R. A. HENINGTON.

TRACK GAGE.

APPLICATION FILED MAR. 10, 1914.

1,131,377.

Patented Mar. 9, 1915.

2 SHEETS—SHEET 1.

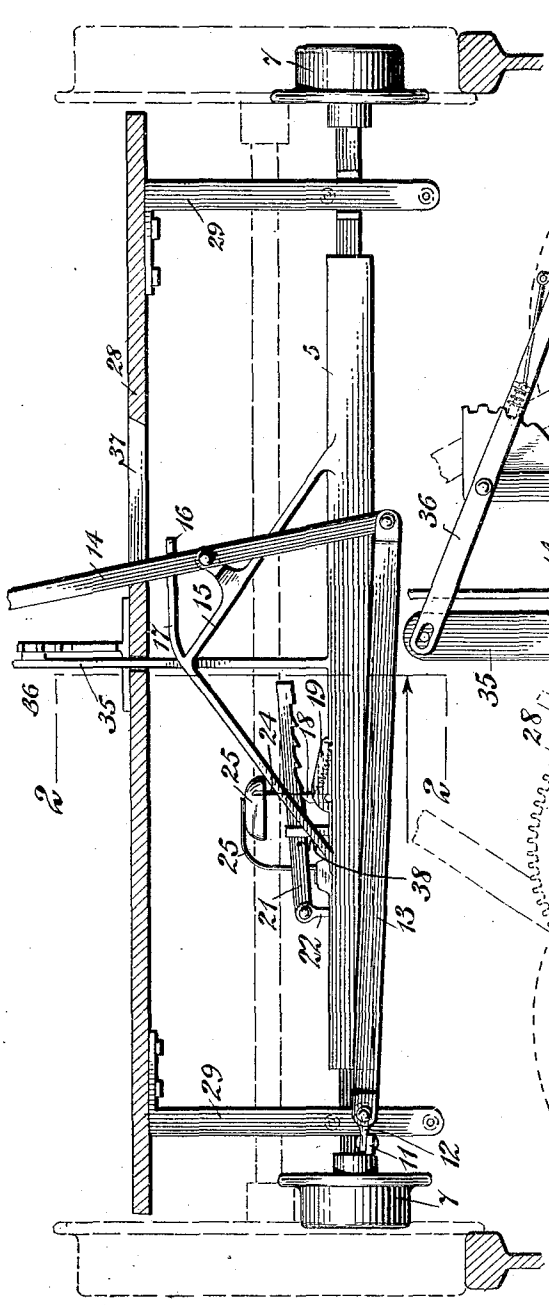

Fig. 1.

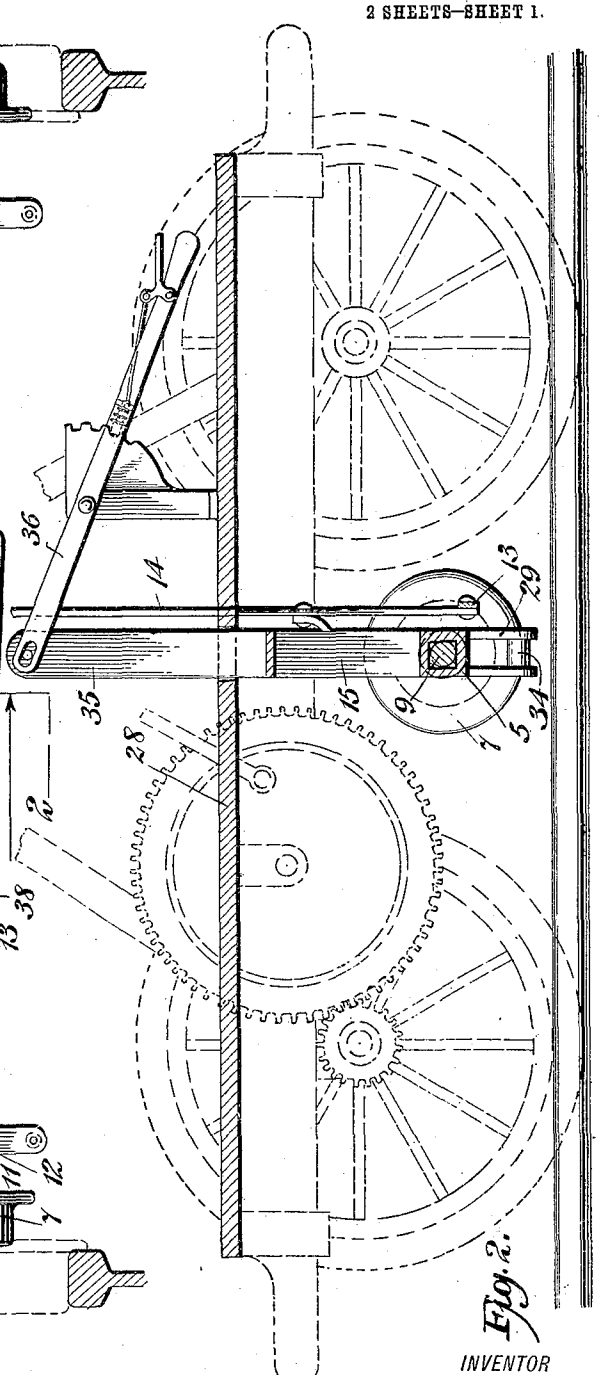

Fig. 2.

WITNESSES

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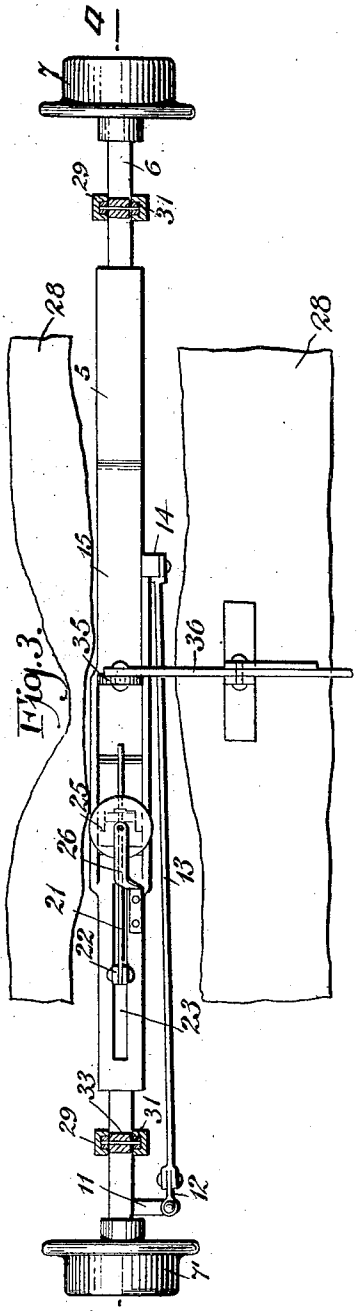

Fig. 3.

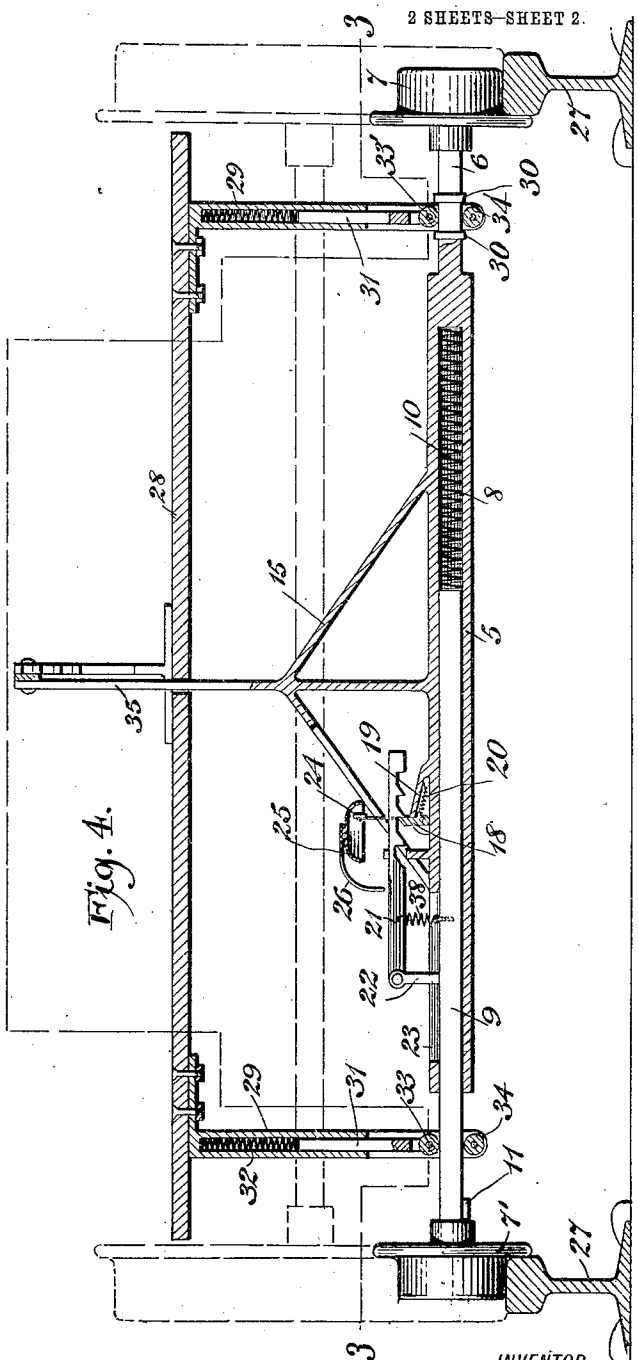

Fig. 4.

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UNITED STATES PATENT OFFICE.

RICHARD ABRAHAM HENINGTON, OF WASHINGTON, MISSISSIPPI.

TRACK-GAGE.

1,131,377. Specification of Letters Patent. Patented Mar. 9, 1915.

Application filed March 10, 1914. Serial No. 823,790.

To all whom it may concern:

Be it known that I, RICHARD A. HENINGTON, a citizen of the United States, and a resident of Washington, in the county of Adams and State of Mississippi, have invented a new and Improved Track-Gage, of which the following is a full, clear, and exact description.

My invention relates to means for indicating a variation in the width of a track; and it has reference more particularly to a device which may be provided on vehicles used for inspection of tracks.

The object of the invention is to provide a simple, inexpensive, and strong device which will indicate spreading in the track by giving an alarm at the places where the spreading has taken place. I attain this object by the mechanism illustrated in the accompanying drawings forming part of this specification, in which similar characters of reference indicate corresponding parts in all the views and wherein:

Figure 1 is a transverse section of a hand car provided with an embodiment of my invention, which is shown in inoperative position; Fig. 2 is a longitudinal section on line 2—2, Fig. 1; Fig. 3 is a section on line 3—3, Fig. 4, the platform being partly broken out to show the details of construction; and Fig. 4 is a vertical section on line 4—4, Fig. 3, showing the device in operative position.

Referring to the drawings, the device proper consists of a telescopic member formed of a main support 5 having a reduced end 6 on the extremity of which a flange-wheel 7 is mounted to rotate. The said support is also provided with an axial bore 8, open at the opposite end, and into which bore through the open end is fitted a bar 9 mounted so as to slide in said bore, and which in combination with the main support forms the telescopic member. The said bar is constrained to slide in said support by making the cross section of said bar and bore angular. The projecting end of said bar 9 receives a wheel 7′ similar to wheel 7 and mounted similarly on said end of the bar. Mounted in the bore 8 is a coil-spring 10, the tendency of which is to force the said bar 9 out from the support and thus increase the distance between the wheels 7 and 7′.

The bar 9 adjacent the wheel 7′ is provided with a lateral arm 11 rigid with the bar and which is connected by a link 12 to one end of a connecting rod 13; the other end of which rod is connected to a lever 14 preferably of the first class. The said lever 14 is pivoted on a bracket 15 forming part of the support 5. By moving said lever on its pivot to the position shown in Fig. 1, the bar 9 is forced into the bore, as shown in said figure, and the lever 14 is then made to engage a tooth 16 provided on an extension 17 forming part of the bracket 15. Said lever 14 has enough freedom on its pivot to move laterally, whereby the same can be made to easily engage or disengage said tooth 16. A member 18 is pivotally mounted on the support 5 and is maintained against part 19, integral with the support 5, by means of a resilient member 20. That is to say, the said part 19 forms an abutment for the pivoted member 16 preventing its further movement in the direction of said part while permitting the movement of the same in the opposite direction. The upper end of said pivoted member 18 is engaged by a rack 21, which is, in turn, pivotally connected to an arm 22 which forms part of the bar 9 and projects through a slot 23 formed in the support 5. The pivoted member 18 is also provided with a hammer 24 adapted to strike a bell 25 carried by a bracket 26 which is mounted on the support 5. A spring 38 maintains the engagement between the rack 21 and the member 18.

When the wheels 7 and 7′ roll on the rails 27 forming the track and there is an increase in width between the rails, the spring 10 will force the bar 9 out, whereby the rack 21 will move the pivoted member 18 away from the part 19 until the same passes under the tooth of the rack and is forced back against the part 19 of the resilient member 20. The contact of the member 18 with the part 19, due to the resilient member 20, causes the hammer 24 to strike the bell, thus announcing that there is a spreading in the track. The distance between the teeth of the rack may be a quarter or a half inch or more or less, if desired. If the distance between the teeth is a quarter of an inch and there is a spreading of three-quarters of an inch between the rails, the bell will ring three times, indicating the amount of spreading therebetween.

The device is secured to a platform 28 of a hand car by means of brackets 29 extending downwardly from the under side of the platform. One of the brackets 29 en-

gages the reduced end 6 of the support, which reduced end is provided with flanges 30 engaging said bracket, whereby said support is prevented from longitudinal displacement. The other of the brackets 29 engages the bar 9. Each of the brackets is provided with a plunger 31 and a resilient member 32 which forces the plungers against the parts engaged in said brackets. The plunger of the bracket engaging the bar 9 is provided with a roller 33 to reduce the frictional resistance between the bar and said plunger when the same is moved in or out of the bore of the support 5. The bracket engaging said bar has also a roller 34 to diminish the friction of the movement of said bar when the device is in operative position, as shown in Fig. 4. The other bracket 29 is, preferably, provided with similar rollers 33′ and 34′ which engage the end 6 of the support. The bracket 15 is also provided with a vertical extension 35 projecting through a slot in the platform 28; and the projecting end of said extension 35 is engaged by a lever 36 mounted on the platform, whereby the said device can be placed in operative or in inoperative position, *i. e.*, the device can be raised or lowered from the platform 28. The lever 14 for operating the bar 9 projects through a slot 37 provided in the platform 28, permitting the operation of the same so as to force the bar into the bore of the support when the device is placed in inoperative position on the hand car, as shown in Fig. 1. The slot 37 in the platform, as well as the slot 23 in the support, are long enough to permit the movement of the lever 14 and the bar 9 respectively caused by the expansion of the spring 10 when the device is in operative position.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. The combination of a hand car having downwardly extending brackets with a track gage engaging said brackets; means carried by said gage adapted to engage the track; means adapted to indicate an increase in length between said means engaging the track; and means for moving the gage in said brackets whereby the same may be placed in operative or in inoperative position.

2. The combination of a hand car having downwardly extending brackets with a track gage engaging said brackets; a plunger in each bracket normally forcing said track gage in engagement with the track; means carried by said gage adapted to engage the track; means adapted to indicate an increase in length between said means engaging the track; and means for raising the gage in said brackets whereby the same is maintained in inoperative position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

RICHARD ABRAHAM HENINGTON.

Witnesses:
GEO. W. HEALY,
J. J. LAMBERT.