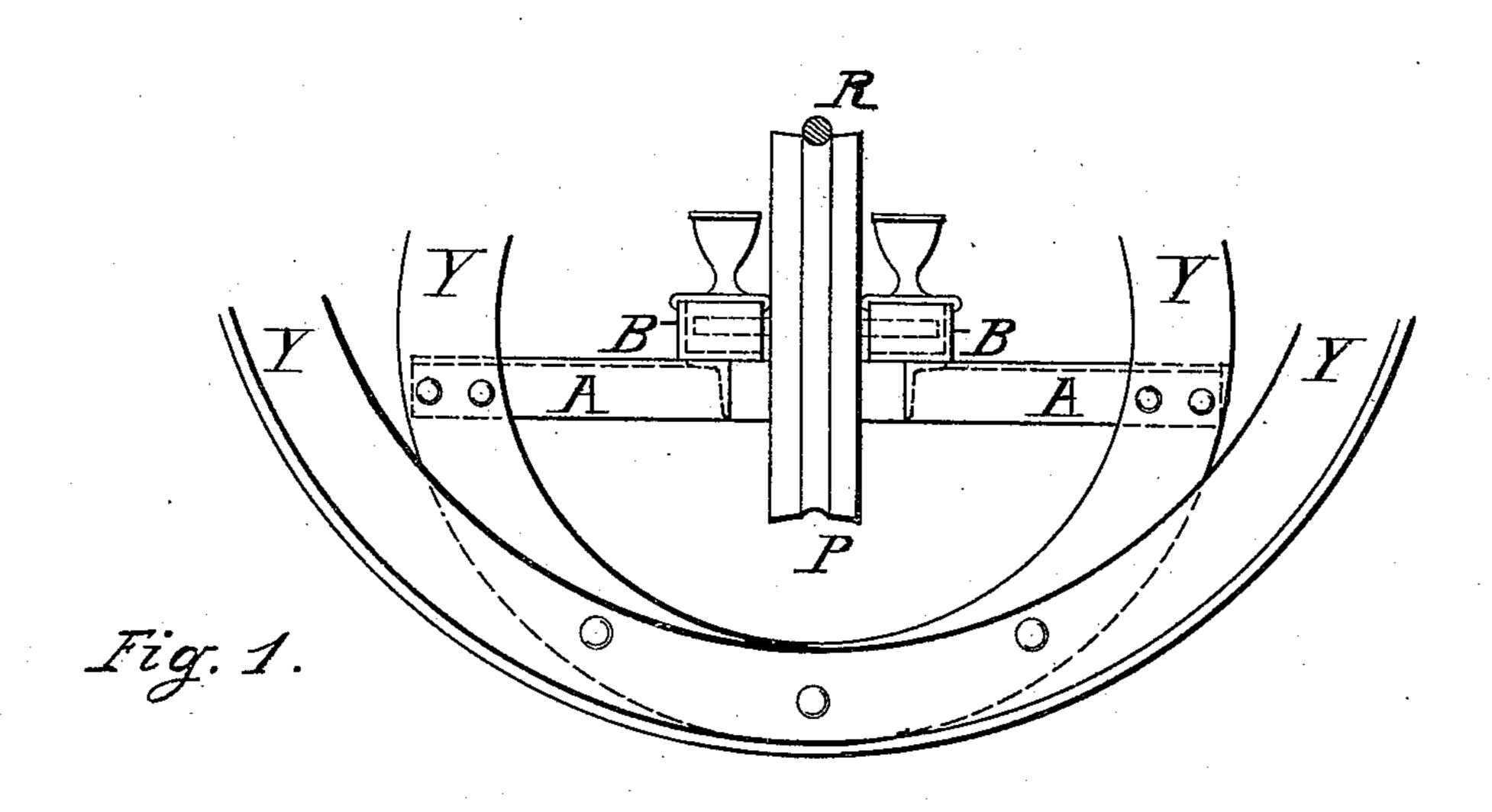
(No Model.)

L. M. CLEMENT. CABLE STREET RAILWAY.

No. 446,221.

Patented Feb. 10, 1891.



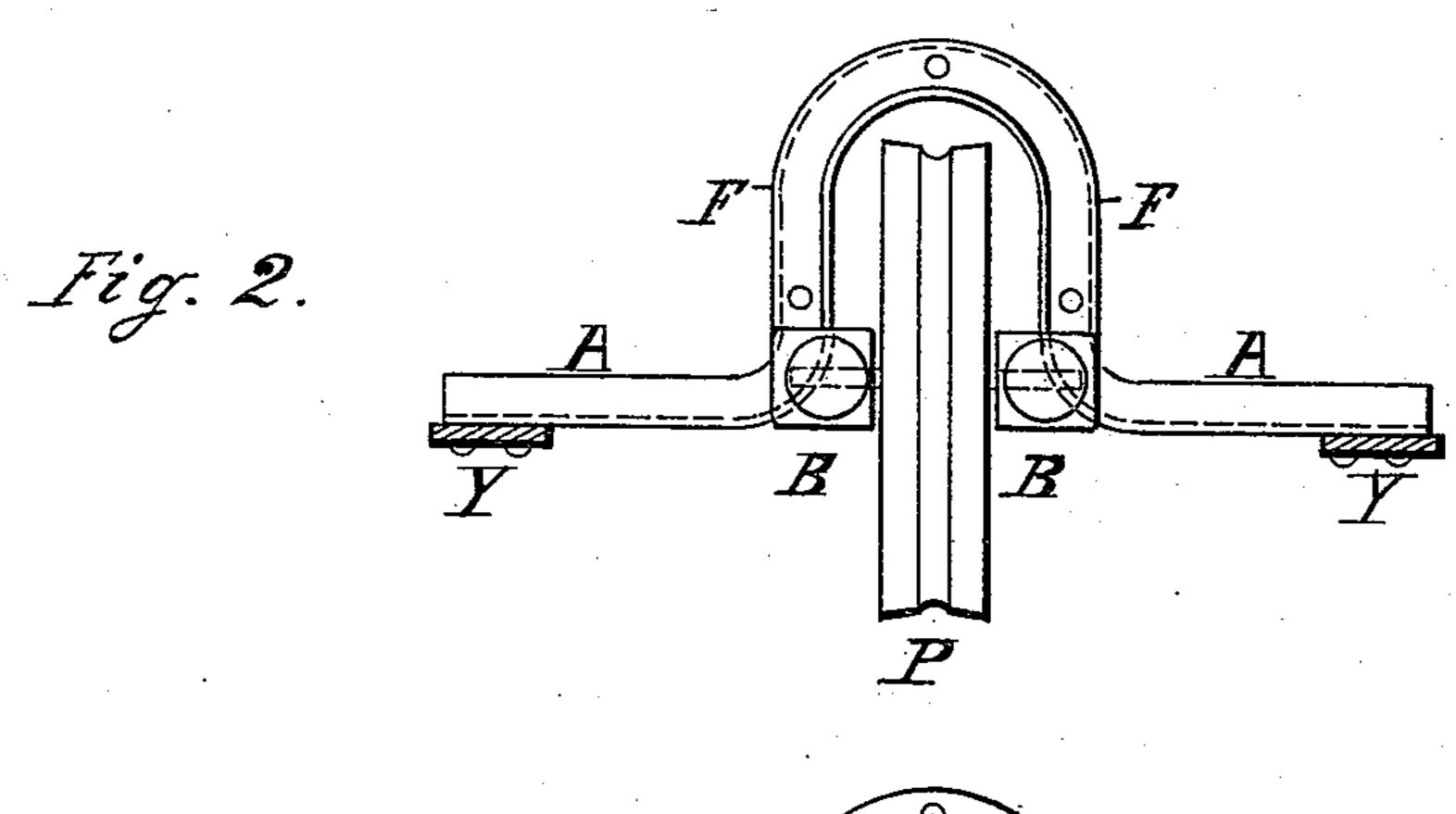
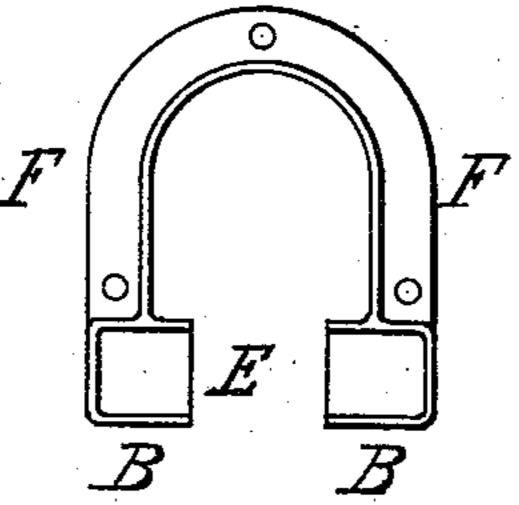


Fig. 3.



Witnesses: Lionel Heynemann George-EWatriss

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LEWIS M. CLEMENT, OF OAKLAND, CALIFORNIA.

CABLE STREET-RAILWAY.

SPECIFICATION forming part of Letters Patent No. 446,221, dated February 10, 1891.

Application filed July 21, 1890. Serial No. 359,839. (No model.)

To all whom it may concern:

Be it known that I, Lewis M. Clement, a resident of the city of Oakland, in the county of Alameda and State of California, have invented certain Improvements in Cable Street-Railways, of which the following is a specification.

My invention relates to the pulleys, spaced at regular intervals in the road-bed, designed to carry the cable and known as "carrier-pulleys," and relates more particularly to the frame supporting the axle-boxes of said pulleys. It is desirable that these axle-boxes rest in one frame, instead of being bolted separately to the supports, as is often done. These supports may settle unequally and throw the carrier-pulley out of line, besides creating difficulties in setting the pulley fair.

The frame uniting the two axle-boxes is generally of cast-iron. Heretofore it has been made to surround the pulley, causing inconvenience in removing and replacing the pulley. It must be remembered that these pulleys are below the surface of the street and are only accessible through small traps, enabling the attendant as a rule to use but one hand in handling the pulley—a circumstance rendering the operation a matter of some difficulty.

The object of my invention is to facilitate the proper attendance of the carrier-pulleys. This object I accomplish by the means illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of the pulley and frame with its supports; Fig. 2, a plan of the same; Fig. 3, a plan of the frame by itself.

Similar letters in each view represent similar parts.

In Fig. 1, R is the cable, supported by the

carrier-pulley P.

In Figs. 1 and 2, Y Y represent a part of the yoke supporting the rails and slot-rails of the road-bed. An angle-iron A A is attached to said yoke Y Y to support the carrier-pulley frame F F. This frame F F is

open on one end E, Fig. 3, and designed horseshoe shape, instead of surrounding the pulley, as heretofore. The frame serves merely to unite the two axle-box sockets B B, forming 50 a yoke, open on one end, the sockets at B B being designed to contain the axle-boxes and arranged to be bolted or otherwise fastened to the angle-iron A A. The open end E of the frame is placed toward the trap-opening 55 in the street, so that when the pulley is to be removed or replaced the pulley need not be lifted to clear the frame, as heretofore necessary with frames surrounding the pulley. All that is required is to lift it clear of its 60 boxes, the frame offering no further hinderance to the operation. The use of this pulley-yoke frame is not limited to any particular style of axle-box or any particular method of supporting said pulley and frame in the 65 road-bed and may be used whether these are supported by the yoke or any other part of the road-bed.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, 70 is—

1. In cable street-railways, the carrier-pulley frame F, having the open end E, substantially as described, and for the purpose set forth.

2. In cable street-railways, the carrier-pulley P, in combination with a pulley-frame F, having one end open, for the purpose set forth.

3. In cable street-railways, the yoke-frame F, with its open end E and provided with the 80 pulley-axle-box sockets B B, for the purpose described.

4. In cable street-railways, the pulley-frame F, having the open end E and box-sockets B B, in combination with the carrier-pulley P, 85 substantially as described, and for the purposes set forth.

LEWIS M. CLEMENT.

Witnesses:

LIONEL HEYNEMANN, GEORGE C. WATRISS.