(No Model.)

J. LAMPLUGH.

CABLE AND STREET RAILWAY CROSSING.

No. 432,054. Patented July 15, 1890.

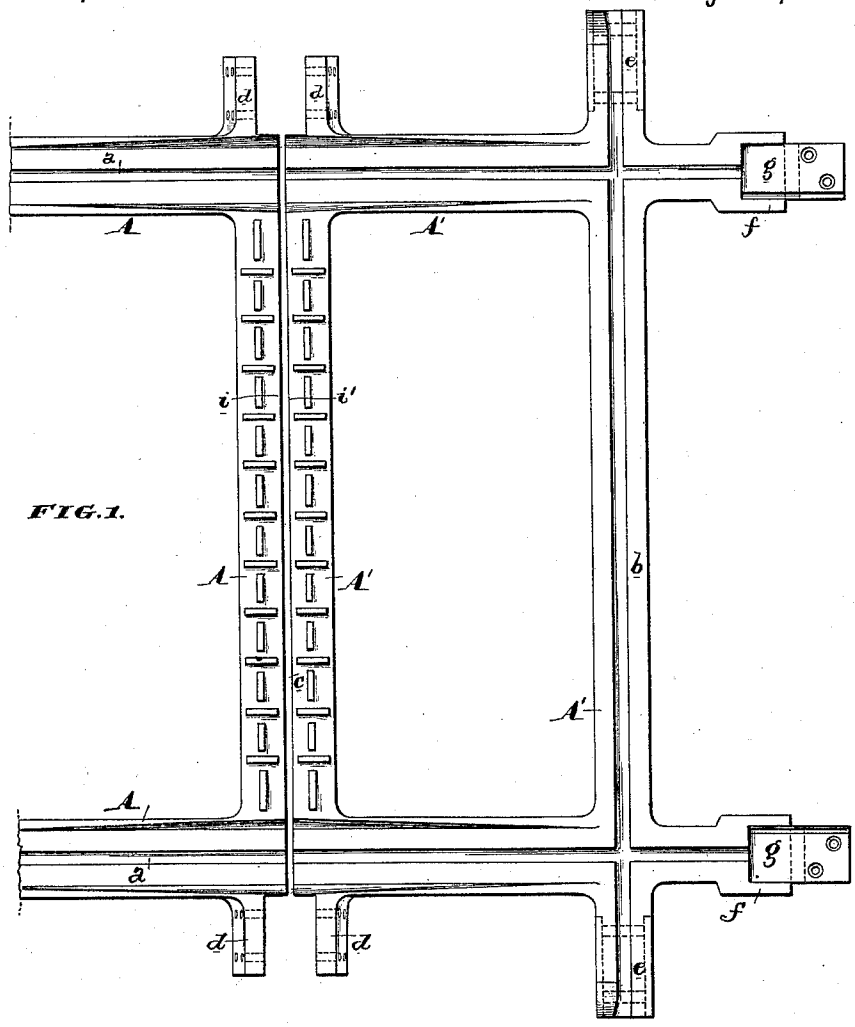


FIG. 1.

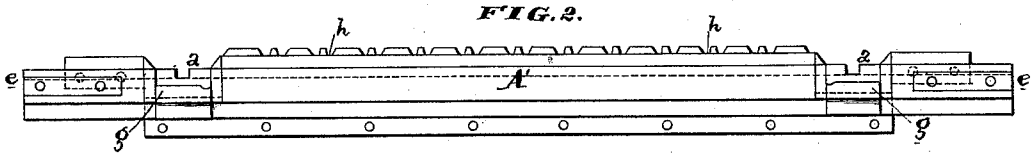


FIG. 2.

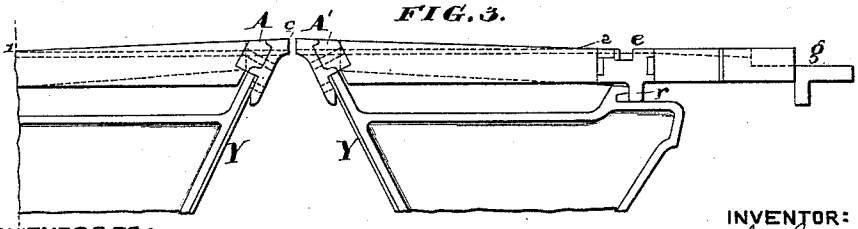


FIG. 3.

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JACOB LAMPLUGH, OF PHILADELPHIA, PENNSYLVANIA.

CABLE AND STREET RAILWAY CROSSING.

SPECIFICATION forming part of Letters Patent No. 432,054, dated July 15, 1890.

Application filed July 29, 1889. Serial No. 319,029. (No model.)

To all whom it may concern:

Be it known that I, JACOB LAMPLUGH, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Cable and Street Railway Crossings, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in the crossings placed at the intersection of a cable railway and an ordinary street-railway; and the object of my invention is to furnish a level-run crossing—that is, a crossing which is upon the same level as the rails of the two roads—which, when the cars pass over the crossing, will not cause the jar usually experienced upon the ordinary crossings, which are constructed to correspond with the grade or slope of the streets. In a cable railway, for the purpose of drainage, the slot through which the grip passes and which is placed midway between the two tracks is elevated somewhat above the level of the tracks; and heretofore it has been the practice to have the crossing-casting made to correspond with this elevation—that is, the tread of the crossing would be higher at the slot than at the sides or rails—and the consequence would be that every time a car passed, and particularly if it were going at a high rate of speed, a sudden and violent jar would be felt. I propose to arrange the casting so that the tread of the crossing will be upon precisely the level of the rails which join it, and thereby to cause all parts of the road to be perfectly smooth.

My invention relates, further, to improvements in the slot-rails at the crossing. I make the slot-rail at this point a part of the crossing-casting, so that these rails are continuous at the crossing, as shown in the drawings, and hereinafter fully described.

In the drawings, Figure 1 is a plan of my improved crossing; Fig. 2, a side view of Fig. 1, and Fig. 3 an end view of Fig. 1.

The crossing consists of two castings A A′, which are precisely alike.

a a b b are the treads of the rails, the former being the tread of the street-railway and the latter the tread of the cable railway..

c is the grip-slot.

d are the arms to which the slot-rail may be bolted. The rails of the cable railway are bolted to the casting at the arms *e*.

f are arms furnished with pockets *g* to receive the rails of the street-railway. These pockets, as well as the arms *e*, are shaped to correspond with the shape of the rails which are used on the respective roads.

The castings A A′ are made to correspond with the cable system, and that shown in the drawings is adapted to the "yoke" system.

In Fig. 3, *y* is the yoke, and the castings have a rib *r* under them to rest on the yokes, as shown, to keep them in position.

One of the principal features of my invention is the level run, which will be clearly seen from Figs. 2 and 3. In Fig. 3 the dotted line 1 2 represents the tread of the crossing, and in Fig. 2 *a* is the level of the tread, while the line *h* represents the top line of the slot-rail.

It is the usual practice now to form the slot-rails separately and of convenient lengths and to fasten them to the conduit by bolts or otherwise. I propose casting the slot-rail at the crossing in the same piece with the crossing—that is, each part A A′ of the casting is cast with a slot-rail upon it. Thus the casting A is furnished with a slot-rail *i* and the casting A′ with a slot-rail *i′*, whereat both castings are furnished with arms *d*, Fig. 1, to which the slot-rail ordinarily used is bolted.

The advantage of forming the slot-rails in one piece with the crossing-castings are that it cannot be forced from its position or loosened by passing vehicles or trains, and so close up the slot at this point. Where the rails are separate and secured in the usual manner, they are frequently loosened at crossings, close the slot, and cause serious accidents to the grip.

The crossing may be made to any degree or radius to suit the angles of streets or radius of curves which may occur upon the line.

I claim—

1. A cable-crossing consisting of the cast-

ings A A′, having the level-run treads *a b*, arms *d* to make connection with the slot-rails, and arms *e* and *f* for making connection with the cable and street railway rails, all substantially as and for the purposes set forth.

2. The combination, with a cable-crossing, of the slot-rail cast in one piece with the said crossing, and arms *d*, to which the continuation of the said slot-rails may be bolted.

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

JACOB LAMPLUGH.

Witnesses:
JOHN F. HALBACH,
WALTER W. CALMORE.