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S. SCHAFFAN, JR
MINIATURE RAILWAY CONNECTOR

2,567,790

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Fig. 1

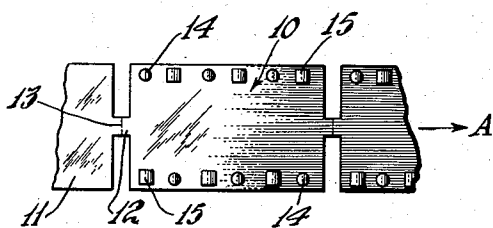


Fig. 2

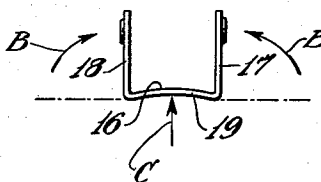


Fig. 3



Fig. 4



Fig. 6

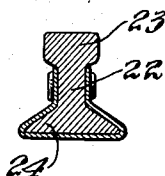


Fig. 5

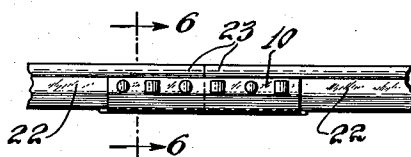
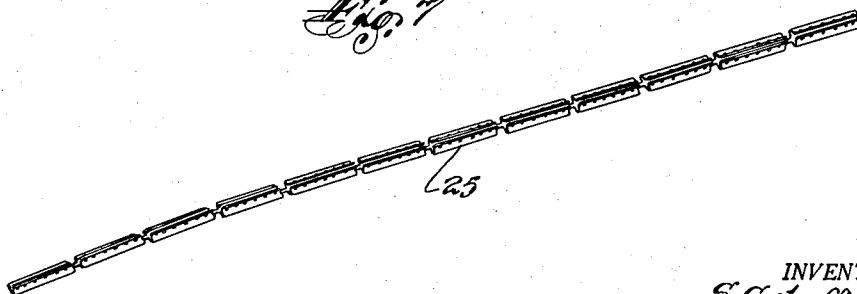


Fig. 7



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MINIATURE RAILWAY CONNECTOR

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1 Claim. (Cl. 238—205)

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This invention relates to improvements in connectors such as are used for connecting rail sections of miniature railway systems.

It is the object of this invention to provide a connector which may be readily manufactured in an economical manner and which will prove effective, efficient and durable in use.

These and other advantageous objects, which will later appear, are accomplished by the structure shown and illustrated in the accompanying drawings, wherein:

Fig. 1 is a top plan view illustrating the first step in one method of manufacture of the connector of my invention,

Fig. 2 is an end elevational view of the connector in the second step of said method of manufacture,

Fig. 3 is a similar view of the connector in the final or completed stage of manufacture,

Fig. 4 is a fragmentary side elevational view of an article of manufacture comprising a plurality of connectors manufactured pursuant to my invention,

Fig. 5 is a fragmentary side elevational view of a connector embodying my invention, shown connecting a pair of rail sections,

Fig. 6 is a vertical transverse sectional view taken on line 6—6 of Fig. 5, and

Fig. 7 is a perspective view of an article of manufacture comprising a group of connectors embodying my invention.

As shown in Fig. 1 of the drawings, the connector of my invention is preferably fabricated from relatively flexible material, to the form shown in Fig. 7 by the use of manufacturing expedients such as plastic molding, extrusion or other convenient means. One method of manufacture is illustrated in the drawings, involving the use of dies, wherein the connector is manufactured from flat stock material 11, such as thin steel or other flexible material, moved in the direction indicated by the arrow A and blanked out to define the outline of the connector 10 with the links 12 of reduced width therebetween. Said links are preferably scored or otherwise weakened as at 13 to facilitate cutting, breaking, the same or otherwise separating the connectors for use.

Fig. 2 illustrates the second step of manufacture, wherein the connectors 10 are subjected to the action of tools and dies to elevate the side walls 17 and 18 thereof to parallel position in the direction of the arrows B while the bottom 16 thereof is subjected to the action of tools and dies as indicated at C to impart a concave cross-section 19 thereto.

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Fig. 3 illustrates the last manufacturing step wherein the side walls of the connector are subjected to the action of tools and dies brought against the same in the direction of the arrows D to bend the same by imparting obtuse angles at 20, 21 thereto, substantially medially of the height thereof.

By virtue of the concavity of the bottom wall 16 of the connector 10, when the latter receives a rail as shown in Fig. 6, the flat bottom portion 24 of the rail 22 will straighten the concave portion of the connector 10 and the side walls of the connector will tightly embrace the rail so that the connector will become tightly wedged on the rail with the side walls 17 and 18 tightly embracing the neck portion of the rail and abutting the under-surface of the head 23 thereof.

The connectors 10 manufactured pursuant to the above disclosure are preferably cut off as articles of manufacture into groups of twelve or any other convenient number, as shown in Fig. 7, and may be sold in groups of such units for facility of use. Thus the connectors are protected against accidental bending and separation until it is desired to use the same, at which time they may be simply cut apart or otherwise separated at 13 for connecting rail sections 22 as in Fig. 5.

The connector of my invention is provided, in the first step of manufacture illustrated in Fig. 1, with the alternately arranged embossed or depressed portions 14, 15 in simulation of the head and nut ends of bolts used in the connectors of standard gauge railroads. In model railroads, such connectors are known as "rail joiners," "rail connectors" or "fish plates." The effective simulation of the standard gauge connector is made apparent from an inspection of Fig. 4; it will be further noted from an examination of Fig. 5 that the simulation in actual use is quite accurate.

While I have shown in the drawings and described in the above specification, a convenient form of structure and method of making the same embodying my invention, it will be apparent from such disclosure that the invention is capable of many modifications in structure and method of manufacture without departing from the spirit and scope thereof, as set forth in the appended claim.

Having thus described my invention what I claim as new and desire to secure by Letters Patent, is:

A rail connector for miniature railway track systems comprising an imperforate member formed from a blank of relatively thin and

readily flexible material, said member including a bottom wall generally arcuate and upwardly convex in cross-section, and upwardly extending side walls, each side wall including an inwardly directed portion medially of its height, and upwardly directed portions extending from said inwardly directed portions and cooperating therewith to receive and engage rail ends to be inserted therein, said connector automatically conforming to the shape of the inserted rail ends for locking the rail ends in said connector without the use of separate fastening means, the upwardly directed portions of the side walls being embossed to simulate the head and nut ends of bolts used in rail connectors of standard gauge. 15

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