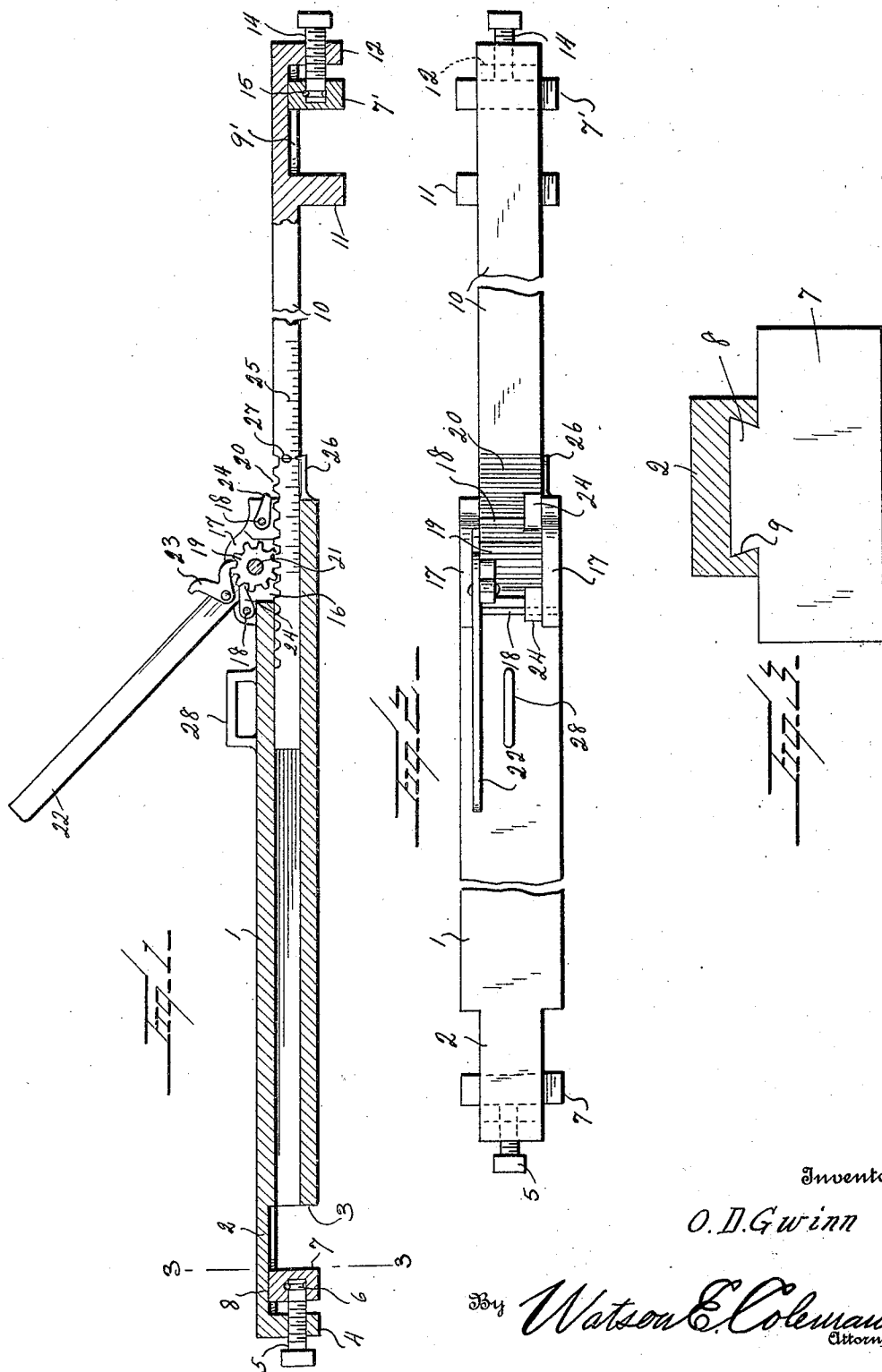


O. D. GWINN.
 TRACK GAUGE.
 APPLICATION FILED MAY 7, 1921.

1,405,113.

Patented Jan. 31, 1922.



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Specification of Letters Patent.

Patented Jan. 31, 1922.

Application filed May 7, 1921. Serial No. 467,779.

To all whom it may concern:

Be it known that I, OTHOR D. GWINN, a citizen of the United States, residing at McKendree, in the county of Fayette and State of West Virginia, have invented certain new and useful Improvements in Track Gauges, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in track gauges and it is an object of the invention to provide a novel and improved device of this general character which may be employed with convenience and facility to assure the proper setting of the rails of a trackway.

It is also an object of the invention to provide a novel and improved device of this general character which, in addition to operating as a gauge, serves as an implement to push or pull the rails of a trackway one with respect to the other as may be required to restore the trackway to the desired gauge.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved track gauge whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a view partly in longitudinal section and partly in elevation of a track gauge constructed in accordance with an embodiment of my invention;

Figure 2 is a view in top plan of structure as illustrated in Figure 1;

Figure 3 is an enlarged sectional view taken substantially on the line 3—3 of Figure 1.

As disclosed in the accompanying drawings, 1 denotes an elongated tubular body provided at its outer end with the longitudinally disposed extension 2, which, when the device is in use, is adapted to rest upon or overlie the head of a rail with the adjacent end 3 of the body 1 in contact with the inner side of said head.

The outer end of the extension 2 is pro-

vided with an inwardly directed flange 4 through which is threaded a bolt 5. The inner portion of the bolt 5 is in swivel connection as at 6 with a slide or flange 7. The slide or bolt 7 is disposed transversely of the extension 2 and is provided at its central portion with an upstanding dovetail lug 8 fitting within the longitudinally disposed guide channel or groove 9 formed in the underface of the extension 2. By having the slide or flange 7 adjustable lengthwise of the extension 2, the space between said slide or flange 7 and the opposed end 3 of the body 1 can be varied in accordance with the requirements of practice to receive rail heads of different sizes.

Telescopically engaged within the opposite or inner end portion of the body 1 is an elongated member 10 provided adjacent its outer end with a depending flange 11 which is adapted to have contact with the inner side of the head of a rail.

Outwardly of the flange 11, the member 10 is provided with the second depending flange 12 through which is threaded a bolt 14. The bolt 14 is in swivel connection as at 15 with the flange or bolt 7, slidably engaged within the guide channel or groove 9' in the same manner as hereinbefore set forth with respect to the flange or slide 7. The guide channel or groove 9' is formed in the inner face of the member 10 between the flanges 11 and 12. The flange or slide 7' is adjusted with respect to the flange 11 so that the space between the said flanges 11 and 7' may be varied in accordance with the width of the head of the rail with which the member 10 directly coacts.

The top wall of the body 1 at its inner end portion is cut away as at 16 and at opposite sides of said cut away portion 16 are the upstanding webs or flanges 17, the opposite end portions of said webs being connected by the cross rods 18. Rotatably supported by and between the webs 17 is a toothed roller or gear 19 constantly in mesh with the rack 20 carried by the upper or outer surface of the member 10. Upon requisite rotation of the roller or gear 19 the body 1 and member 10 may be moved endwise one with respect to the other.

As herein disclosed, the roller or gear 19 is mounted upon a shaft 21 connecting the webs 17 and loosely engaged with said shaft 21 between the web 17 and the roller or gear 19 is an end portion of an elongated operat-

ing lever 22. Pivotaly engaged with the lever 22 is a double pawl 23. When the pawl 23 is in one position, the swinging or oscillation of the lever 22 rotates the roller or gear 19 in one direction to impart endwise movement to the member 10 and when the position of the pawl 23 is reversed the roller or gear 19 is rotated in the opposite direction and the member 10 consequently moved in an opposite direction. Pivotaly supported by each of the rods 18 is a holding pawl 24, one of the said pawls 24 being in engagement with the roller or gear 19 when the second pawl 24 is in an inoperative position. The functioning of each of the pawls 24 is dependent upon the direction in which it is desired to rotate the roller or gear 19.

The side face of the member 10 is provided with the graduations 25 with which coact an index or pointer 26 carried by the adjacent or inner end of the body 1.

When my improved device is engaged with the heads of the rails of a trackway, the shoulder 3 is in contact with the inner side of one of said heads and the flange 11 in contact with the inner side of the head of the second rail. If the rails are in proper relation, the index 26 will register with the zero graduations 27 or other identified graduation. Should the graduations show that the rails have spread, the roller or gear 19 will be rotated in a direction whereby the body 1 and member 10 will have relative inward movement and which movement is continued until the rails have been returned to their desired gauge. In the event the trackway has contracted, the roller or gear 19 is rotated to impart outwardly relative movement to the body 1 and member 10 until the rails have been restored to their proper gauge.

In view of the fact that my improved device is also employed as an implement to effect the desired shifting of the rails of a trackway, it is important that the flanges or slides 7 and 7' be adjustably supported so that these flanges or slides 7 and 7' will have close contact with the outer sides of the heads of the rails and which is particularly important when the gauge is used in connection with the rails which have separated.

Carried by the inner end portion of the body 1 is a hand grasp or handle member 28 so that the device may be readily and conveniently manipulated and transported.

From the foregoing description it is thought to be obvious that a track gauge constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not

wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:

1. A track gauge comprising an elongated member provided at one end with a longitudinally disposed extension adapted to rest upon the head of a rail, the outer end of the extension being provided with an inwardly directed flange, a slide supported by the under face of the extension and having movement lengthwise of said extension, and a member threaded through the flange of the extension and operatively engaged with the slide for imparting movement to the slide toward or from the flange, the adjacent end of the member being adapted to contact with one side of the head of the rail and the slide being adapted to contact with the opposite side of said head.

2. A gauge of the class described comprising two members having relative endwise movement, means for imparting such relative endwise movement to the members, each of said members having means to engage the inner side of a rail, a movable member carried by each of the first named members to engage the outer side of the rail, and means operable independently of the means for imparting relative endwise movement to the first named members for imparting movement to the last named members.

3. A gauge of the class described comprising an elongated member, an end portion of said member being provided with longitudinally spaced flanges, the inner flange being adapted to engage the inner side of the head of a rail, a slide supported by the member between the flanges and movable lengthwise of the member, and a member threaded through the outer flange and operatively engaged with the slide for moving the slide in either direction lengthwise of the member.

4. A gauge of the class described comprising two members telescoping one within the other and having relative endwise movement, track engaging means carried by the outer end portions of the members, a wall of the outer member having its inner portion cut away, the opposed face of the inner member being provided with a rack, the outer member having outstanding webs at opposite sides of the cut away portion thereof, a gear rotatably supported by the webs and meshing with the rack of the inner member, a lever supported for swinging movement by the outer end adjacent the gear, a pawl carried by the lever for engagement with the gear, and a holding pawl carried by the outer member for engagement with the gear.

In testimony whereof I hereunto affix my signature.

OTHOR D. GWINN.