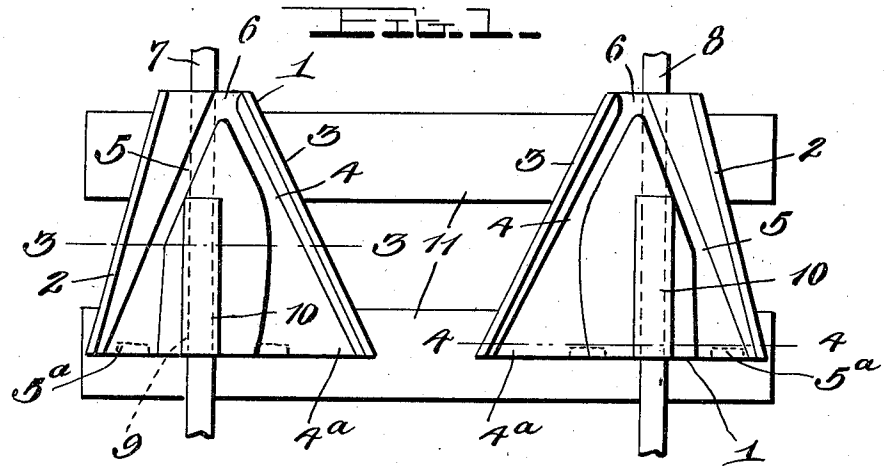
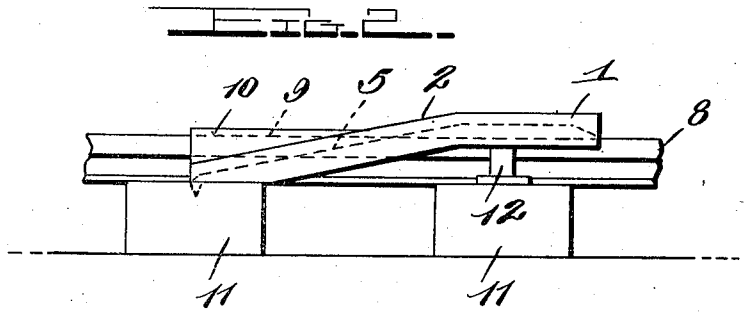
C. H. GAMBILL.

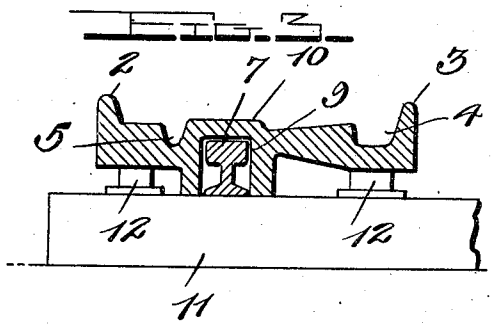
CAR RERAILING FROG.

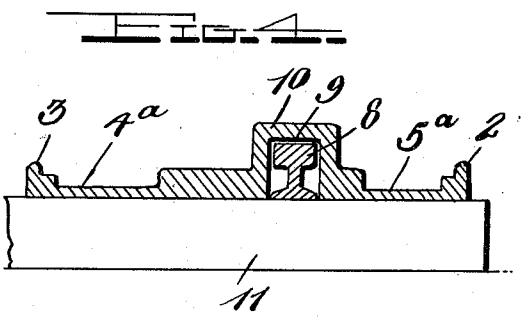
APPLICATION FILED APR. 15, 1912.

1,035,957. Patented Aug. 20, 1912.









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UNITED STATES PATENT OFFICE.

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CAR-RERAILING FROG.

1,035,957. Specification of Letters Patent. Patented Aug. 20, 1912.

Application filed April 15, 1912. Serial No. 690,773.

To all whom it may concern:

Be it known that I, CHARLES HILL GAMBILL, a citizen of the United States, residing at Nashville, in the county of Davidson and State of Tennessee, have invented certain new and useful Improvements in Car-Rerailing Frogs, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to rerailing frogs by means of which the wheels of railway cars and engines may be expeditiously and accurately guided upon the rails when they have been derailed from any cause.

The object of the invention is the provision of a portable frog of this character which can be manufactured at a minimum of cost and will be durable and effective in its operation.

The invention as hereinafter particularly claimed will be readily understood from the accompanying drawings taken in connection with the detailed description of the same which follows:

In the drawings: Figure 1 is a top plan view of a pair of frogs in operative relation to the rails; Fig. 2 is a side elevation of the same; Fig. 3 is a transverse vertical section on the line 3—3 of Fig. 1; and Fig. 4 is a similar section on the line 4—4 of Fig. 1.

My improved rerailing frog comprises essentially a casting 1 having the form in top plan of a truncated V. The upper face of the frog is slightly inclined to form an approach and is provided with marginal guard ribs 2 and 3, which extend from the broad base of the V to the truncated apex of the same. The upper face of the frog is provided substantially parallel to the guard rib 3 with a flange receiving groove 4 and at an oblique angle to the guard rib 2 with a flange receiving groove 5. These two grooves converge toward the apex of the V and merge at the point 6, which lies at that side of the axis of the V which is between the rails 7 and 8 of the track. The lower portions of the grooves 4 and 5 are widened laterally at 4^a and 5^a to afford a flaring entrance thereto, the entrance 4^a when the frog is in operative position being between the rails and the entrance 5^a exterior thereto.

The frog is provided upon its lower face with a rail receiving groove 9 which corresponds substantially with the axis of the frog, the upper face of the frog being likewise provided with a corresponding dividing rib 10.

The frogs are adapted to be placed one upon each rail as shown, and in such position that the base of the V containing the entrances 4^a and 5^a rests upon one of the cross ties 11 from which it is inclined to the horizontal rising gradually to the level of the ball of the rail, the narrow forward portion of the frog being supported upon the legs 12.

The operation of the device will be obvious to one skilled in the art.

The two frog members are not counter parts one of the other but are rather complementary and they are arranged in such manner that the guard ribs 3 shall be within the rails and the guard ribs 2 without the same, in which position the merging point of the grooves in each case will be just within the rails at the point where the flange of the wheel guided from either direction will drop to its proper position upon the inner side of the rail ball. Whether the wheels are derailed upon one side of the track or the other they will, when drawn forward, engage with the flaring entrances 4^a and 5^a and will be deflected by said grooves and directed by the guard ribs 2 and 3 laterally to the proper position relative to the rails, when continued further movement will bring the wheels upon the rails in proper relation thereto.

Having thus described the invention, I claim:

1. A rerailing frog comprising a truncated V-shaped casting inclined to the horizontal and having upon its upper face marginal guard ribs extending from the base upwardly toward the truncated end of the V, and also provided substantially parallel to one of the ribs with a wheel flange receiving groove and upon the opposite side at an oblique angle to the guard rib with a similar wheel flange receiving groove merging into the first groove at the apex, the two flange receiving grooves merging at a point just inside the rail, the lower portions of the groove being widened laterally to afford a flaring entrance thereto, said casting being provided on its lower face along its axis with a rail receiving groove, and upon its upper face above the rail receiving groove with a corresponding axial dividing rib.

2. A rerailing frog comprising a truncated

V-shaped casting provided with an inclined approach, the upper face thereof having wheel flange grooves, the outer wall of one groove being parallel with the inner edge of the frog, the outer wall of the other groove being at an oblique angle to the outer edge of the frog, one end of the inner walls of said grooves being substantially parallel with the rails, the opposite ends thereof each being parallel with the opposite wall of said groove, guard ribs extending upwardly along the marginal edges of the casting, the said wheel flange grooves merging at the apex of the truncated V-shaped casting and the lower face of the said casting being provided with a rail receiving groove, substantially as described.

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

CHARLES HILL GAMBILL.

Witnesses:
C. W. CASE,
C. W. JACKSON.