ABSTRACT: A connector for coupling together adjacent lengths of toy and model railway tracks comprising an elongated member having at its opposite ends at least two spaced projections one of which will engage the relatively remote sides of track end members at different distances apart according to whether the track is straight or curved, the elongated member conveniently lying in slots in said track end members and the projections preferably extending from both sides of the elongated member.
MODEL RAILWAY TRACK

BACKGROUND TO THE INVENTION

The rail tracks of toy and model railways are conventionally coupled together by at least one connector which cooperates with the end members of the track lengths that are to be connected together, but it is a drawback that several differently constructed connectors are required and must be made available for connecting one type of rail track to any other. A connector for coupling two lengths of straight rail track is unsuitable for coupling a length of straight rail track to a length of curved rail track nor can connectors suitable for straight rail tracks be used for coupling two lengths of curved rail track. It is therefore an object of the invention to provide a connector for toy and model railways which is suitable for coupling together two lengths of rail track of any kind.

This invention relates to rail track connectors for toy and model railways of the kind in which coupling members at the ends of an elongated web member cooperates with the end members of the track lengths that are to be connected together and accordingly comprises an elongated member provided with two or more relatively spaced projections for coupling together consecutive track lengths by engaging track end members at longer and shorter distances apart.

The track connector is disposed at the track center line so that only one connector is required for coupling two track lengths together. The projections at each end of the elongated member permits the connector to bridge different coupling distances between the end members of adjacent track lengths.

In a preferred embodiment, the projections comprise integral transverse webs projecting at right angles from the elongated member and, according to another feature of the invention they may project from both sides at each end thereof.

Preferably the elongated member will be insertable in slots provided on the underside of each of the end members of the two track lengths that are to be connected together. The depth of the slots can be chosen to conform with the height of the web of the elongated member so that it will not project from the underside of the rail track.

Rail tracks of every possible track shape can be connected by using only one connector at each track junction as the configuration of the coupling members is such that the rail tracks coupled thereby are held so that they cannot be relatively displaced. For connecting together two lengths of straight rail track or of two lengths of curved rail track forming an S-bend, the connector is inserted into the slots in the end members of the tracks so that the two projections at the opposite ends thereof are directed towards the relative remote sides of the end members containing the slots.

On the other hand, when it is desired to connect a length of straight rail track and a length of curved rail track, the projections at opposite ends that are an intermediate distance apart bear against the relatively remote sides of the members containing the slots.

Two lengths of curved rail track are connected together by so inserting the connector into the slots in the end members of the tracks that the projections at opposite ends thereof that are relatively furthest apart bear against the relatively remote sides of the walls of the track end members containing the slots.

It will thus be understood that the same connector can be used to connect two lengths of straight rail track, two lengths of curved rail track, and a length of straight rail track to a length of curved rail track. A part from the savings inherent in the fact that only one rail track connector need be provided, it is easier for a child to play with the railway because different kinds of curved rail track can be connected together more quickly and without posing problems. Moreover, the reduction in the number of parts that must be kept in stock is a convenience to manufacturers and retailers alike.

Preferably the connector is made of elastic material, particularly of a synthetic thermoplastic material, which imparts a degree of flexibility to the connector which is of advantage when the connected lengths of track are subject to tension or flexure and the connector is nevertheless expected neither to become loose nor to break.

BRIEF DESCRIPTION OF DRAWINGS

FIG. 1 is a perspective view of a rail track connector.

FIG. 2 is a plan view of the undersides of two connected lengths of straight rail track.

FIG. 3 is a plan view of the undersides of two connected lengths of straight rail track.

FIG. 4 is a plan view of the undersides of a length of straight rail track connected to a length of curved rail track, and

FIG. 5 is a plan view of the undersides of two connected lengths of curved rail track.

DESCRIPTION OF PREFERRED EMBODIMENT OF THE INVENTION

The embodiment of a rail track connector 1 shown in FIG. 1 comprises an elongated member 2 which is formed at each end with two relatively spaced projecting members 3, 4 and 3', 4' extending from each side thereof. The two members 3 and 3' that are furthest apart also form the two ends of the elongated member 2. The member 2 is adapted to be inserted into two slots 5 and 5' of which one is provided centrally on the underside of the end members of each of two adjoining lengths of track 6 and 6'.

The two members 4 and 4' of the member 2 that are nearest to one another bear against the relatively remote sides of the track end members 6, 6' containing the slots 5 and 5' when two lengths of straight track 8 and 8' are connected together, as shown in FIG. 3. For connecting a length of straight rail track 8' to a length of curved rail track 9, as shown in FIG. 4, the members 3 and 4' or 3' and 4 which are an intermediate distance apart bear against the relatively remote sides of the track end members containing the slots 5 and 5'.

Finally, when it is desired to connect two curved lengths of track 9 and 9', then the two end projecting members 3 and 3' which are the greatest distance apart bear against the relatively remote sides of the track end members containing the slots 5 and 5'.

We claim:

1. A straight or curved toy or model railroad track comprising in combination:
   a pair of two track sections having at each end a tie mounting the rails of said sections, said ties having a substantially U-shaped cross section whereby to define two branches, said branches defining an elongate space therebetween, the open side of said space facing outwardly;
   a coupler for selectively and releasably coupling two straight track sections or a straight and a curved track section or two curved track sections, said coupler comprising a coupling bar having at each end a pair of lengthwise spaced apart coupling elements, said coupling elements and said ties being so correlated that upon placement of two track sections in position for coupling two straight track sections the pairs of coupling elements at the ends of the bar are fittable into the spaces defined by the branches of the two adjacent ties; for coupling a straight track section and a curved track section, the pair of elements at one end of the bar is fittable into the space of one tie and the two coupling elements at the other end of the bar are fittable into positions straddling the facing branch of the other tie; and for coupling two curved track sections the two coupling elements at both ends of the bar are fittable into positions straddling the facing branches of the ties of both track sections.

2. The combination according to claim 1 wherein each of said pairs of said coupling elements comprises two spaced-apart crossbars.

3. The combination according to claim 2 wherein the outer distance between the two crossbars of each pair matches the width of the spaces defined by the branches of the ties and the
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3. width of the gap between the crossbars of each pair matches the thickness of the branches of the ties facing each other when the track sections are placed in position for coupling.

4. The combination according to claim 3 wherein the branches of the ties adjacent to the ends of the track sections each include a cutout fitting the cross-sectional outline of the coupling bar.

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