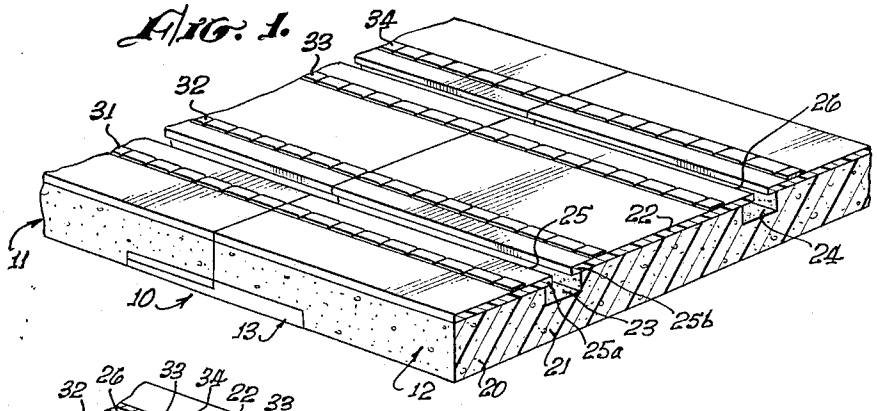
Nov. 29, 1966 I. R. ATHEARN 3,288,368

FLEXIBLE SLOT-RACING TRACK

Filed April 10, 1964 2 Sheets-Sheet 1

FIG. 1.



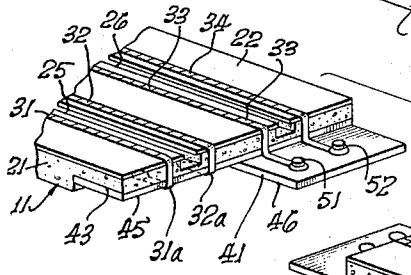


FIG. 2.

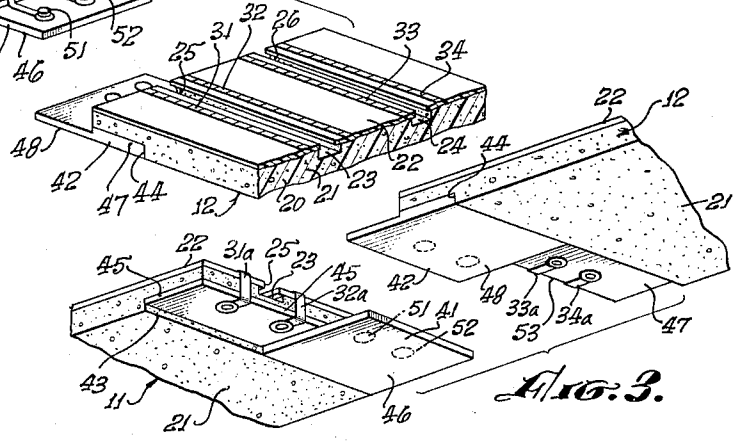
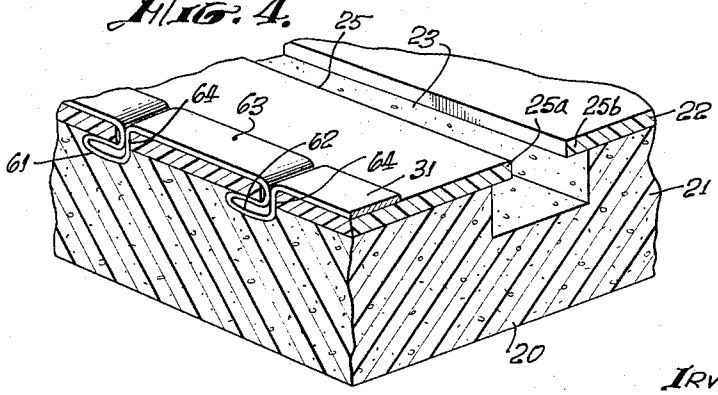


FIG. 3.

FIG. 4.



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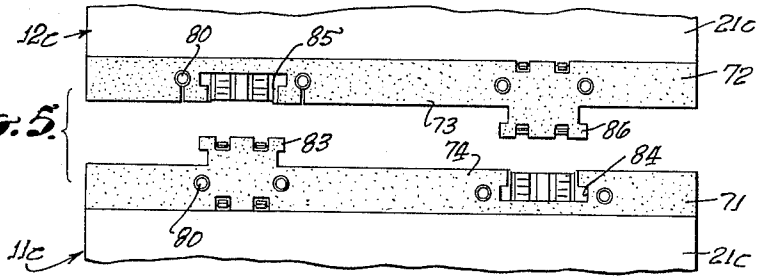
By Edmond F. Shanahan
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Nov. 29, 1966 I. R. ATHEARN 3,288,368

FLEXIBLE SLOT-RACING TRACK

Filed April 10, 1964 2 Sheets-Sheet 2

FIG. 5.



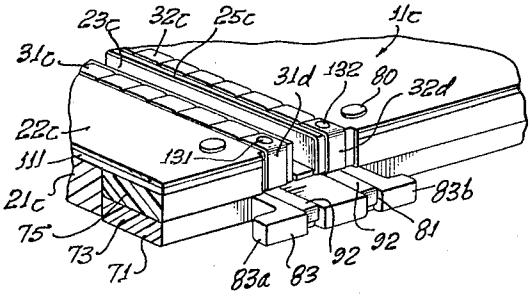


FIG. 6.

FIG. 7.

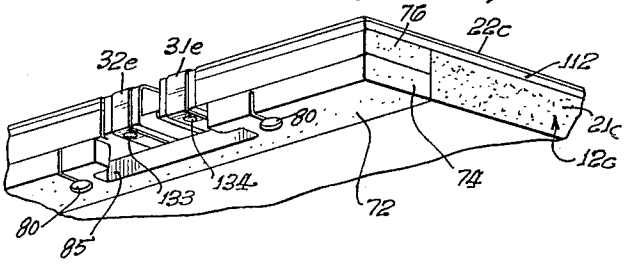


FIG. 10.

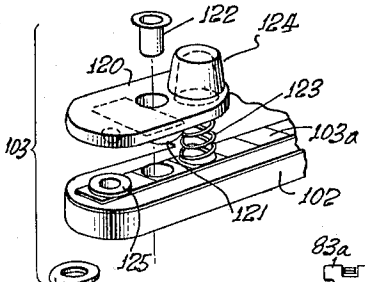


FIG. 8.

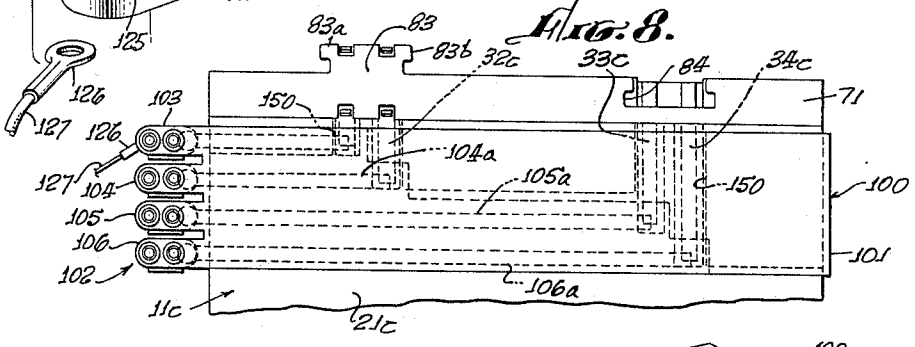


FIG. 9.

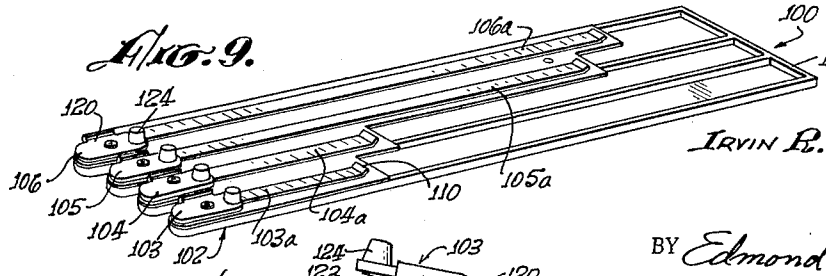
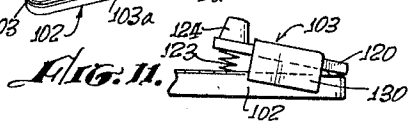


FIG. 11.



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Patented Nov. 29, 1966

3,288,368

FLEXIBLE SLOT-RACING TRACK

Irvin R. Athearn, 11129 Van Buren Ave., Los Angeles, Calif.

Filed Apr. 10, 1964, Ser. No. 358,915
10 Claims. (Cl. 238—10)

This invention relates generally to slotted roadways or tracks used for the racing of electrically powered model automobiles and the like. More particularly, the invention is a slotted track construction which is flexible and may be rolled up for storage. The track of the invention is of laminated construction, being comprised of a base lamination of relatively thick and relatively yielding flexible material, such as foam plastic, and a surface lamination which is relatively thin, hard, and unyielding, but flexible enough for rolling up.

In a preferred form of the invention, electrical supply strips on each side of the slotted track are formed by stitching a copper ribbon to the racing surface lamination with a loop of excess ribbon under the surface lamination at each stitch point, thereby making the copper ribbon longitudinally extensible.

In model motoring, a model automobile containing a small low-voltage electric motor, is operated on a roadway platform which is provided with a guide slot to steer the automobile, and a pair of electric power tracks to supply electric power to the motor. The front wheels of the model automobile are steerable and are provided with a downwardly projecting slot-follower, usually an arm of metal or plastic closely received in the guide slot. The underside of the automobile is also provided with a pair of downwardly projecting electrical pick-up brushes, which ride along the electrical supply tracks.

Usually the roadway is equipped to provide parallel racing for two or more model automobiles. The roadway is usually constructed of a number of rigid track sections, which may be assembled on a plywood panel, or other rigid platform, to provide two or more parallel racing slot roadways. Separate electrical controls are then provided so that two operators can race their cars in competition over the slotted roadway.

Although the hobby and sport of slot-track racing with model automobiles has grown rapidly in recent years, it has been restricted by the need for a bulky, costly, and substantially permanent roadway structure. The rigid sections of slotted track have usually been screwed to one or more panels of plywood, four feet by eight feet each. Such a roadway is so massive and heavy that it is not practical for most people to erect in a home, or even to store in a garage, or to transport in the family automobile.

Despite the massiveness of the rigid track used heretofore, such tracks have had certain deficiencies in reliability of operation. The electrical tracks most commonly used in the past have employed strips of sheet steel embedded in the track surface. These steel tracks have tended to become corroded, and to present increasing resistance to the transmission of power to the automobile; it has been necessary to periodically clean them, in order to keep the roadway in satisfactory operation.

Most tracks heretofore known have been formed of plastic by means of molding dies. It has not been practical to mold track sections with slots having overhanging shoulders, so as to retain the track follower of the model automobile. Methods for adding retaining shoulders to the guide slots have heretofore been relatively expensive.

The major object of the present invention is to provide a slotted-track roadway which is flexible, lightweight, and adapted to be rolled up for storage.

Another important object of the present invention is

to provide a flexible roadway of sufficient thickness to provide a guide slot large enough to accommodate standard slot-followers, and overhanging shoulders along the sides of said slots for assisting in the retention of the slot-follower.

Still another object of the invention is to provide a flexible roadway having copper tracks which are substantially free of corrosion problems, and which are flexible enough to withstand repeated rolling and unrolling of the flexible roadway.

The foregoing and other objects of the invention are accomplished by means of a roadway construction which employs a base of polyurethane foam having a thickness at least twice the slot depth. Sponge rubber or similar material may be substituted for the polyurethane foam, but it will be understood from the following description that the base material must have a soft resilience permitting it to be elongated and otherwise deformed during rolling, in order that it may accommodate itself to the rolling of a relatively less flexible surface lamination. It has been discovered that material which is soft enough to deform readily for rolling up must have a thickness of twice the slot depth in order to retain constant width of slot.

The preferred surface lamination is the so-called "rigid" vinyl sheet, which presents a relatively hard and unyielding surface to the weight of the model automobile, but is nevertheless flexible enough to be rolled up for storage. Other stiff but flexible sheeting, such as other plastics, or plasticized textiles, may be substituted for vinyl, provided they combine the requirements of providing a flat road surface when unrolled, and yet are capable of being rolled up for storage, without taking a set, i.e., being permanently deformed by rolling.

The electrical power strip employed in the invention is a copper ribbon bonded, stapled, or stitched to the road surface lamination, with spaced looping provided to permit the strip to experience elongation during rolling, without being subjected to sufficient tension to break it.

One species of the invention is much preferred beyond any other. It is a species which employs the copper ribbon in a lock stitching manner, with a loop projecting through the surface lamination to the underside thereof at each locked stitch location. Such a construction, as will be described in detail hereinafter, provides an electrical contact strip which is permanently and firmly attached to the flexible roadway, but which nevertheless has so much excess material in the stitch loops that it yields longitudinally when the flexible roadway is deformed, without breaking. It remains flat enough for good electrical contact during operation despite many repeated rollings and unrollings of the roadway.

The invention will best be understood from the following description of a preferred specific embodiment, read in connection with the accompanying drawings, in which:

FIGURE 1 is a perspective view of a short section of the roadway of the invention, showing two slotted tracks for the side by side racing of two automobiles, and the roadway coupling of two track sections;

FIGURE 2 is a perspective view of the roadway sections of FIGURE 1, showing them uncoupled and withdrawn from the plane of connection a sufficient distance to reveal the coupling means;

FIGURE 3 is a perspective view of the uncoupled roadway sections of FIGURE 2, but viewed looking upwards from the bottom; and,

FIGURE 4 is a very much enlarged fragment of one of the roadways, seen in perspective from above, but also sectioned in a longitudinal vertical plane and a transverse vertical plane so as to reveal details of the roadway construction.

FIGURE 5 is a plan view of a second form of slotted roadway coupling;

FIGURES 6 and 7 are enlarged details, seen in perspective, of the mating parts of the coupling of FIGURE 5;

FIGURE 8 is a bottom view of an electric connection system associated with the coupling of the type illustrated in FIGURES 5 to 7;

FIGURE 9 is a perspective view, seen from above, of the electrical connection means which is attached to the bottom of the slotted roadway, and is viewed in bottom view in FIGURE 8;

FIGURE 10 is an enlarged perspective view showing one of the electrical connection means of FIGURE 9 in detail; and

FIGURE 11 is a small side elevation detail of the power connector terminal of FIGURE 10.

In FIGURE 1 a slotted roadway indicated generally by the numeral **10** is seen to be comprised of two track sections **11** and **12** which are connected end to end to form a continuous integral unit by a coupling means indicated generally by the numeral **13**.

Roadway section **12** is seen in cross section at **20**. The construction of roadway **12**, which is identical to that of roadway section **11**, is comprised of a relatively thick plastic foam base **21**, and a relatively thin, hard, stiff, but flexible sheet of vinyl **22** laminated to its upper surface (by means of a suitable adhesive or less desirably, by means of other types of attachment).

The softly yielding base layer **21** is provided with two guide slots **23** and **24**, and the surface layer **22** has longitudinal openings **25** and **26** above guide slots **23** and **24**, respectively.

It is to be noted that the surface sheet **22** projects over each side of the guide slots **23** and **24**, so as to provide longitudinal retaining shoulders (e.g., **25***a* and **25***b*) for holding the slot-follower of the model automobile with slightly greater firmness than is the case with a fully open slot. It will be understood that it is not the purpose of this track construction to retain the automobile on the track regardless of how carelessly it is operated in traveling over curved sections. The retaining shoulders **25***a* and **25***b* above slot **23**, for example, are sufficient to keep the track follower from touching the walls of the slot **23**, and also to retain it slightly better than a fully open slot, but will nevertheless permit the automobile to be thrown from the track by centrifugal force if the operator is careless or unskilled, thus adding to the sport of model automobile racing on a flexible roadway.

The relative physical characteristics and relative dimensions of laminations **21** and **22** are important parts of the present invention. Surface lamination **21** must provide the roadway **10** with a certain degree of rigidity and resistance to wear. For example, the thin surface lamination **22** must not only sustain the wear of the wheels of the racing model automobile, but, in addition, shoulders **25***a* and **25***b* must provide a smooth, hard, frictionless but wear-resistant surface for guiding the slot-following means (not illustrated) of a model automobile racer used on the roadway **10**.

Surface lamination **22** is laterally stiff, and generally resistant to deformation except that it is sufficiently flexible to be rolled up.

Base lamination **21**, on the other hand, must be sufficiently yielding to be deformable in all directions. It must follow curving roadway sections of surface lamination **22**. It must tolerate without rupture or set an extensive elongation at the bottom when the roadway sections **11** and **12** are rolled up.

On the other hand, it will be seen from the cross section **20** that it is only the soft and yielding base lamination **21** which provides lateral dimensional stability, that is, a constant width for slots **25** and **26** along their lengths. Experiment with many constructions for the roadway **10** has demonstrated that a base lamination **21** soft enough to have the required characteristics should preferably be approximately twice as thick as the depth of slot **23** in order to have sufficient structural strength to provide good follower slots of constant width at **25** and **26**. If the slot **23** exceeds half the thickness of base **21** by a substantial fraction, the roadway tends to develop varying slot width.

Electrical power is provided to the automobiles being guided over the roadways **11** and **12** by a pair of parallel copper ribbon contact strips **31** and **32** on each side of slot **23**, and **33** and **34** on each side of slot **24**. The copper strips **31** to **34** are attached to the roadway **13** by a stitching through the surface sheet **22** which will be described in detail hereinafter in connection with FIGURE 4.

FIGURES 2 and 3 reveal the details of the connector **13**. It is seen that roadway sections **11** and **12** are provided with mating connector members **41** and **42**, which are recessed into their lower surfaces in recesses **43** and **44**.

Typically, connector **41** is comprised of a base strip **45** which extends transversely across the entire width of the recess **43** transverse to the end of roadway section **11**, and a coupling tongue **46**, lying to one side of the longitudinal centerline of roadway section, which is usually only half as wide as the roadway section **11**, but extends beyond it.

Connector **42** is similarly constructed of a base strip **47** in recess **44**, and a half width tongue **48**, as best seen in the bottom perspective view of FIGURE 3.

It will be noted from FIGURES 2 and 3 that the recesses **43** and **44** somewhat reduce the thickness of the base lamination **21** at the coupling location. However, the coupling members **41** and **42** are of relatively rigid construction, and extend longitudinally with respect to the roadway sections **11** and **12** for a substantial distance on each side of the plane of connection, so as to provide smooth transition of the model automobile slot follower from one section to another.

FIGURES 2 and 3 illustrate a preferred manner of positive electrical connection between the electrical tracks **31** to **34** on different roadway sections **11** and **12**. Tracks **33** and **34** turn vertically downwards at the end of roadway section **11** to the upper surface of tongue **46** and then continue out on said surface to metal snap-connection buttons **51** and **52**. The bottom perspective view of FIGURE 3 reveals that snap-connection buttons **51** and **52** are received in snap-button recesses **53** and **54** on the underside of base section **47** on the adjacent end of roadway section **12**. The recesses **53** and **54** are small metal cups, which are electrically connected to track ribbons **33***a* and **34***a*, which latter follow the contour of the end of rotary section **12** to the upper surface of said roadway section. Another view of the recess cup electrical connection is seen from the top perspective view of FIGURE 2 for tracks **31** and **32** at **31***a* and **32***a*.

FIGURE 4 shows an enlarged perspective and sectional view of the roadway **10**, to illustrate the preferred form for attachment of an electrical track, typically track **31**. It will be understood that the track in rigid roadway sections heretofore known has not been required to withstand even a single folding, whereas the present roadway calls for an electrical track capable of withstanding repeated flexings during rolling and unrolling. It has been found that a vastly superior and longer lasting flexible roadway can be made by providing the electrical track **31** with extra loops **61** and **62** spaced, as by track sections **63** at intervals along the entire length of the track **31**. When such a construction is used, the track **31** may be a very thin soft ribbon of annealed copper. Prior to bonding of surface lamination **22** to the foam plastic base lamination **21** (by means of a suitable resin such as epoxies), the surface slits **64** along the entire path of the series of transverse slits **64** along the entire path of the electric path **31**. Also, prior to bonding, the copper ribbon is formed with its loops, and a loop inserted through

each of the transverse slits **64**. The upper track sections are rolled to flatten them, and the loops **61** and **62** are likewise rolled to be folded against the underside of surface lamination and provide anchoring.

When the surface lamination **22** is then bonded to the base lamination **21**, the loops **61** and **62** are permanently anchored in place so that the track ribbon **31** is not readily detached from surface lamination **22**. However, the loops **61** and **62**, although difficult to extract from slit **64**, do provide a resiliently yielding connection between each of the adjacent track sections **63**. Both the loop **62** and the adjacent softly elastic material of base lamination **21** permit of a certain amount of movement of track ribbon **31** in and out of slits **64** during deformation of the roadway **10**.

Roadway sections **63** are very short, and the loops **61** and **62** are repeated at such closely spaced intervals that the track ribbon **31** will not be ruptured by repeated rolling and unrolling of roadway **10**. A certain amount of experimental testing will be required to select the optimum spacing of slit **64**, and the optimum size of loops **61** and **62**.

FIGURES 5 to 7 illustrate an alternative and preferred construction for coupling to roadway sections. In these views, roadway parts corresponding to parts previously identified in connection with FIGURES 1 to 4, are identified again by the same numerals but with the addition of a lower case "*c*." Thus, in FIGURE 5, track sections **11***c* and **12***c* are coupled by means of a connector indicated generally by the numeral **70**, and comprised of the mating, mirror-image connecter members **71** and **72**.

The bottom view of FIGURE 5 and the perspective details of FIGURES 6 and 7 reveal that each of the connector members **71** and **72** is comprised of two hard plastic bars or strips riveted transversely to the ends of road sections **11***c* and **12***c*. Thus, connector member **71** is seen to be comprised of a lower coupling bar **73** and an upper anchor bar **75**, while connector member **72** is similarly constructed of lower coupling bar **74** and upper anchor bar **78**.

The roadways **11***c* and **12***c* are of an improved type provided with an intermediate lamination of stiff paper at **111** and **112**. This additional lamination of paper provides superior means of adhesion, since both plastic foam and vinyl can be attached to the paper better than to each other. It will also be understood that instead of paper **111**, a paint-like coating could be applied to provide the intermediate lamination.

The anchor bars **75** and **76** provide the means for securely fastening the connecting members **71** and **72** to the ends of road sections **11***c* and **12***c*, respectively. As seen in the perspective detail of FIGURE 6, the plastic foam base **21***c* terminates just behind the connector member **71**, while the vinyl surface lamination **22***c* has an extended length **22***d*, which extends over the upper surface of anchor bar **75**, as does also the paper lamination **111**. However, it will be obvious that the extended length **22***d* could be wrapped around anchor bar **75** and clamped between its lower surface and the upper surface of coupling bar **71**. In the construction illustrated anchor bar **75** is clamped against coupling bar **71** by anchoring rivets **80** (best seen in the bottom view of FIGURE 5) which pass through aligned holes in both coupling bar **73** and anchor bar **75**, as well as through vinyl lamination **22***d* and paper lamination **111** or **112**.

The coupling bar **73** has a projecting tongue **83** on one side of roadway **11***c* and a coupling recess **84** on the other side; coupling bar **74** is likewise, but oppositely provided with a coupling recess **85** and a coupling tongue **86**. The tongues **83** and **86** have hooking or locking engagement in coupling with mating recesses **85** and **84**, respectively. One preferred form of construction is the T-shape illustrated in the drawings, and seen, for example, in FIGURE 6 where tongue **83** is seen to have a pair of projecting side lobes **83***a* and **83***b*.

Continuous electrical contact between connected roadway sections **11***c* and **12***c* is provided by virtue of the fact that the ribbon contact strips **31***c* and **32***c* are fastened at their ends by copper rivets **131** and **132**, which pass through the anchor bar **75** and make electrical contact with a pair of junction conductors **91** and **92**, in the form of strips of resilient copper or brass, aligned with tracks **31***c* and **32***c*, and pressed against the electrical junction rivets **131** and **132** by the riveted assembly of coupling bar **73** to anchor bar **75**.

The appearance of the lower ends of the junction rivets may be seen in coupling member **72** for similar junction rivets **133** and **134**, which during coupling, press against the upper surfaces of junction conductors **91** and **92**.

The connector system **70** illustrated in FIGURES 5 to 7 is extremely rugged, holds roadway sections **11***c* and **12***c* in firm and close connection despite tensile stresses, prevents them from getting out of alignment, and provides assured positive electrical contact, even after prolonged and repeated usage.

FIGURES 8, 9 and 10 illustrate a preferred form of power input terminal, for use with the flexible slotted roadway **10** of the invention. It is illustrated in use with connector **70**, but it will be understood that it might be employed with other connectors, also. The power input terminal is indicated generally by the numeral **100**, in FIGURE 8, and is seen from the bottom of roadway section **11***c* into which it is fitted in a transverse recess **11***d*, in the plastic foam base **21***c*.

The perspective view of FIGURE 9 shows the power input terminal from above, a view possible only when it has been dismounted from under roadway section **11***c*.

The various components of the power input terminal **100** are all mounted on a power terminal block **101**, which may be conveniently molded of a structurally rigid, electrically insulating plastic. Power terminal bock **101** has a power connection section **102**, which projects to one side of roadway **11***c*, and mounts four terminal clamps **103**, **104**, **105** and **106**.

The terminal clamps **103** to **106** are in electrical connection with copper ribbon contact strips **31***c* to **34***c*, as illustrated in FIGURE 9. The roadway strips **31***c* to **34***c* are continued on the underside of foam base **21***c* for stepped distances, and the power terminal clamps **103** to **106** are provided with transverse power supply strips **103***a*, **104***a*, **105***a*, and **106***a* which have upturned ends **110** so as to make contact only with one of the roadway strips **31***c* to **34***c*. It will be understood that contact between the wrong power strip and roadway strip is avoided by recessing roadway strips **31***c* to **34***c* into the bottom of foam base **11***c* as indicated at **111**.

A preferred form of the power terminal clamp is illustrated in detail in the perspective view of FIGURE 10, and the side elevational view of FIGURE 11. In FIGURE 10, the typical terminal clamp **103**, mounted on the extending portion **102** of terminal block **101**, seen fragmentarily only in FIGURE 10, is seen to achieve clamping by a lever **120**, which has a transverse fulcrum wedge **121** and is assembled to terminal block extension **102** by a tubular rivet **122**. A helical holding spring **123** is housed in the interior of a finger button **124**, and urges the lever **120** into terminal clamping position as illustrated from one side in FIGURE 11.

The terminals may conveniently be ring terminals such as the ring terminal **125** on transverse power strip **103***a*, and ring terminal **126** attached to a power supply line **127**. A protruding boss **128**, on the underside of the end of lever **120** will serve to hold the ring terminals **125** and **126** in electrical contact with each other, except when released by pressure applied to finger button **124**.

The side view of FIGURE 11 shows that, in one preferred form, a vertical side flange **130** will help to keep lever **120** in proper alignment, despite its single assembly connection by rivet **122**, because of guiding engagement with the side of terminal block extension **102**.

While I have described one specific embodiment of the invention, and in particular a vastly superior and preferred form thereof, it is to be understood that the invention claimed is not restricted to the embodiment illustrated and its preferred details. The invention may be extensively modified albeit by subtraction of superior features to produce an inferior form thereof, by any variation or modification falling within the scope of the following claims.

For example, although the stitch looping of copper ribbon is a preferred species, a cheaper construction may employ a strip of conductive material, such as copper ribbon or plastic tape impregnated with conductive material (powdered copper, for example), which may be bonded to the upper surface of the roadway surface lamination by a suitable adhesive. In its least expensive form, no loop surplus material would be provided at spaced intervals, and rupture for repeated folding of the track would probably be encountered. However, even in a bonded track, the tendency to rupture may be reduced by introduction of some lengths of slack unattached portions of the strip at spaced intervals along the length thereof.

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

1. A flexible roadway for a model vehicle of the type which is electrically powered and provided with slot-follower and electrical pick-up means, which roadway includes: a laminated road structure comprised of a base lamination of readily deformable elastic material having a thickness substantially greater than the depth of slot required for said slot-follower, and a surface lamination of relatively thin, flexible, but deformation-resistant material, said roadway structure being slotted to guide said model vehicle by said slot follower; and electric track means on each side of said slot comprised of a ribbon of conductive material, said ribbon having loops of surplus material at spaced intervals along its length.

2. A flexible roadway for a model vehicle of the type which is electrically powered and provided with slot-follower and electrical pick-up means, which roadway includes: a laminated road structure comprised of a base lamination of readily deformable elastic material having a thickness substantially greater than the depth of slot required for said slot-follower, and a surface lamination of relatively thin, flexible, but deformation-resistant material, said roadway structure being slotted to guide said motor vehicle by said slot follower; inwardly projecting shoulders on each side of the opening of said slot formed by providing a greater slot width in said base lamination than in said surface lamination; and electric track means on each side of said slot comprised of a ribbon of conductive material, said ribbon having loops of surplus material at spaced intervals along its length.

3. A flexible roadway for a model vehicle of the type which is electrically powered and provided with slot-follower and electrical pick-up means, which roadway includes: a laminated road structure comprised of a base lamination of readily deformable elastic material having a thickness not substantially less than twice the depth of slot required to accommodate said slot follower, and a surface lamination of flexible but otherwise deformation-resistant material having a thickness small relative to said slot depth, said roadway structure being slotted to guide said motor vehicle by said slot follower; and electric track means on each side of said slot comprised of a ribbon of conductive material, said ribbon having loops of surplus material at spaced intervals along its length, each of said loops being received through said surface lamination into said base lamination through longitudinally spaced transverse slots in said surface lamination, and each of said loops being folded under said surface lamination to provide anchoring.

4. A flexible roadway for a model vehicle of the type which is electrically powered and provided with slot-follower and electrical pick-up means, which roadway includes: a laminated road structure comprised of a base lamination of readily deformable elastic material having a thickness not substantially less than twice the depth of slots required to accommodate said slot-follower, and a surface lamination of flexible but otherwise deformation-resistant material having a thickness small relative to said slot depth, said roadway structure being slotted to guide said motor vehicle by said slot follower; inwardly projecting shoulders on each side of the opening of said slot formed by providing a greater slot width in said base lamination than in said surface lamination; and electric track means on each side of said slot comprised of a ribbon of conductive material, said ribbon having loops of surplus material at spaced intervals along its length, each of said loops being received through said surface lamination into said base lamination through longitudinally spaced transverse slots in said surface lamination, and each of said loops being folded under said surface lamination to provide anchoring.

5. A flexible roadway for a model vehicle of the type which is electrically powered and provided with slot-follower and electrical pick-up means, which roadway includes: a laminated road structure comprised of a base lamination of readily deformable elastic material having a thickness at least twice the depth of slot required to accommodate said slot-follower, and a surface lamination of flexible but otherwise deformation-resistant material having a thickness small relative to said slot depth, said roadway structure being slotted to guide said motor vehicle by said slot follower; inwardly projecting shoulders on each side of the opening of said slot formed by providing a greater slot width in said base lamination than in said surface lamination; electric track means on each side of said slot comprised of a ribbon of conductive material, said ribbon having loops of surplus material at spaced intervals along its length, each of said loops being received through said surface lamination into said base lamination through longitudinally spaced transverse slots in said surface lamination, and each of said loops being folded under said surface lamination to provide anchoring; coupling means at adjacent ends of sections of said roadway comprised of a projecting tongue on the undersurface of said base lamination on one side of the longitudinal centerline thereof, and a tongue receiving connector recessed in the undersurface of said base lamination to receive a similar tongue on the opposite side, said connection on adjacent sections being oppositely arranged to mate with one another, and continuing portions of said conductive track means connected to connection points on said tongues and tongue receiving recesses for the secure electrical connection between electrical track means on connected roadway sections.

6. A flexible roadway for a model vehicle of the type which is electrically powered and provided with slot-follower and electrical pick-up means, which roadway includes:

a laminated road structure comprised of a base lamination of readily deformable elastic material and a surface lamination of relatively thin, flexible, but deformation-resistant material, said roadway being slotted to guide said model vehicle by said slot-follower;

electric track means on each side of said slot comprised of a ribbon of conductive material, said ribbon being attached to the surface of said surface lamination;

transverse coupling bar means attached to the ends of adjacent sections of said roadway, and having adjacent mating tongues and slots for the coupling of said roadway sections;

and electrically conductive junction strips on said coupling means for interconnecting corresponding electric tracks on adjacent ends of said roadway sections.

7. A flexible roadway for a model vehicle of the type which is electrically powered and provided with slot-fol-

lower and electrical pick-up means, which roadway includes:

a laminated road structure comprised of a base lamination of readily deformable elastic material and a surface lamination of relatively thin, flexible, but deformation-resistant material, said roadway being slotted to guide said model vehicle by said slot-follower;

electric track means on each side of said slot comprised of a ribbon of conductive material, said ribbon being attached to the surface of said surface lamination;

transverse anchor bars at adjacent ends of sections of said roadway;

transverse coupling bars attached to the underside of said anchor bars, coupling bars of adjacent sections of said roadway having adjacent mating tongues and slots for the coupling of said roadway sections;

and electrically conductive junction strips on said tongues and slots for interconnecting corresponding electric tracks on adjacent ends of said roadway sections.

8. A flexible roadway for a model vehicle of the type which is electrically powered and provided with slot-follower and electrical pick-up means, which roadway includes:

a laminated road structure comprised of a base lamination of readily deformable elastic material and a surface lamination of relatively thin, flexible, but deformation-resistant material, said roadway being slotted to guide said model vehicle by said slot-follower;

electric track means on each side of said slot comprised of a ribbon of conductive material, said ribbon being attached to the surface of said surface lamination;

transverse anchor bars at adjacent ends of sections of said roadway, said surface lamination together with said ribbons of conductive material thereon being continued around and under said transverse anchor bars;

transverse coupling bars attached to the underside of said anchor bars, coupling bars of adjacent sections of said roadway having adjacent mating tongues and slots for the coupling of said roadway sections;

and electrically conductive junction strips on said tongues for interconnecting corresponding electric tracks on adjacent ends of said roadway sections.

9. A flexible roadway for a model vehicle of the type which is electrically powered and provided with slot-follower and electrical pick-up means, which roadway includes:

a laminated road structure comprised of a base lamination of readily deformable plastic material and a surface lamination of relatively thin, flexible, but deformation-resistant material, said roadway being slotted to guide said model vehicle by said slot-follower;

and electrical track means on each side of said slot comprised of a ribbon of conductive material, said ribbon being attached to the surface of said surface lamination.

10. A flexible roadway for a model vehicle of the type which is electrically powered and provided with slot-follower and electrical pick-up means, which roadway includes:

a laminated road structure comprised of a base lamination of readily deformable plastic material and a surface lamination of relatively thin, flexible, but deformation-resistant material, said roadway being slotted to guide said model vehicle by said slot-follower;

electrical track means on each side of said slot comprised of a ribbon of conductive material, said ribbon being attached to the surface of said surface lamination;

intermediate lamination between said base lamination and said surface lamination, and providing secure adhesion for each of said laminations;

and expansion loops of said ribbon at spaced intervals along its length, said loops having conductive material not attached to said surface lamination, and normally slack to provide lengthening of said track means without tension when said roadway is deformed.

No references cited.

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