

J. M. BRUNS.

TRACK.

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997,541.

Patented July 11, 1911.

Fig. 1.

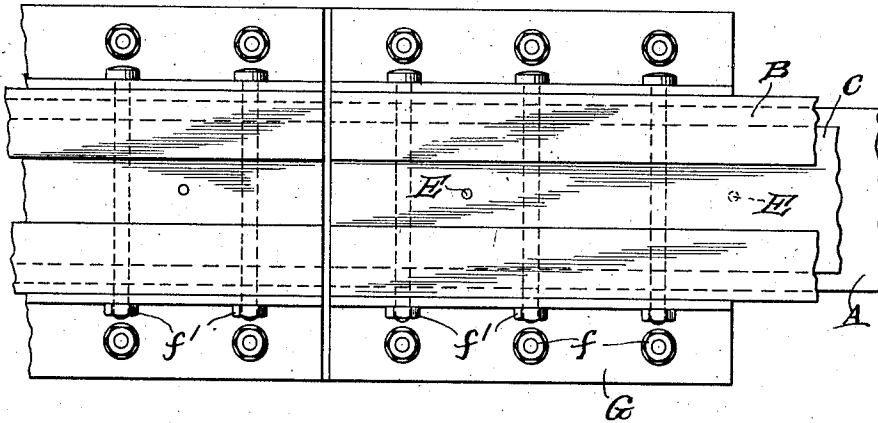
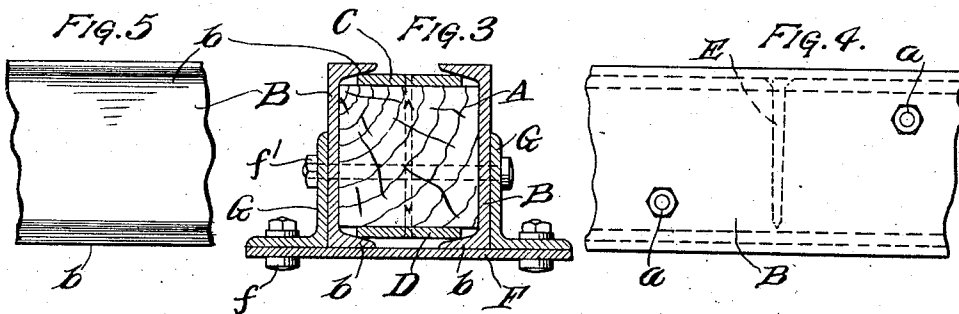
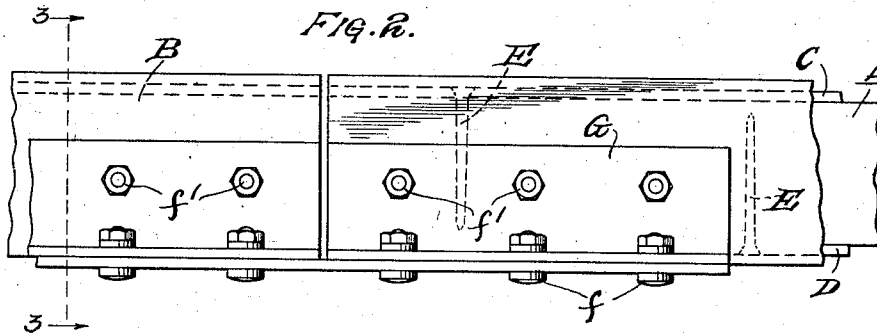


Fig. 2.



WITNESSES
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TRACK.

997,541.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN M. BRUNS, a citizen of the United States of America, and resident of Waterloo, Black Hawk county, Iowa, have invented a certain new and useful Improvement in Tracks, of which the following is a specification.

My invention relates to tracks for excavators and other heavy machines.

It relates more particularly to tracks upon which broad wheels or rollers may travel. Tracks of this kind have been made by inclosing heavy timbers between channel irons. I find, however, that these tracks have not been satisfactory. The flanges on the channel irons have yielded under the weight of the wheels or rollers, and have pressed into the timbers to an undesirable extent. Also, the timbers for this purpose were necessarily of liberal dimensions in cross section. This, of course, resulted in a considerable expenditure for timbers, especially as they had to be replaced often. And, moreover, it was necessary to dress the timbers to fit the channel irons.

Objects of my invention are, therefore, to provide a track of such character that the flanges of the channel irons are prevented from pressing into the wood of the timbers; to provide a track of such character that smaller timbers can be used than heretofore; to provide a track of such character that the timbers need not be dressed; and to provide a track that will be efficient and comparatively inexpensive to construct and maintain.

In the accompanying drawings, Figure 1 is a plan of a section of track, showing the joint between two rails, embodying the principles of my invention. Fig. 2 is a side elevation of the said section of track. Fig. 3 is a transverse section on line 3—3 in Fig. 2. Fig. 4 is a side elevation of a portion of one of the rails. Fig. 5 is a side elevation of a portion of one of the channel irons, showing the inner side thereof.

As thus illustrated, the timbers A are of suitable length and are arranged end to end. These timbers are rectangular in cross section. The channel irons B are disposed at opposite sides of the said timbers. A plate C rests flatwise upon each timber, and similar plates D are provided for the lower surfaces of said timbers. Spikes E are driven through holes in said plates and into the

timbers to secure the plates in place. It will be seen that said plates are narrower than the timbers. In this way the flanges *b* of the channel irons B rest or impinge, about midway of their width, upon the edges of said plates. The channel irons are clamped in place by horizontal bolts *a*, which extend through the timbers, and which are staggered along the length of the rail. Each rail is thus made up of a timber, two channel irons, and two iron plates.

The ends of the rails are supported on plates F and secured thereto by angle irons G. These angle irons are secured to the plate F by means of bolts *f*. The ends of the rails are clamped between said angle irons by means of bolts *f'*.

The protecting plates C and D prevent the flanges *b* from pressing into the timbers. The said timbers, as they do not have to be dressed down to fit against the said flanges *b*, can be of less vertical thickness than heretofore. The upper flanges *b* provide a track or way along which a wheel or roller may travel. The flanges are fully and firmly supported by the plate C. Thus the said flanges cannot sag or fall under the weight of the excavator or other machine. As the timbers are smaller than heretofore, and do not have to be dressed, the expenditure for timber is materially reduced. There is practically no carpenter work involved in the installation of a track of this kind. Also, a track of this kind will stand more wear and tear and last longer than the kind heretofore employed in this kind of work.

What I claim as my invention is:

1. A track rail comprising a pair of channel irons, a timber for spacing the said channel irons apart, and plates disposed with their edges between the said timber and the upper and lower flanges, respectively of the channel irons.

2. A track rail comprising a pair of members with upper flanges, each flange serving as a tread, a timber for spacing the members apart, and a plate disposed with the edges thereof between the said flanges and the top of said timbers.

3. A track rail comprising a pair of members with upper flanges, which flanges extend toward each other and form the tread of the track, a timber for spacing said mem-

bérs apart, and supporting means interposed between the flanges and the top of said timber.

4. The combination of two channel irons, 5 a timber interposed between said irons, plates spiked to the top and bottom of said timber, the edges of said plates extending between the said timber and the flanges on said irons, and bolts for clamping the irons 10 to the timber.

5. The combination of a timber, channel irons clamped thereto, the plates on the top and bottom of said timber, which plates have longitudinal edges extending between 15 the timber and the flanges of said irons, plates for supporting the track, and angle irons for securing the track to said supporting plates.

6. A track rail comprising a pair of mem- 20 bers with lower flanges, a timber for spacing

the members apart, and a plate disposed with the edges thereof between the said flanges and the bottom of said timber.

7. A track rail comprising a pair of mem- 25 bers with lower flanges which extend toward each other, a timber for spacing said members apart, and supporting means interposed between the flanges and the bottom of said timber.

8. In a track rail, two parallel members, a 30 plate supporting said members extending parallel therewith, a support below said plate, and means for securing the members at each side of the support.

Signed by me at Waterloo, Iowa this 30th 35 day of Nov. 1909.

JOHN M. BRUNS.

Witnesses:

MAUDE DUMOND,
FRANK F. KNAPP.

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