

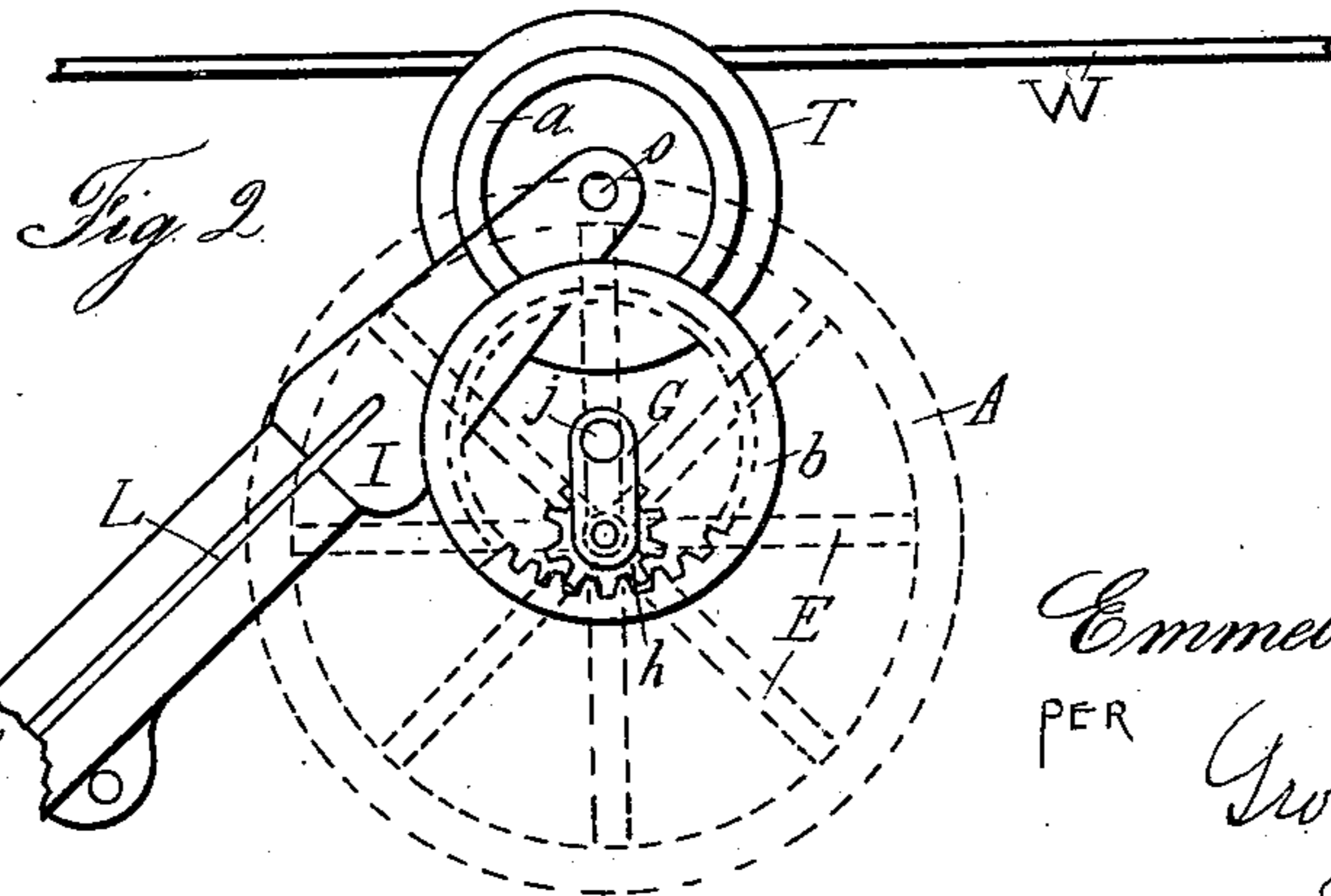
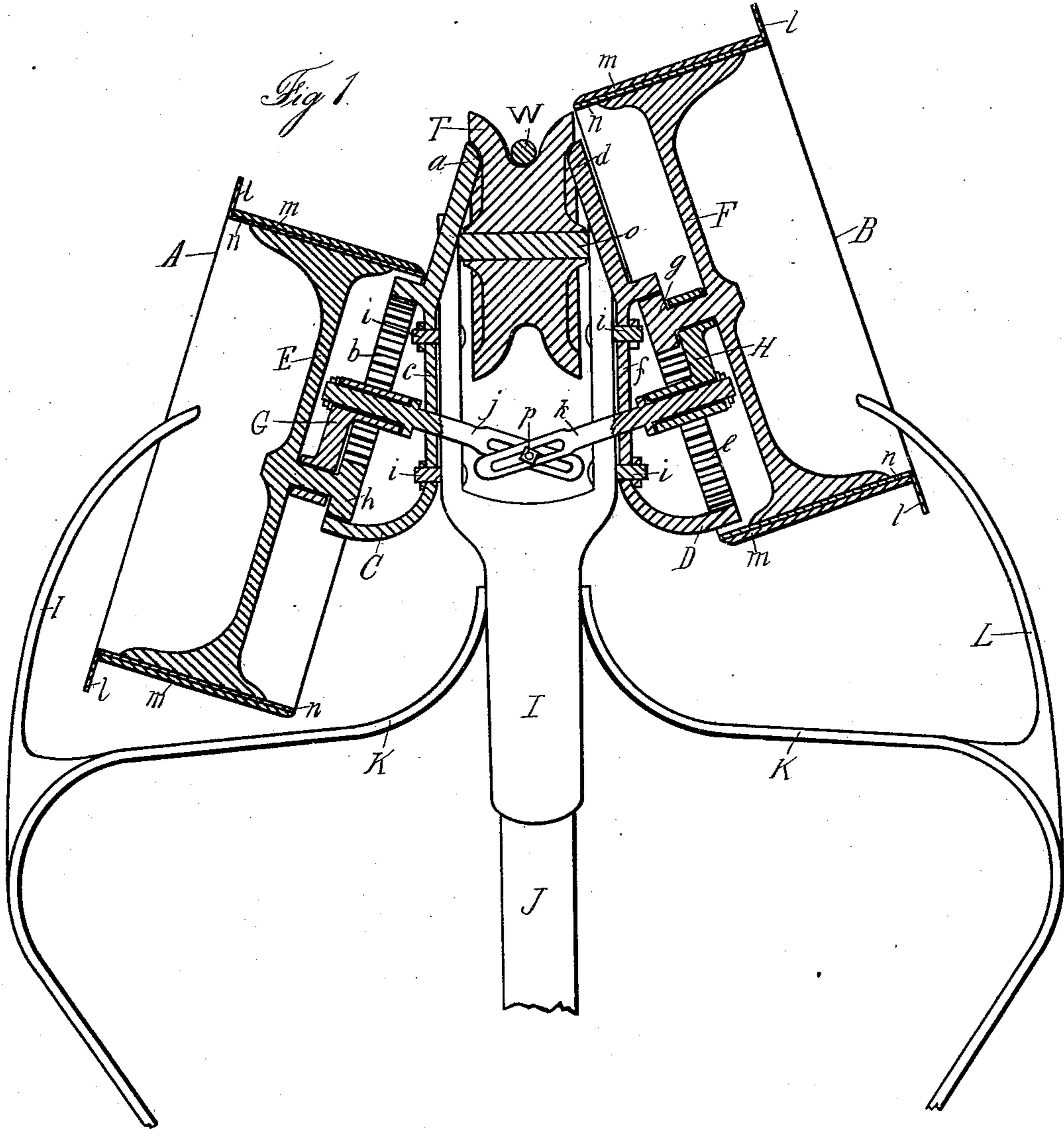
No. 636,299.

Patented Nov. 7, 1899.

E. G. SOLOMON.
TROLLEY.

(Application filed July 24, 1899.)

(No Model.)



WITNESSES

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EMMET G. SOLOMON, OF OMAHA, NEBRASKA.

TROLLEY.

SPECIFICATION forming part of Letters Patent No. 636,299, dated November 7, 1899.

Application filed July 24, 1899. Serial No. 724,923. (No model.)

To all whom it may concern:

Be it known that I, EMMET G. SOLOMON, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain useful Improvements in Trolleys; and I do hereby declare that the following is a full, clear, and exact description thereof, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention has relation to a new and novel improvement in trolleys.

The object of my invention is to provide a self-adjusting trolley so arranged that should the trolley slip from the trolley-wire at any time it would be encountered by one of two wheels, which are mounted adjacent to the trolley proper, and riding upon these pulleys would be slowly directed into the trolley.

In the accompanying drawings I have shown in Figure 1 a front view of a trolley, partly in section, with portions broken away, embodying my invention, while Fig. 2 shows a side view thereof, disclosing the position of the trolley-wheel and the auxiliary drums used in my invention.

My invention comprises, essentially, a trolley-head, I, of the usual construction, secured to a suitable pole J, and within which head is mounted a shaft o, upon which is revolvably held the trolley-wheel T, which is shown in contact with the trolley-wire W. Positioned adjacent to the trolley-head I are two brackets C, provided with the flat portion c, by means of which the bracket is secured to the trolley-head and from which bracket C extends the internal gear b, as is shown in the drawings, the bracket being secured to the trolley-head by means of the bolts i. Extending upward from this bracket C is a guard a, which ends adjacent to the trolley-wheel T, and this trolley-wheel T is preferably hollow, so that this guard a enters the dish portion of this trolley-wheel, as is shown. These brackets C are used in pairs, as shown. Passing through the brackets C are the shafts j and k, which have their slotted ends united by means of the bolt p, and these shafts extend beyond the internal gears b and are adapted to revolvably support a crank-shaft G, upon which crank-shaft works a drum provided with a pinion h, working within the

internal gear b. These drums A are provided with projecting flanges l and the covering m, as is shown in the drawings. The guard K extends from the trolley-head I and is provided with an upward extension passing into the drums A and B, which will work over the same. Now should the trolley-wire W slip off of the trolley T we will assume it will engage the drum A, and this drum A would be revolved because of its contact with the trolley-wire as the car is moving and would revolve this drum, so that the crank-shaft G would be carried upward until the drum were brought at a point above the trolley T, and as the drum is set at an angle the wire would slide from the drum onto the trolley-wheel T. The drum B is shown in its upper extreme position, disclosing how the trolley-wire works off of the same. The drum revolving of course positively feeds upward and so invariably brings the trolley-wire at a point above the trolley-wheel.

The covering m may be of some suitable non-conductive material, if desired, as may also the guard a, and,

Having thus described my said invention, what I claim as new, and desire to secure by United States Letters Patent, is—

1. The combination with a suitable trolley-head, of an internal gear fixed to each side of said trolley-head, shafts passing through said internal gears, crank-shafts working upon said shafts, and drums provided with gears working upon said crank-shafts, said gears meshing with said internal gears to carry said drums in a radial path above and below said trolley-head.

2. The combination with a trolley-head, of a bracket secured to each side of said trolley-head, stub-shafts passing through said brackets and united at their ends, internal gears secured to said brackets, crank-shafts working upon said stub-shafts, drums working within said crank-shafts and provided with gears meshing with said internal gears, said drums being positioned at an angle to said trolley-head to revolve beyond said trolley-head, as and for the purpose set forth.

Signed in the presence of two witnesses.

EMMET G. SOLOMON.

Witnesses:

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