No. 649,828. Patented May 15, 1900.

R. EVANS & G. J. HOOPER, JR.

CONTINUOUS TRACK FOR BICYCLES, &c.

(Application filed Sept. 13, 1899.)

(No Model.) 2 Sheets—Sheet 1.

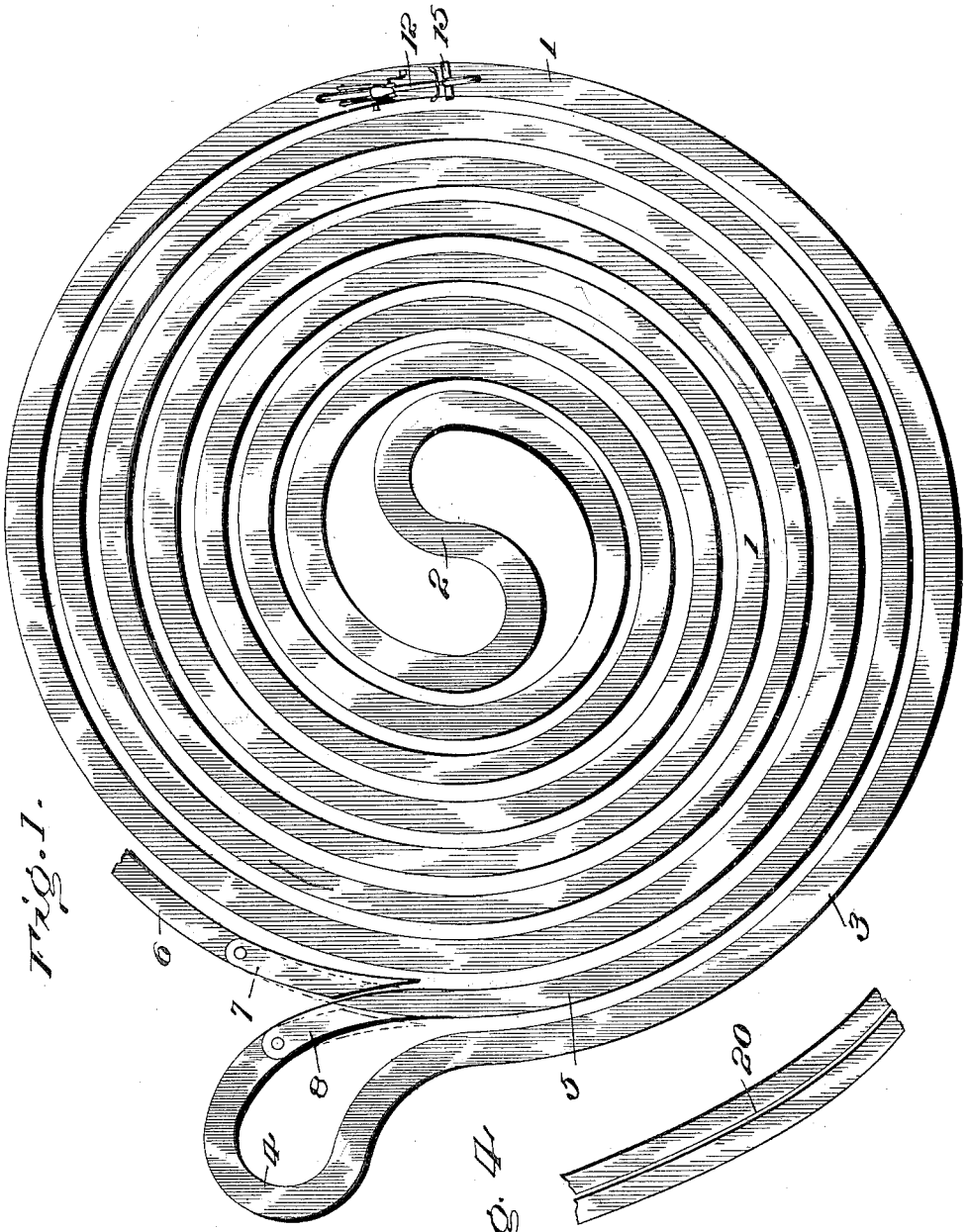

Fig. 1.

Fig. 4.

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Fig. 2.

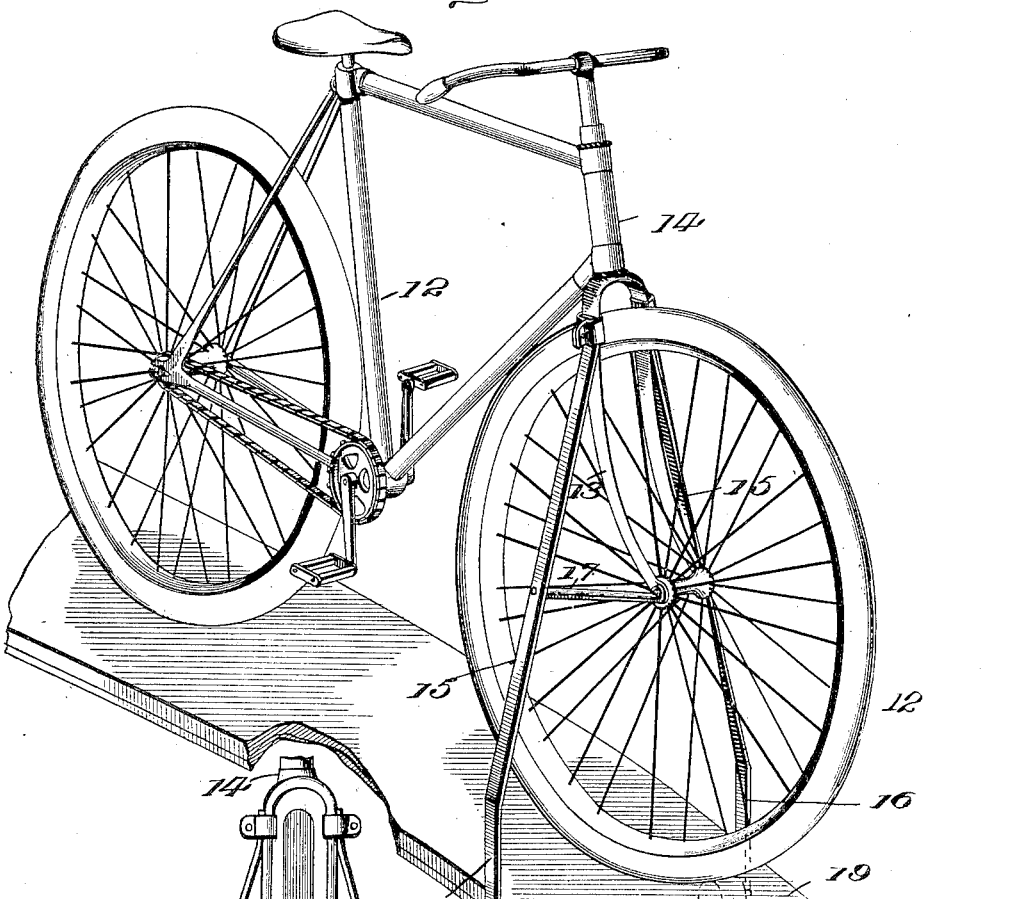
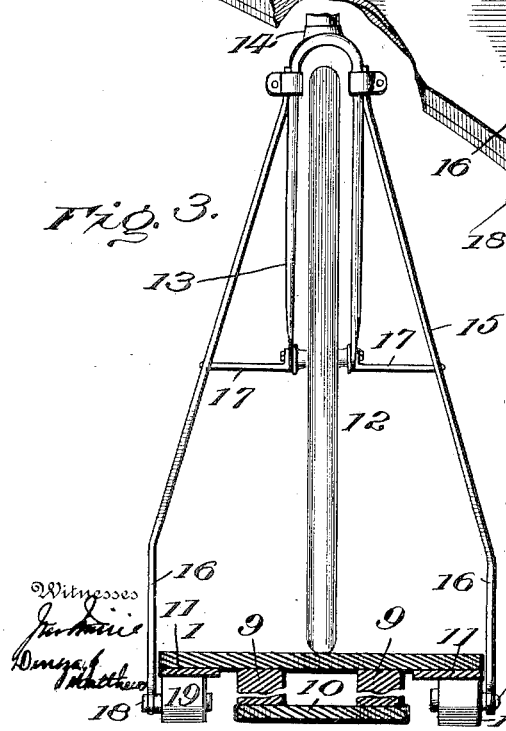


Fig. 3.



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UNITED STATES PATENT OFFICE.

RICHARD EVANS AND GEORGE J. HOOPER, JR., OF RICHMOND, VIRGINIA.

CONTINUOUS TRACK FOR BICYCLES, &c.

SPECIFICATION forming part of Letters Patent No. 649,828, dated May 15, 1900.

Application filed September 13, 1899. Serial No. 730,375. (No model.)

To all whom it may concern:

Be it known that we, RICHARD EVANS and GEORGE J. HOOPER, Jr., citizens of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented certain new and useful Improvements in Continuous Tracks for Bicycles, &c.; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to continuous tracks for the purpose of amusement or exercise in accordance with the proportions and dimensions of the same and of the devices relatively coacting therewith.

It is the intent and purpose of the invention to construct a track of spiral form having a central compound curved loop to permit a reverse traverse and an outer end return-loop to preserve the continuity and enable an object on the track to move through decreasing curves toward the center and return over increasing curves between the decreasing ones until it reaches the outer termination of the track, where a substantial circular movement can be made back to the starting-point. By this means in a large device a long stretch of track in a comparatively-small compass is attainable and avoid a rotary swing or movement continuously in one direction, and thereby prevent dizziness and other injurious effects.

The invention consists of the construction and arrangement of parts more fully hereinafter described and claimed and such changes thereof in the proportions, dimensions, and minor details as legitimately fall within the scope of the invention.

In the accompanying drawings, Figure 1 is a top plan view of a track embodying the invention and showing a bicycle located on one portion thereof. Fig. 2 is a perspective view of a portion of the track and a bicycle thereon. Fig. 3 is a sectional elevation of the track and a part of the bicycle. Fig. 4 is a detail plan view of a modification.

Referring to the drawings, wherein similar numerals are utilized to indicate corresponding parts in the several views, the numeral 1 designates a track of regular spiral form having a length dependent on the number of coils used. At the center the coils are formed into a regular compound curved reverse 2, and the outer termination of the outermost coil 3 is merged into a substantially-circular return-bend 4, which is connected to the coil 5 next the said outermost coil. At the point where the return-bend meets the coil 5 the latter has a curved rest siding or extension 6 for supporting the movable objects not in use on the track. Between the point of meeting of said siding or extension and the coil 5 a pivoted switch-bar 7 is located and is intended to stand normally open. Said switch-bar is of such shape that when the free end thereof is brought to bear on the adjacent part of the coil 5 to close the opening between said coil and switch-bar the latter regularly conforms to and continues the curvature of the coil, and a movable object can then be easily run onto the said coil from the siding or extension, or vice versa. Between the return-bend 4 and outer termination of the coil 5 another switch-bar 8 is located and is normally closed. The said bar 8 is also shaped to continue the lines of curvature and is opened, as shown in dotted lines, when the bar 7 is closed, so that the opposite edges of adjacent termination of the coil 5 may have both edges clear. At the points of location of the switch-bars noted the several parts of the track are connected by suitable depressed devices, which extend under the said bars and do not interfere with the operation of the movable objects.

The floor or upper bearing-surface of the track is constructed of suitable material and thickness and supported by sills 9, Figs. 2 and 3, resting on a base beam or plate 10. Outside of the opposite sills and against the under side of the floor of the track from the edges inwardly smooth track plates or strips 11 are secured and constructed of such material as to resist wear.

To illustrate the utility of the track, a movable object in the form of a bicycle 12 is shown in the accompanying drawings. It will be understood, however, that other objects or devices could be equally well employed. To the opposite sides of the front fork 13, near the base of or point of connection with the front post 14, the upper ends of two rods 15

are secured and diverge equally. The lower terminations 16 of said rods are vertical and depend below the track and stand out from the edges of the latter to permit a sidewise movement. At a proper elevation horizontal braces 17 are secured to the rods 15 and the axle of the front wheel of the bicycle. In the lower ends of the vertical terminations 16 of the rods inwardly-extending stub-axles 18 are mounted and have rollers 19 thereon, which are held closely to and rotatably bear on the plates or strips 11. The rods 15, with their lower vertical terminations 16, hold the bicycle centrally of the track, and to accommodate the curves the latter may be canted, as found necessary. Also the bicycle is held upright and prevented from falling to either side and can be ridden by any one whether a bicycle-rider or not. Furthermore, a number of bicycles or other movable objects can traverse the track without interference, and considerable amusement as well as harmless exercise can be had.

The reverse bend at the center and outer return-loop make the service of a number of attendants unnecessary, and the movement of the object in a reverse direction renders the device perfectly safe and harmless.

In Fig. 4 a portion of the track is shown having a central slot 20 for the purpose of making a cable-track, and chairs, hobby-horses, or other vehicles could be attached thereto and be given a continuous and regular movement.

Having thus described the invention, what is claimed as new is—

1. A pleasure-railway track of true spiral formation, beginning at the center and winding outward in spiral lines, and having all the volutes or elements in substantially the same horizontal plane.

2. A pleasure-railway track comprising a member of spiral formation winding from the center outward, a second member winding from the outer terminal of the first-mentioned member inward, and reverse curves or loops at the inner and outer terminals of the two members, the volutes of the two members alternating and with the connecting-loops being in the same horizontal plane, substantially as set forth.

3. A pleasure-railway track comprising parallel track members winding horizontally from the center outward in true spiral form, reverse bends or loops in the same horizontal plane with and connecting adjacent terminals of the parallel track members, one of the curves or loops including a switch-bar, a siding, and a second switch-bar adapted to connect the siding with the terminal of the track member with which the switch-bar of the loop coöperates, the two switch-bars being located upon opposite sides of the pointed terminal of the track member, substantially as described.

4. A pleasure-railway track of the character described comprising a plate, parallel sills applied to the plate, a floor secured to the sills and projecting beyond the opposite sides thereof and having its longitudinal edges parallel, and strips secured to the under side of the floor adjacent to its longitudinal edges, substantially as set forth.

5. In combination with a pleasure-railway track, a bicycle or like movable object to travel upon the track, rods clipped at their upper ends to the upper ends of the fork sides and downwardly divergent and having rollers at their lower ends to bear against the strips applied to the lower side of the track, and horizontal braces connecting the axle and the lower ends of the fork sides with the said rods, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

RICHARD EVANS.
GEORGE J. HOOPER, JR.

Witnesses:
E. S. MITCHELL,
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