

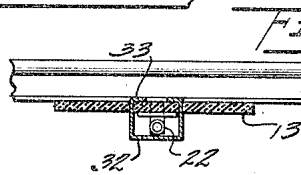
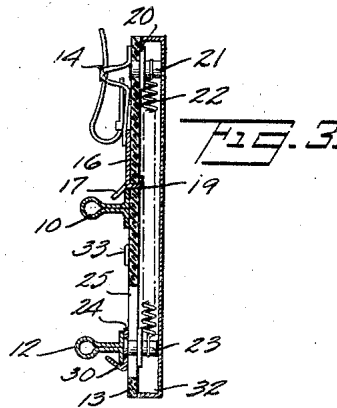
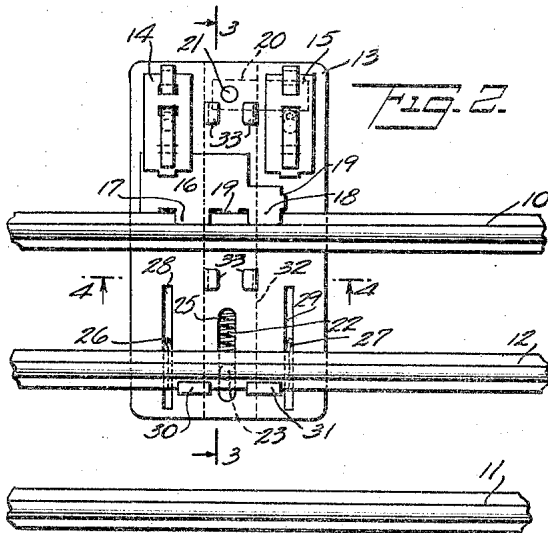
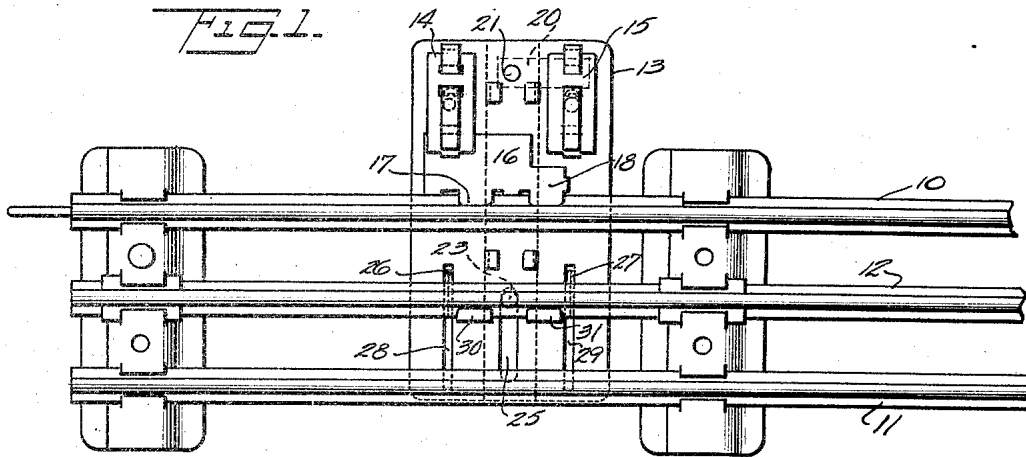
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TRACK CONNECTER

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## UNITED STATES PATENT OFFICE

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## TRACK CONNECTER

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The present invention relates to track connecters, and is more particularly directed toward track connecters suitable for use with toy electric railroads. The track layout of toy electric railroads is composed of a plurality of interchangeable track sections, switches and crossings and the like assembled together for train operation. Each of these sections has two outside wheel bearing or track rails and a central insulated third rail.

In the toy railroad art two gauges of track are in common use. In the narrow gauge track the wheel bearing rails are approximately  $1\frac{3}{8}$  inches apart, while in the wide gauge track these rails are approximately  $2\frac{1}{4}$  inches apart. Power is supplied to these rails by means of connecters either permanently fastened to the track sections or detachably connected to these sections. The connecters generally have two terminals, one of which can be connected to a wheel bearing rail, while the other one is connectible to the center or power rail. Connecters of this nature are used not only for supplying the propulsion current for the locomotive, but for connecting in signals and various track accessories.

The present invention contemplates the provision of a track connector which can readily be used with either wide gauge track or narrow gauge track, and one wherein the connector can be readily fastened to the track section of either size.

The accompanying drawings show, for purposes of illustrating the invention, two of the many possible embodiments in which the present invention may take form, it being understood that the drawings are illustrative of the invention rather than limiting the same.

In these drawings:

Figure 1 is a top plan view of a section of narrow gauge track showing the track connector applied to it;

Figure 2 is a fragmentary view of a portion of wide gauge track showing the connector in place;

Figure 3 is a sectional view taken on the line 3—3 of Figure 2; and

Figure 4 is a section taken on the line 4—4 of Figure 3.

The toy track shown in Figures 1 and 2 has a pair of outside wheel bearing rails 10 and 11 and a central insulating power supply rail 12. As above stated, and as illustrated in the drawing, the track sections are of different gauges.

The track connector as here shown employs an insulating base 13 which supports all of the other elements. Two wire receiving terminals 14 and 15 of the usual construction are mounted on this base plate. The terminal 14 extends over on top of a plate 16 which has upwardly extending rail engaging fingers or hooks 17 and 18 adapted to overlie the base of the rail 10. This plate 16 is fastened in place by prongs bent down underneath the insulating base as indicated at 19. The other wire receiving terminal is connected by a strap 20 with a post 21 anchored in the insulating plate. This post is connected to one end of a contractile spring 22, while the other end of this spring is connected to a post 23, carried by a slidable rail engaging member 24. The post passes through a slot 25 while the rail engaging member 24 is provided with two downwardly bent extensions 26 and 27 adapted to slide back and forth in slots 28 and 29. The rail engaging member 24 has a pair of inwardly bent prongs or hooks 30 and 31 adapted to overlie the base or foot of the third rail, as indicated. A casing or housing 32 formed of sheet metal covers or encases the spring 22, and is held in place by means of prongs 33 bent over onto the upper face of the insulating plate.

When the device is to be placed on the track it is merely pushed in under the rails until the rail engaging fingers 30 and 31 may engage under the edge of the third rail. A strong pull is then exerted so as to stretch the spring 22 and permit passing the fingers 17 and 18 on the fixed rail-engaging member up over the base of the wheel bearing rail 10, after which the spring will hold the connector in place on the track. It is obvious that this form of connector can be very quickly attached to the rails in any desired place along the track layout, and that con-

nections may be made with the third rail and the track rail.

It is obvious that the invention may be embodied in many forms and constructions, and I wish it to be understood that the particular form shown is but one of the many forms. Various modifications and changes being possible, I do not limit myself in any way with respect thereto.

I claim:

1. A track connector for toy electric railroads comprising an insulating base, a pair of wire receiving terminals carried thereby, a clip carried by the upper side of the base electrically connected with one of the terminals and provided with overhanging portions adapted to overlie the base of a track rail, a second clip slidably carried by the base and electrically connected with the other terminal, the second clip having an overhanging portion engageable with the opposite side of the third rail, and a spring urging the clips toward one another to support the connector from the two rails.

2. A track connector for toy electric railroads comprising an insulating base, a pair of fixed wire receiving terminals carried thereby, the base having longitudinal slots, a rail engaging member slidably carried in the slots and connected with one of the terminals, a contractile spring for pulling the member toward the fixed terminals, and a stationary rail engaging member connected to the other terminal, the two members being arranged opposite one another and adapted to engage with a track rail and a third rail of toy railroad track sections of different gauge.

3. A self adjusting track connector for toy railroads comprising an insulating base, a pair of stationary wire receiving terminals, a fixed rail engaging member and a slidable rail engaging member, and a contractile spring urging the slidable member toward the fixed member, whereby the slidable member may be hooked against a center rail and the spring stretched to permit hooking the fixed member over the outside of the track rail.

Signed at New York, in the county of New York, and State of New York, this 19th day of April, 1928.

JOSHUA L. COWEN.

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