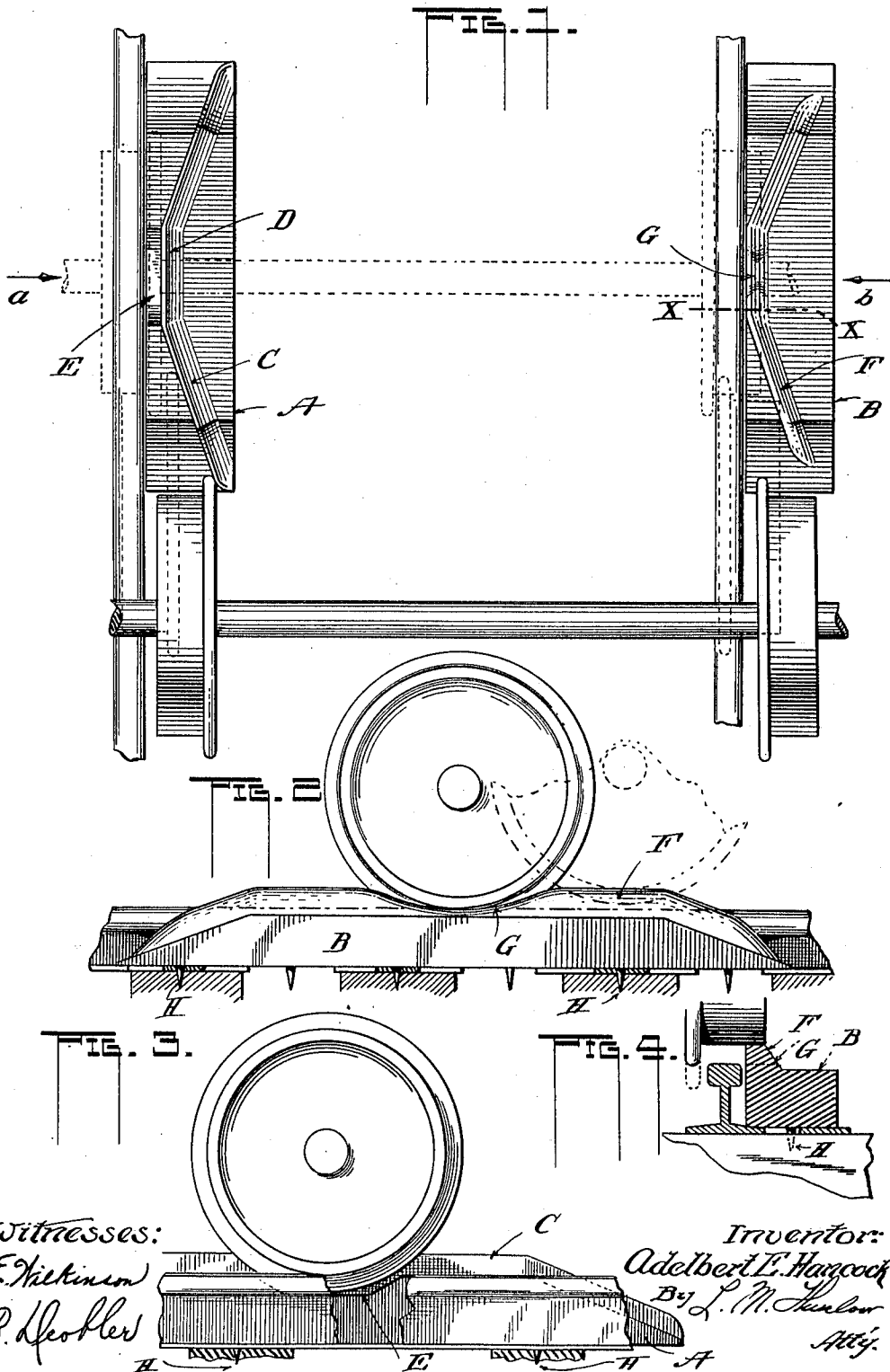


A. E. HANCOCK.
 RERAILING DEVICE.
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1,035,875.

Patented Aug. 20, 1912.



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UNITED STATES PATENT OFFICE.

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RERAILING DEVICE.

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To all whom it may concern:

Be it known that I, ADELBERT E. HANCOCK, citizen of the United States, residing at North Chillicothe, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Rerailing Devices; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a rerailing device, pertaining particularly to members to be placed adjacent to each rail of a railway track by which to replace derailed rolling stock upon said track.

The object of the invention is to provide a device to be placed at each rail one of them being so constructed that the flange of the outer wheel in meeting it will be carried above the top surface of the rail so that it may readily pass over the same, there being provision on the other of the devices by which to cause both wheels to shift or skid sidewise toward and into the position they occupy when upon the rails all of which will be clearly brought out herein.

Another object is to provide a rerailing device to be placed by the side of each rail without in any way overlying the same, one of said devices being of such a structure that the flange of the wheel moving over it will be raised clear of the top surface of the rail, said device further having a depression in its upper surface substantially even with or lower than the top of the rail to permit the face of the wheel to descend to its proper position upon the said rail and an object, also, is to provide means for the opposite device by which to raise the wheel at that side to the proper position to carry it over the rail and to provide, in addition, a depression in said device so that when the wheel has reached its proper position above the rail it will be permitted to drop upon the same.

In the accompanying drawing:—Figure 1 is a plan of the two rails of a track and a device involving my invention placed adjacent each of them. Fig. 2 is an elevation of a rail and one of the devices of my invention as seen in the direction indicated by the dart *b* in Fig. 1. Fig. 3 shows a rail and a part of the other device of my invention as seen in the direction indicated by

the dart as in Fig. 1. Fig. 4 is a transverse section of a rail and one of the devices taken on line *x x* Fig. 1.

The two devices which coact to replace the wheels upon the track are indicated by A and B; the member A being placed inside the track adjacent to one of the rails, the other one being outside the track adjacent to the opposite rail. The said member A consists of a body of the desired height and width and it is of some considerable length. It has an upwardly slanting approach preferably at each end, since thereby it may be used for wheels approaching from either direction. A flange C beginning at substantially the outer corner at one end upon the inclined approach extends up over the top surface of the body toward the rail and may terminate at said rail, and is spaced therefrom as shown. Preferably, it continues parallel to the rail as at D and thence again extends in an angular direction outward away from the rail toward the other outer end of the body terminating upon the slanting approach at that end. In the upper surface of the body between the flange and the rail is a recess E, particularly shown in Fig. 3, which recess is designed to receive the flange of the wheel as also shown in the figure just referred to.

The other member B consists of a body of substantially the same form as that described, being provided with the inclined end approaches, and having, also, a flange or raised portion F, which, beginning near the outer corner of the body upon the inclined approach, extends along the upper surface of said body in an angling direction toward and close to the edge adjacent the rail. Substantially at the middle of the length of the body, said flange or raised portion is provided with a depression indicated at G the bottom of which is preferably a little lower than the upper surface of the rail, said flange thence extending at an angle outwardly away from the edge of the body toward the outer corner of the opposite end of the body substantially as shown. Preferably each member A B is provided on its under surface with a series of spikes or friction points adapted to sink into the ties, for instance, as indicated in the last three figures of the drawing, whereby said members will be retained in their proper positions regardless of the side stresses that

may be imposed upon them by the wheels. They are made quite broad so as to have a wide bearing upon the ties so that they will not be likely to turn over or rock due to said side stresses mentioned.

When placed as shown in Fig. 1 the wheels to be replaced can approach from either direction it being noted that the flange of the wheel at the left, as viewed in Fig. 1, in approaching the member A starts up the incline and in striking the angling flange C is skidded toward the rail as it moves along said member until the wheel-flange drops into the recess E. Meanwhile the face or tread of the opposite wheel has ridden upon the flange F of the member B and is drawn toward the rail due to the engagement of the flange of the opposite wheel with the flange C as described. The flange F in also extending toward its rail provides a support for the tread of the wheel during its entire travel and it is much higher than the top surface of the rail or of such a height at least, that as the wheel is skidded above it the wheel-flange will readily clear that surface. When the pair of wheels reaches the central portion of the members A and B or above the recesses E, G, both wheels will drop upon the rails, the flange of one and the tread of the other entering their respective recesses, both wheels now having been replaced. The members A and B can now be withdrawn in a lateral direction from beneath the wheels, since the latter in resting upon the rails do not bind them. Or, if desired, the members can remain in place until the wheels pass over and beyond them and afterward said members can be removed.

The flanges C and F may be merely a raised part of the broad surface of the respective members the parts of said members adjacent the rails merely lying at a lower level to make room for the wheel, but at the same time it is desired to expose but a small area of the flange F to the wheel-tread thereby presenting as little friction surface as possible in order to allow the wheel to readily skid over it.

It is to be noted that the wheels are not made to skid down an incline onto the rails as is commonly done, but that they are made to travel over and above the rails and then descend upon them without relying upon the weight of the car and its ability to overcome friction in sliding upon an incline. It has been found that in devices employing the latter method the desired results are not always attained since more often than otherwise the flanges of the wheels or the corners of the treads in becoming worn to quite a sharp edge through continued wear upon the rails cut into the inclined face of the soft casting and do not slide and the purpose of the device is thereby destroyed.

Again, when depending upon the sliding or skidding of the wheels the weight thrown upon the devices often causes them to tip and move from under the wheels necessitating the readjustment of said devices and repeating the work. Again there are no parts to hook over or engage the rail in any way. The wheels rest upon a solid foundation and are positively carried over upon the rails in the most simple manner with the least possible chance of failure of the rerailing operation.

I may use but one half of each of the members A B, that is to say, I may employ a member having one of the slanting approaches, each said member being terminated at the middle of the length of the form shown in the figures, or at the position of the depressions E G. The wheels in traveling up upon the raised parts can drop from them upon the rails. A lighter and cheaper structure would result although, of course, in having but one end as the approach a reversal in position at the rails would be required to meet the difference in direction of approach of the wheels. In either case the structures are such that the flange C or its equivalent, together with the other structures, will cause the wheels to be positively shifted sidewise as they move upward and, in finally overhanging the rails they will afterward drop upon them.

As distinguished from the devices of the art no parts of my structure overlie the rails and yet they lie close to the rails and the wheels having first been raised higher than them then travel along the member to finally overhang the rails and then drop upon them instead of sliding sidewise down upon them. This has been partially brought out previously herein but is again touched upon in order to very clearly distinguish between the difference in structure and the results produced in my rerailing device over those of which I am aware.

Having thus described the invention, I claim:

1. A rerailing means comprising an inner and an outer block each lying adjacent one of the rails and each having a part uprising from its upper surface to a position above the top of the rail and extending in an angling direction toward the rail, one of said parts having a depression at its terminus nearest the rail, there being a depression in the other block adjacent the terminus of its said part lying nearest the rail.

2. A rerailing means comprising an inner and an outer block each having an inclined end face, and each having a part uprising from the upper surface thereof above the top of the rail and extending in an angling direction toward the latter, one of said parts having a depression to receive a wheel at its terminus adjacent the rail, there being a

recess in the block having the other described part, the same being below the level of the top surface of the rail and spacing the angling part of that block from its rail.

5 3. A rerailing means comprising an inner and an outer block each having an inclined end face and having an upper surface substantially parallel to the top surface of the rail, one of them having a part uprising
10 therefrom and extending in an angling direction from the outer portion of the block toward the rail, one of them being separated from the latter by a space, there being a depression in the top surface of the block
15 at said space inward from said part, the other block having a raised portion whose edge extends in an angling direction toward and terminates near the same, the top surface of the part being somewhat above the top
20 surface of the rail, there being a depression in the raised surface of that part.

4. A rerailing means comprising an inner and an outer block each having an inclined end face and having an upper surface substantially parallel to the top surface of the
25 rail, one of said blocks having a portion provided with a substantially upright face said portion being inclined at an angle to the longitudinal line of the rail and extending
30 inwardly toward the same from a position near the outside portion of the block and separated at its inner end from the rail by a space, said portion overlying the said in-

clined end, there being a depression in the block beneath said space, said depression extending below the top surface of the rail, the
35 other block having a raised portion extending at an angle toward its rail higher than the same and terminating adjacent thereto and having a depression therein at its terminus.
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5. A rerailing means comprising an inner and outer block each having an inclined portion at each of its ends and each having
45 a raised part extending up one of the inclines of each block and along its upper surface toward the rail and thence extending parallel to the rail and thence diverging and extending along the blocks and down
50 the other incline thereof to near the outer portions of the same, one of them at that part lying parallel to the rail being separated from the rail by a space, there being a depression in the block below said space
55 adjacent the rail and below the level of the top of the said rail, there being a depression in the raised part of the other block adjacent to the rail and substantially opposite the depression in the opposite block.

In testimony whereof I affix my signature, 60
in presence of two witnesses.

ADELBERT E. HANCOCK.

Witnesses:

U. L. ANDERSON,
CHAS. L. CAMP.