

J. CONTOS.
 TRACK ADJUSTER.
 APPLICATION FILED MAY 8, 1911.

1,013,987.

Patented Jan. 9, 1912.

2 SHEETS-SHEET 1.

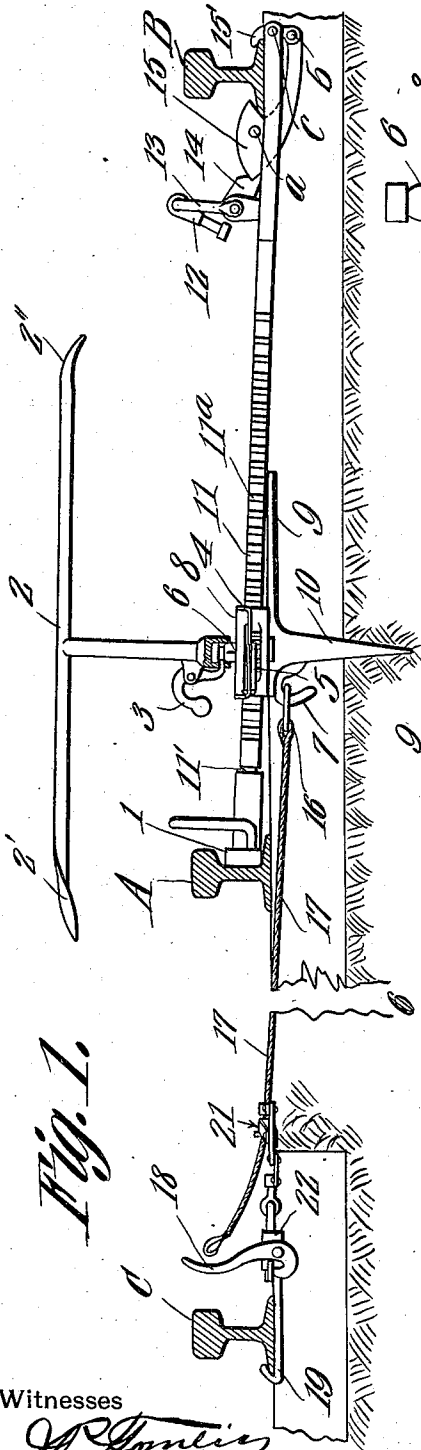


Fig. 1.

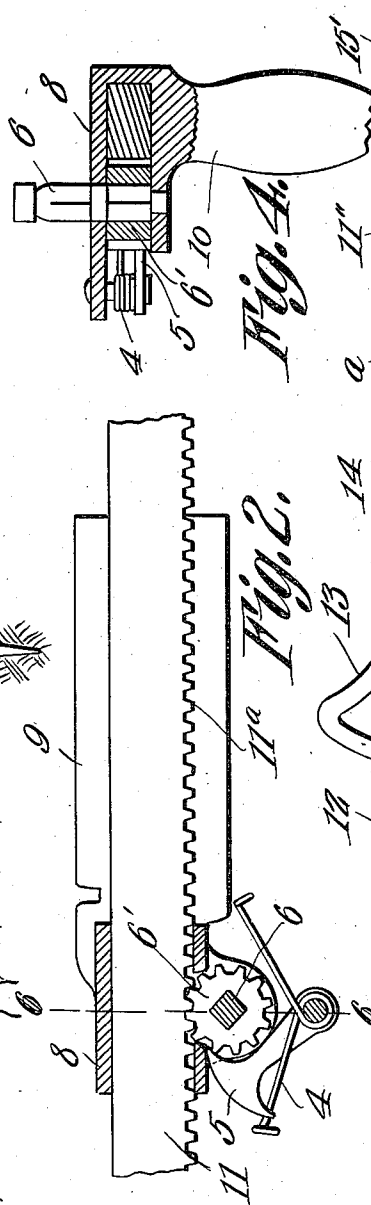


Fig. 2.

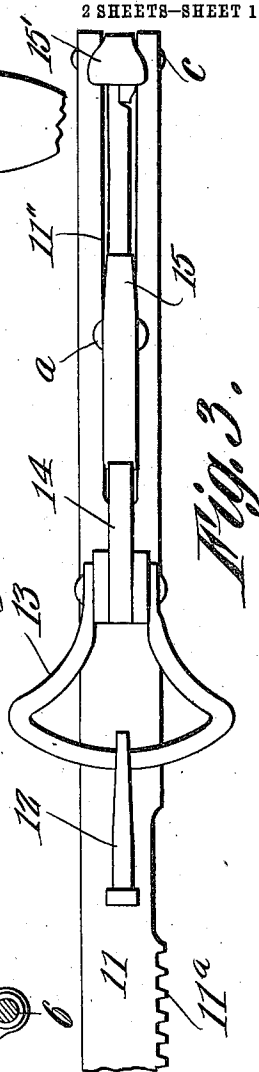


Fig. 3.

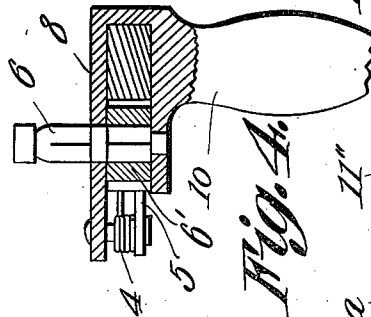


Fig. 4.

Witnesses

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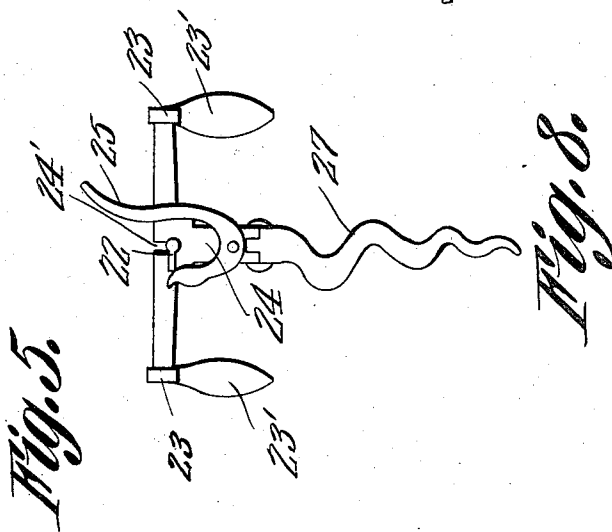
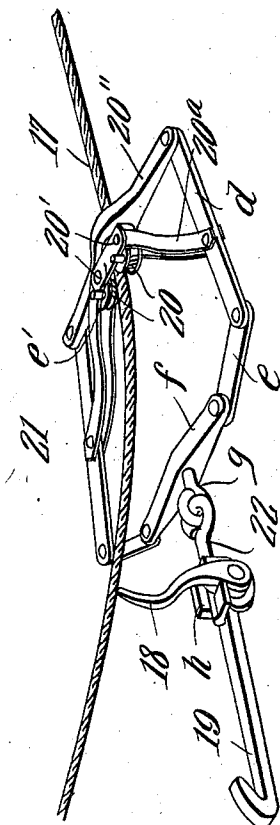
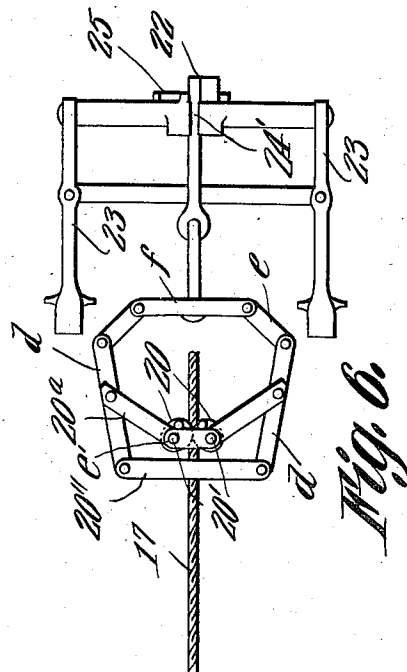
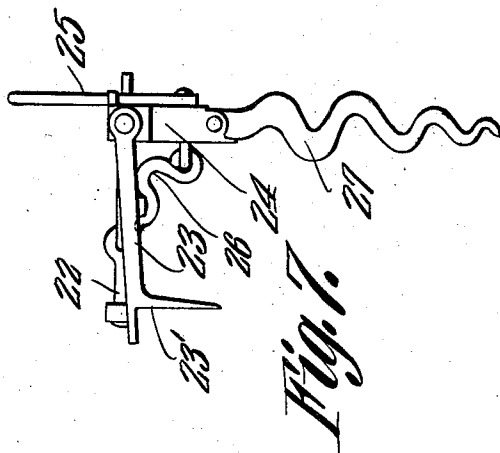
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2 SHEETS—SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN CONTOS, OF GRAND ISLAND, NEBRASKA.

TRACK-ADJUSTER.

1,013,987.

Specification of Letters Patent.

Patented Jan. 9, 1912.

Application filed May 8, 1911. Serial No. 625,910.

To all whom it may concern:

Be it known that I, JOHN CONTOS, a citizen of the United States, residing at Grand Island, in the county of Hall and State of Nebraska, have invented a new and useful Track-Adjuster, of which the following is a specification.

This invention relates to an improvement in track adjusters, the primary object of the invention being the provision of a means which is hinged or fixedly supported between the rails and is provided with means which exerts an oppositely disposed pushing and pulling operation to move the rails the desired distance, another means being provided to engage a third rail and thus insure the parallelism of the three rails.

A further object of this invention is the provision of an anchoring means having slidably mounted therethrough a rack bar, and means for projecting the bar, means being provided at the ends of the bar for exerting a pushing action against one rail with means provided at the other end of the bar for exerting a pulling action, said means being wedged in connection with the rail.

A further object of the invention is the provision of an attachment for the fixed means which will adjustably engage a third rail and assist in anchoring the fixed means centrally of the point of operation.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention disclosed, can be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings,—Figure 1 is a side elevation of the device in operable relation with three rails. Fig. 2 is a detail view of the central portion of the mechanism the casing, being shown in section showing the operating mechanism and the rack bar. Fig. 3 is a top plan view of the clamping end of the rack bar. Fig. 4 is a cross section through the line 6—6 of Fig. 2. Fig. 5 is a perspective view of the clamping device for the cable and a connection for the third rail. Fig. 6 is a plan view of a modified attachment to be connected thereto. Fig. 7 is a side elevation of said modification. Fig. 8 is a front elevation thereof.

Referring to the drawings the numeral 1 designates the bearing plate for the inner rail A, said bearing plate being adjustably connected at 11' to the rack bar 11, which at its opposite end is slotted as at 11". Slidably mounted upon this rack bar intermediate of its ends is a casing 8 which is provided with the plate or platform 9, which when the fixed element 10 is being inserted, is stepped upon to drive the element 10 home, between the rails A and B. Journaled in this casing 8 is a shaft 6 which carries a small pinion 6' which meshes at all times with the teeth 11^a of the rack bar 11. The said disk is shouldered and is adapted to be engaged by the crank 2 and locked thereon by means of the pivoted clip 3. The operating handle 2 is provided with the oppositely disposed ends 2' and 2'' having piercing points adapted to make an opening for the fixed element 10.

Pivoted between the outer ends 11'', of the rack 11, at *c* is a hook 15', whose upper end is adapted to engage the outer flange of the rail B, Fig. 1, while pivoted to its other end as at *b* is the hook 15, whose pin *a* retains its hooked terminal above the rack and within the slot 11'', to engage the opposite flange of the rail B.

The hook 15, when the shaft 6 is employed as a windlass, is locked by the cam 14, the lever 13 having its lock 12 placed in the notch 9', of the plate 9, so that any pull upon the plate 9, will also exert the same pull upon 13 to cause 14 to press against the hook 15, which is mounted to move in the slot 11', of the rack 11.

In order to lock the rack 11 and the ratchet 6' in the desired position, and also to prevent any backward slipping thereof during the turning of the ratchet 6', the pivoted dog or stop 5 is provided, and is held in operative position by means of the spring 4.

Mounted upon the sides opposite the rail A of the fixed element 10 is a hook 7 to which is removably attached a ring 16 carried by the flexible connection 17 whose free end passes between the two rollers or cams (20 pivoted at 20' and held together by the bar *e'* of the holding device 21.) Pivotally connected to the inner ends of the arm 20'' are two rods *d* connected to the cross head *f* by means of links *e*, the cams 20 being operably connected to the links *d* through the medium of the two handles 20^a. The swiveled eye *g* is connected to the locking

member or key 22, which as shown in Fig. 5 is slipped into the slot h of the hook 19 which adapted to engage the outer flange of the third rail C. The cam 18 pivotally connected to the inner end of the hook 19 is adapted to assume the position as shown in Figs. 1 and 5 when the holder 22 is in place, it being pushed downwardly to release said holder from the slotted end portion h .

As shown in Figs. 6 and 7, the hook 19 and its relative parts are dispensed with and the screw 27 with its pivoted connection 24 is employed. This connection 24 is provided with a central slot 24' for the removable reception of the key or lock 22 which is held in locked position by means of the hook lever 25, or may be removed from the slot thereby. Pivoted to the cross bar 24 and extending therefrom are two parallel arms 23. These arms 23 are provided with the earth-engaging terminals 23' and by means of the pivoted lock 26, the parts are locked in the position as shown in Fig. 7.

The device as shown in Figs. 6 and 7 is more especially adapted to move a single track. When this is done the cable 17 is connected by its holder to the member 24, the screw 27 having been set in the ground and the arm or point 23' also fast in the ground. The crank 2 is then operated in the usual manner and pulls upon the cable 17. By this means it will be seen that the main device is placed in operative position with two rails and may be connected to operate the device as shown in Figs. 6 and 7 to move objects out of the road of travel.

It is also evident by employing the rail-engaging hook 19 and permitting the part to assume the position as shown in Fig. 1 that all the elements are braced one against the other, so that the operation of the bar 11 will tend to space the rails and will have no tendency whatsoever to move away from the ground.

When a single track is to be moved but a short distance, it is unnecessary to employ the cable 17, and its connections, the point 10 with its casing, being made the fixed element, while the rack bar 11, is operated, its clamping device 15 and 15' being placed in engagement with the rail to be moved similarly to its engagement in Fig. 1.

What is claimed is:—

1. A rail straightener, comprising a fixed element for engagement with a road-bed, a bar, means for adjusting the bar with respect to said element, a pushing head at one end and a pulling hook at the other end of the bar, and means connected to a third rail and the fixed element of the bar for locking the parts in operative relation.

2. A rail straightener, comprising a fixed element for engagement with a road-bed, a bar, means for adjusting the bar with respect to said element, and hinged at oppo-

site ends of said bar, one having a bearing plate for engaging inside a rail and the other having a hook for engaging outside the opposite rail, a member for engaging inside of the last named rail, and means connected to a third rail and the fixed element for locking the parts in operable relation.

3. A rail straightener, comprising a fixed element for engagement with a road-bed, a rack bar slidably mounted through said element and having at its opposite ends respectively rail-engaging heads of which one includes a hook, a gear journaled in said element and engaging the teeth in the bar, and a ratchet mechanism for locking the bar.

4. A rail straightener, comprising a fixed element for engagement with a road-bed, a rack bar slidably mounted through said element and having at its opposite ends respectively rail-engaging heads of which one includes a hook, a gear journaled in said element and engaging the teeth of the bar, a rack mechanism for locking the bar, and means connected to a third rail and the fixed element for locking the parts in operable relation.

5. A rail straightener, comprising a fixed element for engagement with a road-bed, heads for engaging with the rails, respectively, a bar connecting said heads and made up of sections detachably connected and removable to adjust the device to differently spaced rails, means on said elements for moving the bar through it in either direction at will, and means connected to the third rail and fixed element for locking the parts in operable relation.

6. A rail straightener comprising, a fixed element for engagement with a road-bed, a bar, means for adjusting the bar with respect to said element, a pushing head at one end and a pulling means at the other end of the bar, a flexible connection having one end connected to the fixed element, and means connected to the other end of the flexible element for securing said flexible connection in opposition to the bar and to brace the fixed element.

7. A rail straightener comprising, a fixed element for engagement with a road-bed, a bar, means for adjusting the bar with respect to said element, a pushing head at one end and a pulling means at the other end of the bar, means engaging a third rail, and a flexible connection connected to said means and the fixed element of the bar whereby the parts are held in operable relation.

8. A rail straightener, comprising a fixed element for engagement with a road-bed, a bar, means for adjusting the bar with respect to said element, a pushing head at one end and a pulling means at the other end of the bar, means for anchoring the elements

at a predetermined place, and a flexible connection connecting the said means with the fixed element of the bar.

9. A rail straightener, comprising a fixed element for engagement with a road-bed, a bar, means for adjusting the bar with respect to said element, heads at opposite ends of said bar, one having a bearing plate for engaging inside the rail and the other having a hook for engaging the outside of the opposite rail, a member for engaging inside the last named rail, and an anchoring means oppositely disposed to the said hooked end and connected to the fixed element as and for the purpose set forth.

10. A rail straightener, comprising a fixed element for engagement with a road-bed, a bar, means for adjusting the bar with relation to said element, a pushing head at one end and a pulling means at the other end of the bar, and a bracing means connected adjacent to the fixed element and adapted to exert a pull in line with the bar.

11. A rail straightener, comprising a fixed element having a casing, a rack bar slidably mounted in said casing, a ratchet wheel provided with an operating shank mounted in said casing, two rail-engaging means each one side of the opposite end of said bar, and a spring-actuated locking means interposed at the casing between the ratchet and the bar.

12. A rail straightener, comprising a fixed element adapted to be driven in the ground,

a casing carried thereby provided with a platform adapted to rest upon the ground and at right angles to the fixed element, a rack bar slidably mounted in said casing, means for moving the bar back and forth, and rail-abutting and engaging means mounted upon the respective ends of said rack bar.

13. A rail straightener, comprising an earth-engaging member provided with a casing and a platform at the upper end and at right angles thereto, a rack bar slidably mounted in said casing, means for moving the rack bar, means for locking the rack bar against a retrograde movement, and rail-engaging means mounted at the opposite ends of said rack bar.

14. A rail straightener, comprising an earth-engaging prong, an earth platform at right angles thereto, a casing carried by said prong, a rack bar mounted slidably in said casing, a rotating ratchet wheel journaled in said casing, and opposed to the rack of the bar, a spring actuated ratchet for locking the rack, a hook at one end of the rack bar for engaging the rails, and an abutting means at the other end of said rack bar.

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

JOHN CONTOS.

Witnesses:

CHAS. G. RYAN,
M. GUY BRITT.