No. 778,379. PATENTED DEC. 27, 1904.

A. O. SLENTZ.

TURN TABLE.

APPLICATION FILED NOV. 23, 1903.

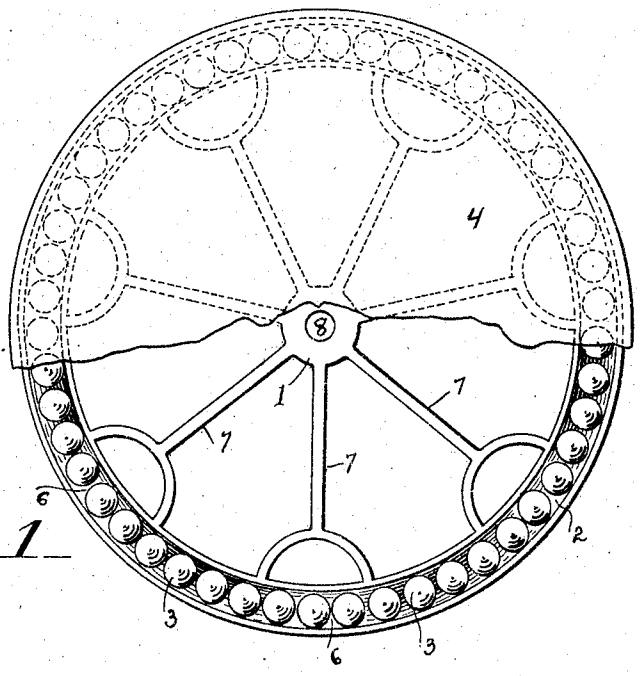


Fig. 1

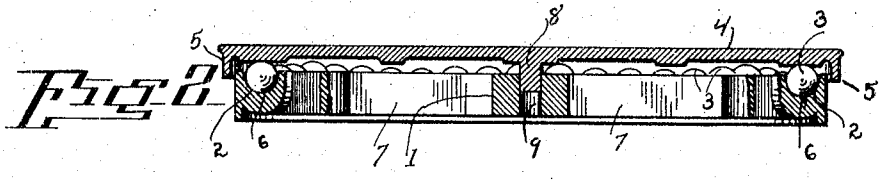


Fig. 2

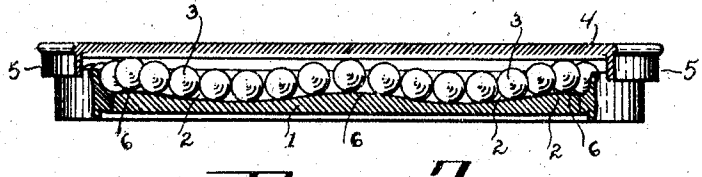


Fig. 3

WITNESSES:

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No. 778,379. Patented December 27, 1904.

UNITED STATES PATENT OFFICE.

ALBERTUS O. SLENTZ, OF CANTON, OHIO, ASSIGNOR OF ONE-HALF TO THE CANTON FOUNDRY AND MACHINE COMPANY, OF CANTON, OHIO, A CORPORATION.

TURN-TABLE.

SPECIFICATION forming part of Letters Patent No. 778,379, dated December 27, 1904.

Application filed November 23, 1903. Serial No. 182,232.

To all whom it may concern:

Be it known that I, ALBERTUS O. SLENTZ, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Turn-Tables; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a top view showing a portion of the rotatable plate broken away. Fig. 2 is a horizontal section showing a transverse view of the annular trough and the antifriction-balls properly located therein, the view being taken at a point showing the highest elevation of the ball-trough. Fig. 3 is a sectional view cutting the ball-trough longitudinally.

The present invention has relation to turn-tables; and it consists in the novel arrangement hereinafter described, and particularly pointed out in the claims.

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

In the accompanying drawings, 1 represents the fixed base or foundation, which is formed of a size to correspond with the size of the turn-table designed to be constructed. The base 1 is provided with an annular groove 2, which annular groove is for the purpose of receiving the antifriction-balls 3, which balls are located in the groove, substantially as illustrated in the drawings. The top plate 4 should be and preferably is provided with annular flange 5, which annular flange extends downward and overlaps the periphery of the base 1, substantially as shown in the drawings. For the purpose of reducing the friction of the balls the trough 3 is formed upon its bottom face with depressions or elevations which might be termed "serpentine" in form, thereby providing the elevated points 6 and inclines leading up and from said elevated points in either direction. In use any desired number of elevated points such as 6 may be employed, reference being had to the size of the turn-table designed to be constructed and also the number of points of support designed for the rotatable plate 4. It will be understood that the plate will rest upon the balls at a time when the balls are upon the points or elevations 6 and that the balls located in the trough intermediate the elevations will be free or clear from the bottom or under side of the plate 4, by which arrangement no contact will be maintained upon the balls intermediate the elevations, thereby leaving the balls free to be moved or rolled in the trough between the elevated points, the balls being moved by the ones coming in contact with the rotatable plate as they pass over the summits or high points, it of course being understood that as the plate is rotated the balls on the summits will become the driving ones for the balls that have passed down the inclines and into the trough.

The object of forming the trough as above described is to give to the rotatable plate but few contact-points and said contact-points so located that the rotatable plate will be held in a true position with reference to the base 1 and the trough.

For the purpose of giving the base 1 the desired amount of strength the base should be provided with the arms 7, said arms being so formed that one of the connecting-points of each of said arms will come upon opposite sides of the summit, this feature being illustrated in Fig. 1.

For the purpose of providing a center or journal point for the table it should be provided with the journal 8, which journal rotates in the aperture 9, formed in the base 1.

For the purpose of reducing the friction and the wear of the balls the depressed portions of the trough may be provided with any suitable lubricant, and of course the balls as they pass through the lubricant will to a certain extent become submerged in the lubricant contained in the trough.

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

1. In a structure of the class described the combination of a fixed base provided with a journal-socket and an annular groove, said

groove provided with a series of alternating depressions and elevations, balls adapted to travel in the groove and each elevation adapted to support a ball, and a movable plate supported upon the balls on the elevations, and the movable plate journaled in the socket of the base, substantially as and for the purpose specified.

2. In a structure of the class described, the combination of a fixed base provided with an annular groove, said groove provided with a series of elevations and depressions, balls adapted to travel in the groove and up and down over the elevations and up and down through the depressions, and the elevations each adapted to support a ball in the path of travel, and a movable plate supported upon the balls while on the elevations, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ALBERTUS O. SLENTZ.

Witnesses:

J. A. JEFFERS,

F. W. BOND.