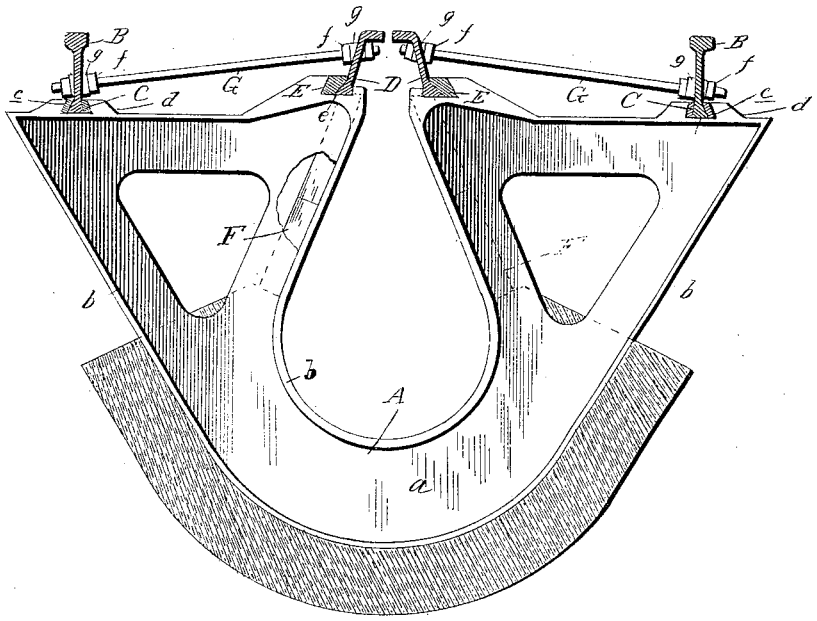
(No Model.)

P. F. BARR.

CABLE RAILWAY.

No. 386,178. Patented July 17, 1888.



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CABLE RAILWAY.

SPECIFICATION forming part of Letters Patent No. 386,178, dated July 17, 1888.

Application filed April 9, 1888. Serial No. 270,053. (No model.)

To all whom it may concern:

Be it known that I, PINCKNEY F. BARR, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Cable Railways, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to certain new and useful improvements in cable railways, and relates more particularly to the construction of the track and the conduit, the object being to improve and cheapen the previous constructions of this character, and to facilitate repairs when necessary.

To these ends the invention consists in the peculiarities of construction, and the combinations, arrangement, and adaptation of parts, all as more fully hereinafter described, and then particularly pointed out in the claim.

The invention is clearly illustrated in the accompanying drawing, which, with the letters of reference marked thereon, forms a part of this specification, and which represents a vertical transverse section through the conduit.

Referring to the details of the drawing by letter, A designates the yoke formed with a web, *a*, and the flange *b* around its outer and inner margins, thus having a substantially H-shaped cross-section. The upper outer faces of this yoke are provided with dovetail recesses *c*, forming seats or chairs for the tram-rails B, the outer wall of the recess being inclined, as shown at *d*, the metal of the yoke around said recesses being preferably increased, as shown, to add strength thereto. The tram-rails B are seated in said recesses, and are formed with a base having inclined sides, as shown, said bases being retained in their position within said recesses by means of the wedges C, one upon each side of the base of the rail. These wedges are of various thicknesses, and are designed to be interchangeable for the purpose of bringing the track to the desired gage.

At the inner ends of the upper face of the yoke, near the slot in which works the gripper, I form the recesses *e*, having inclined walls, as shown, and in these recesses are seated the slot-rails D, which are substantially Z-shaped in cross-section. In these recesses *e* upon the outer sides of the bases of the slot-rails, which are also preferably formed with inclined sides, are placed the wedges E.

The pulley over which runs the traction rope or wire is secured to the yoke within the gutter thereof in any suitable manner.

In practice the yokes are embedded in concrete or other analogous bed at suitable distances apart, the concrete or bed being extended to the point indicated by dotted lines. The lining-pieces F, preferably of wood, but they may be of thick sheet metal, corrugated or otherwise, are then placed in the position shown, either resting on the flange of the yoke and abutting at their ends against the webs of the adjacent yokes, or the webs may be provided with a slot adjacent to the inner flange, and the strips F passed through the said slots and extending the length of the distance between two or more yokes; but I prefer the former method, as by this means the strips serve in a measure to strengthen the yoke at this point. The lower ends of the strips in this instance will be supported by the concrete, but when the slots are employed the lower edges of the pieces F will rest upon the bottom wall of the slot, as will be readily understood.

The webs of the rails are perforated to receive the rods G, which connect the tram-rail on one side of the yoke with the slot-rail on the same side. These rods connect the bottom of the tram-rail with the top of the slot-rail, as shown, to better brace the parts and materially strengthen the same.

The rods G are provided with the nuts *f*, one upon each side of each rail, and between these nuts and the web of the rail are located the washers *g*, the sides of which adjacent to the rail are inclined so that the said washers will have a flat bearing on the web of the rail and the nuts a similar bearing on the washers. With this construction the rails (both tram and slot) may be readily brought to the proper gage, which is sometimes very difficult, owing to the uneven shrinking of the iron yoke casting when cooling.

What I claim as new is—

The combination, with the series of yokes provided with the flanges *b* and formed with seats for the slot-rails, of the concrete bottom, the slot-rails secured in said seats, and the lining-pieces between said concrete and slot-rails independent of said rails and supported by said flanges, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 5th day of April, 1888.

PINCKNEY F. BARR.

Witnesses:
JAMES E. MACKHAM,
ALEXANDER E. HORN.