No. 775,441. PATENTED NOV. 22, 1904.

H. J. CAMPBELL.

CAR REPLACER.

APPLICATION FILED JUNE 10, 1904.

NO MODEL.

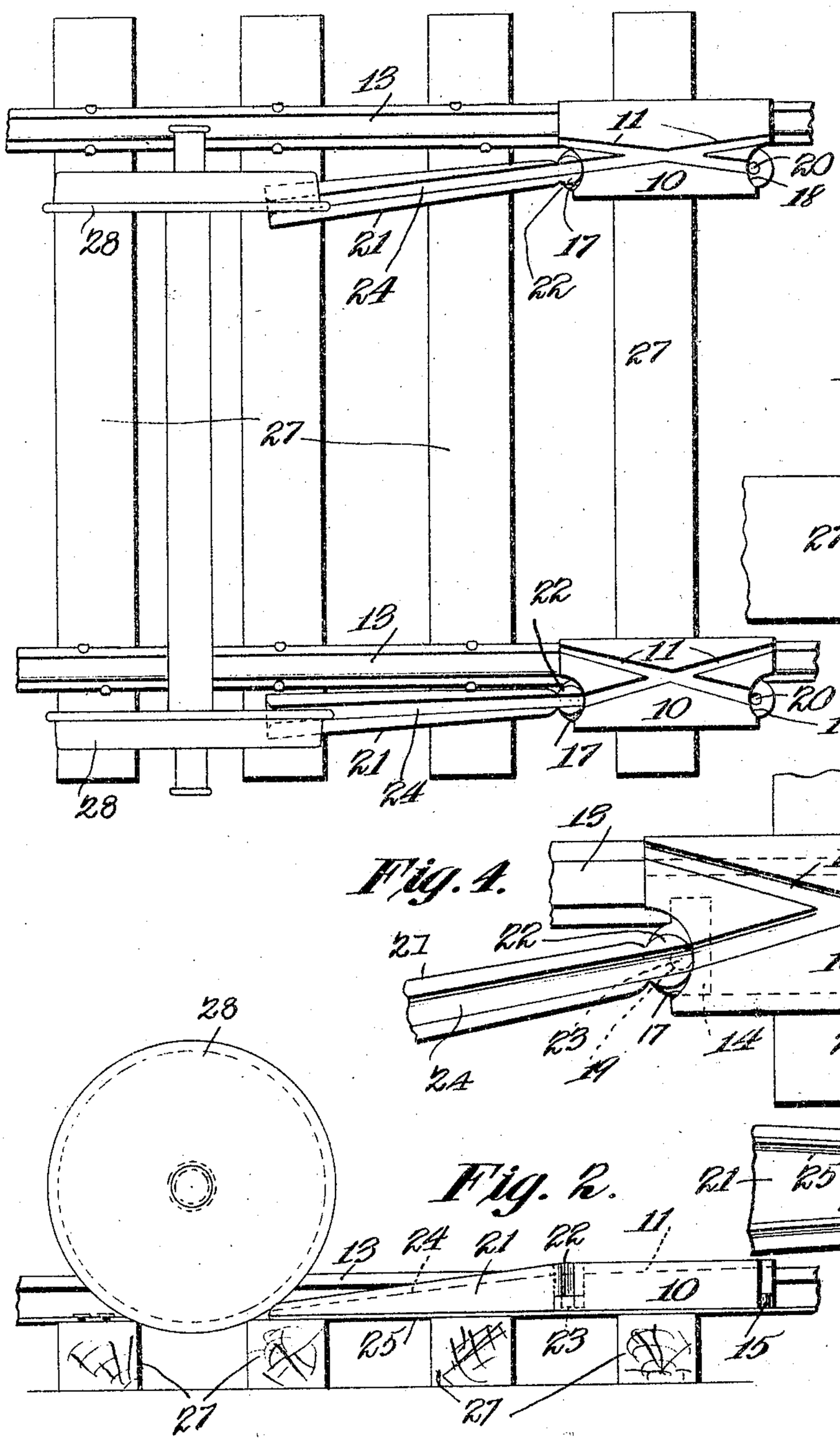

Fig. 1.

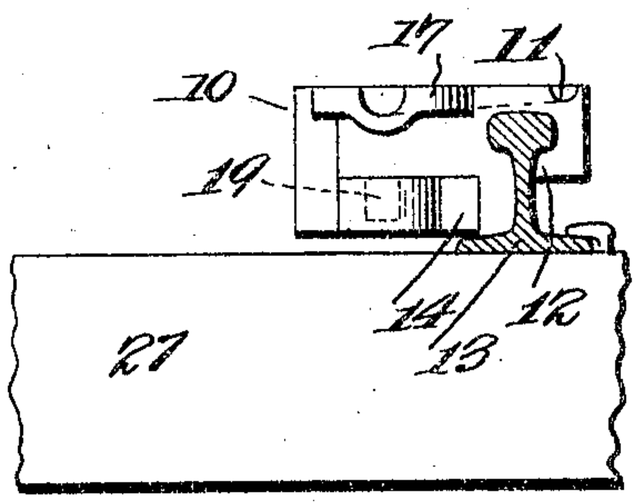

Fig. 3.

Fig. 4.

Fig. 2.

Fig. 5.

Witnesses,
E. G. Stewart
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No. 775,441. Patented November 22, 1904.

UNITED STATES PATENT OFFICE.

HARRY JAMISON CAMPBELL, OF ATHENS, OHIO.

CAR-REPLACER.

SPECIFICATION forming part of Letters Patent No. 775,441, dated November 22, 1904.

Application filed June 10, 1904. Serial No. 212,008. (No model.)

To all whom it may concern:

Be it known that I, HARRY JAMISON CAMPBELL, a citizen of the United States, residing at Athens, in the county of Athens and State of Ohio, have invented a new and useful Car-Replacer, of which the following is a specification.

This invention relates to devices employed for replacing derailed cars upon the rails, and has for its objects to improve the construction and produce a device of this character efficient in action, easily applied, and operable from either end.

With these and other objects in view, which will appear as the nature of the invention is better understood, the same consists in certain novel features of construction, as hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of the embodiment of the invention capable of carrying the same into practical operation, it being understood that the invention is not necessarily limited thereto, as various changes in the shape, proportions, and general assemblage of the parts may be resorted to without departing from the principle of the invention or sacrificing any of its advantages, and the right is therefore reserved of making all the changes and modifications which fairly fall within the scope of the invention and the claims made therefor.

In the accompanying drawings, Figure 1 is a plan view of a section of railway-track with the improved device applied. Fig. 2 is a side view of the same. Fig. 3 is an end elevation of the base member in position on a railway-rail with the replacer-rail detached. Fig. 4 is an enlarged plan view of one of the base members and a portion of one of the replacer-rails. Fig. 5 is an inverted view of a portion of one of the replacer-rails enlarged.

The improved device comprises a base member or "frog" 10, having one or more diagonally-disposed grooves 11 for the flanges of the derailed wheels and with an inwardly-extending longitudinal rib 12 for engaging beneath "head" portion of the rail 13 on one side and with downwardly-extending projections 14 15 at the ends for bearing upon the foot of the rail upon the other side. By this means it is obvious the frog member may be readily attached to the rail by tilting it sidewise to engage the rib 12 beneath the head of the rail and then dropping it down until the projections 14 15 rest upon the foot of the rail.

The member 10 is preferably provided with two grooves 11, these being disposed in reverse order, so that the device is double-ended or adapted to receive the derailed wheels 28 from either end, and the grooves also preferably converge from their receiving ends toward the discharging ends, the object to be hereinafter described. The ends of the base member opposite the larger ends of the flange-grooves 11 are provided with half-bearings 17 18 and the projections 14 15 provided with stud-sockets 19 20.

A rail member 21 is provided, having a convex end 22 and stud 23 for alternate engagement, respectively, with the half-bearing 17 or 18 and stud-sockets 19 20. The upper surface of the rail member is inclined and provided with a longitudinal flange-groove 24 for registration with the flange-grooves 11 in the base member, and by widening the grooves 11 at their receiving ends the grooves 24 will retain its registering position therewith, no matter to how great an extent the rail may swing upon its stud 23, as will be obvious. The lower surface of the rail member 21 is level with the ties and is provided with spaced longitudinal ribs 25 26 to embed themselves in the ties 27 and prevent lateral movement under the pressure exerted when the device is in use.

Two of the base members 10 are employed, differing slightly in the arrangement of the grooves 11 to insure the proper guidance of the right and left car-wheels upon the rails, as illustrated in Fig. 1.

With a device thus constructed it is obvious that a derailed car may be very easily and quickly replaced upon the rails by arranging a pair of the devices adjacent to the derailed wheels 28, with the pointed ends of the rail members 21 beneath the treads and

with the grooves 24 beneath the flanges of the same and then drawing the car forward, as by a locomotive, when the derailed wheels will quickly and surely mount the rails.

By constructing the device to operate from either end it makes no difference from which side the power is to be applied, thus materially increasing the efficiency and operativeness of the device.

The parts are preferably formed of cast-steel of sufficient strength to withstand the strains to which they will be subjected.

I claim—

1. A car-replacer comprising a base member having a diagonal wheel-flange groove in its upper face and a longitudinal rib for engaging beneath the head of the rail and with a rail-stud socket in one end, in combination with a rail member having a stud for swinging engagement with said socket and provided with a longitudinally-disposed flange-groove for registration with the flange-groove in said base member.

2. A car-replacer comprising a base member having reversely-disposed diagonal wheel-flange grooves in its upper face and a longitudinal rib for engaging beneath the head of the rail and with rail-stud sockets in its opposite ends, in combination with a rail member having a stud for engagement with said sockets and provided with a longitudinally-disposed flange-groove for alternate registration with the diagonally-disposed grooves in said base member.

3. A car-replacer comprising a base member having a diagonal wheel-flange groove in its upper face and a longitudinal rib for engaging beneath the head of the rail and with a vertical half-bearing at one end of the same and a stud-socket extending below the bearing in combination with a rail member having a convex end for movably engaging said half-bearing and a stud for movably engaging said socket, said rail member provided with a longitudinal wheel-flange groove for continuous registration with the groove in said base member.

4. A car-replacer comprising a base member having a longitudinal rib for engaging the head of the rail and provided with a diagonally-disposed wheel-flange groove converging toward one end and with a stud-socket in alinement with the larger end of said groove, in combination with a rail member having a stud for movably engaging said socket and provided with a longitudinal groove for continuous registration with the groove in said base member.

5. A car-replacer comprising a base member having a longitudinal rib for engaging beneath the head of the rail on one side and a depending portion for bearing upon the foot of the rail upon the other side and with a diagonal wheel-flange groove in its upper face, and a rail member, pivoted by one end to said base member and provided with a longitudinal flange-groove for continuous registration with said base-member groove.

6. The combination in a car-replacer, of a base member having diagonally-disposed crossed grooves, and a grooved rail, one end of the latter having means for detachable connection to either end of the grooved member.

7. The combination with a grooved member, of a grooved rail pivotally connected thereto, said rail having pointed ribs for engagement with the ties or similar supports.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HARRY JAMISON CAMPBELL.

Witnesses:

L. S. WILSON,

R. L. WOODWORTH.