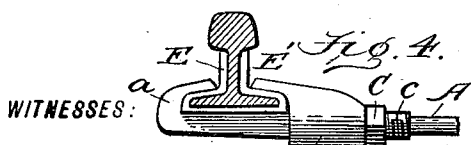
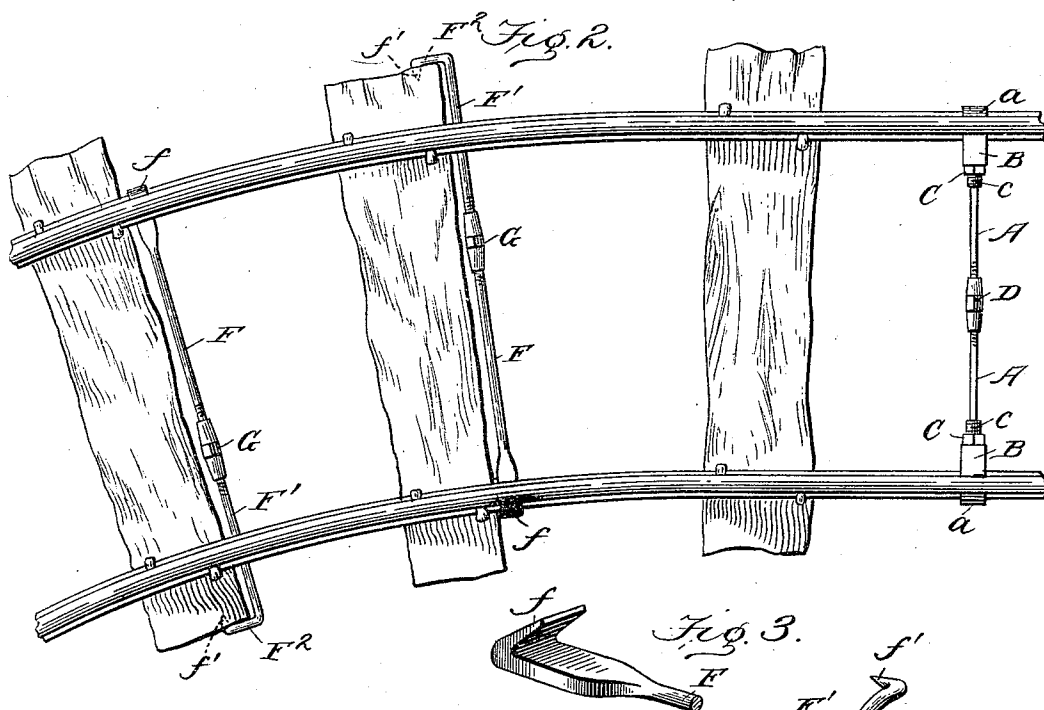
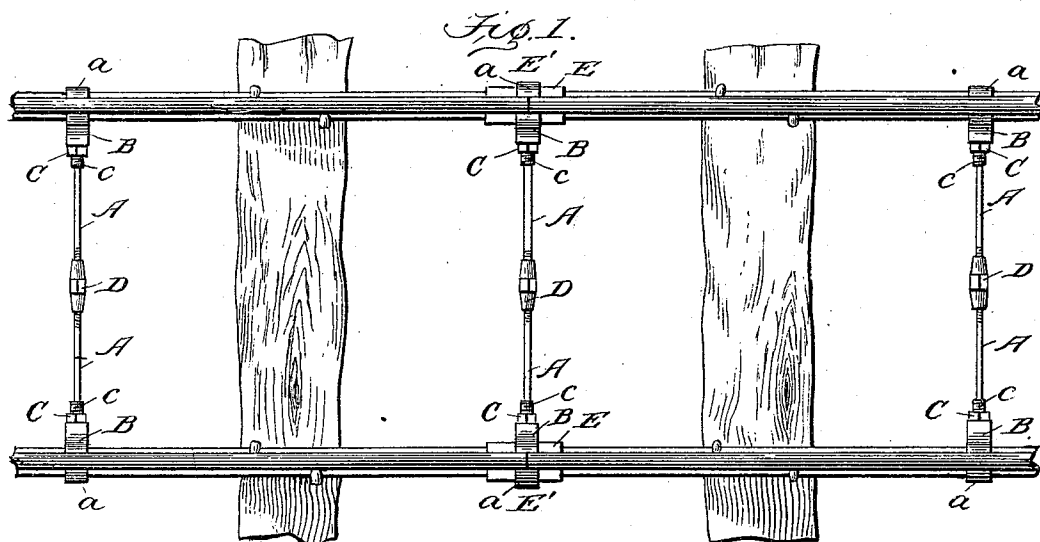


(No Model.)

C. J. REDIFER.
TRACK BRACE.

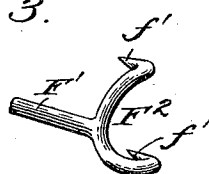
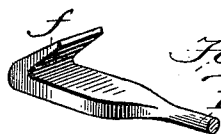
No. 554,728.

Patented Feb. 18, 1896.



WITNESSES:

Edwin L. Bradford ^B
Chas E Brock



INVENTOR

G J Redifer
BY *R. H. Hacey*
ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES J. REDIFER, OF MUNSON STATION, PENNSYLVANIA.

TRACK-BRACE.

SPECIFICATION forming part of Letters Patent No. 554,728, dated February 18, 1896.

Application filed October 29, 1895. Serial No. 567,294. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. REDIFER, of Munson Station, Clearfield county, and State of Pennsylvania, have invented an Improved Track-Brace, of which the following is a specification.

The object of this invention is to hold the rails of a track a proper distance apart, thus keeping the track in true gage, and by the use of my brace the track is rendered steadier, fewer ties will be required, and consequently less spikes, thus economizing considerable in both material and labor in building a railroad.

Another object is to prevent the spreading of rails on curves, and also the spreading of rails at joints.

With these objects in view my invention consists in the particular construction of the several parts, and their novel combination or arrangement, all of which will be fully explained and then pointed out in the claim.

In the drawings forming a part of this specification, Figure 1 is a view of a straight track; Fig. 2, a view showing a curved track, and Figs. 3 and 4 show details of construction.

In the practical embodiment of my invention I construct a track-brace of two tie-rod sections united by a double nut or turnbuckle. Each rod A has a broad hook-shaped jaw *a* at its outer end, which jaw is adapted to engage the outer edge of the base-flange of the rail from the outer side, and sliding upon the rod is a movable jaw B adapted to engage the inner edge of the base-flange, and is held in such position by the nut C engaging threads *c* cut upon the rod near its outer end. Each rod is attached to the rail and the inner ends united by means of the double nut or turnbuckle D, so that by turning said nut or buckle the rails can be drawn together the desired distance to attain the true gage. The rails thus held in true position require only enough

spikes to hold them down on the ties, and a less number can be employed than is now the case, and the number of ties can also be decreased, thus saving both in labor and material in building a railroad.

The rigid and movable jaws are made quite broad and prevent the brace slipping or sliding diagonally and throwing the rails out of gage.

When it is desired to brace a joint between ties, it can be easily accomplished by employing a splice-bar E and attaching the brace to said bar, as shown at E', the hooks of the jaws being opened a little more in this case to accommodate the splice-bar.

Upon a curved track the tendency is for the train to force the lower rail inward and the upper rail outward, and to avoid this I provide a tie rod or brace, which consists of a rod F having a jaw *f* at its outer end, and a rod F' having a pair of clamping-arms F² diverging from each other and carrying prongs *f'* at their outer ends, the inner ends of the rods F and F' being threaded and united by means of a double nut or turnbuckle G.

In operation the jaw is hooked upon the base of the rail, the clamping-arms fastened to the end of the tie and the nut or buckle tightened as needed. The rail thus braced will be held securely in place and all possibility of the rails spreading avoided.

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

A rail-brace, comprising a tie-rod having a jaw, a rod having clamping-arms, and the double nut or turnbuckle, substantially as shown and described.

CHARLES J. REDIFER.

Witnesses:

CHAS. E. MURRAY,
E. BOLLINGER.