

No. 726,224.

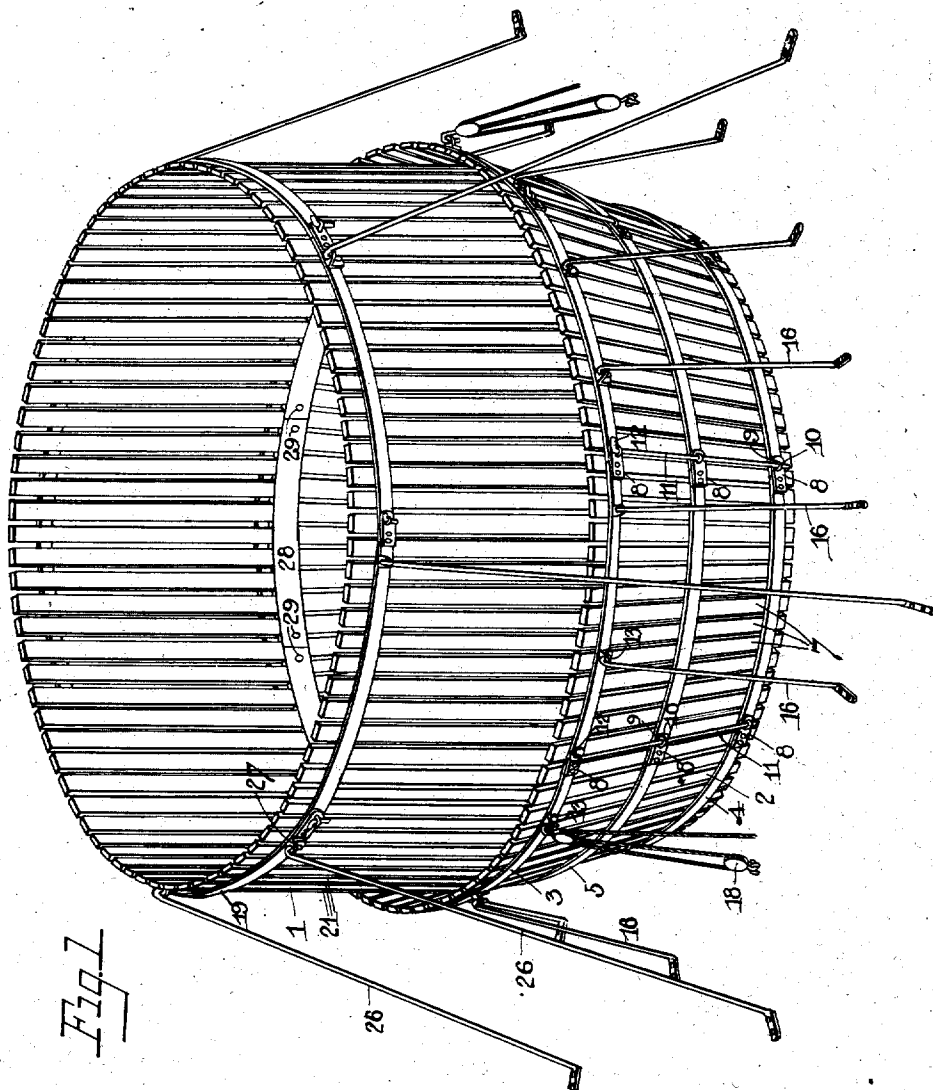
PATENTED APR. 21, 1903.

S. M. HOWARD.  
BICYCLE TRACK.

APPLICATION FILED DEC. 17, 1902.

NO MODEL.

2 SHEETS--SHEET 1.



*Witnesses:*

Franklin D. Wells.  
Esq. N. York

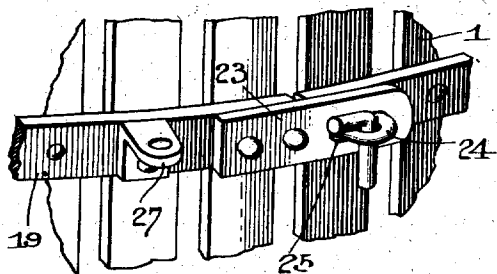
SAMUEL M. HOWARD, Inventor.  
By his Attorney,  
Samuel A. Vicker

S. M. HOWARD.  
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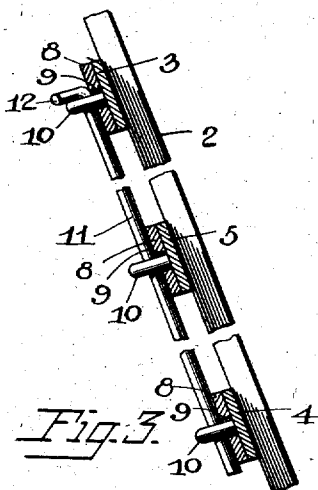
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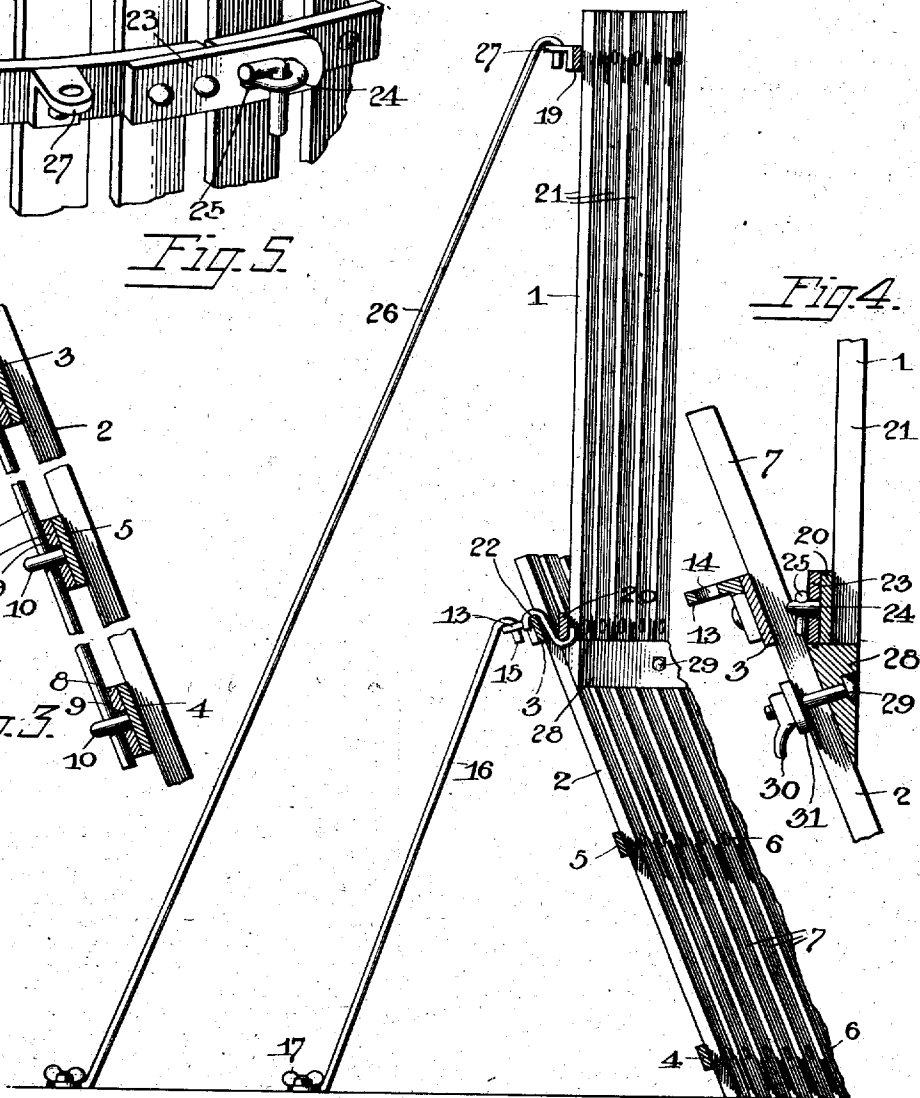
2 SHEETS—SHEET 2.



*Fig. 5.*



*Fig. 3.*



*Fig. 4.*

*Fig. 2.*

Witnesses:

*John C. Burwell.*  
*Geo. W. Coppenhaver.*

SAMUEL M. HOWARD, Inventor.  
By his Attorney,  
*Samuel S. Allen.*

# UNITED STATES PATENT OFFICE.

SAMUEL M. HOWARD, OF WASHINGTON, DISTRICT OF COLUMBIA.

## BICYCLE-TRACK.

SPECIFICATION forming part of Letters Patent No. 726,224, dated April 21, 1903.

Application filed December 17, 1902. Serial No. 135,495. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL M. HOWARD, of Washington, in the District of Columbia, have invented an Improved Bicycle-Track; and I 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 an improved "bicycle-track" adapted for use in cycle-races, exhibitions, or other performances, and has for its object to provide a simple, inexpensive, and portable device of this character formed of several sections which can be readily assembled for use and quickly detached and removed when desired.

A further object of the invention is to provide a track disposed in a vertical plane and extending in a circular line, so that a rider may travel around in an approximately horizontal plane.

A further object of the invention is to provide a track composed of two main sections constituting separate tracks detachably secured together, so that it can be used either as a single or double track.

A further object is to produce a double track in which the two members are arranged one above the other and at such an angle to each other that a rider after attaining sufficient speed on the lower track may switch off on the upper track and ride in perfect safety for a considerable length of time in a horizontal plane at right angles to the track.

A further object is to provide a double track composed of two main sections constituting separate tracks, each of which is formed of several independent sections fastened together in such a manner as to allow one or more of the independent sections to be readily removed when desired, so as to make the track larger or smaller at will and vary the angle or inclination of said tracks with respect to each other and also allow the bicycle and rider to be viewed through the several sections forming the structure.

The invention consists, primarily, in a bicycle-track formed of two main sections supported by suitable guy-rods and braces, the lower section of which is of a substantially truncated-cone form and to the divergent in-

clined side walls of which is detachably secured the upper section, consisting of a vertically-disposed annular flange supported at the junction of the two sections by an annular running-board, which forms a smooth connection between the two sections and permits the rider to change from the lower to the upper section at will and without injury to the machine.

The invention further consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of the track, showing the same in position ready for use. Fig. 2 is a vertical section of one side of the track. Fig. 3 is a vertical section showing the manner of fastening the independent sections of the lower track together. Fig. 4 is a sectional view showing the manner of clamping the running-board in position. Fig. 5 is a detailed perspective of two of the sections composing the upper track and means for fastening them together.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates the upper track, and 2 the lower track. The lower track 2, which is made of wood or other suitable material, is of a substantially truncated-cone form and is provided with upper and lower metallic rings 3 and 4 and an intermediate ring 5. The upper ring 3 is of greater diameter than the lower rings, and secured to the inner side of said rings in any suitable manner, as by bolts 6, are converging inclined trackway slats or bars 7, spaced from each other throughout their entire length, so as to permit the interior of the track to be seen. The rings 3, 4, and 5 are preferably made in detachable sections having overlapping end plates 8, provided with openings 9, adapted to receive eyes 10, secured to the adjoining sections and being fastened together by means of rods 11, having handles 12 passing through the eyes. By having the track made in several sections it allows the track to be made larger or smaller when desired by the removal of one or more of the said sections and also permits the an-

gle or inclination of the side walls to be varied. The upper ring 3 is provided with outwardly-extending lugs 13, having openings 14, adapted to receive the hooked ends 15 of  
5 braces 16, which are detachably secured to the floor in any suitable manner, as by screws 17.

As a means for securing the several sections in their proper position preparatory to  
10 attaching the braces 16, I provide a block and tackle 18, one end of which is passed through the opening in one of the lugs 13 on the ring 3 and the other end thereof detachably secured to the floor.

15 The upper track-section 1 consists of an upper and lower annular ring 19 and 20, to the inner sides of which are suitably secured, as by means of bolts, rivets, or the like, vertically-disposed spaced track-bars 21, forming  
20 a vertically-disposed annular track, the lower end of which rests within the lower track-section 2, the lower ring 20 being in horizontal alinement with the ring 3 on the lower section and is secured therein by means of S-  
25 shaped hooks 22, one end of each of which passes under the ring 20 and the other end thereof under the ring 3, as clearly shown in Fig. 2 of the drawings.

The upper and lower rings 19 and 20 of the  
30 upper track 1 are also formed in detachable sections, one of their end portions being provided with an overlapping plate 23, adapted to receive an eye 24 on the adjoining section, through which passes a pin 25 and by  
35 means of which they are secured together. The upper track 1 is also provided with radiating braces 26, one end of which is fastened in an eye 27 on the ring 19 and the other end thereof detachably secured to the  
40 floor.

At the junction of the upper and lower track-sections I provide a running-board 28, which is substantially triangular in cross-section, being formed in one or more sections  
45 and detachably secured to the inclined side bars 7 of the lower track 2 by means of a bolt 29, which passes between the bars 7 and is secured thereto by a wing-nut 30, bearing against a loose washer 31, which rests against  
50 the outer faces of the adjoining side bars and securely clamps the running-board to the track.

The running-board 28 forms an additional support for the upper track and also a smooth  
55 connection, allowing the rider to change from one track to the other without injury to himself or machine.

The upper track 1 can be vertically adjusted with respect to the lower track by removing one or more of its sections and sliding  
60 said track and running-board downwardly until the ring 20 is in horizontal alinement with the ring 5 on the lower track-section. The hooks 22 may then be passed over said  
65 rings and the running-board clamped in position.

In operation the parts are assembled and ad-

justed to their proper position, and the rider after encircling the inclosure within the track  
70 several times may mount the inclined walls of the lower track and after attaining sufficient speed will be enabled to change to the upper track and perform the seemingly impossible feat of riding in a curved horizontal  
75 plane at right angles to said track, being held in contact with the walls thereof by centrifugal force.

When it is desired, the upper track may be removed and the lower track used alone, or in some cases the strips which form the  
80 lower and upper track members may be formed integral.

While I have shown the upper track arranged in a vertical plane with respect to the lower track, it is obvious that the angle there-  
85 of may be varied and other changes in size, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim is—

1. A bicycle-track having its upper portion in a substantially vertically plane and its lower portion disposed at an angle to the ver-  
95 tical.

2. A bicycle-track comprising a lower inclined track-section, and an upper annular track-section disposed at an angle thereto.

3. A bicycle-track comprising a lower circular inclined track-section, and an upper  
100 annular track-section detachably secured thereto.

4. A bicycle-track comprising a lower inclined sectional track, and an upper annular  
105 sectional track detachably secured thereto.

5. A bicycle-track comprising a lower inclined sectional track, and a vertically-disposed annular upper sectional track detach-  
110 ably secured thereto.

6. A bicycle-track comprising a lower inclined circular track-section, an upper vertically-disposed annular track-section detach-  
115 ably secured thereto, and an annular running-board detachably secured to the lower track-section at the junction of the track-sections.

7. A bicycle-track comprising a lower circular inclined track-section, a vertically-disposed annular upper track-section detach-  
120 ably secured thereto, an annular running-board secured to the lower section at the junction of the upper and lower track-sections, braces attached to said sections, the lower  
125 and upper track-sections being composed of independent track-sections detachably secured together.

8. A bicycle-track comprising a lower inclined track-section, an upper annular vertically-disposed track-section detachably se-  
130 cured thereto, an annular running-board secured to the lower track-section at the junction of the upper and lower track-sections, said running-board being made in sections

and detachably secured to the lower section by means of bolts passing through the running-board and the lower track-section.

9. A bicycle-track comprising a lower track-section formed of an upper, lower and intermediate rings having secured thereto inclined bars separated throughout their lengths, an upper track-section formed of an upper and lower ring having secured thereto vertically-disposed spaced bars detachably secured to the lower track-section the lower ring on the

upper section being in horizontal alinement with the upper ring on the lower section and S-shaped hooks passing over one of said rings and under the other.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

SAMUEL M. HOWARD.

Witnesses:

THOS. KELL BRADFORD,  
CARRIS WILSON.

Correction in Letters Patent No. 726,224.

It is hereby certified that in Letters Patent No. 726,224, granted April 21, 1903, upon the application of Samuel M. Howard, of Washington, District of Columbia, for an improvement in "Bicycle-Tracks," an error appears in the printed specification requiring correction, as follows: In line 94, page 2, the word "vertically" should read *vertical*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 12th day of May, A. D., 1903.

[SEAL.]

F. I. ALLEN,  
*Commissioner of Patents.*

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