

(No Model.)

M. LILLIS.
ADJUSTABLE RAILWAY TRACK LIFTER.

No. 512,726.

Patented Jan. 16, 1894.

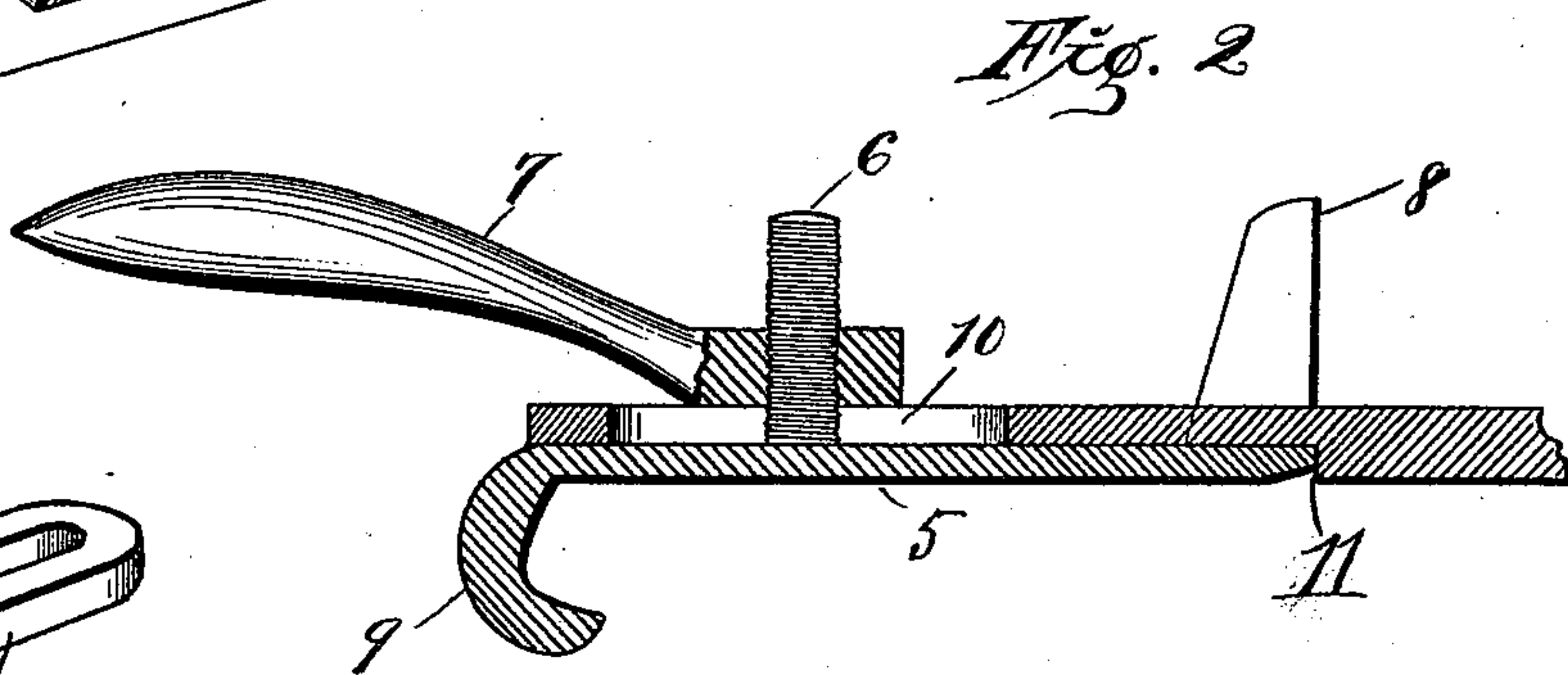
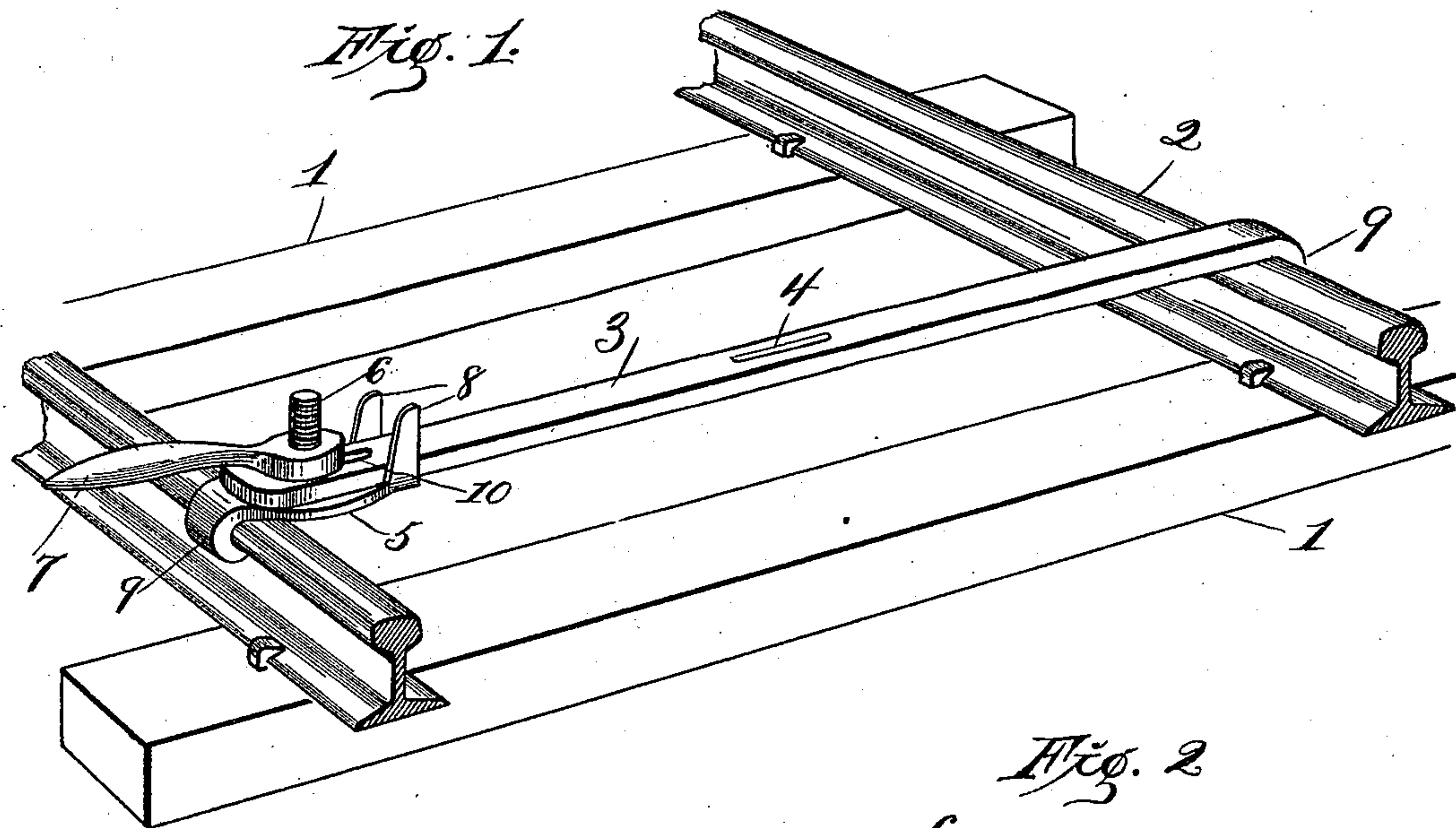


Fig. 4.

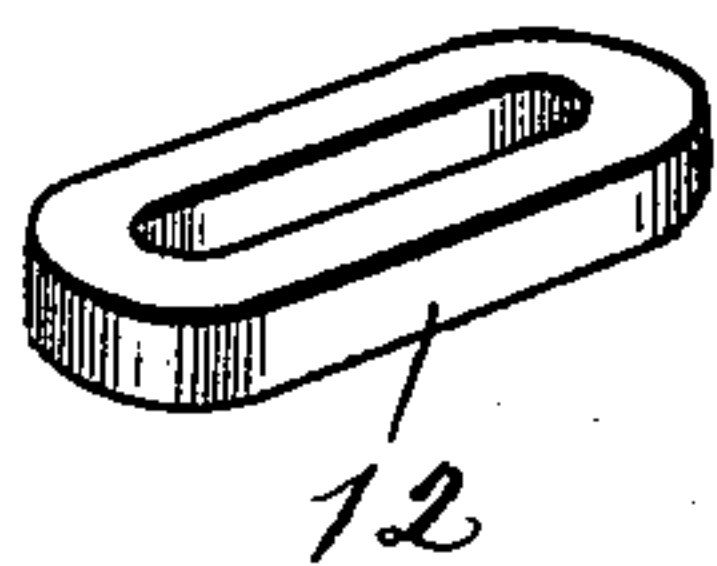
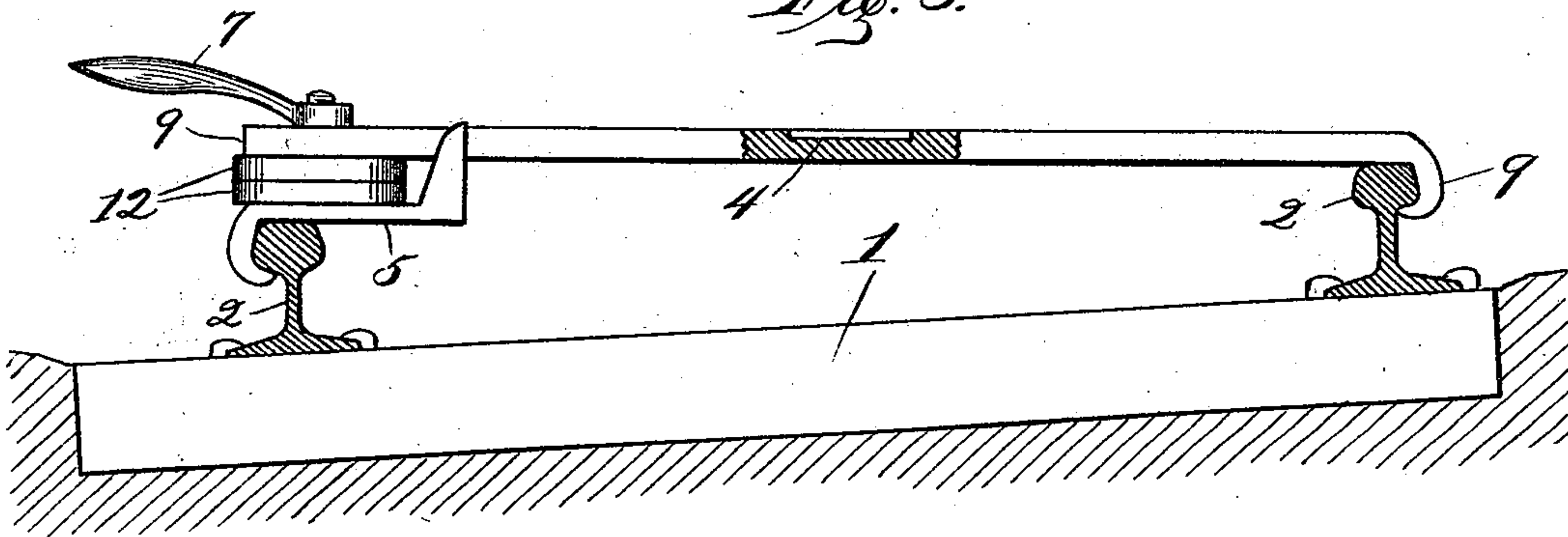


Fig. 3.



Witnesses:-
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MICHAEL LILLIS, OF BEATRICE, NEBRASKA.

ADJUSTABLE RAILWAY-TRACK LIFTER.

SPECIFICATION forming part of Letters Patent No. 512,726, dated January 16, 1894.

Application filed February 23, 1893. Serial No. 463,361. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL LILLIS, of Beatrice, Gage county, Nebraska, have invented certain new and useful Improvements in Adjustable Railway-Track Lifters, of which the following is a full, clear and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an adjustable railway track lifter, and the object of my invention is to provide a means whereby a railway track while undergoing construction or repairs can be raised from the ground at such points where raising, leveling, &c., is required, without removing the dirt or ballast from under the ends of the cross tie which usually is done at the present time.

To the above purposes my invention consists in certain peculiar and novel features of construction and arrangement, as will be specified and claimed hereinafter.

In order that my invention may be fully understood, I will now proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a perspective view of a section of a railway track with my improved track lifter in position. Fig. 2, is a vertical longitudinal section of one end of the track-lifter, and showing the screw clamping lever. Fig. 3, is a vertical longitudinal sectional view of the lifter, and showing it applied in operative position to a track when the rails are in a different horizontal plane, and, Fig. 4, is a detail perspective view of a slotted washer or link-plate.

1 designates the ties on which the rails are secured by means of spikes.

2 designates the rails.

3 designates my improved track lifter in a proper position for placing the lifting jack under it when the track is to be lifted.

4 designates a small spirit level secured to the upper side of the lifter, the object of which is to provide for leveling the track.

5 designates a loop or hook provided with a vertical stationary screw-threaded bolt 6, said bolt passing upwardly through an elongated opening or slot 10 in the end of the lifter and arranged so that it can be adjusted and readjusted to and from the main lifter-bar as the occasion may require, so as to

shorten or lengthen the lifter according to the gage of the track, and is firmly secured to said rails in the described position by means of lever clamping nut 7. The adjustable hook is also provided with vertically extending ears or spurs 8 which serve as guides to hold the adjustable hook in its proper position relative to the lifter.

9 designates the two extreme ends of the lifter hooked under the outer projecting caps of the rail.

In Fig. 2, will be seen a shoulder 11 formed by recessing the slotted end of the lifter at its under side, sufficiently to receive the loop or hook 5, so that the under side thereof will lie in the same horizontal plane as the under side of the lifter proper. This shoulder of course will limit the inward movement of said hook, and must be arranged sufficiently inward from the slotted end to accommodate the lifter to roads of the narrowest "gage."

In order to adapt my lifter to curved tracks, or tracks having one rail in a different horizontal plane from the other, so that said difference may be maintained, I have provided a number of slotted washers or plates 12, a sufficient number of which are adapted to be interposed between the hook-bar 5 and the lifter proper, so that the position of the lifter may be adjusted in a perfectly horizontal plane; this position being ascertained from reference to the spirit-level.

The operation of lifting the track-rails is as follows: The lifter 3 and the hook-bar 5 are placed upon and transversely of the track, so that the hook 9 of the bar 3 shall engage at the outer side of and against the under side of the head of the adjacent track-rail. The hook-bar 5 is now moved inwardly so that the hook thereof shall likewise engage the opposite track-rail. The handle 7 is then grasped and the nut-head turned upon the screw-bolt 6, so that the lifter and the hook-bar shall be clamped firmly together. A small quantity of the ballast or earth is now removed from the bed about midway of and beneath the lifter, for the reception of an ordinary lifting-jack. The jack may now be operated in the usual manner, to raise the track-rails in the same horizontal plane sufficiently to allow of tampering, leveling, &c. From the above description, it will be seen

that I have produced a track-lifter, by which the relative positions of the track-rails may be maintained, which is adjustable to roads of different gage, which is easy of operation, and which is simple, strong, durable and inexpensive of construction, and finally a track lifter which can successively and easily be operated by one man.

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

1. A track-lifter, comprising a bar having a hook at one end, and a hook-bar adapted to be longitudinally adjustable upon the first mentioned bar, and means to clamp said hook-bars firmly together, substantially as set forth.

2. A track-lifter, comprising a bar having a hook at one end adapted to engage one track-rail, and a slot in the opposite end, and a second bar having a hook at one end adapted to engage the other track-rail and a bolt near the other end engaging the slot in the first mentioned bar, and a clamping nut engaging the bolt and adapted to secure the said bars firmly together, substantially as set forth.

3. In a track-lifter, the combination with a bar having a hook adapted to engage a track-rail, and a longitudinally adjustable bar car-

ried by the first mentioned bar, and also provided with a hook adapted to engage the opposite track-rail, of a spirit-level carried by the first mentioned bar, substantially as and for the purpose set forth.

4. A track-lifter, comprising a bar having a hook at one end, and a second bar also having a hook at one end, and longitudinally adjustable upon the first mentioned bar, and means to hold it firmly at any point of adjustment, and guide ears also projecting from each side of the adjustable bar and embracing the opposite sides of the first mentioned bar, substantially as set forth.

5. In a track-lifter, the combination with a hooked bar having a spirit-level, and a second hooked bar longitudinally adjustable upon the first-mentioned bar of slotted plates adapted to be interposed between said bars and arranged as described, substantially as and for the purpose set forth.

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

MICHAEL LILLIS.

Witnesses:

M. P. SMITH,
H. C. WHITE.