No. 623,722. Patented Apr. 25, 1899.

J. KILEY.

TIE PLATE GAGE FOR RAILWAYS.

(Application filed Dec. 9, 1898.)

(No Model.)

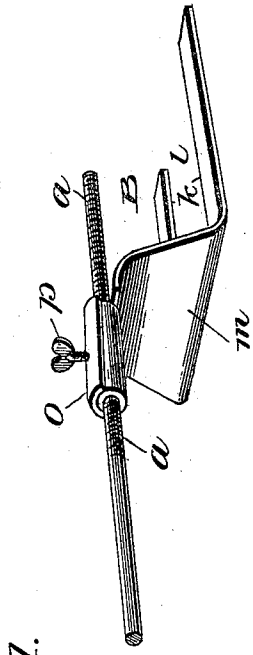


Fig. 1.

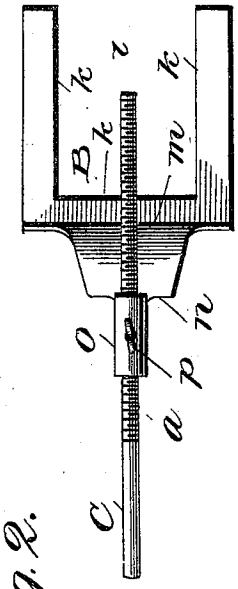
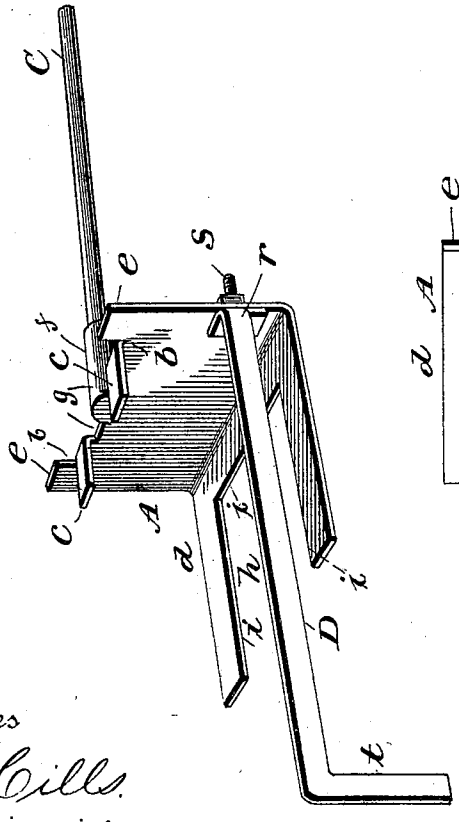
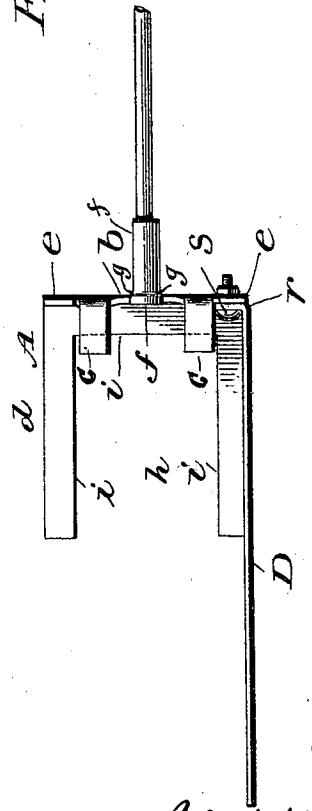


Fig. 2.





Witnesses

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TIE-PLATE GAGE FOR RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 623,722, dated April 25, 1899.

Application filed December 9, 1898. Serial No. 698,779. (No model.)

To all whom it may concern:

Be it known that I, JOHN KILEY, a citizen of the United States, residing at Salamanca, in the county of Cattaraugus and State of New York, have invented certain new and useful Improvements in Tie-Plate Gages for Railways; and I do 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.

This invention relates generally to railway-track-laying devices or implements, and particularly to tie-plate gages; and it has for its object to provide a simple, durable, and inexpensive implement adapted to be used for locating tie-plates on ties in the exact position they should occupy in order to receive the track-rails thereon at the proper track-gage; and it consists of the parts and combinations of parts hereinafter described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of my improved gage, and Fig. 2 a plan view of the same.

Similar letters refer to similar parts in both the views.

Referring to the drawings, A represents the fixed end plate of the gage, and B the adjustable end plate, said plates being connected by a rod C, which is preferably formed tubular and at its free end is inscribed or otherwise provided with a graduated scale *a*, whereby the distance apart of said end plates may be accurately regulated to conform to the gage of the class of rails on which the implement is to be used. The end plates are each formed from a single sheet of metal, steel being preferred, but any other suitable metal may be employed, and they are stamped, pressed, or bent into the forms shown in the drawings, and which will now be described. The fixed plate A is bent at right angles to provide the upright wall *b*, out of which the lugs *c* are cut and bent at right angles to said wall and parallel with the base *d* of said plate A, said lugs being cut or formed at points removed from the side edges of the wall *b*, so as to provide the upright projections or clips *e* at each side of said plate, the purpose of which and the said lugs will be hereinafter described. That portion *f* (the central) of the upright wall *b* left standing between the lugs *c* is bent over in the opposite direction to the lugs and into the same plane therewith and its side edges adjacent the wall slitted, as at *g*, and then bent into tubular form in order to receive one end of the rod C therein, in which position said rod is firmly secured by rivets or bolts or in any other desired or convenient manner. The base of the plate A is cut out, so as to provide the rectangular space *h* between the straight edges *i*, said space being of the dimension of the tie-plate it is intended to use.

The adjustable end plate B is bent at right angles and formed with straight edges *k*, surrounding three sides of the space *l* in its base, similar to plate A; but the upper part of its upright wall *m* is continued in a curved line to a horizontal plane and is slitted, as at *n*, and its side edges bent over and overlapped to form a tube *o* in order to receive the free end of the rod C therein. The object of lapping the ends in forming the tube is to provide a double thickness of material at this point to afford sufficient purchase for the thumb-screw *p*, which is inserted in a threaded perforation in said tube to secure the end plate B in its adjusted position on the rod.

D represents a flat rod having one end bent at right angles, as at *r*, and perforated, whereby it may be firmly, but adjustably, secured to the end plate A by a screw and nut *s*, or in any other desired manner, and having its other or free end bent downwardly to form a hook *t* accurately at right angles to the said rod D.

With the implement above described the positions that the tie-plates are to occupy on ties in order to maintain the proper track-gage may be quickly and accurately indicated whether the tie be in or out of the track. If the ties are out of the track, the implement is placed on the tie, with the end plates in the position shown in the drawings, and the hook *t* is caught over the end of the tie, so as to form a guide or gage for the location of the tie-plate at the proper distance from the end of the tie, and the position said tie-plate is to occupy at each end of the tie is then marked by drawing a pencil or other suitable marking-tool along the straight edges in the base

of the end plates. Of course it will be understood that the ties, if not level at the proper places, will be adzed to a level and that the rod D must be of a length to conform to the length of the ties (which are usually of uniform length) being used. If it is desired to equip ties already laid with tie-plates or to replace tie-plates on ties in the track, a section or one rail of the track is removed and the lug *c* of the end plate A is laid on the top of the remaining rail, with the clips *e* resting against the inner side of the rail to form a gage. The thumb-screw in end plate B is then loosened and said end plate turned half over, and after being adjusted on the rod to the gage desired is secured on the rod and placed on the tie and the position for the tie-plate marked thereon in the manner above described.

Owing to the reversibility of the end plate B, the implement may be used across intermediate rails in switches and frogs in placing tie-plates on ties in the track as the rod is carried over the intermediate rails by reason of the lugs *c* resting on the top of the rail, and the end of the rod does not project out over the plate to interfere with the marking of the tie.

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

1. A railway-tie-plate gage consisting of a rod provided with end plates each of which is formed with parallel straight edges and a straight edge at right angles to and connecting said parallel straight edges, and a hooked rod secured to one of said plates, whereby the position the tie-plates are to occupy relative each other may be accurately marked on the tie.

2. A railway-tie-plate gage consisting of a rod provided with end plates formed with straight edges to indicate three sides of a rectangle, one of said plates being reversibly secured to said rod and the other having lugs adapted to be placed on a rail, whereby the gage may be used to mark the position for tie-plates on ties in the track.

3. A railway-tie-plate gage comprising a rod, end plates formed with straight edges to indicate three sides of a rectangle, one of said plates being rigidly fixed to the rod and formed with horizontal lugs and vertical clips and the other plate being adjustably and reversibly secured to said rod.

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

JOHN KILEY.

Witnesses:
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