No. 862,775. PATENTED AUG. 6, 1907.

C. WARREN.

RAILWAY TRACK GAGE, TIE ADJUSTER, HOLDER, AND CURVE ELEVATOR.

APPLICATION FILED MAY 31, 1907.

Fig. 1.

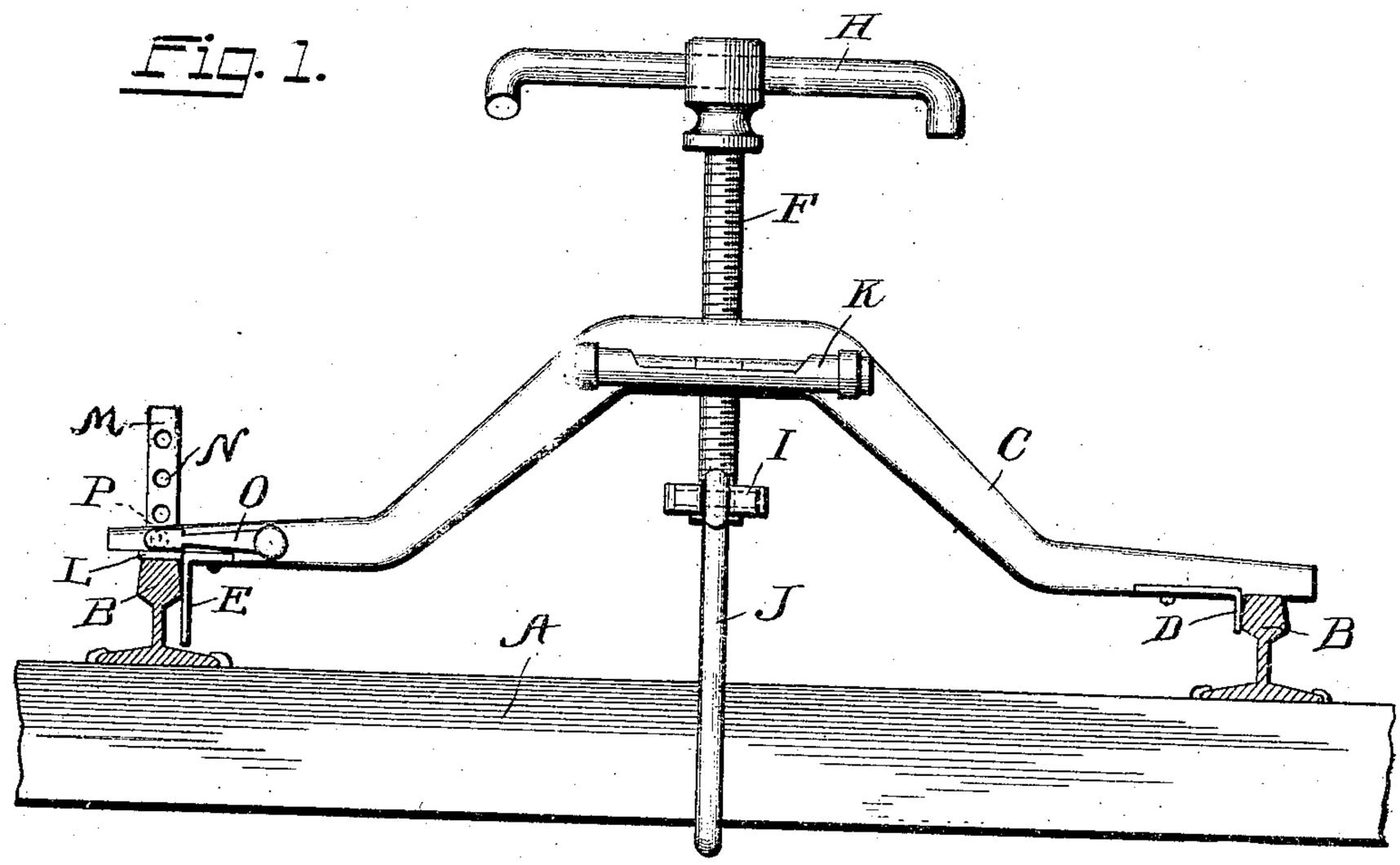
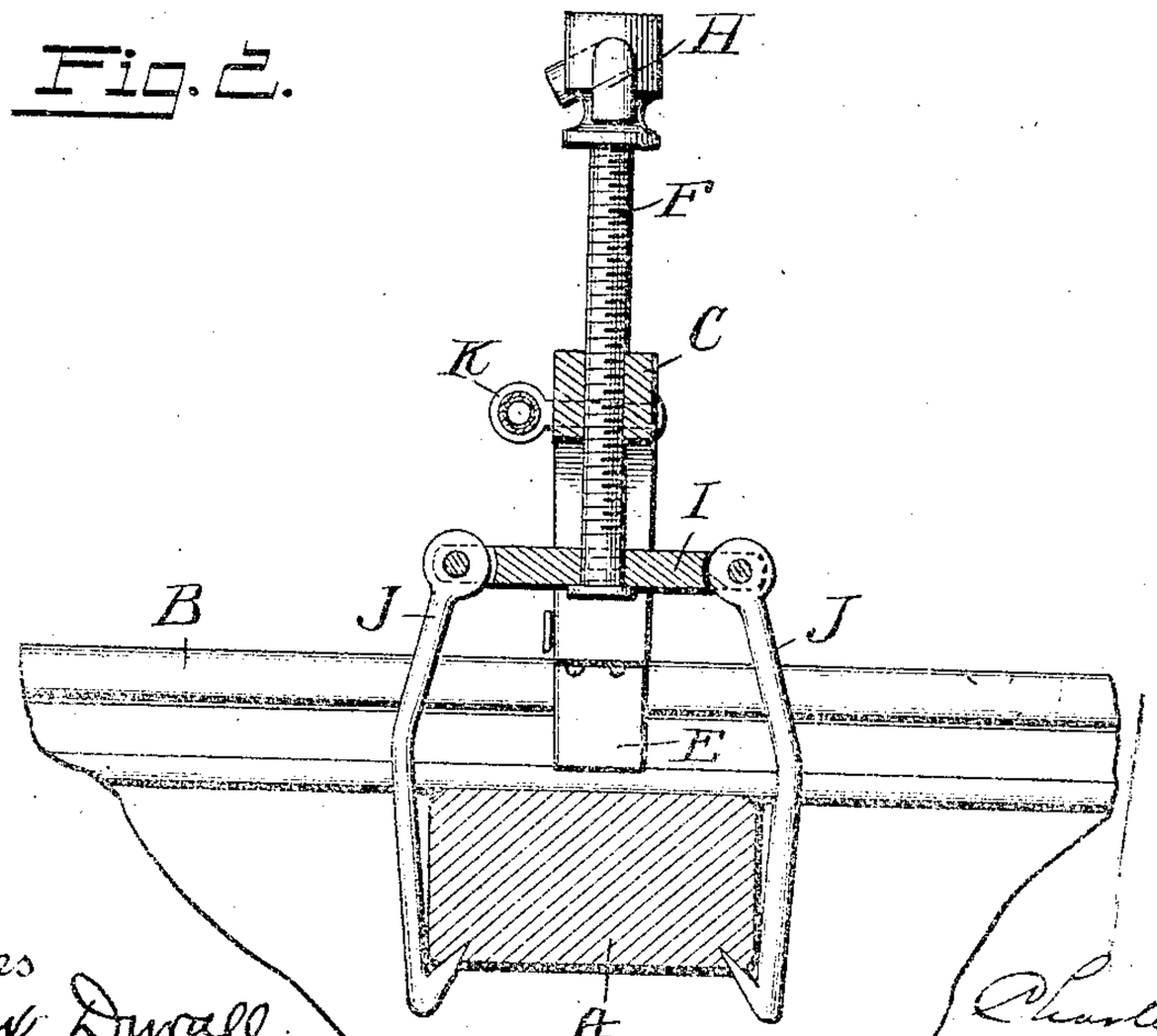


Fig. 2.



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RAILWAY-TRACK GAGE, TIE ADJUSTER, HOLDER, AND CURVE-ELEVATOR.

No. 862,775. Specification of Letters Patent. Patented Aug. 6, 1907.

Application filed May 31, 1907. Serial No. 376,570.

To all whom it may concern:

Be it known that I, CHARLES WARREN, a citizen of the United States, residing at Salem, in the county of Washington and State of In ana, have invented certain new and useful Improvements in Railway-Track Gages, Tie Adjusters, Holders, and Curve-Elevators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a railway track gage, tie adjuster, holder and curve elevator.

The object of my invention is to produce a device which will, after the tie has been placed under the track, immediately elevate it to the proper position, hold it firmly in place against the rails until the ballast is firmly tamped under the tie and the outside spikes driven home.

A further object of my invention is to produce a device that will adjust the rails, while placing the tie in position without the use of any other gage.

A further object of my invention is to produce a device that while placing the tie in position will show the proper elevation of each of the rails, thereby enabling the workmen to adjust the rails to a common level, and at the same time to provide a device that will enable said workmen to elevate one rail to any desired degree of elevation above the other on curved or straight grades.

Referring to the accompanying drawings forming a part of this specification;—Figure 1 is a sectional view of a track, showing in elevation a tie and my improved track gage, tie, adjuster, holder, and curve elevator. Fig. 2 is a sectional view taken at right angles to Fig. 1, and showing the rail in elevation.

Like letters refer to like parts in all the views.

A represents the tie, B the rails of the railroad track, and C a metal yoke, which may be of wrought, cast or other metal, and provided with a right angled bracket piece D attached to one leg of the same. E represents a similar and somewhat longer right angled bracket attached to the other leg of said yoke C, and the two brackets D and E are so spaced by said yoke C that they will just fit on the inside surfaces of the rails B, as shown.

The yoke C is screw threaded in its center and receives the screw threaded metal rod F provided at its upper end with a handle H, and at its lower end with the cross piece I. Said cross piece has pivotally attached thereto at each end the grappling hooks J adapted to seize and hold the tie A, as shown. Attached to the yoke C at one side, and in the center thereof, is a spirit level K. One leg of the yoke C is slotted, and receives the shoe L adapted to rest on the rail and provided with the shank M perforated with the holes N.

O is a spring fastened to the slotted leg of the yoke C and controls a locking pin P passing through said slotted leg and the holes N at right angles to the slot, as shown.

The operation of my device is as follows. When a new tie is placed in position under the rails, the yoke C is placed across the rails, as shown, with the brackets D and E fitting the interior surfaces of said rails, and the rod F is screwed down until the hooks J grip the tie. The rod F is then screwed up by means of the handle H until the tie strikes the bottom side of the rails. The level K is then consulted and one rail or the other elevated or depressed until the right position is secured. The handle H is then turned to set up further on the screw threaded rod F to hold the parts firmly in place, and the ballast is tamped home underneath the tie.

In case one rail is to be elevated above the other, as on curves, or at any other place desired, the slotted end of the yoke C is adjusted along the shank M of the shoe L until the pin P comes opposite the right hole N in the shank M. The holes N are so spaced that each represents one degree of elevation. After this slotted leg has been thus adjusted along the said shank M, the yoke is placed in position on the rails and the tie gripped as before. Then the opposite rail is elevated until the level shows zero, when the said rail will be as much higher than the other rail, as is represented by the particular hole that has been selected in the shank M. After this position has been secured the ballast is tamped, as before, and the spikes driven home.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:—

1. In a railway track gage, tie adjuster, holder and curve elevator, the combination of a yoke provided with brackets adapted to fit between the inner surfaces of the rails, and with a screw threaded hole at its central portion, a screw threaded rod passing through the said hole, and provided with a cross piece at its lower end, and a handle at its upper end, and grappling hooks adapted to seize a tie pivotally attached to said cross piece, substantially as described.

2. In a railway track gage, tie adjuster, holder and curve elevator, the combination of a yoke provided with brackets adapted to fit between the inner surfaces of the rails, and with a screw threaded hole at its central portion, a screw threaded rod passing through the said hole, and provided with a cross piece at its lower end, and a handle at its upper end, grappling hooks adapted to seize a tie pivotally attached to said cross piece, said yoke also provided with a spirit level at its center and a slot in one leg, a shoe provided with a perforated shank passing through said slot and means to hold said leg at any desired point on said shank, substantially as described.

3. In a railway track gage, tie adjuster, holder and

curve elevator, the combination of a yoke provided with brackets adapted to fit between the inner surfaces of the rails, and with a screw threaded hole at its central portion, a screw threaded rod passing through the said hole, and provided with a cross piece at its lower end, and a handle at its upper end, grappling hooks adapted to seize a tie pivotally attached to said cross piece, said yoke also provided with a spirit level at its center, and a slot in one leg, a shoe provided with a perforated shank passing through said slot and each of the holes of which represent one degree of elevation of the opposite rail, and means to hold said leg at any desired point of adjustment on said shank, consisting of a spring pressed pin passing through said leg, slot, and holes, substantially as described.

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

CHARLES WARREN.

Witnesses:

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WILL MOBLEY.