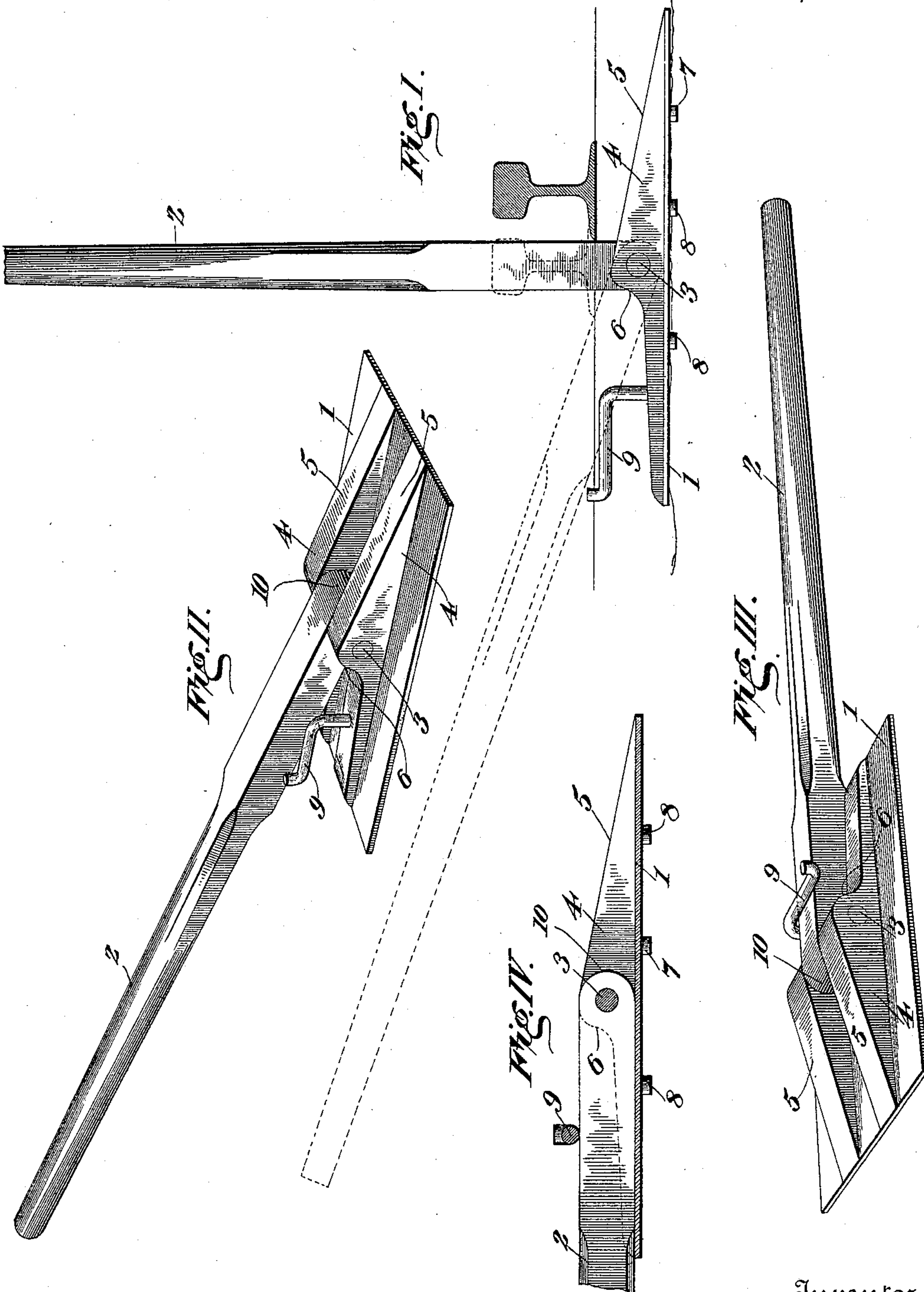


(No Model.)

E. ERICKSON.
TRACK LINER.

No. 583,737.

Patented June 1, 1897.



Witnesses
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UNITED STATES PATENT OFFICE.

ERICK ERICKSON, OF AMIRET, MINNESOTA.

TRACK-LINER.

SPECIFICATION forming part of Letters Patent No. 583,737, dated June 1, 1897.

Application filed November 11, 1896. Serial No. 611,695. (No model.)

To all whom it may concern:

Be it known that I, ERICK ERICKSON, of Amiret, in the county of Lyon, State of Minnesota, have invented certain new and useful Improvements in Track-Liners, of which the following is a complete specification, reference being had to the accompanying drawings.

The object of my invention is to produce an improvement in tools for correcting irregularities or inequalities in a line of railway tracks. To keep a track in proper repair and in the best condition, it is necessary not only to employ track-lifters or other means for keeping the rails level, but it is necessary also to preserve perfect alinement between the track-rails. By the use of the ordinary lining-bar it requires a crew of from six to eight men to line a track, but with my invention the same work can be done by three men, each provided with one of my tools.

The saving of expense in track-lining by the use of my device in place of the ordinary lining-bar is greatest in the spring when the ground is soft. At that season of the year the employment of the ordinary lining-bar is rendered very difficult because the bar sinks into the soft earth without moving the track, and a comparatively great number of men and ordinary tools is required to do the work.

My implement is adapted to work equally well on hard or soft ground and under all conditions to facilitate the work to which it is adapted.

In the accompanying drawings, Figure I is an end section of a rail, showing in dotted lines my tool in its initial position in operation and in full lines its final position. Fig. II is a perspective view of my liner, showing the handle slightly elevated. Fig. III is a similar view showing the handle depressed and locked to the base-plate. Fig. IV is a longitudinal section of my implement with part of the handle broken away.

Referring to the figures on the drawings, 1 indicates a base-plate, which preferably consists of an oblong plate of iron or steel that is suitable for insertion between adjoining ties of a railroad-track. It is designed to afford a firm support against the ground for the operation of the lever-handle 2, and its dimensions may be varied to suit the char-

acter of the work required of it. The handle is pivotally secured, as by a stout pivot-pin 3, between parallel supports 4. These supports preferably have inclined forward edges 5 and rearwardly-disposed shoulders or offsets 6. The supports are preferably made separate from the base-plate and are of suitable width and dimensions to perform their office. When made of separate pieces from the base-plate, they may be secured to the base-plate, as by screws or rivets 7, whose heads project beyond the bottom of the base-plate and constitute stud-like projections 8, adapted to prevent the slipping of the base-plate in practice. The studs in the bottom of the base-plate may be otherwise and more numerous provided, if preferred.

9 indicates a lock which consists, preferably, of a crank whose one arm is pivotally secured as to one of the supports 4 and whose other arm is adapted to swing across the face of the lever 2 and lock it against the upper face of the base-plate. (Shown in Fig. III.) The lower end of the lever 2 is curved, as indicated at 10, and is sustained by the pin 3 in such position between the supports 4 as to allow it to swing freely from one side of the base-plate to the other.

In operation the base-plate is slipped into position under the rail to be lined, as shown in Fig. I, the bottom of the plate resting upon the ground between the ties. The lever 2 is lowered toward the base and pushed forward until its lower end is freely introduced underneath the rail. Thereupon the operator, lifting upon the free end of the lever, causes it to pinch against the edge of the rail and to shift the position of the rail upon the ties.

To accomplish the result described, the lever must be adapted to reach or approach the perpendicular position, or if the surface against which the base-plate rests is inclined it may be necessary for the lever to swing beyond the perpendicular position in order to perform its office. In this respect my invention is distinguishable from track-lifts with which I am acquainted, the use of the latter being restricted to the work of leveling tracks and being without utility in track-lining work.

If there is insufficient space between the ties underneath the rail to be lined to accom-

modate the base-plate of my tool, the handle may be secured to the base-plate by means of the lock 9, when the base-plate may be used as a shovel to dig away sufficient earth to permit its insertion.

It will be understood from the foregoing description that the implement which I have described is adapted not only for use in shifting the track laterally, but also for lifting the track. The peculiar pivotal connection of the lever with the base-plate, whereby the lever may assume any position from one approximately horizontal to one past the vertical while in engagement with the rail and while the base-plate is beneath the rail, permits these uses of the implement. When the lever is in a horizontal position beneath the rail and is moved, it operates to lift the track, and when arranged at an angle, say, of forty-five degrees and is moved it operates to shift the track laterally.

What I claim is—

1. In a track-liner, the combination of a base-plate adapted to be inserted below a rail, a lever pivoted thereto, and arranged to bear against the flange of the rail, the pivotal con-

nection with the plate permitting it, while in engagement with the rail, to swing from a position approximately horizontal to a position past the vertical, whereby the track-liner may be used either to move the track laterally or to lift it, substantially as set forth.

2. In a track-liner, the combination of a base-plate, 1, adapted to be inserted below a rail, the supports, 4, carried thereby, and a lever, 2, adapted to engage with the rail, pivoted between the said supports, and arranged to swing freely, while in engagement with the rail, from a position approximately horizontal to a position past the vertical, substantially as set forth.

3. In a track-liner, the combination with a base-plate and lever pivoted thereto, of a lock on the base-plate adapted to secure the lever against the face of the base-plate, substantially as set forth.

In testimony of all which I have hereunto subscribed my name.

ERICK ERICKSON.

Witnesses:

F. W. WEBB,
G. E. NEWELL.