

(No Model.)

H. D. OLER.
CONDUIT ELECTRIC RAILWAY.

No. 504,847.

Patented Sept. 12, 1893.

Fig:1.

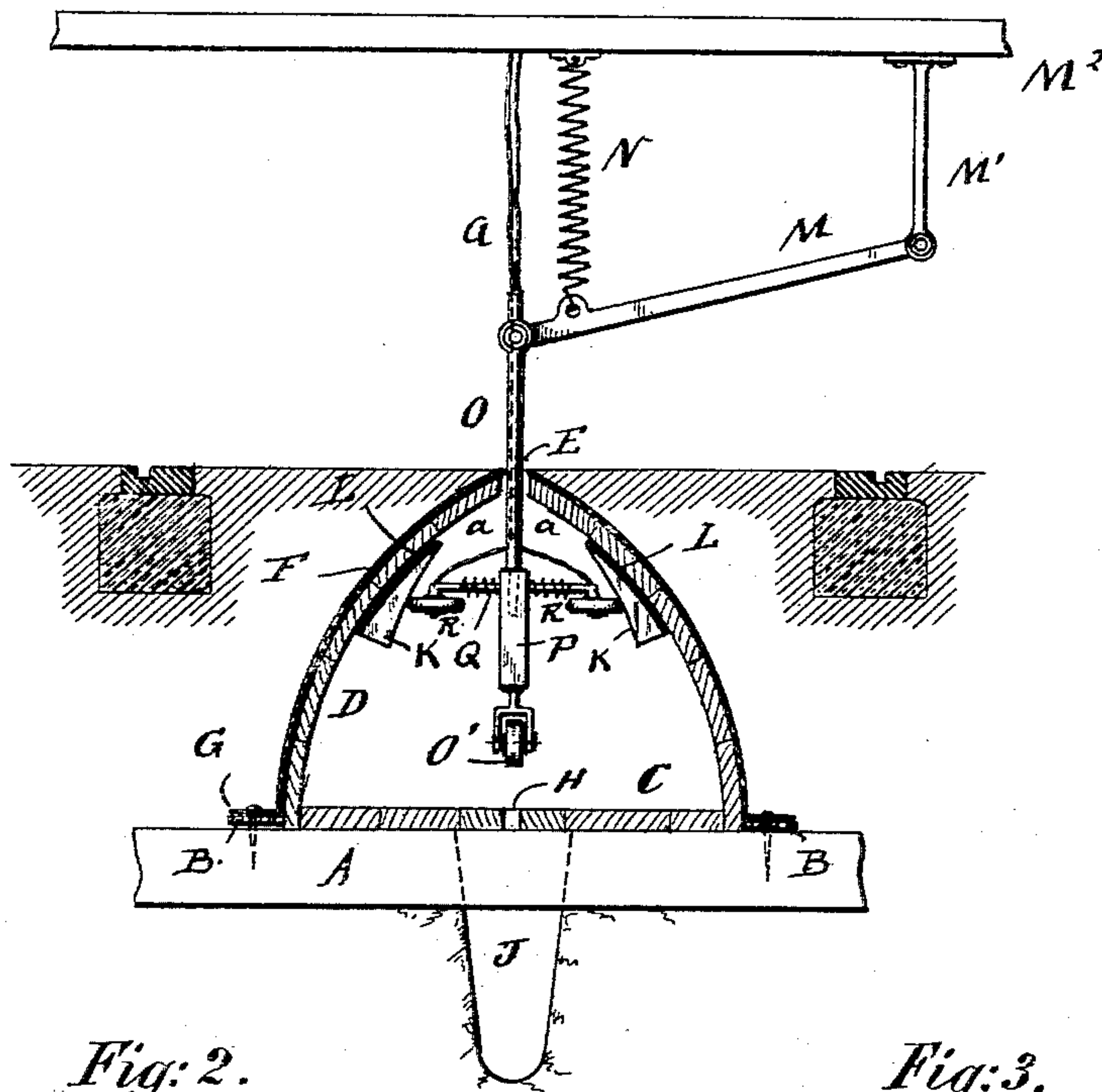


Fig:2.

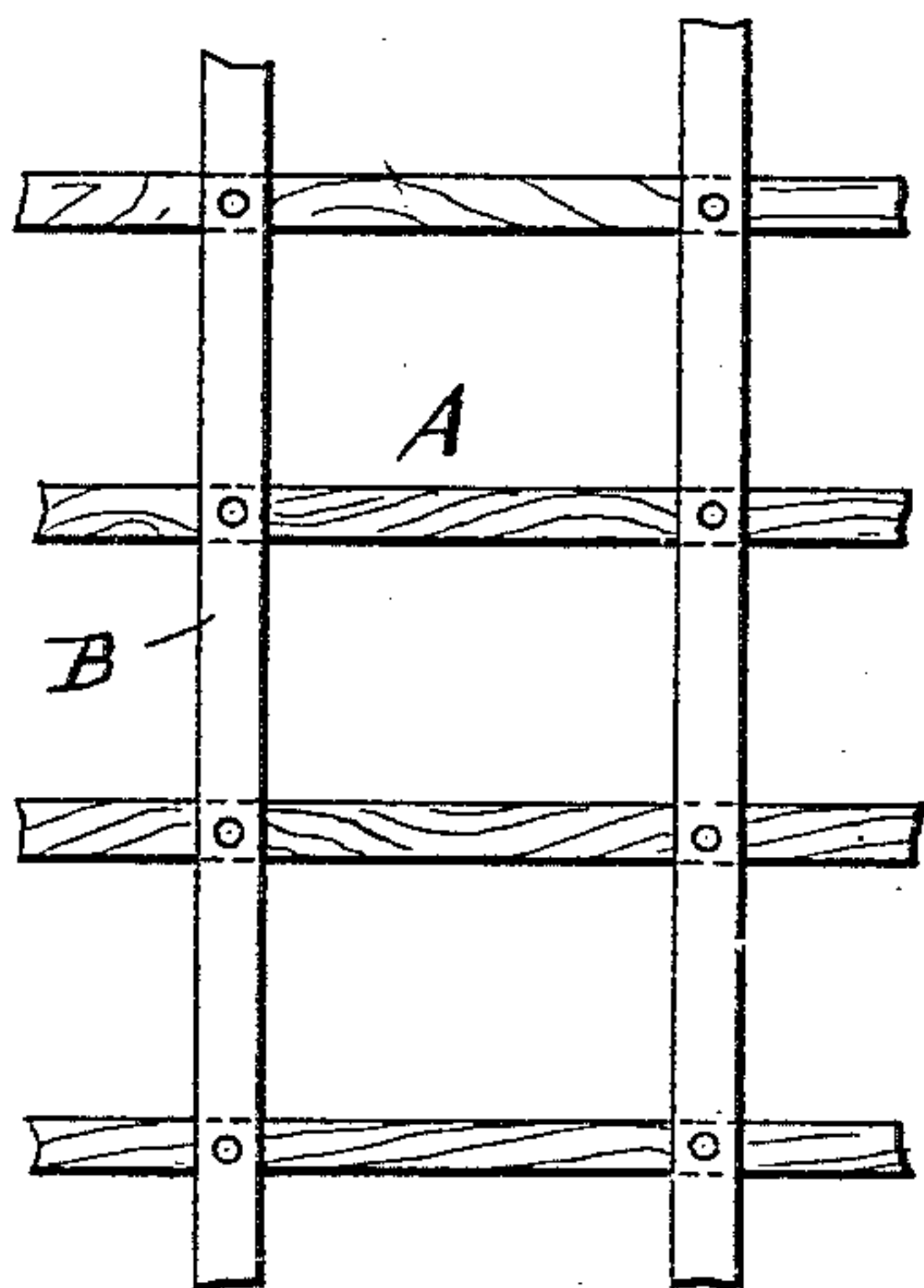


Fig:3.

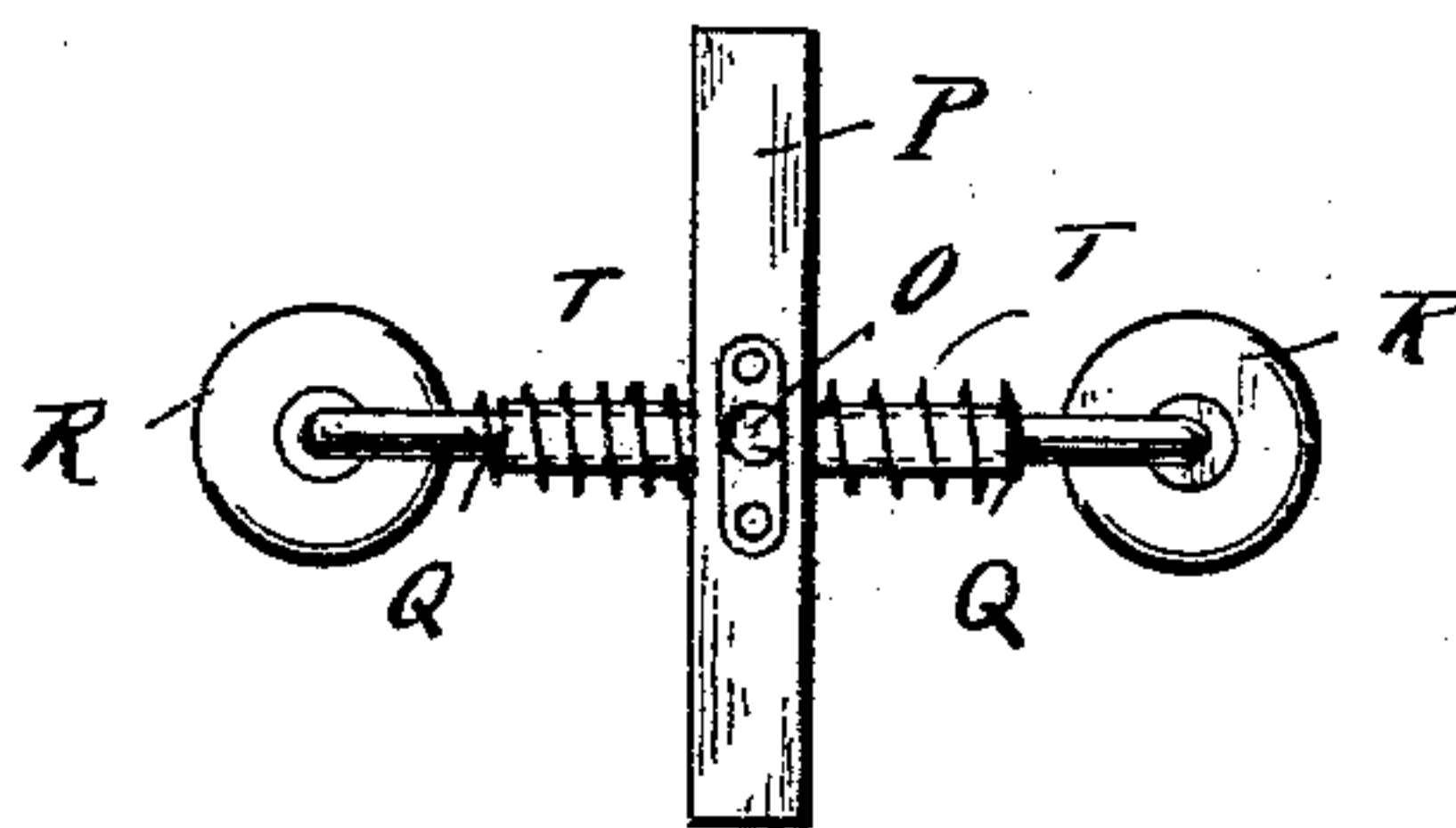
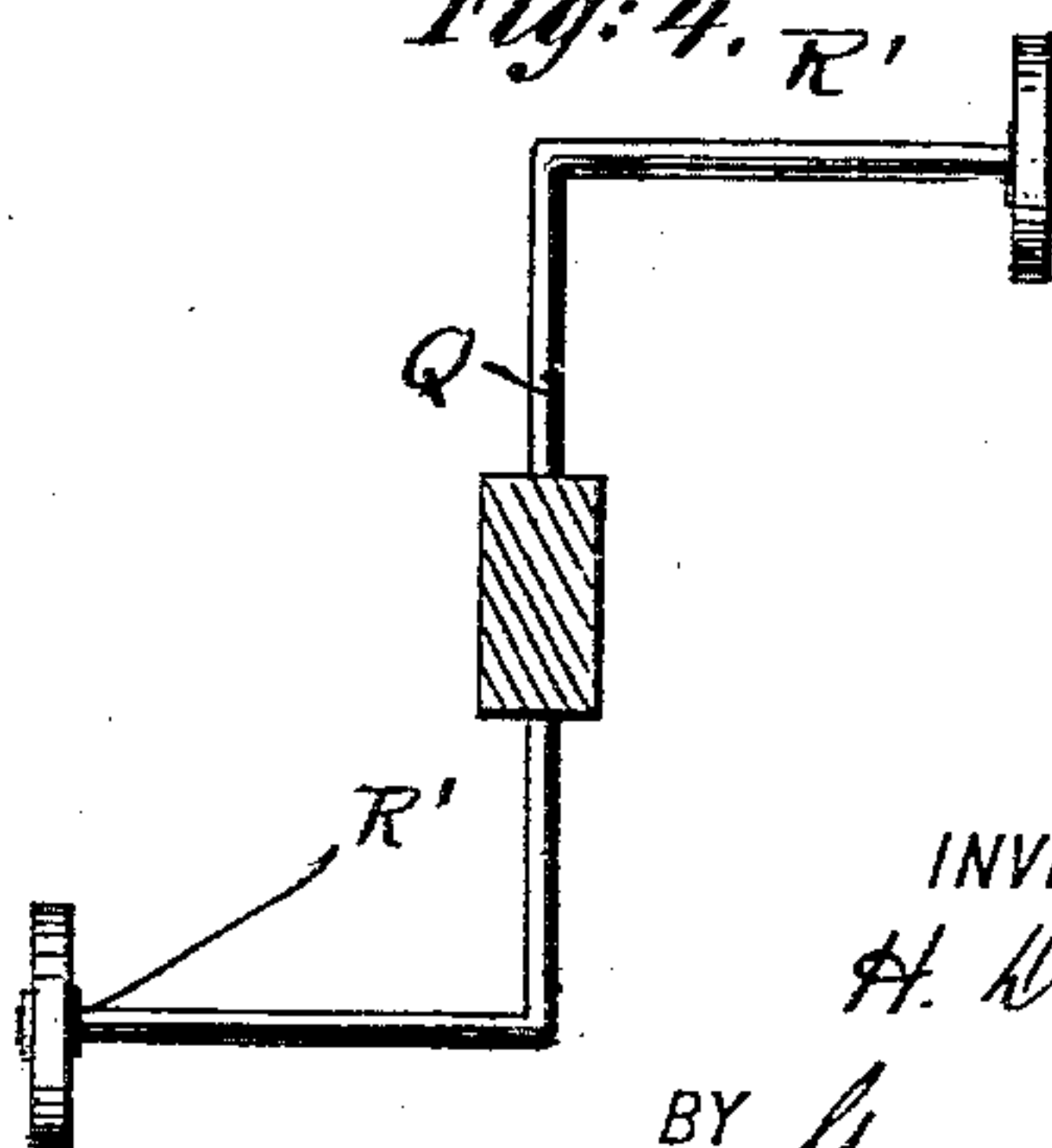


Fig:4. R'



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CONDUIT ELECTRIC RAILWAY.

SPECIFICATION forming part of Letters Patent No. 504,847, dated September 12, 1893.

Application filed August 23, 1892. Serial No. 443,902. (No model.)

To all whom it may concern:

Be it known that I, HENRY D. OLER, a citizen of the United States, and a resident of Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Conduits for Electric Railways, of which the following is a specification.

This invention relates to improvements in conduits for electric railways: and the object of my invention is to provide a conduit which is simple in construction, strong and durable, and in which the conductors are thoroughly insulated and so arranged that under no circumstances can any current pass from the same except through the devices on the car.

The invention consists in a conduit formed with a wooden bottom and curved wooden sides, between the upper edges of which a slot is formed, a metal covering for said conduit, which covering is provided with flanges at the bottom edges and metal strips placed upon the sleepers at right-angles to the same, upon which strips the flanges of the conduit covering rest.

The invention further consists in the combination with a conduit, of electric conductors having wedge shape and secured to the sides of the same, and a rod passing through the slot of the conduit and provided with arms on the end on which rollers are mounted from which conductors lead to the car.

The invention also consists in the construction and combination of parts and details which will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical transverse sectional view of my improved conduit for electric railways. Fig. 2 is a plan view of the sleepers and the bed rails. Fig. 3 is a plan view of the contact rollers, and Fig. 4 is a plan-view of the same, showing a modified arrangement.

Similar letters of reference indicate corresponding parts.

The sleepers A are to be arranged a greater or less distance below the pavement and the rails for the car.

Upon the sleepers A two parallel strips of metal B are placed at right angles to said sleepers, and between the same a floor C is laid of wooden planks. At the side edges of

said floor the curved side walls D are built of wooden planks, and between the upper ends of the same the slot E is formed. On the outer surface of said side walls D a protective covering F of sheet metal is placed, which is provided at the lower end with the flange G, said flanges resting on the strips B. Spikes or nails are driven through the flanges G and strips B in the sleepers A, for the purpose of holding the parts in place, and said protective covering F is suitably fastened in the side walls D. A slot H is formed in the floor C, through which slot moisture can pass into the gutter I below the sleepers. To the inner surface of each side wall D a wedge shaped conductor K is fastened near the upper end of said side wall, and between said conductor and the side wall a layer L of insulating material is placed, said insulating material preferably consisting of a mixture of ground glass and rubber. A lever M is pivoted to a standard M' projecting downward from the car floor M² and is pulled upward by a spring N attached to said lever and to the car floor. To the lower end of said lever a rod O is pivoted, which carries a roller O' at its lower forked end, said rod O passing through the slot E, and to the same a wooden block P is fastened, which extends in the direction of the length of the slot, and from the same two telescoping arms Q project in opposite directions, and on the end of each arm a metal disk R is mounted to rotate horizontally. From said disks R the wires α lead up through a bore in the rod O and up to the car. As shown in Fig. 4, the rods Q, instead of extending transversely, may extend longitudinally and have bends at the ends, and the disks R' may be mounted to rotate in a vertical plane instead of in a horizontal plane. Springs T surrounding the telescoping rods Q press those sections carrying the disks outward. The spring N draws the lever M upward and keeps the rollers R in contact with the conductors K, as the latter are wedge shaped. The current passes from the conductors through the disks R through the wires α to the motor in the car. In case the spring N breaks, the rod O drops to the bottom of the conduit, its roller O' runs along said bottom without injuring said rod or tearing up the bottom of the conduit.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. An electric conduit, constructed with a wooden bottom and wooden sides, between the
5 upper edges of which a slot is formed, a metal covering for each side of the conduit, which metal covering is provided at the lower end with a flange, and metal strips fastened to the
10 sleepers at right - angles to the same, upon which metal strips the flanges of the metal side coverings of the conduit rest, substantially as set forth.

2. The combination, with a conduit, of wedge shaped conductors secured to the sides of the
15 same, a rod passing through the slot of the conduit, telescoping arms projecting from said rod, spring for pressing the outer parts of said telescoping rods outward, disks mounted

on the ends of said telescoping arms and conductors extending from said disks to the car, 20 substantially as set forth.

3. The combination, with a conduit, of electric conductors secured to the sides of the same, a rod passing through the slot of the conduit, arms on said rod, disks on the ends 25 of said arms, a lever pivoted to the car bottom and to said rod and a spring for drawing said lever and the rod upward, substantially as set forth.

In testimony that I claim the foregoing as 30 my invention I have signed my name in presence of two subscribing witnesses.

HENRY D. OLER.

Witnesses:

OSCAR F. GUNZ,
CHARLES SCHROEDER.