J. REINEHR.

RAIL LAYING APPARATUS.

APPLICATION FILED AUG. 24, 1910.

1,038,654.

Patented Sept. 17, 1912.

3 SHEETS—SHEET 1.

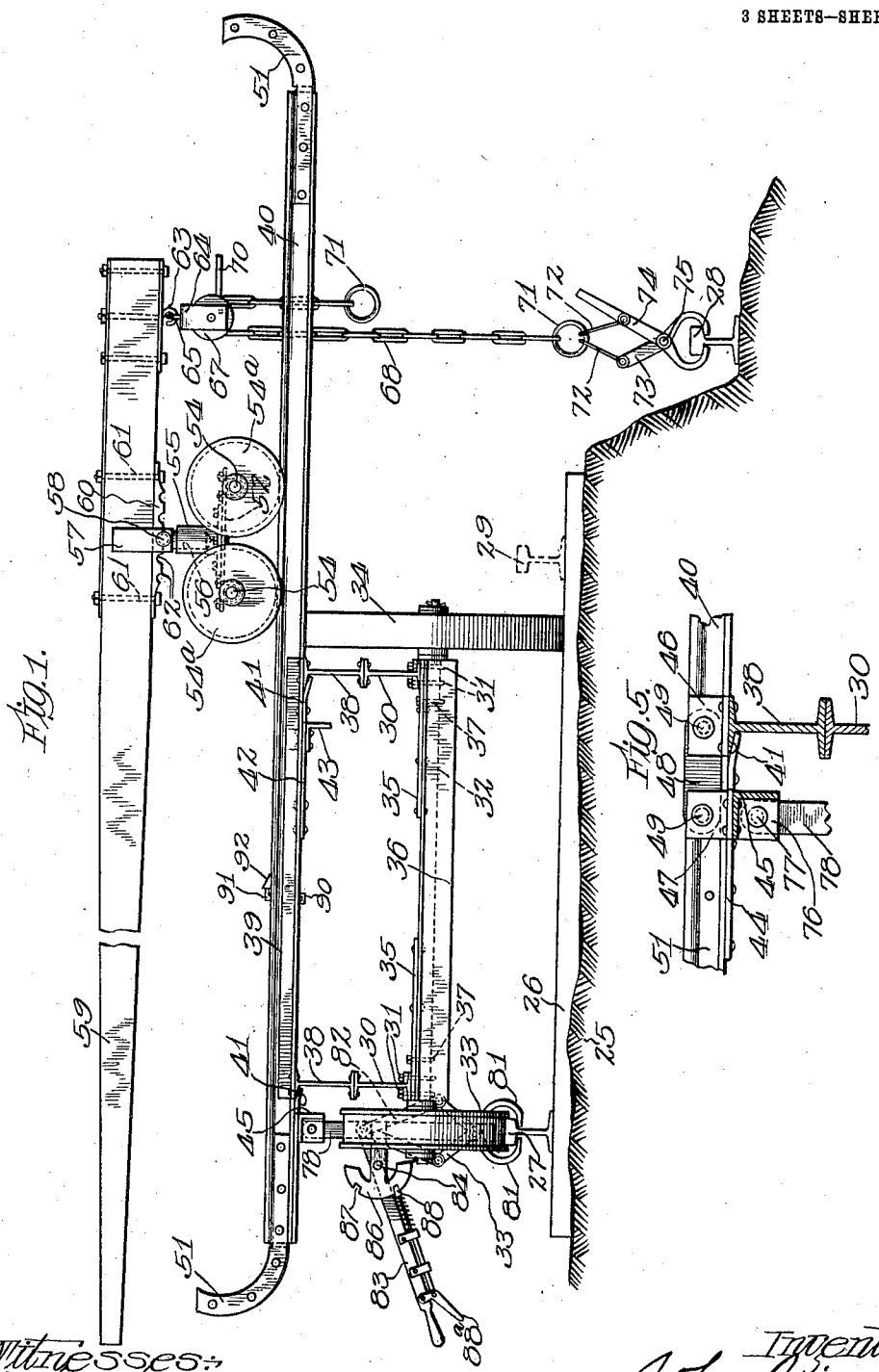

Fig. 1.

Fig. 5.

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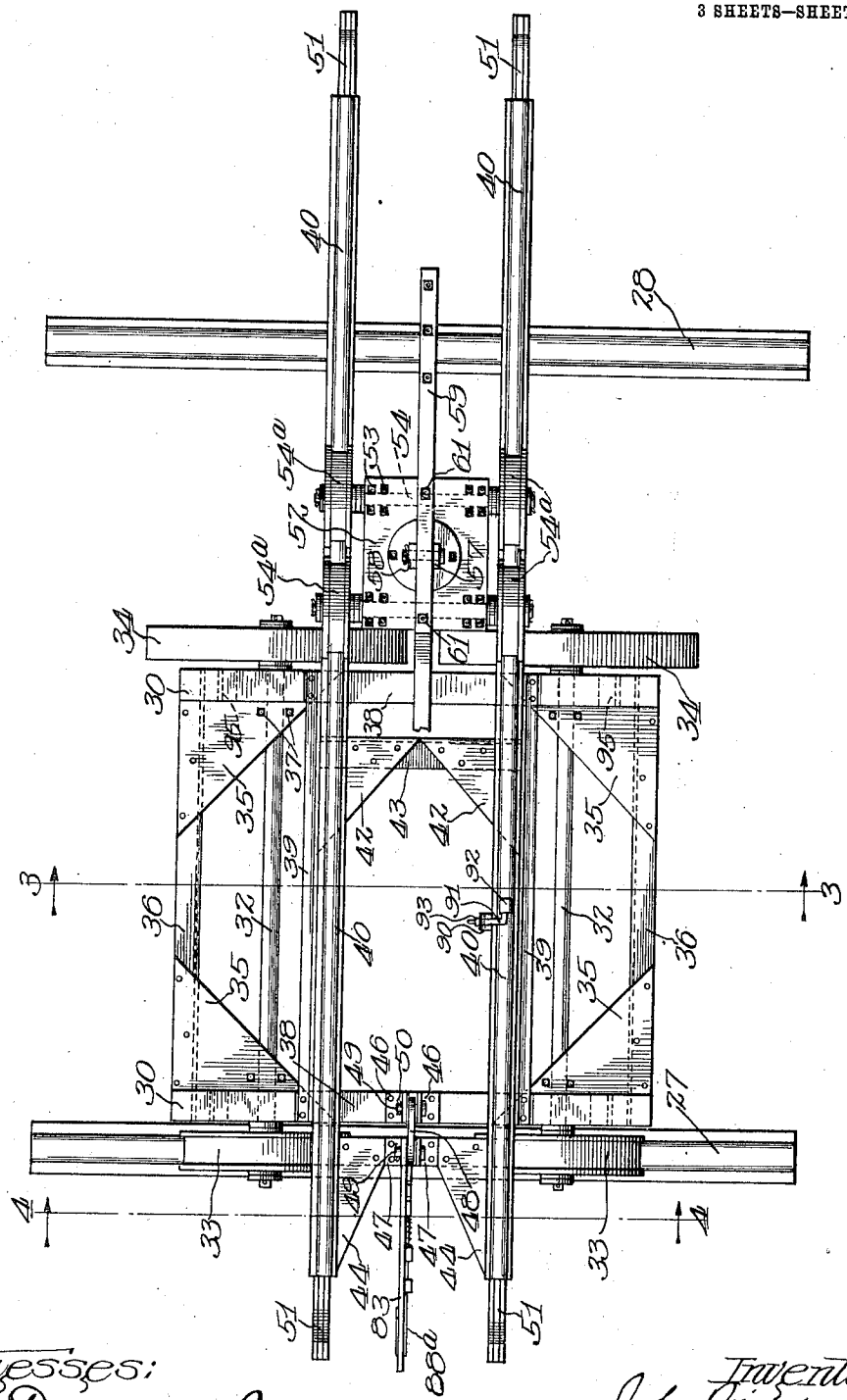

Fig. 2.

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3 SHEETS—SHEET 3.

Fig. 3.

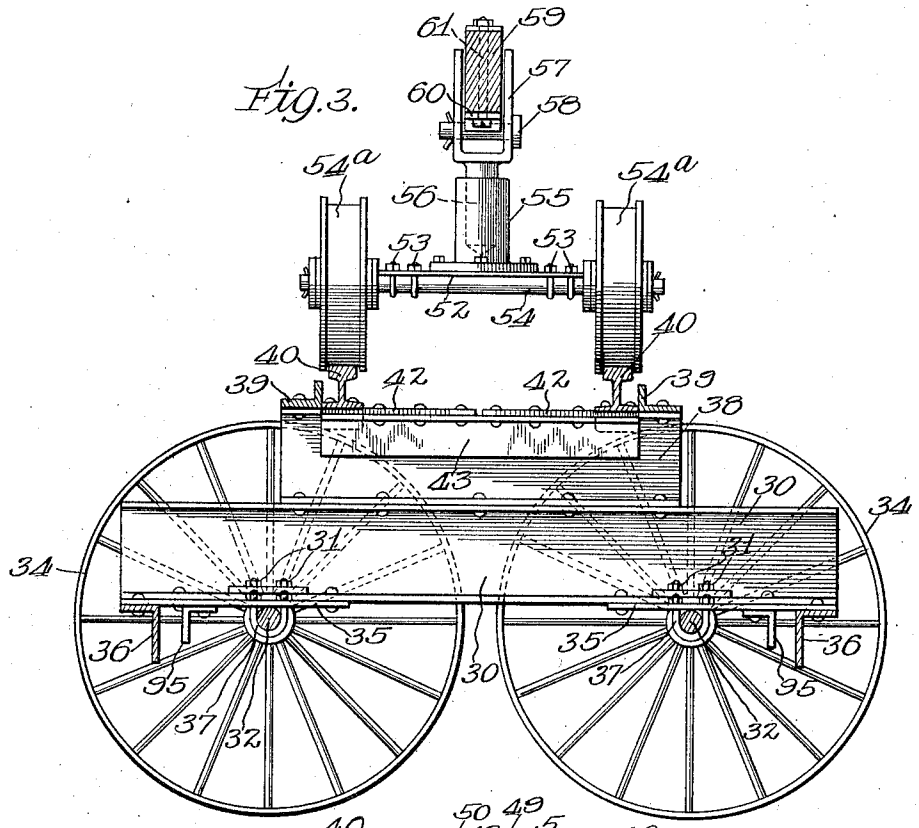
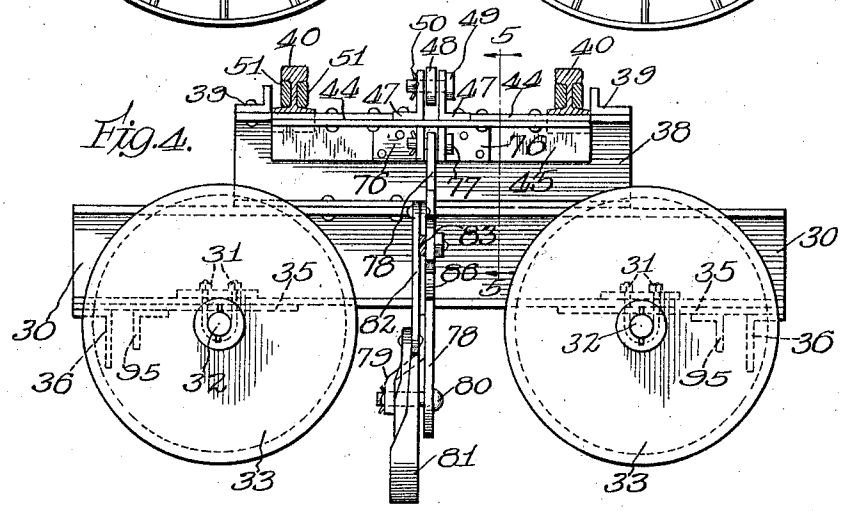


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN REINEHR, OF SAVANNA, ILLINOIS, ASSIGNOR TO RAIL LAYING MACHINE COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

RAIL-LAYING APPARATUS.

1,038,654. Specification of Letters Patent. **Patented Sept. 17, 1912.**

Application filed August 24, 1910. Serial No. 578,762.

To all whom it may concern:

Be it known that I, JOHN REINEHR, a citizen of the United States, residing at Savanna, in the county of Carroll and State of Illinois, have invented certain new and useful Improvements in Rail-Laying Apparatus, of which the following is a specification.

My invention relates to rail lying apparatus of the general character shown in my Patent No. 498,023, granted February 1, 1910; the apparatus therein disclosed being designed particularly for relaying railroad track, that is, making over old track by substituting new rails in place of the old worn out rails.

The object of the present invention is to provide certain improvements relating particularly to the truck or vehicle on which the rail handling apparatus is supported, which will be hereinafter described and claimed.

The invention in a preferred embodiment is illustrated in the accompanying drawings wherein—

Figure 1 is a side elevation of the apparatus; Fig. 2 is a plan view of the same; Fig. 3 a sectional elevation taken on line 3—3 of Fig. 2, looking in the direction of the arrows; Fig. 4 a similar view taken on line 4—4 of Fig. 2; Fig. 5 a fragmentary sectional view taken on line 5—5 of Fig. 4, looking in the direction of the arrows.

Like characters of reference indicate like parts in the several figures of the drawings.

The apparatus consists in the preferred form shown of a truck which runs along the road-bed, a track transversely placed on the truck and projecting from the same on the working side thereof, a carriage which runs back and forth on this track, a lever mounted with a universal joint on the carriage, rail grappling apparatus carried on the end of said lever and means for preventing the truck from tilting when the carriage is run out on the projecting end of the track. The carriage, the lever and rail grappling means are described and claimed in my Patent No. 992,594 dated May 16, 1911, which is a division hereof, and therefore need not be described herein as they form no part of the invention claimed in the present application.

Referring now to the drawings, 25 represents the earth of the road-bed, 26 one of the cross ties, 27 one of the rails on the side of the track opposite the working side, (it being understood that, following the usual practice, the work is done separately on opposite sides of the track), 28 one of the new rails which is shown as lying on the shoulder outside of the ties, and 29 the position, shown in dotted lines, which this rail will eventually take.

The truck, by which term I intend to designate the car or carriage which runs on the road-bed, is preferably constructed as follows: 30 designates two I beams constituting the side frame members of the truck, to which are secured by stirrups 31, the axles 32 of the truck, carrying, at one side of the truck, the flanged, preferably double flanged, wheels 33, and on the other side the broad tired non-flanged wheels 34 of greater diameter than wheels 33. Wheels 33 run on the rails 27. Wheels 34 may be run directly upon the ties or over stringers placed on the ties. To the under side of the I beams 30, at each end, are secured the triangular plates 35, and to the under sides of these plates the transverse frame member angle bars 36. The axles 32 are preferably secured also to the plates 35 by means of stirrups 37. Secured on the upper flange of the I beams 30 are the short I beams 38, and cross-wise of these beams are the angle irons 39 against which are abutted the rails 40 which rest upon the I beams 38 and upon which runs the carriage sustaining the rail handling apparatus. The rails 40 have secured to their under sides the clips 41 which engage under the upper flanges of the I beams 38. To the under side of the rails 40 are secured the forward triangular plates 42 to which is riveted the transverse angle iron 43, and the rear plates 44, to which is secured the angle iron 45. On the I beam 38 which is adjacent the plates 44, are two upstanding angle plates 46 and a similar pair of angle plates 47 are secured to the top of the angle iron 45. A link 48 is secured between the pairs of angle plates 46, 46 and 47, 47 by means of the pins 49 and cotters 50. By this arrangement, the track consisting of the rails, plates 42 and 44 and angle irons 43 and 45 is held securely in position on the truck, but in such manner that it may be expeditiously removed when necessary—for example when the rail laying apparatus has to be taken from the railroad track to allow a train to pass. The tracks 40 are prefer-

ably provided at each end with stops formed by the curved strips or plates 51 secured to the webs of the rails.

Apparatus of novel construction is provided for preventing the truck from being tilted when the carriage supporting the rail handling device is on the working end of its track. This apparatus is made up of the following parts: On angle iron 45 are the two angle plates 76 between which is pivoted, by means of a pin 77, a hanger 78 (see particularly Fig. 16) and on this hanger is a plate 79 between which and the end of the hanger is pivoted on the pin 80 the two grappling members 81 which are adapted, when closed to extend around the ball of rail 27. To the upper end of the members 81 are pivoted the links 82 pivoted together at their upper ends and to the end of the lever 83 which is fulcrumed on a pivot 84 carried by a bracket 85 on the hanger 78. The bracket 85 is provided with a sector 86 having two notches 87 adapted to receive a spring-pressed tooth 88 of ordinary construction which is carried on lever 83 and operated by the hand grip 88a. The sector is formed with two notches so that the gripping members may be set either in their closed position around the ball of the rail or held in their open position above the rail.

While I have described my improved rail laying machine in the form in which I prefer to construct it, it will be obvious that there might be some change made in the form and construction of the parts and in the particular mechanical mechanisms employed; therefore I do not limit myself to these particulars except as the same are made specific limitations in certain of the claims herein.

I claim:

1. In apparatus of the character described, the combination with a truck, of a transversely arranged track, and means for removably securing the track to the truck comprising clips and a removable link.

2. In apparatus of the character described, the combination with a truck provided with flanged side members, a transversely arranged track comprising rails and cross pieces connecting said rails together, clips on said track which engage with the flanges of the truck side members, and a removable link which holds said track in position on the truck.

3. In apparatus of the character described, the combination with a truck comprising side members composed of I beams, a track comprising rails and cross pieces connecting said rails together, transverse members on the I beams which prevent the spreading of the rails, clips on the under side of said rails adapted to engage with the flanges of said I beams, and a link secured to one of said I beams and to said track.

4. In apparatus of the character described, the combination with a truck, of a transversely arranged track, means for removably securing the track to the truck comprising clips and a removable link, and means adapted to prevent the tilting of the truck.

JOHN REINEHR.

Witnesses:
P. H. Truman,
Edwin Johnson.

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

Correction in Letters Patent No. 1,038,654.

It is hereby certified that in Letters Patent No. 1,038,654, granted September 17, 1912, upon the application of John Reinehr, of Savanna, Illinois, for an improvement in "Rail-Laying Apparatus," an error appears in the printed specification requiring correction as follows: Page 1, line 11, for the number "498,023" read *948,023;* and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 22d day of October, A. D., 1912.

[SEAL.]

C. C. BILLINGS,

Acting Commissioner of Patents.