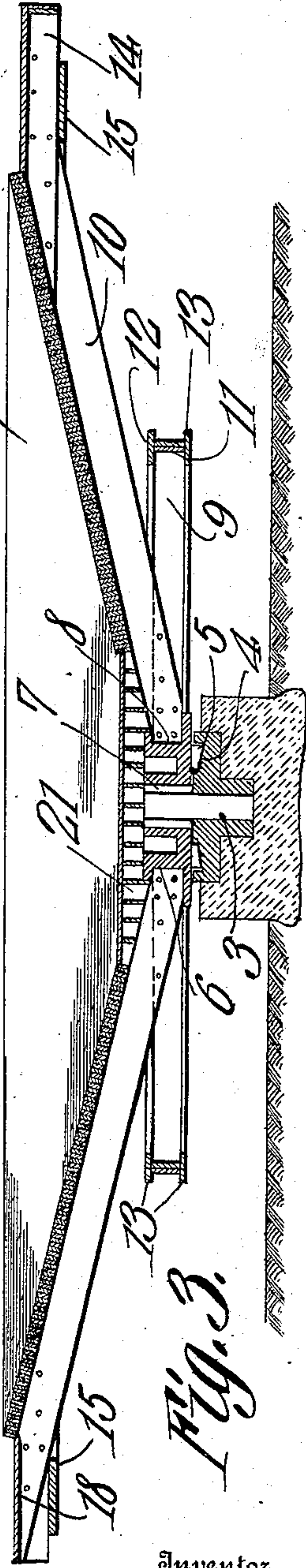
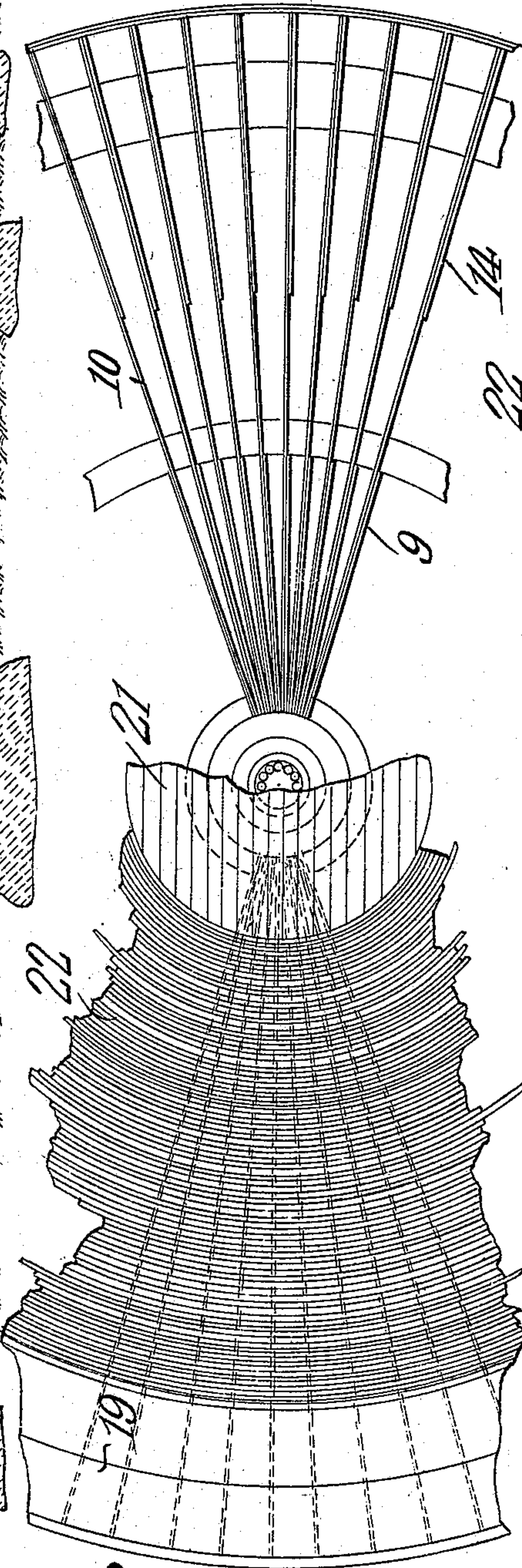
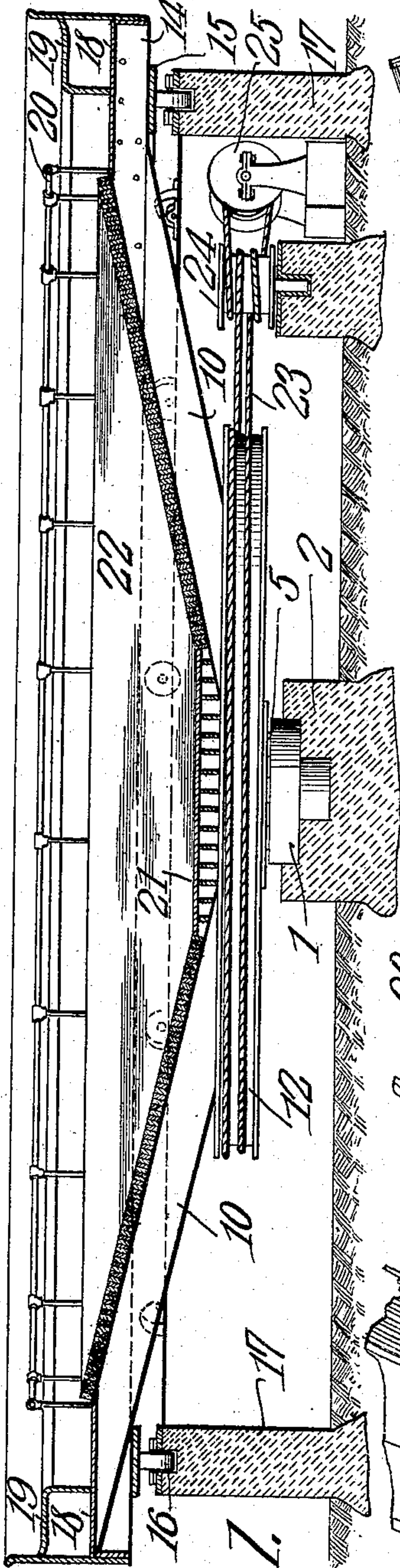


J. WEIL.
 ROTARY SKATING RINK.
 APPLICATION FILED MAR. 24, 1908.

916,072.

Patented Mar. 23, 1909.



Witnesses
E. J. Hunt
Robert Lawson

Fig. 2.

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UNITED STATES PATENT OFFICE.

JOHN WEIL, OF MANSFIELD, OHIO.

ROTARY SKATING-RINK.

No. 916,072.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed March 24, 1908. Serial No. 423,014.

To all whom it may concern:

Be it known that I, JOHN WEIL, a citizen of the United States, residing at Mansfield, in the county of Richland and State of Ohio, have invented a new and useful Rotary Skating-Rink, of which the following is a specification.

This invention relates to roller skating rinks and its object is to provide a revoluble bowl-shaped skating floor having simple and efficient means for supporting it whereby it can be readily revolved.

Another object is to provide a skating floor which is of novel construction.

A further object is to provide a platform carrying seats for spectators and which is designed to rotate with the skating floor.

With these and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings: Figure 1 is a side elevation of the bowl portion of the rink, some of the joists being removed from under it and the balance of the structure, with the exception of the driving mechanism, being shown in section. Fig. 2 is a plan view of a portion of the rink, the floor being partly broken away to show the frame thereunder. Fig. 3 is a vertical transverse section through the structure, the seats and railings being removed therefrom.

Referring to the figures by characters of reference, 1 designates a circular bearing member mounted upon a suitable supporting structure 2 and having a stem 3 seated therein and extending upward therefrom. A circular groove 4 is formed in the upper face of the bearing member and has its bottom inclined downward toward the periphery of the groove. This groove constitutes a raceway for a series of conical rollers 5 constituting bearings for the hub 6 of the structure. This hub is mounted to rotate upon the stem 3, there being anti-friction rollers 7 within the hub and surrounding the stem.

Formed within the periphery of the hub 6 is a series of sockets 8 in each of which is seated the inner end of a substantially horizontal spoke 9 and an inclined joist 10, said joist and spoke being bolted or otherwise secured together at their inner ends. The outer ends of the spokes 9 are secured with-

in an annular groove 11 formed in the inner surface of a ring 12 which constitutes the rim of a pulley, there being annular flanges 13 upon the edge portions of the ring. 60

The inclined joists 10 may be of any desired lengths and extend radially from the hub and secured to the upper portion of each joist is a horizontal extension 14 having a circular track 15 in the form of a flat ring, 65 secured to the bottom thereof. This track bears upon a series of anti-friction rollers 16 arranged in a circle and mounted on a suitable supporting structure 17. Secured upon the extensions 14 is a circular horizontal 70 floor 18 constituting a platform which surrounds the skating surface and may be provided with benches or chairs 19 arranged in a circle and back of a circular railing 20. A circular horizontal floor 21 is also preferably 75 constructed upon the hub 6 and the inner or lower end portions of the joists. This circular floor is surrounded by the inclined bowl-like skating floor 22 which is made up preferably of narrow boards placed on edge and 80 bent in arcs concentric with the axis of the structure so that a smooth and rigid surface is produced.

The mechanism utilized for rotating the structure may be of any desired construction 85 and, as shown in Fig. 1, preferably consists of a cable 23 extending around the pulley 12 and also around drums 24 and 25 which may be driven by any preferred form of motor, not shown. 90

In using the rink the persons who are to occupy the skating floor 22 or the platform 18 step thereon before the structure is set in motion. Motion is transmitted to the movable structure through cable 23 and 95 pulley 12 and by providing the bearings 4, 7 and 16 the structure can be caused to rotate very readily and without the use of much power. It is designed to gradually increase the speed of rotation so that the skaters will 100 not feel the effects thereof too suddenly. By providing a skating surface which is substantially bowl-shaped the action of centrifugal force is overcome and a high speed can be attained by the skaters without danger of 105 being thrown from the skating surface. It is of course to be understood that the skaters can move in the direction of rotation of the rink or in the opposite direction as preferred.

What is claimed is: 110

1. In a skating rink the combination with a central bearing; of a hub mounted on the

bearing and having a series of radial sockets, spokes seated at their inner ends within the sockets and extending upwardly and outwardly from the hub along radial lines, a central circular platform arranged horizontally above the hub and upon the inner portions of the spokes, a bowl-like skating floor carried by the spokes and around the central platform, a horizontal extension at the upper end of each spoke, a circular platform carried by said extensions and surrounding the bowl-like floor, a circular rail beneath and movable with said circular platform, anti-friction bearing devices supported below and contacted by the rail, and means for revolving the hub and the parts connected thereto.

2. A skating rink comprising a central bearing, a hub journaled thereon, inclined spokes or joists radiating from the hub, a central horizontal platform supported above the hub and the inner ends of said spokes or joists, a bowl-like skating floor supported by

the spokes or joists and surrounding the central horizontal platform, horizontal extensions projecting outwardly from the upper ends of the spokes or joists, a circular horizontal platform carried by the extensions and surrounding the bowl-like skating floor, spaced anti-friction bearings for said horizontally extending portions, a circular track carried by said portions and mounted on the bearings, a seat arranged upon said platform, a guard device interposed between the skating floor and the outer circular platform, and means for rotating the hub and the parts carried thereby.

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

JOHN WEIL.

Witnesses:

C. T. BAUER,
H. M. ALVORD.