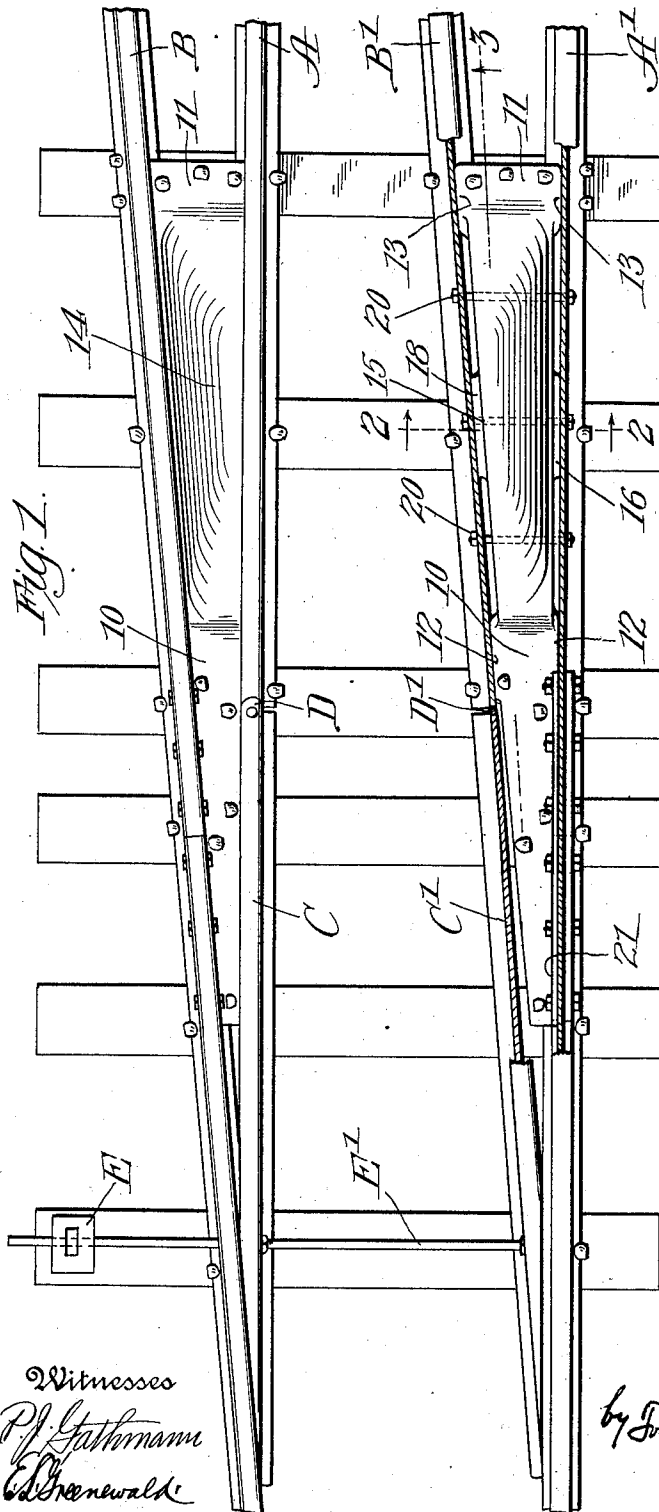


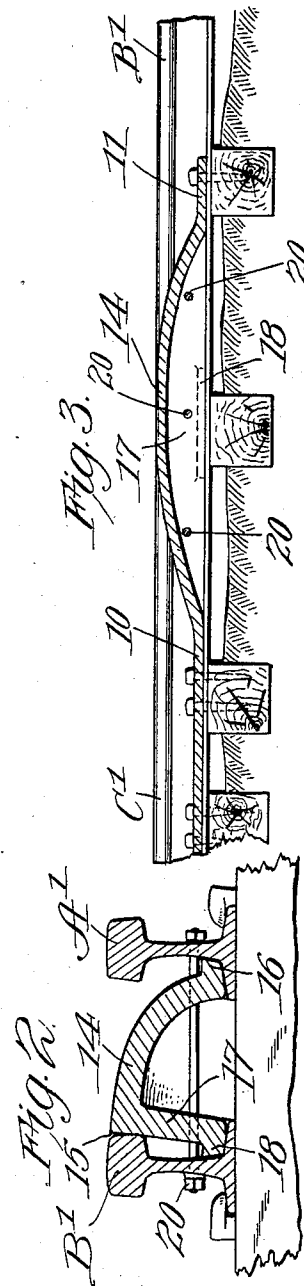
H. P. HUGHES.
RERAILING DEVICE.
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1,063,799.

Patented June 3, 1913.



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UNITED STATES PATENT OFFICE.

HINCHEY P. HUGHES, OF GREENWOOD, SOUTH CAROLINA.

RERAILING DEVICE.

1,063,799.

Specification of Letters Patent.

Patented June 3, 1913.

Application filed August 1, 1912. Serial No. 712,802.

To all whom it may concern:

Be it known that I, HINCHEY P. HUGHES, a citizen of the United States, residing at Greenwood, Greenwood county, State of South Carolina, have invented certain new and useful Improvements in Rerailing Devices, of which the following is a specification.

This invention relates to devices for replacing on a track trucks of cars or locomotives, and more particularly to a device of this class which is permanently secured in place at the switch of a siding where derailment is most likely to occur and when it does occur the function of the device is to replace or rerail the car or engine while the latter is in motion.

The invention has for its principal object to generally improve and lessen the cost of manufacture of the device shown in the patent to J. W. Bodie No. 1,019,941.

Other objects and the novel features of the invention will be apparent from the following description taken in connection with the accompanying drawings in which:

Figure 1 is a plan view of part of a railroad track showing the switch at a siding with my improved rerailing means applied thereto, parts of the rails being broken away. Fig. 2 is a vertical sectional view along line 2—2 of Fig. 1. Fig. 3 is a longitudinal sectional view along line 3—3 of Fig. 1.

In the drawing, A, A' designate the main line rails, B, B' the siding rails and C, C' the switch points pivoted at D, D' to the rails A and B' respectively and operated simultaneously from the switch stand E through the operating rod E' connected to both switch points C and C'.

The rerailing device which is the subject of this invention is preferably used in pairs, one being placed in between rails A and B and another in opposition thereto between rails A' and B'. Another pair is set at the other end of the siding thus requiring four for each siding. As shown in Fig. 1 there is a right and left rerailing device, one being used to rerail the train on the main line in case the switch splits and the other is placed on the switch line to rerail the train in case the switch splits in switching off cars or trains onto the siding.

The said device is formed or stamped from $\frac{3}{4}$ inch malleable steel.

The rerailing device is trapezoidal in shape and the long or non-parallel sides thereof are disposed alongside of the adjacent rails. At its ends the device has anchor sections 10 and 11 formed so that the central flat portion of said anchor sections will rest flush against ties to which the device is anchored by spikes. The edges of said anchor sections 10 and 11 adjacent the rails are slightly offset so that they will fit flush over the edge of the foot or base flange of each rail and form lugs 12, 12 and 13, 13 which abut against the webs of the adjacent rails.

Intermediate the anchor sections 10 and 11 the metal is formed into a rounded oval-shaped section 14. As shown in Fig. 2 the oval section 14 has its apex 15 adjacent the rail B' at the point where section line 2—2 intersects the same and is curved or convex in cross section in all directions. The section 14 gradually curves or slopes to the foot of rail A' and has a lug 16 formed at the lower end to provide a foot by means of which it rests on the foot of rail A' and abuts against the web of said rail. At its upper edge 15 the section 14 abuts against rail B and is on a level with the top surface of said rail. Extending downwardly from said curved section 14 at the edge 15 there is an inclined bracing member 17 which has a foot or lug 18 formed at its lower edge by means of which the brace rests on the foot or base flange of rail B' and abuts against the web of rail B'. The brace is formed of sufficient thickness to support the load carried by the curved section 14 and by the peculiar convex or arched construction the latter is braced in all directions so that it will not buckle inwardly or downwardly.

The dimensions of the device for ordinary use on standard gage tracks are eight feet in length by approximately eight inches in width at the central section. The length of the device is an important feature as one end of the same extends close to the switch point so that when the truck is derailed it will not be wrecked by jumping over a number of ties before it reaches the rerailing device. There are no flat surfaces on

the inclined portion 14, it being a rounded oval-shaped gradually rising surface insuring perfect rolling contact of the revolving wheels on the locomotive or car making it impossible for a moving train to pass over unless properly rerailed.

Bolts 20 are passed through the rails and the rerailer therebetween so that the device will always be in position with the rail, even if the ties work loose slightly from their true position. The bolts and spikes cooperate to hold the device in position so that when it is hit by a locomotive truck it will not give way. An angle iron comprising an upstanding lug 21 is shown in Fig. 1 and may be formed integral with the device to take the place of the usual angle iron bolted to the rails at the rail joints. When placing the device in position where two rails join the usual angle iron is removed and the upstanding lug 21 on the rerailer takes its place.

The operation of the device is as follows, assuming that a locomotive running on the main line runs into a switch which splits, switch point C moving slightly to the right in Fig. 1. The wheels on the truck will in most cases leave the track and when the width between rails permits will run on the flanges at the inner edges of the treads between rails A, B and A', B'. The flanges fall onto the end sections 10, 10 and run up the gradually inclined surfaces 14. There will be a tendency for the wheels to move in the direction of the track on which the train is proceeding and when the top of the inclined portions 14, 14 is reached there will be an unbalanced effect causing the flanges of the wheels to move to their proper track, the wheel between rails B and A riding up the inclined surface 14 of the device between said rails and over the top of the rail A, the wheel between tracks A', B' in the meantime sliding down incline 14 of the rerailing device between rails A' and B' and the tread thereof riding onto the top of rail A'.

In case the switch splits when the train is running onto the siding track B, B', wheels between rails A', B' will run up the incline and be pulled over rail B' by wheels sliding down incline 14 between rails A and B. The tread of the latter wheels will run onto the top of rail B.

Owing to the fact that the device is stamped out and is hollow, thin and of malleable steel; it may be manufactured much more cheaply than the cast device of the Bodie patent referred to, furthermore it is much lighter and may be handled much more easily than a cast block of material.

It will be seen that I have provided a simple and efficient device for the protection of switches which will automatically place back on the track a car which becomes derailed by having run into an open switch.

Having thus described the invention what is claimed as new is:

1. A rerailing device adapted to be associated with a switch on a railway track, said device being formed from sheet metal and comprising means whereby the device may be secured to a part of the track structure and including a portion which is formed to fit between the switch point and adjacent rail, and a curved section intermediate the ends of the device adapted to rerail a derailed wheel.

2. A one-piece rerailing device adapted to be set between rails adjacent a switch on a railroad track, said device comprising means at one of its ends for permanently anchoring the device to a tie, a section intermediate the ends having a curved upper surface inclined toward the ends and one rail, the apex of the curved surface being located adjacent the other rail, and bracing means extending from the edge adjacent the apex adapted to support the curved section at its highest point.

3. A trapezoidal-shaped one-piece rerailing device adapted to be set between rails adjacent a switch on a railroad track, the non-parallel edges being disposed alongside the rails, said device comprising flat portions at its ends adapted to rest on and be permanently secured to ties, a section intermediate the ends having a curved upper surface and being curved in cross-section in all directions, the said curved surface being inclined to the ends and to one rail, the apex of the curved surface being disposed adjacent the other rail and at a level with the top thereof, and means engaging the foot and web of each rail to brace said curved section transversely.

4. A rerailing device adapted to be permanently set between rails adjacent a switch on a railroad track, said device comprising means at its opposite ends whereby the device may rest on and be secured to railroad ties, said device having a narrow part at one end adapted to fit between the switch point and adjacent rail, a curved section intermediate the ends adapted to rerail a derailed wheel, and means adapted to engage the rails and brace said curved section.

5. A rerailing device adapted to be permanently set between rails adjacent a switch on a railroad track, said device being formed from a single sheet of suitable metal and comprising anchor portions at its ends whereby the device may rest on and be secured to ties, one of the anchor portions being constructed to extend between the movable switch point and the adjacent rail, a curved section intermediate the ends adapted to rerail a derailed wheel, and means adapted to brace said curved section.

6. Rerailing means adapted to be permanently associated with the movable switch

points of a switch on a railroad track, said
means comprising a pair of substantially
similar sheet metal rerailing devices, each
having a part adapted to extend between the
5 switch point with which it is associated and
the adjacent rail, and means for fastening
each device to a part of the track structure.

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

HINCHEY P. HUGHES.

Witnesses:

J. B. PARK,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
