July 31, 1951 W. C. LEVERING 2,562,623

TOY RAILROAD TRACK AND ROADBED UNIT

Filed Feb. 19, 1948

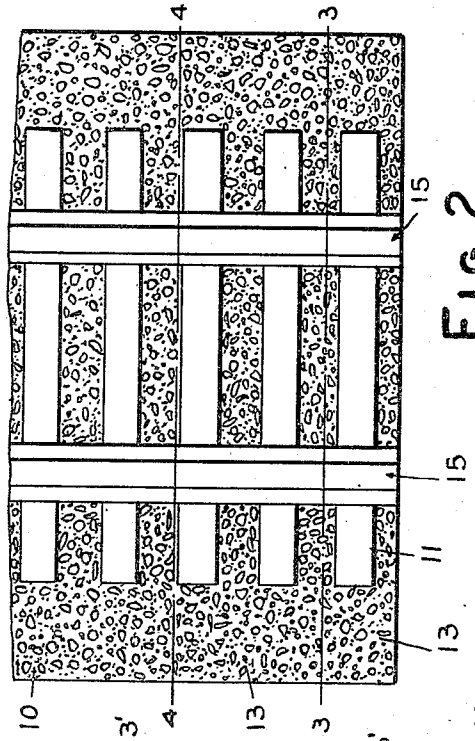


FIG. 2.

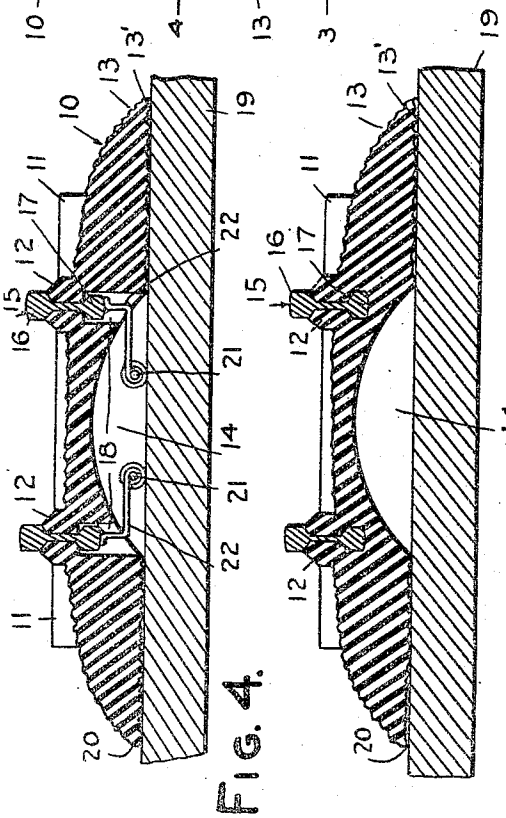


FIG. 4.

FIG. 3.

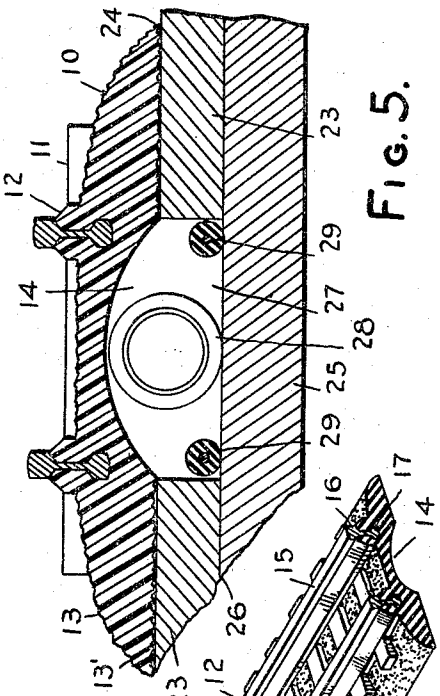


FIG. 5.

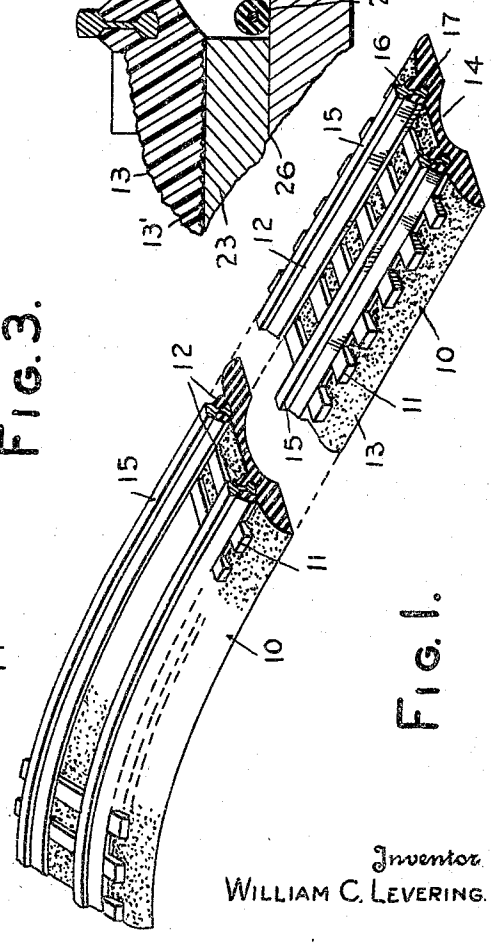


FIG. 1.

Inventor
WILLIAM C. LEVERING.

By

Attorney

Patented July 31, 1951 2,562,623

UNITED STATES PATENT OFFICE

2,562,623

TOY RAILROAD TRACK AND ROADBED UNIT

William C. Levering, Martinsville, N. J.

Application February 19, 1948, Serial No. 9,555

1 Claim. (Cl. 238—10)

1

My invention is a toy railroad track and roadbed unit.

An important object of the invention is to provide a device of the above mentioned character, having the metallic rails embedded in the roadbed, producing a highly simplified permanently assembled unit.

A further object of the invention is to provide a track and roadbed unit which will closely simulate the conventional railroad track and roadbed.

A further object of the invention is to provide a toy railroad track and roadbed unit which may be formed flexible so that it may be curved vertically or horizontally.

A further object of the invention is to provide a toy roadbed unit having a recess formed upon its lower face for the reception of electric means.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a perspective view of a toy railroad track and roadbed unit embodying my invention,

Figure 2 is a plan view of same, parts broken away,

Figure 3 is a transverse section taken on line 3—3 of Figure 2,

Figure 4 is a similar view taken on line 4—4 of Figure 2, and,

Figure 5 is a transverse section through the toy railroad track and roadbed unit showing a modified form of the invention.

As shown in Figures 1 to 4 inclusive, the numeral 10 designates a roadbed, which preferably is formed of rubber which is relatively thick and stiff enough to hold its shape but may be flexed or bent. The degree of stiffness may vary but satisfactory results are obtainable by having the rubber in the roadbed about as flexible as the rubber in a deflated pneumatic tire of a bicycle. Arranged upon the upper surface of the roadbed are spaced cross-ties 11 and upwardly projecting tapering flanges 12. The upper face of the roadbed 10 is formed roughened, as indicated at 13, to simulate stone ballast. The lower face 13' is also preferably roughened. The roadbed 10 is provided with a central longitudinal recess 14 extending throughout its entire length.

The numeral 15 designates rails having upper and lower heads 16 and 17. These rails are embedded within the roadbed 10, and are arranged between the flanges 12. The rails 15 are metal, and are preferably formed of some metal which is not resilient to any considerable extent, such as iron or copper, whereby the rails will retain a curved shape when bent into the same.

2

The roadbed 10 is formed in a straight mold, and the rails 15 in their straight condition are suitably supported in the mold cavity. The plastic material, such as rubber, is introduced into the mold cavity and molded about the rails 15, which become embedded therein, as shown and described. The rubber is of course suitably vulcanized within the mold cavity, as is well known. During this molding operation, one or more pairs of vertical openings 18 are molded in the roadbed 10, lead to the lower heads 17 and discharge into the recess 14. The roadbed 10, cross-ties 11, and flanges 12 are formed integral.

As stated, the railroad track and roadbed unit are originally formed straight, and being bendable or flexible, may be bent or curved horizontally or vertically, to assume the desired shape. The roadbed 10, which may or may not be bent or curved, is arranged upon a rigid base 19 and rigidly secured thereto by cement at the line 20.

The numeral 21 designates control wires, mounted within the recess 14, and having connection with branch lead wires 22 extending through openings 18 and soldered or otherwise electrically connected with the lower heads 17, as shown. The rails 15 may therefore be connected with the opposite poles of the source of current, for supplying the current to the motor of the toy locomotive traveling upon the rails 15.

The roadbed 10 is molded from some flexible material like rubber, when it is desired that the combined track and roadbed unit be flexed. When such unit is constructed in a straight length not to be bent, then the roadbed unit may be molded from a rigid phenolic thermosetting plastics material such as "Bakelite." Both materials are electrical insulators.

In Figure 5, I have shown a slight modification of the invention. The track and roadbed unit is identical with that shown in connection with the first form of the invention except that the roadbed 10 is shown as formed from a molded thermosetting plastics material, such as "Bakelite," and the openings 18 are omitted. This roadbed 10 is mounted upon spacing elements 23, and are rigidly secured thereto by cement, at the line 24. These spacing elements 23 are mounted upon a rigid base 25 secured thereto by cement at the line 26. The recess 14 is in

communication with a passage 27 formed by the spacers 23. The enlarged opening formed by the recess 14 and passage 27 receives a magnetic coil 28 and control wires 29. This magnetic coil produces a point of magnetism which travels longitudinally of the coil and track, and will co-act with an iron part secured to a toy locomotive or the like, arranged upon the track to cause the same to travel longitudinally of the track.

It is to be understood that the forms of my invention herewith shown and described are to be taken as preferred examples of the same and that various changes in the shape, size and arrangement of parts may be resorted to without departing from the spirit of my invention or the scope of the subjoined claim.

Having thus described my invention, what I claim is:

A toy railroad track and roadbed unit comprising a unitary continuous flexible roadbed formed of moulded plastic material, the roadbed having its upper surface roughened to simulate rock ballast, the roadbed being provided upon its upper face with raised transverse projections simulating crossties, said roadbed being provided at its transverse center and upon its lower face with a longitudinal recess which reduces the thickness of the roadbed at its top adjacent to the transverse center of the roadbed, the sides of the recess terminating short of the longitudinal edges of the roadbed so that the roadbed has relatively wide thick longitudinal marginal edge portions, and separate flexible substantially non-resilient metallic rails having upper and lower heads, the rails having their body portions and lower heads embedded within the relatively wide thick longitudinal marginal edge portions and the upper heads projecting above the upper face of the roadbed, the recess increasing the flexibility of the roadbed and also receiving electric elements, the roadbed and rails being bendable as a unit to a selected curvature, the non-resilient rails being stiff enough to prevent the flexible roadbed from returning the unit to the straight position after it is bent and released so that the unit retains its selected curvature.

WILLIAM C. LEVERING.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,096,632	Kramer	May 12, 1914
1,773,560	Westcott	Aug. 19, 1930
1,783,367	Peterson, Jr.	Dec. 2, 1930
1,949,720	Kelley	Mar. 6, 1934
2,153,624	Jones	Apr. 11, 1939
2,196,257	Dubilier	Apr. 9, 1940
2,239,395	Mallory	Apr. 22, 1941
2,265,965	Frisbie	Dec. 9, 1941
2,272,903	Bonanno	Feb. 10, 1942