

UNITED STATES PATENT OFFICE.

CHRISTIAN JOHNSON, OF MONA, IOWA.

GAGE FOR RAILROAD-TIES.

SPECIFICATION forming part of Letters Patent No. 647,840, dated April 17, 1900.

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To all whom it may concern:

Be it known that I, CHRISTIAN JOHNSON, a citizen of the United States, residing at Mona, in the county of Mitchell and State of Iowa, have invented certain new and useful Improvements in Railroad-Tie Markers; 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 device for marking railroad-ties for the purpose of allowing the ends of ties on the line side of the road to be easily, quickly, and accurately adjusted an equal distance from the rail, and has for one object to provide a light, simple, and durable construction and one that can be conveniently handled.

A further object is to provide a device which will not only mark the ties an equal distance from the end, but one that will make the mark extend across the tie at a right angle thereto, so that when the mark on the tie is laid parallel with the outside base of the rail the tie will extend straight across the track or at right angles to the rail.

It has hitherto been the custom to measure the distance that the ends of the ties are to extend outside of the rail by means of a mark made on the maul and pick handles of the workman, which is a very laborious and uncertain method.

Referring to the drawings, Figure 1 is a perspective view of my device with the marking-slide partly raised, and Fig. 2 is a perspective view of the device folded.

In the drawings, *a a'* represent two parallel members, which, together with the cross-pieces *b b'* at the ends thereof, form the base-frame of my device. Hinged to the cross-piece *b* of the base-frame are two standards *c c'*, connected together at their lower ends by a cross-piece *d* and at their upper ends by a cross-piece *e*, which also serves as a handle *h*. The standards *c c'* are held in an upright position by means of the slotted rod *i*, which is pivoted at *k* to the bed-frame, and a bolt *l*, passing through the standard *c'* and the slot *i'* in the rod *i*, the said bolt being provided with a thumb-screw *m*. By loosening the thumb-screw *m* the standards can be folded upon the base-frame, when the screw can be

retightened and the device will be in a convenient form for transportation.

Situated between the standards *c c'* and working in slots formed in their inner faces is a board *n*, carrying a plate *o*, provided with a sharp edge or teeth *o'*. A handle *o''* is formed on the upper end of the said board *n*, and a projecting finger *p*, secured to the lower inner face of the said board by coming into contact with the cross-piece *d*, prevents the teeth *o'* entering too deep in the tie.

Bolts *q*, provided with thumb-screws and working in slots *q'*, formed in the base-frame, carry a cross-piece *r* on their lower ends beneath the said frame, by means of which the distance to be marked on the tie can be regulated.

In order to quickly adjust the device on a tie and to have the cut extend square across the face thereof, the lower end *s* of the standard *c'* projects below the base-frame and a block *t* is secured to the projecting end *u* of the rod *i*.

The operation of my device is as follows: After the standard or upright portion is secured in its vertical position the bed-frame is placed upon the tie desired to be marked, the cross-piece *r* touching the end of the tie and the extension *s* of the standard *c'* and the block *t* on the rod *i* touching the side of the tie. The board *n* is then raised by means of the handle *o''* to a suitable height and released. The board will descend of its own weight and cause the cutting edge or teeth *o'* of the plate *o*, secured to the lower end of the board, to enter the tie a sufficient distance to leave a clear impression.

In operating on very hard ties as much pressure as is necessary may be given to the handle of the board in its descent by the hand of the operator.

Having thus described my invention, what I claim is—

1. A device for marking railroad-ties having a base-frame, standards hinged to the said frame, a sliding marker between the said standards, and a slotted rod pivoted to the said base-frame and slidably connected to one of the said standards by means of a bolt passing through the said slot, substantially as set forth.

2. A device for marking railroad-ties hav-

ing a base-frame, standards hinged to the said frame, handle connecting the upper ends of the said standards, sliding member between the said standards provided with a toothed plate, and an adjusting means on the said bed-frame for regulating the distance to be marked on the tie, substantially as set forth.

3. A device for marking railroad-ties consisting of a base-frame, slotted standards hinged to the said base-frame, a sliding member between the said standards provided with a handle, a toothed plate secured to the said

sliding member, slotted rod secured pivotally to the said base-frame and connected with one of the said standards, the lower end of the said rod and the standard to which it is connected projecting below the base-frame, substantially as set forth.

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

CHRISTIAN JOHNSON.

Witnesses:

F. H. FISCHER,
A. H. ANDERSON.