

ALEXANDER WILSON.
Improvement in Rail Lifters.

No. 118,413.

Patented Aug. 22, 1871.

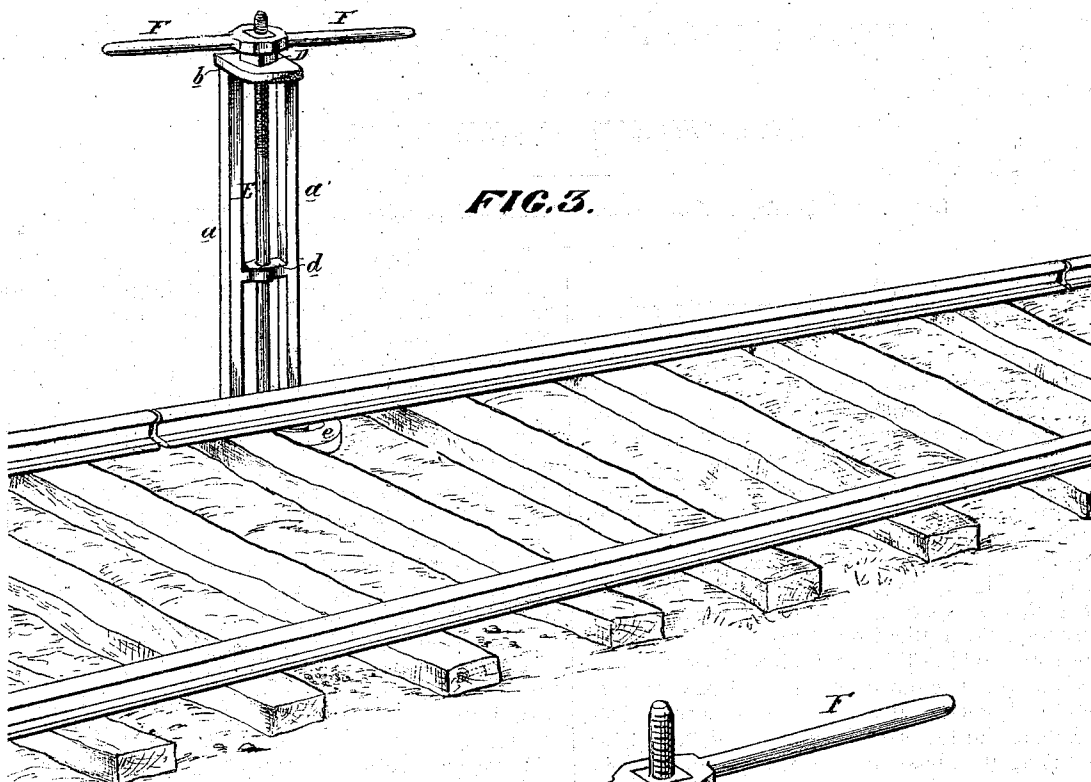


FIG. 3.

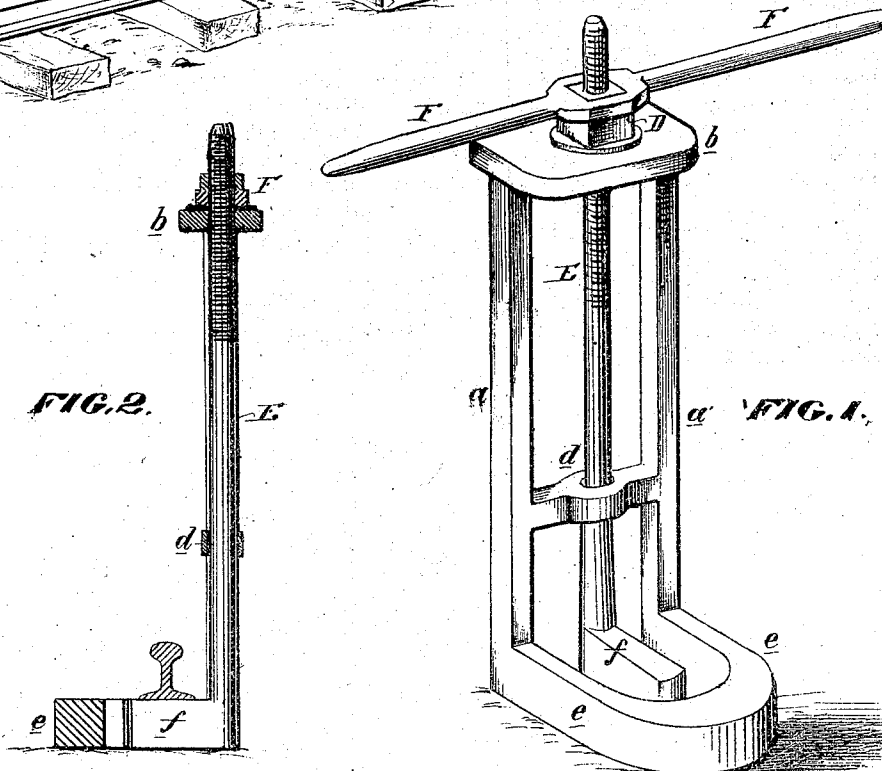


FIG. 2.

FIG. 1.

WITNESSES { *Mr. B. Harding.*
Thos. M. Hearn

Alexander Wilson
by his attys
Howson and son

UNITED STATES PATENT OFFICE.

ALEXANDER WILSON, OF OXFORD, PENNSYLVANIA.

IMPROVEMENT IN RAIL-LIFTERS.

Specification forming part of Letters Patent No. 118,413, dated August 22, 1871.

To all whom it may concern:

Be it known that I, ALEXANDER WILSON, of Oxford, county of Chester, State of Pennsylvania, have invented an Improved Rail-Lifter, of which the following is a specification:

My invention consists of a rail-lifter, constructed in the peculiar manner too fully explained hereafter to need preliminary explanation, with the view of simplicity of construction, lightness, portability, durability, and ready applicability to the rail to be lifted.

Figure 1 is a perspective view of my improved rail-lifter; Fig. 2, a vertical section of the same; and Fig. 3, a perspective view of a railroad track, illustrating the application of my improved lifter.

The frame of the lifter, which will be best observed in Fig. 1, consists of two posts, *a* and *a'*, connected together at the top by the cross-plate *b*, and near the lower end by a bar, *d*, the posts terminating in a base, *e*, bent to the horseshoe-form represented in the drawing, and the whole being made by preference of wrought-iron, as the best material for resisting the strains to which the lifter has to be subjected. On the top of the cross-plate *b* bears a nut, *d*, the threaded interior of which is adapted to the upper screwed portion of a rod, *E*, the latter passing through and being guided by the cross-bar *d* and said cross-plate *b*. This rod *E* terminates at the bottom in a foot, *f*, which projects into the space formed within the bent base *e*, as shown in Fig. 1.

In using the above-described instrument the screw-rod *E* is first lowered until the upper surface of its foot *f* is level with or slightly below the upper surface of the base *e*, and the lifter is then adjusted in respect to the rail to be lifted in the manner shown in Fig. 3—that is, the base, bedded on the ground between the sleepers, is, with the foot *f* of the screw-rod, thrust beneath the rail to be lifted. A wrench, *F*, is now applied to the nut *D*, and so operated that the rod *E* will be raised and with it the rail.

The advantages of my improved rail-lifter are superior steadiness, resulting from the extension of the projection *e* beneath the rail, simplicity of construction, lightness, portability, its ready applicability to the rail, and its capability of resisting the severe strains to which it has to be subjected.

I claim—

The construction of the above-described lifting-jack, consisting of the frame, its projection *e*, screw-rod, foot *f*, and nut *D*, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALEXANDER WILSON.

Witnesses:

SAML. A. DICKEY,
WM. T. FULTON.