

(No Model.)

B. E. TILDEN.
CAR REPLACER.

No. 489,109.

Patented Jan. 3, 1893.

Fig 1

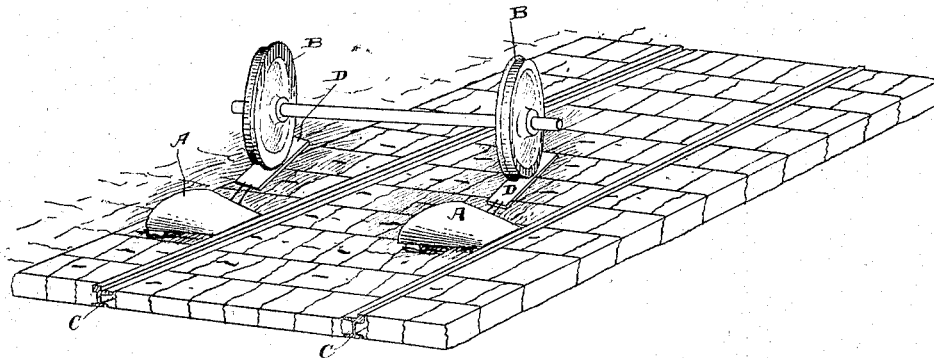


Fig 2.

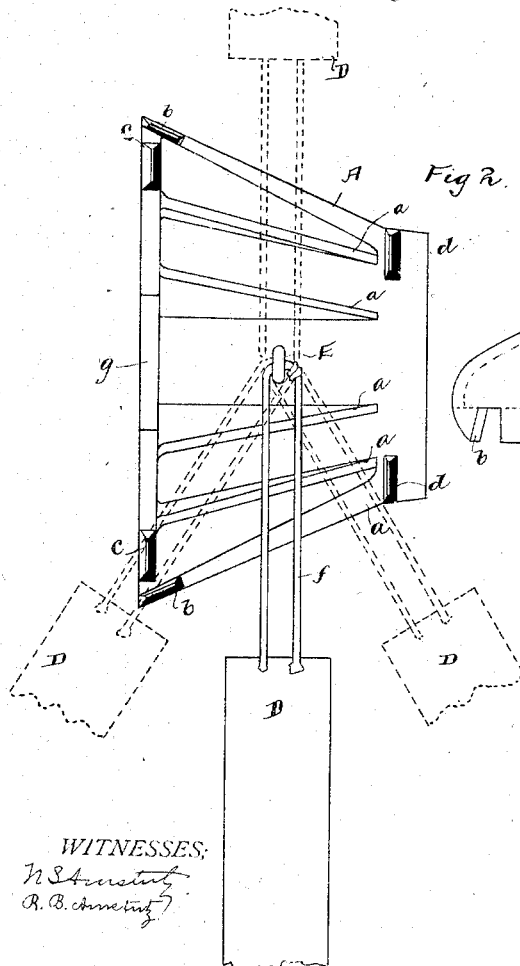
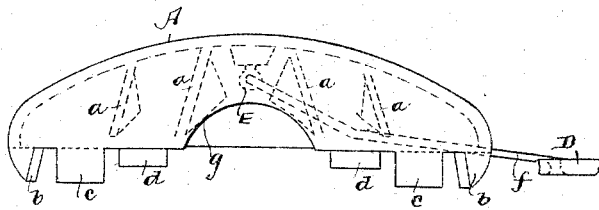


Fig 3



WITNESSES:
H. S. ...
R. B. ...

INVENTOR,
Burt E. Tilden

UNITED STATES PATENT OFFICE.

BURT E. TILDEN, OF CHICAGO, ILLINOIS, ASSIGNOR TO B. E. TILDEN CO., OF SAME PLACE.

CAR-REPLACER.

SPECIFICATION forming part of Letters Patent No. 489,109, dated January 3, 1893.

Application filed February 8, 1892. Serial No. 420,793. (No model.)

To all whom it may concern:

Be it known that I, BURT E. TILDEN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Car-Replacers, of which the following is a specification.

My invention relates principally to car replacers for replacing upon the rails, the wheels of electric motors which have become derailed, but it may also be used to advantage in replacers for other kinds of rolling stock.

The objects of my invention are to provide a device which will prevent the replacing frog from sliding when being engaged by the wheel, and also to provide a replacing frog with which the electric power may be employed in replacing an electric motor.

My invention is illustrated in the accompanying drawings, in which

Figure 1 is a perspective view, with wheels engaging a pair of car replacers. Fig. 2 is a view of a replacing frog inverted. Fig. 3 is a side view of the replacing frog.

In the drawings, A represents the replacing frog, B, B. a pair of car wheels and C, C. the rails of a track.

The frog A is made with the upper surface sloping toward the rail, so that the wheel when engaging the same will be thrown toward the rail. The frog A is also provided with suitable braces *a a a a* which serve to strengthen the frog, and spurs *b b*, *c c* and *d d* which aid in holding the frog in position to the rail when being engaged by a wheel. A metallic strip D is attached to the frog A by means of a wire connection *f*, as shown in Figs. 2 and 3. The wire connection *f* is connected with a ring E in the frog, or may be attached to the frog, in any other suitable manner, and at any desired position in the frog. And if desired any other suitable metallic connection may be employed to attach the strip D to the frog.

The frog A is constructed with an opening in the side as shown at *g* in Figs. 2 and 3. This renders the frog also suitable to be used

as a hose bridge upon which the car may pass over a fire hose. When being used for this purpose it will of course be necessary to raise the lower end of the frog by any suitable means so as to make the upper surface of the frog horizontal.

I will now describe the operation of my device. When an electric motor is derailed the electric power can not be applied to the motor until an electric circuit between the rail and wheel is provided. In order to make this circuit, the frog A is brought in contact with the track at the proper position to the wheel as shown in Fig. 1. Where the track is on a paved street the spurs *d d* of the frog will fit into the narrow space between the track and paving and hold the frog firmly in contact with the rail as shown in Fig. 1. For this purpose the spurs *d d* are made long and thin and are beveled from both sides so that the same may be readily driven into the space between the rail and pavement. When the frog is placed as above stated, the strip D of the frog is placed in contact with the wheel of the motor, and an electric circuit between the wheel and track being thus completed, the electric power may be used to propel the wheel along the strip D upon the frog A, from which it will be thrown upon the rail. The strip D with the connection described, may be placed at such angle to the frog as will be necessary to bring it in contact with the wheel, as is shown by the dotted lines in Fig. 2. The strip D also serves a further purpose in preventing the frog from slipping when the wheel comes in contact with the same, as the weight of the wheel upon the strip D will firmly hold both strip and frog. When the wheels of the motor are so far distant from the rail that the circuit with the rail can not be completed in the manner stated, the frog may be placed at the proper distance from the rail to engage the wheel, and the circuit may be completed by joining the frog and rail by any suitable metallic connection, or the strip D may be brought in contact with the rail and the frog may be placed in contact with the wheel, the

spurs in the frog A ordinarily being sufficient to prevent the frog from sliding when being engaged by the wheel. In this manner, by a series of shifts of the replacing frog, the wheels
5 may be brought in contact with the rail.

In operation one frog may be used or a pair may be employed as shown in Fig. 1.

I do not desire to limit my invention to the use of the strip D with a frog of the kind
10 shown and described herein, it being obvious that the strip D and connection may be employed to advantage with many other kinds of replacing frogs.

What I claim as my invention, and desire
15 to secure by Letters Patent, is

1. The replacing frog A, having braces *a. a. a.* and spurs *b b c c d d* and opening *g*

substantially as and for the purposes described.

2. The replacing frog A, having opening *g* 20 substantially as described and for the purposes specified.

3. In combination with a replacing frog, the circuit connecting strip D connected with the frog by any suitable means, substantially as 25 and for the purposes described.

4. In combination with the replacing frog A, the circuit connecting strip D having metallic connection *f*, substantially as and for the purposes described.

BURT E. TILDEN.

Witnesses:

WILS C. STERLING,
JNO. A. JOHNSTON.