Aug. 19, 1941. J. W. PATTON 2,253,209

RAILWAY TRAIN

Filed Nov. 9, 1939

FIG. 1

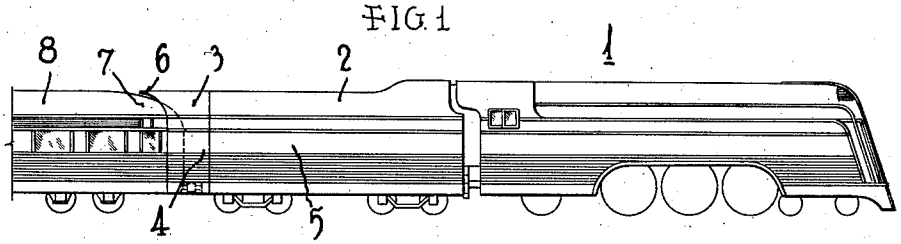


FIG. 2

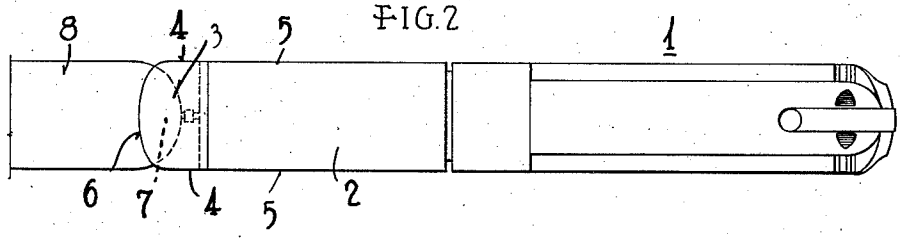


FIG. 3

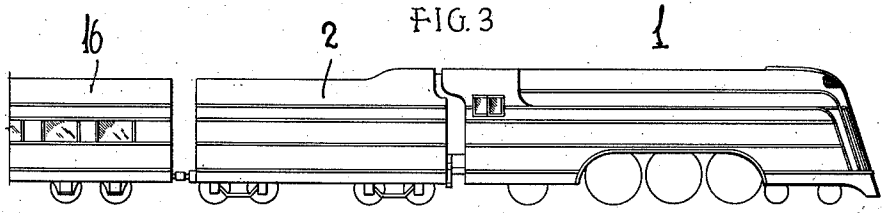
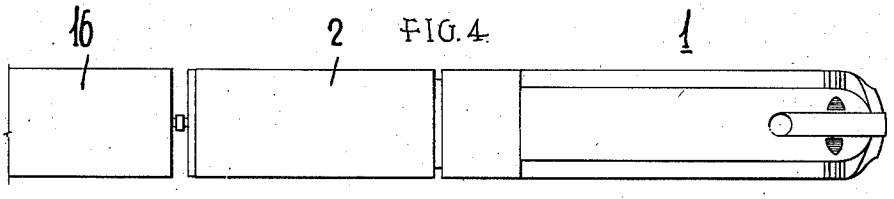


FIG. 4



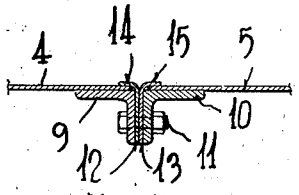


FIG. 5

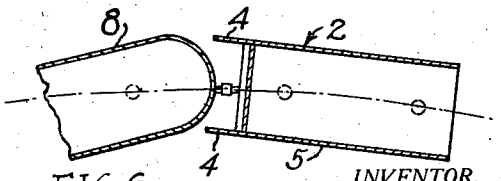


FIG. 6.

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2,253,209

RAILWAY TRAIN

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Application November 9, 1939, Serial No. 303,499

2 Claims. (Cl. 105—2)

The present invention pertains to improvements in the streamlining of railway trains.

Within recent years there has been a considerable development in the streamlining of all means of transportation, including railway trains. In effecting such streamlining, as for example in the case of a railway train, it is desirable to provide a rounded end on the last car of the train. This requirement has meant that the last car of the train must differ materially in its configuration from the remaining cars of the train, and as a result the usual practice has been to turn the train around at each of its terminals in order to prepare it for its return run.

In some instances, however, it has proven impracticable to turn the whole train around, the desirable practice being to simply uncouple the locomotive, turn it around, and then recouple the same to the train at its opposite end. However, in order to preserve the streamlining of the train, this means that the rear car of the train must also be uncoupled, turned around, and recoupled to what was formerly the front end of the train.

One object of the present invention is to solve this problem by providing a streamlined casing for removable attachment to the tractor unit of the train, so that the tractor unit may be connected to the rounded end of a car and still preserve the streamlined appearance of the train. When the casing is removed, the tractor can be used with the usual square ended cars.

The invention will be more readily understood by reference to the attached drawing, in which

Fig. 1 is a view in elevation showing the improved streamlined casing attached to the tender of a steam locomotive, at the point of connection of the latter to the rounded end of a car;

Fig. 2 is a plan view of the arrangement shown in Fig. 1;

Fig. 3 is a view in elevation showing the streamlined casing removed from the tender when the latter is connected to a square ended car;

Fig. 4 is a plan view of the arrangement shown in Fig. 3, and

Fig. 5 is a detailed view in section of the joint between a tractor unit and my improved streamlined casing.

Fig. 6 is a diagrammatic fragmentary horizontal sectional view showing the relation of the parts when rounding a curve in the track.

In the drawing the numeral 1 designates generally the train locomotive or tractor unit. In the embodiment illustrated, the tractor unit is a steam locomotive having the usual tender 2. To this tender is suitably secured the streamlined casing or fairing 3 having side portions 4 constituting extensions of the sides 5 of the tender 2. The top of the casing 3 is similarly an extension of the top of the tender 2 and has an extended portion 6 which projects out over the rounded top 7 of the car 8.

The casing or fairing 3 is preferably attached to the tractor unit in the manner shown in some detail in Fig. 5. In this figure the outside plates 4 and 5 of the casing and tender respectively are joined so as to be substantially flush with each other. To effect this union, angle members 9 and 10 are provided, between which are clamped by means of bolts 11 members 12 and 13 having turned-over portions 14 and 15 engaging and covering the end of plates 4 and 5 respectively.

While the invention has been illustrated as it would be employed in the case of a steam locomotive having a tender, it will at once be obvious that the streamlined casing or fairing 3 might be similarly attached directly to any form of tractor unit.

With this invention it will be seen that a streamlined train may be made up with cars having rounded ends at each end of the train. With such a train it will not be necessary to turn the whole train around at its destination, but merely to turn around and recouple the tractor unit at the other end of the train.

If it is desired to couple the locomotive to a square ended car 16 as shown in Figs. 3 and 4 it will simply be necessary to remove the casing or fairing from the tractor unit, as shown.

Other objects and possible embodiments of the invention will readily occur to one skilled in the art. It is intended therefore that the invention is not to be limited to the embodiment illustrated and described herein, but to include everything within the scope of the appended claims.

What I claim is:

1. A tractor unit having a usual substantially square end and coupling means at said end enabling it to be coupled to either a usual substantially square-ended car or to a rounded-ended car, in combination with means for readily converting the coupling end of said unit from its usual square-ended form to a recessed form adapted to receive the rounded end of a car in coupled relation thereto, said means comprising a rigid casing removably secured to the coupling end of said unit and extending the sides and

top of said unit beyond the substantially square end thereof, to form with said end a recess for receiving the rounded end of a coupled car.

2. Means for converting a tractor unit from a usual square ended type to the type having a recessed end adapted to receive the rounded end of a car in coupled relation thereto, said means comprising a rigid casing adapted to be removably secured to the sides and top of said tractor unit and to extend in substantially flush continuation of its sides and top beyond the square end thereof to form therewith a recess to receive the rounded end of a coupled car.

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