

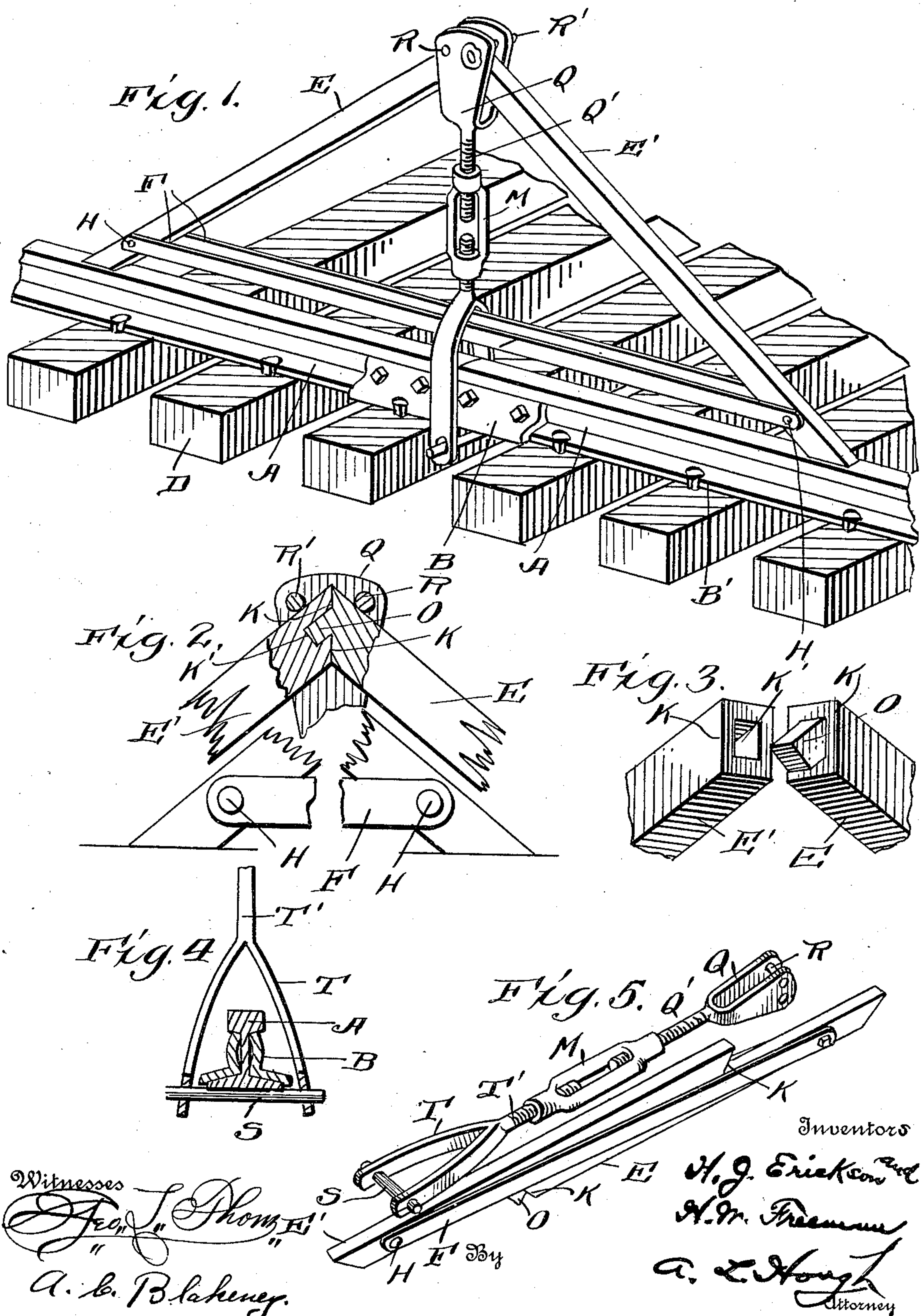
H. J. ERICKSON & H. W. FREEMAN.

ANGLE BAR STRAIGHTENER.

APPLICATION FILED FEB. 14, 1911.

997,767.

Patented July 11, 1911.



UNITED STATES PATENT OFFICE.

HANS J. ERICKSON AND HAROLD W. FREEMAN, OF DEER CREEK, MINNESOTA.

ANGLE-BAR STRAIGHTENER.

997,767.

Specification of Letters Patent. Patented July 11, 1911.

Application filed February 14, 1911. Serial No. 608,641.

To all whom it may concern:

Be it known that we, HANS J. ERICKSON and HAROLD W. FREEMAN, citizens of the United States, residing at Deer Creek, in the county of Ottertail and State of Minnesota, have invented certain new and useful Improvements in Angle-Bar Straighteners; and we 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in angle bar straighteners and the object in view is to produce a simple and efficient apparatus of this nature so constructed that the fish plates upon railway rails may be straightened without removing bolts and spikes as is ordinarily necessary for straightening fish plates upon railways.

The invention comprises various details of construction and combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

We illustrate our invention in the accompanying drawings, in which:—

Figure 1 is a perspective view showing the application of our invention. Fig. 2 is a detail sectional view showing the construction of the standards set at an inclination and engaging the track at the lower ends. Fig. 3 is a detail perspective of the meeting ends of the standard. Fig. 4 is a sectional view through the stirrup which straddles the rail and engages underneath the angle plates, and Fig. 5 is a view showing the apparatus folded.

Reference now being had to the details of the drawings by letter, A, A designate the ordinary rails of a railway and B the angle or fish plates bolted in the usual manner to the rails and held by spikes B' to the ties D. Standards, designated by letters E and E' and made of any suitable material, have bars F pivotally connected thereto by the pins H projecting from the opposite sides of each standard and between which bars the standards are adapted to fold when not in use in the manner shown in Fig. 5 of the drawings. The upper end of each standard is beveled as at K and the upper end of the standard E' is provided with a

recess K' adapted to receive a lug O integral with the standard E, the two being adapted to interlock in the manner shown in the sectional view of the drawings.

A forked member Q is provided with a threaded shank portion Q' and carries two pins R and R', spaced apart and designed to engage the outer edges of the standards E and E' respectively, thus securely bracing and holding the latter.

A turn buckle M has a threaded end engaging the threaded shank portion of the forked member Q and also a stirrup-shaped member T having a threaded shank portion T', and a pin or bar S passes through apertures in said stirrup-shaped member and is adapted to engage underneath the angle plate in the manner shown clearly in the drawings.

It will be noted that the lower ends of the standards are beveled and rest upon tread surfaces of the rails as shown, when the apparatus is adjusted for use and, by the construction shown, it will be noted that the device will be thoroughly braced and prepared to withstand any pressure which may be brought to bear upon the same when the turn buckle is operated to raise the angle plate.

It will be noted that, when the parts are adjusted in their proper relative positions, the stirrup-shaped member will straddle the two bars F and also the track rails in the angle plates and that a direct upward pull will be exerted upon the plates, thus forming a simple and efficient means for straightening the same without removing the plates from the rails or ties. When the device is not in use, it may be folded into a compact form for storage or shipment.

What we claim to be new is:—

1. A straightening device comprising standards, the lower ends of which are adapted to rest upon tread surfaces of tracks, parallel bars pivotally connected to said standards and between which the latter are adapted to fold, the upper end of one standard having a recess, and a lug projecting from the upper end of the other standard and adapted to engage said recess, and turn-buckle actuated means engaging underneath the angle plate and the upper meeting ends of the standards.

2. A straightening device comprising standards, the lower ends of which are adapted to rest upon tread surfaces of tracks,

parallel bars pivotally connected to said standards and between which the latter are adapted to fold, the upper end of one standard having a recess, a lug projecting from the upper end of the other standard and adapted to engage said recess, a forked member, pins carried thereby and engaging the upper ends of said standards and having a threaded shank portion, a stirrup straddling the rail and having a pin extending underneath the angle plates which are fastened to the rails and provided with a threaded shank

portion, and a turn buckle engaging the threaded shank portions of said forked and stirrup members.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses.

HANS J. ERICKSON.
HAROLD W. FREEMAN.

Witnesses:

H. J. BAKER,
A. D. BAKER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."