(No Model.) 2 Sheets—Sheet 1.

F. PETELER.

PORTABLE RAILWAY TRACK.

No. 348,533. Patented Aug. 31, 1886.

Fig. 1.

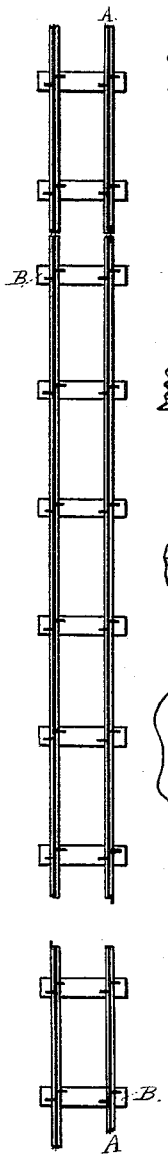
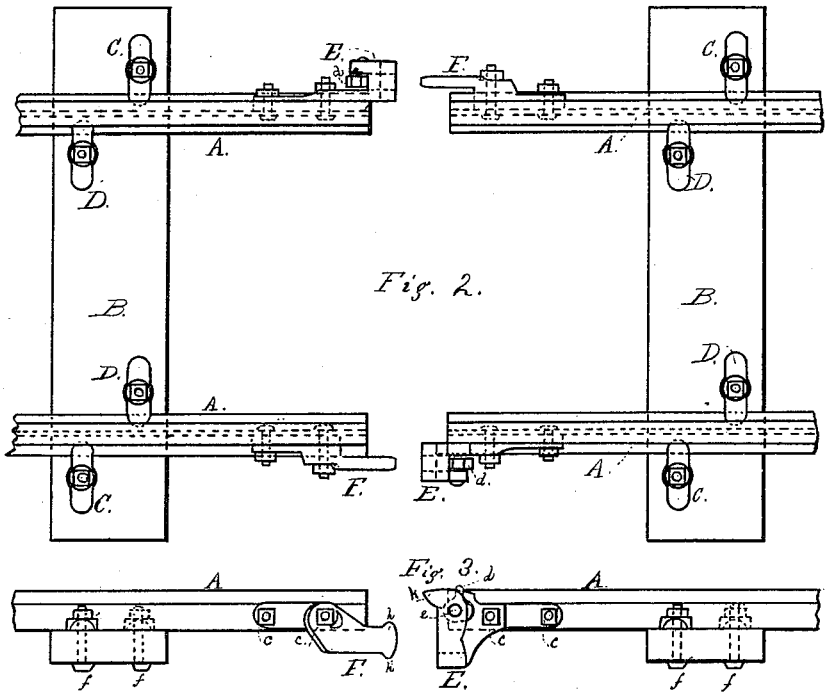
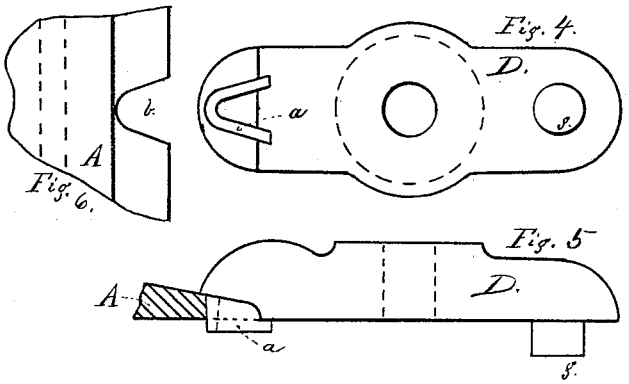


Fig. 2.





WITNESSES:
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Reuben Tomlinson

Francis Peteler INVENTOR

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(No Model.) 2 Sheets—Sheet 2.

F. PETELER.

PORTABLE RAILWAY TRACK.

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Fig. 7.

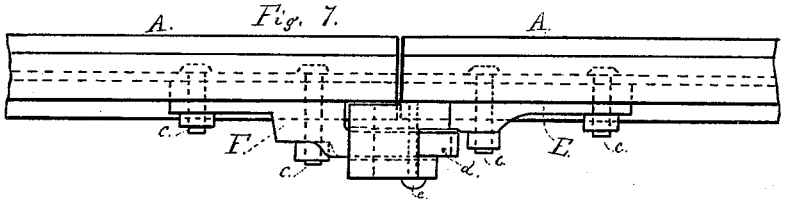


Fig. 8.

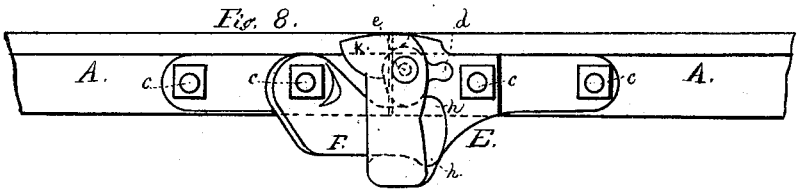


Fig. 9.

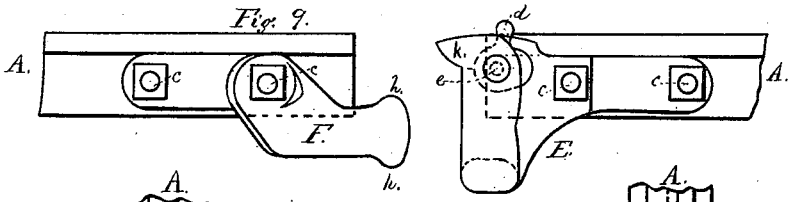


Fig. 10.

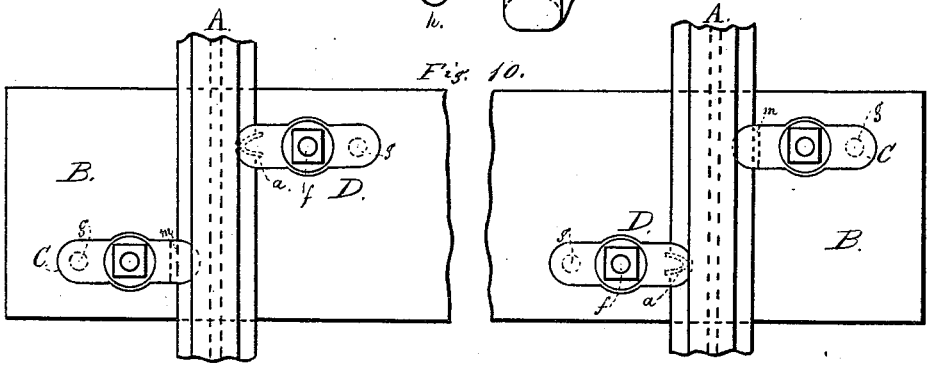
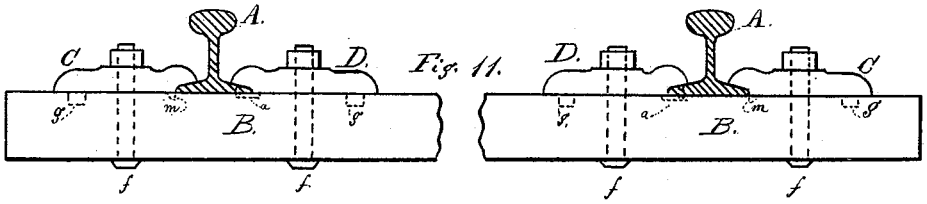


Fig. 11.



WITNESSES:
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Francis Peteler INVENTOR

William W. Redfield ATTORNEY

UNITED STATES PATENT OFFICE.

FRANCIS PETELER, OF MINNEAPOLIS, MINN., ASSIGNOR TO THE PETELER PORTABLE RAILWAY MANUFACTURING COMPANY, OF SAME PLACE.

PORTABLE RAILWAY-TRACK.

SPECIFICATION forming part of Letters Patent No. 348,533, dated August 31, 1886.

Application filed April 29, 1886. Serial No. 200,749. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS PETELER, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Portable Railway-Tracks, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention consists of certain improvements in portable railways, as follows: The sections of track switches and curves of uniform lengths are made of ordinary T-rails and hardwood cross-ties, securely fastened together by bolts and clamps, and firmly connected by flexible couplings in place of the ordinary splice, and at the same time these sections are quickly and readily detached from one another. The flexible couplings render possible a shifting to the right or left of the track at any joint, and, finally, the rails cannot creep nor the cross-ties move, nor the wheels of cars drop into openings between sections.

In the accompanying drawings, Figure 1 is a general plan showing a section of track, generally twenty feet long, closed or coupled with one adjacent section, and open or disconnected from the other adjacent section. Fig. 2 is a plan, and Fig. 3 is an elevation, showing two contiguous joints open. Figs. 4 and 5 are an inverted plan and side view of a clamp on inside of rail. Fig. 6 is a plan of a piece of rail, showing the device for preventing the creeping of the rails. Fig. 7 is a detail plan of a closed joint. Fig. 8 is an elevation of the same. Fig. 9 is an elevation of the same with joint open. Figs. 10 and 11 are a plan and elevation of a cross-tie, showing the two rails clamped thereon.

In my invention the rail-joint consists of two couplings, E and F, bolted each by two bolts to the ends of the rails into the usual splice bolt-holes at ends of rails, as shown in the drawings in Figs. 2, 3, 7, 8, and 9. It will be seen that E and F are in pairs and are essentially mates, and may be placed as such at either end of a pair of rails, and any section of rails turned end for end without affecting the result. The coupling E is formed like a rectangular mortise, so that the end of the coupling F may enter into the said mortise. In this so-called "mortise" in the coupling E is placed a small cam or pawl, *d*, revolving on a rivet, *e*. When this cam *d* is in the position shown in Figs. 3 and 9, there is no obstruction to the free entrance or exit of the coupling F into or out of the coupling E. Consequently the two adjacent sections of track may then be joined or taken apart, as the case may be; but if, after putting two sections together, this cam or pawl *d* is placed in the position shown in Fig. 8, then it will be seen that one section cannot be pulled apart from another. It will also be seen that the shape of the cam *d* and of that part of the coupling E against which said cam *d* revolves, prevents said cam *d* being raised or lowered more than a certain amount. This fact causes said cam *d*, when in position shown in Fig. 8, to remain rigid with the rail when any pull is exerted on either rail by its adjacent rail, and therefore the two rails remain attached. There is also lateral play enough every way in the fit of the coupling F into the coupling E to allow a throw-over of the track at the other end of section to the amount of eighteen inches. This renders possible also a curvature of track of twenty-five feet in one hundred and fifty feet of line. Another feature in the coupling E is that it extends alongside of the adjacent rail, flush with top of rails, and in the same manner for a like distance along the rail to which it is bolted. Thus a practically continuous rail-surface across a joint is secured, and especially when the track is curved is this desirable.

The rails A are bolted to the cross-ties B by clamps C and D, secured by bolts *f*. The outer clamps, C, or those on outside of rail A, are made with a shoulder, *m*, that lays against the edge of base of rail, and also lets slightly into the cross-tie B, as shown in Figs. 2, 10, and 11. The inner clamps, D, or those on inside of rail A, are shown in detail in Figs. 4 and 5, and in place in Figs. 2, 3, 10, and 11. The feature of this inner clamp is the device for prevention of creeping of the rails or the moving of the cross-ties. On the edge of the base of rail A is made a notch or nick, *b*, as shown in Fig. 6, Fig. 4 being a view of the bottom of the inner clamp, D. There is seen thereon and also

on Fig. 5, a lip or projection, *a*. This lip or projection *a* fits the notch *b* in the base of the rails A, and is also deep enough to press into the wood forming the cross-tie B. Thus the rails cannot creep nor the cross-ties move from their proper position.

On both the inner and outer clamps, C and D, a finger or lug, *g*, projects from bottom of same into the cross-tie, as shown in Figs. 4,5, 10, and 11, and thereby the clamps are prevented from turning.

Having described my invention, I desire to claim and secure by Letters Patent, as follows:

1. In a portable railway-track, the coupling E, with its cam or pawl *d* secured to said coupling by rivet *c*, said coupling E being adapted to receive the end of coupling F, said coupling E to be bolted to rails A, all substantially as described.

2. In a portable railway-track, the coupling F, also bolted to rails A, and adapted to enter the coupling E, all substantially as described.

3. In a portable railway-track, the combination of the rail A, having a notch or notches, *b*, with the clamps C, having the shoulder *m* and finger *g*, and also with the clamps D, having the lip *a* and finger *g*, whereby the rails are rigidly secured in every way to cross-ties.

4. In a portable railway-track, the clamp C, having the shoulder *m*, entering slightly into cross-tie, and bearing against base of rail for the purpose of securing rigidity to the cross-tie and rail.

5. In a portable railway-track, the combination of the couplings E and F with the rails A, whereby ease and facility of attachment or detachment, continuity of rail or tread surface, and flexibility of sections, one with another, for shifting and curving the track, are simultaneously secured.

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

FRANCIS PETELER.

Witnesses:

REUBEN TOMLINSON,

WILLIAM W. REDFIELD.