(No Model.)

J. E. PORTER.

RAIL FOR HAY CARRIERS, &c.

No. 570,334. Patented Oct. 27, 1896.

Fig. 1.

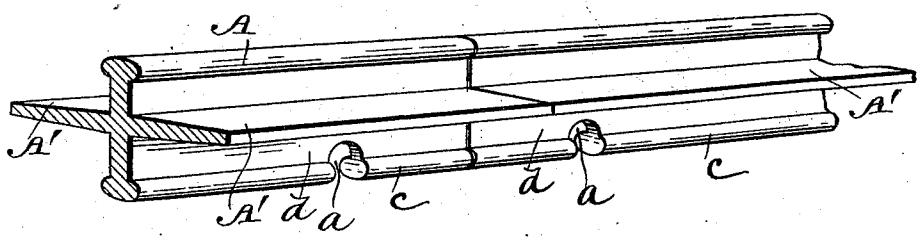


Fig. 2.

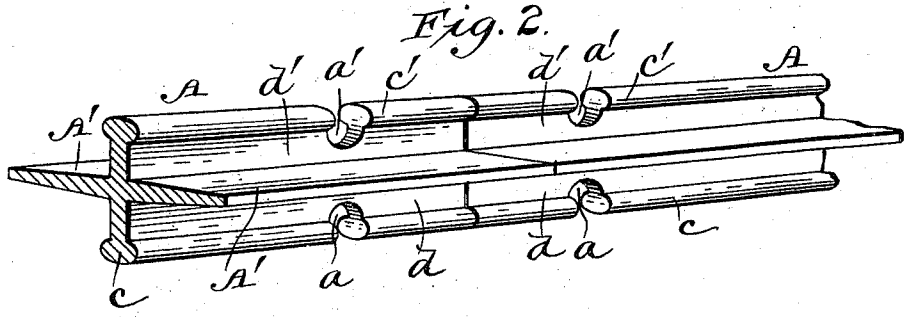


Fig. 3.

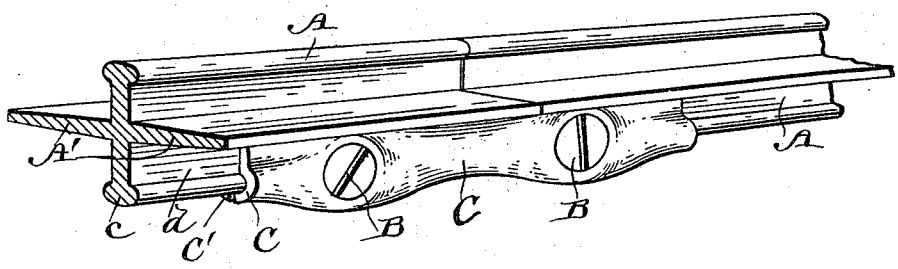
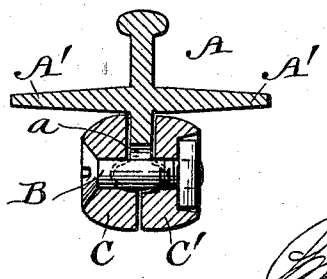


Fig. 4.



WITNESSES

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RAIL FOR HAY-CARRIERS, &c.

SPECIFICATION forming part of Letters Patent No. 570,334, dated October 27, 1896.

Application filed August 12, 1896. Serial No. 602,537. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH E. PORTER, a citizen of the United States, residing at Ottawa, in the county of La Salle and State of Illinois, have invented certain new and useful Improvements in Rails for Hay-Carriers and other Purposes; and I 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.

My invention relates to an improved construction of a joint-clamping splice or coupling for the double-beaded rail; and it consists in a double-beaded rail having a notch for the passage of a clamping-bolt formed near each end of the rail, said notch being cut up transversely through the lower bead and through a portion of the lower web.

It also consists in the combination, with rails having their lower beads and webs notched transversely for the passage of clamping-bolts, of coupling-pieces perforated horizontally in coincidence with the notches of the rails for the passage of the clamping-bolts and shaped on one of their surfaces to fit against the lower webs of the rails and to extend under and around said beads, all as will be hereinafter described.

It also consists in providing the double-beaded rail with transverse notches in its upper bead and in its lower bead and a portion of the lower web, the notches in the upper bead serving for admitting hanger-hooks under the upper bead of the rail, while the notches in the lower bead and web serve for the passage of clamp-bolts of a clamping-joint coupling; or the upper notches may also serve for the passage of joint-clamp bolts when desirable and practicable.

It also consists in the combination, with the double-beaded rail having transverse notches in its upper bead for the passage of hanger-hooks under the bead and with transverse notches in its lower bead and web for the passage of clamping-bolts, of coupling-pieces perforated and matching in its contacting surface the form of the lower bead and web of the rail, as will be hereinafter described.

It also consists in a double-beaded rail for hay-carrier tracks and other purposes, as a new article of manufacture, having transverse notches through either its uppper bead and web or its lower bead and web, or through both its upper and lower beads and webs, as will be hereinafter described.

In the accompanying drawings, Figure 1 is a perspective view of two rails of a double-beaded track constructed in accordance with one mode of employing my invention. Fig. 2 is a perspective view of a modification of said rails constructed in accordance with another mode of employing my invention. Fig. 3 is a perspective view showing a joint clamp or coupling applied to the ends of the two rails, and Fig. 4 is a transverse section of the parts shown in Fig. 3.

A, in Fig. 1 of the drawings, designates my improved double-beaded rail provided with wheel-supporting flanges A′ and constructed with a notch *a* in its lower bead *c* and, for a certain distance, in its web *d*. A notch corresponding to *a* is formed near each end of each rail for the passage of clamping-bolts B, and these notches permit the clamping-bolts to pass through the bead and web of the rail, as illustrated in Fig. 4. As it is very desirable in hay-carrier rails to have their webs of slight depth, it is best to extend the notches entirely through the lower bead and partly in the lower web in order not to increase the depth of the web or necessitate the use of bolts of insufficient strength to bear the strain which comes upon the joints of the track.

If the web were only bored through and the notch not cut in the bead, the web, in order to apply the joint-clamp, would have to be greatly increased in depth in order that bolts of the proper size and strength may be used; but by notching up through the lower bead and some distance into the lower web the rail can be kept of shallow depth and bolts of the proper size and strength can be employed.

The rails constructed as described are coupled together at their abutting ends by joint-coupling pieces C C′, provided with perforations which coincide with the notches *a* for the passage of the clamping-bolts B. The surfaces of these coupling-pieces which come in contact with the lower webs and beads of the rails nicely match the web and bead, as shown in Fig. 4, and when drawn up by the screw-bolts they support the track

at the joints between the rails and, by overhanging the lower bead and extending up to the wheel-supporting flanges, make the joint very rigid, and at the same time the strain upon the bolts is relieved by the contact of the joint-clamp pieces with the upper surface of the lower bead.

In Fig. 2 the rail is shown provided with a transverse notch a' in its upper bead c' and in its upper web d'. By this construction facility is afforded for introducing hanger-hooks under the web at certain portions of the track after the same has been constructed, and thus the inconvenience of sliding the hooks along the whole length of the track avoided, that is, unless the hooks are applied during the erection of the track. If this use is not made of the notches, they may, whenever desirable or practicable, be utilized in connection with upper joint clamp or coupling pieces.

I desire my invention to cover notches through the lower bead and lower web, and also upper notches for any practical purpose in the upper bead and upper web. It, however, is very desirable to use the clamp on the top and bottom bead when the rail is constructed for serving as a merchandise conveyer, as by using the top and bottom clamp its strength is greatly increased.

What I claim as my invention is—

1. A suspension double-beaded rail, provided with transverse notches through its lower bead and web, for the passage of joint-clamp bolts, substantially as described.

2. A double-beaded rail provided with transverse notches in its lower bead and web for the passage of joint-clamp bolts, and transverse notches in its upper bead and web, substantially as and for the purpose described.

3. A double-beaded rail, provided with notches in one of its beads and webs, in combination with joint coupling pieces, and clamping bolts, substantially as and for the purpose described.

4. A double-beaded rail, provided with notches in its upper and lower beads and webs, in combination with joint coupling pieces and clamping bolts, substantially as described.

5. The new article of manufacture herein described, consisting of a rail provided with upper and lower beads and horizontal, intermediate wheel-supporting flanges, and constructed with transverse notches in its bead or beads, substantially as herein described.

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

JOSEPH E. PORTER.

Witnesses:

LEE H. HOOK,

W. F. JACOBS.