheel they are curved inwardly, forming the ribs *a a*, which approach each other as they arch over the trolley-wheel, leaving only a small open space between. The upper edges of the fingers are tapered inwardly, as shown in the drawings, and particularly in Fig. 1. The fingers D D, thus projected at the sides of the trolley-wheel and arching over it, serve to prevent dislodgment of the trolley-wire, and the tapered upper edges of the fingers serve to guide the wire to its seat upon the trolley-wheel. E E are also fingers projected in the same line and parallel with fingers D D and a short distance therefrom and serve, in conjunction with fingers D D, as a

support for small wheels F F, which are jour-
naled therein, the said wheels F F being of
sufficient size to clear the upper edge of the
fingers D D and serve to present a freely-
5 turning contact-surface adapted to carry the
trolley clear of obstructions, relieving it from
any dragging or entangling contacts and serv-
ing greatly to aid in the smoothness of the
running of the trolley and in the protection
10 of the trolley-wire system.

Having thus fully described my invention,
what I claim, and desire to secure by Letters
Patent, is—

1. In a trolley-wheel, the combination with a
15 frame structure supporting the trolley-wheel,
of projecting fingers bearing close alongside
of the edges of the trolley-wheel and extend-
ing a short distance beyond the same pro-
vided with inwardly-bearing rib projections
20 and tapered upper faces and corresponding
fingers adjacent to and parallel therewith,
and antifriction-wheels journaled between
the fingers, substantially as described and
shown.

25 2. In a trolley, the combination with a
frame structure carrying a trolley-wheel and
provided with a ferrule extension adapted to
connect with the trolley-pole, of integral fin-
gers projecting from the axis of the trolley-

wheel and bearing close alongside thereof and 30
a short distance beyond the same provided
with inwardly-extending ribs and tapered up-
per faces and antifriction-wheels, suitably
supported in the framework and the circum-
ferences thereof bearing a short distance be- 35
yond the ends of the fingers, substantially as
and for the purpose described.

3. In a trolley, the combination with a
frame structure supporting a trolley-wheel
and provided with a ferrule extension adapt- 40
ed to connect with the trolley-pole, of inte-
grally-connected fingers bearing close along-
side of the trolley-wheel and provided with
inwardly-projecting ribs and inwardly-in-
clined upper faces, and a corresponding pair 45
of fingers a short distance therefrom and in
parallel relation therewith forming a pair of
fingers on each side of the trolley-wheel and
antifriction-wheels journaled between each
pair of fingers, the peripheries thereof bear- 50
ing a short distance from the outer ends of
the fingers, substantially as specified.

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

GEORGE W. PERRY.

Witnesses:

W. V. TEFFT,

B. M. SIEGLE.