J. KITSON.

TURN TABLE.

APPLICATION FILED NOV. 10, 1913.

1,099,450. Patented June 9, 1914.

FIG. 1.

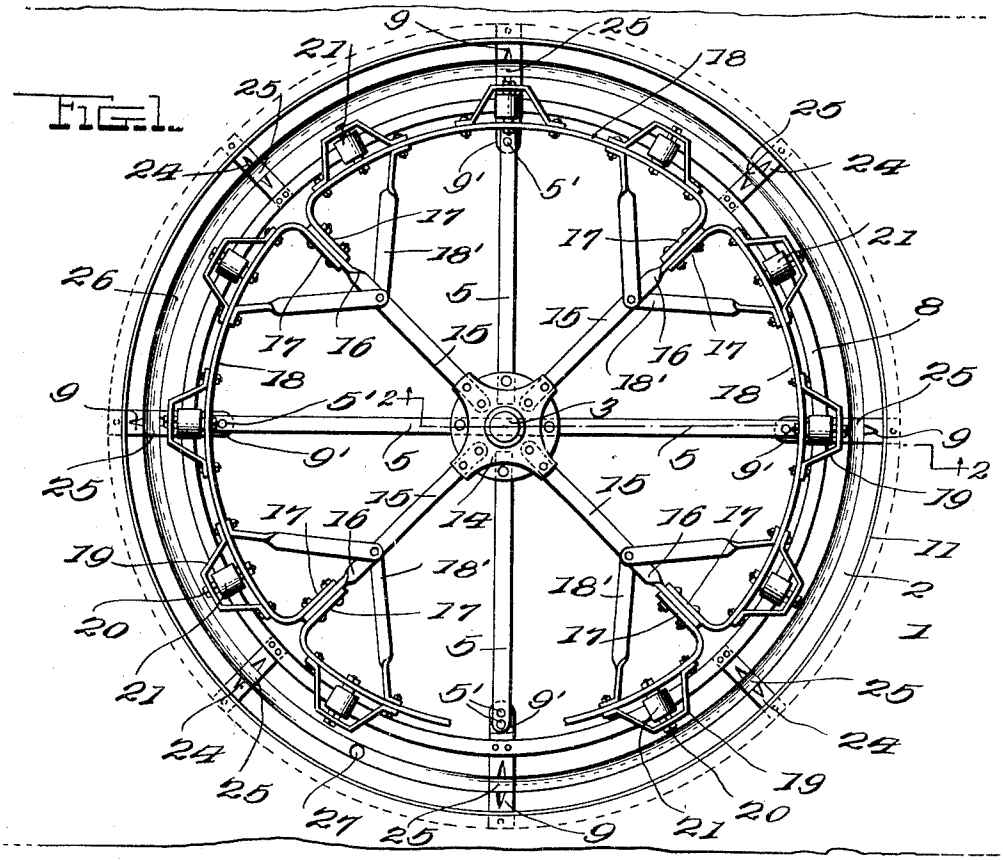


FIG. 2.

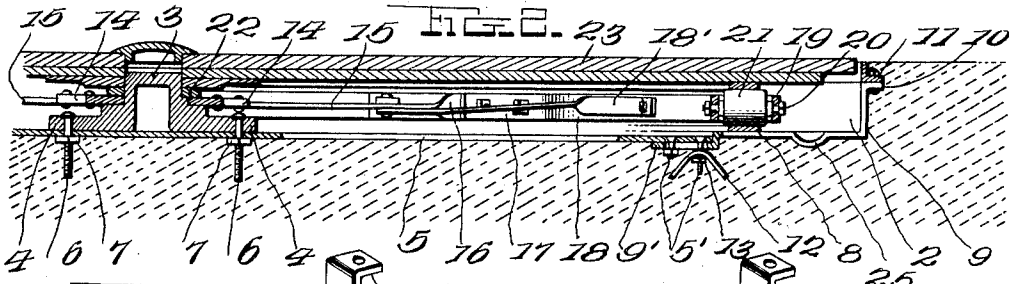


FIG. 3.

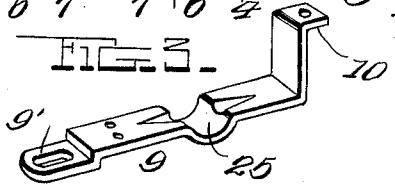
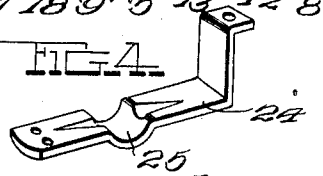


FIG. 4.



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TURN-TABLE.

1,099,450. Specification of Letters Patent. Patented June 9, 1914.

Application filed November 10, 1913. Serial No. 800,196.

To all whom it may concern:

Be it known that I, JAMES KITSON, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Turn-Tables; and I do 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 improvements in turn tables and the primary object of the same is to produce a simple, strong and durable device of this character which may be constructed almost entirely of strap and angle iron, very few castings being employed.

A secondary object is to provide a simple and efficient structure for rigidly maintaining the pivot stud in a truly central position.

With these objects in view, the invention resides in certain novel features of construction and combination herein described and claimed and shown in the drawings wherein:—

Figure 1 is a plan view of a portion of the concrete base showing the super-structure of my improved turn-table in place; Fig. 2 is a vertical section on the line 2—2 of Fig. 1; and Figs. 3 and 4 are detail perspective views of certain brackets used in the construction of my device.

In the drawings my improved turn table is shown in general as comprising a suitable base 1, preferably of concrete and provided with a cavity or well 2, an annular track, a revolving table and anti-friction rollers mounted between said table and said track.

Coming now more particularly to details, a shouldered pivot stud 3 having a lateral flange 4 is centered in the bottom of the well 2 and braced by radial arms 5 which underlie the flange 4 and are provided with holes adapted to receive bolts 6 which are passed through apertures in the flange 4 and then receive anchor nuts 7 embedded in the bottom of the well. These arms 5 project outwardly to a point just inside of the track 8 and are here secured by bolts 5′ to shouldered extensions 9′ of brackets 9 which, as shown are right angular and provided with lateral ears 10 to which is secured an angle iron ring 11. At suitable intervals, certain of the bolts 5′ may be elongated for the reception of anchor plates 12 and nuts 13 embedded in the concrete base and by reference to Fig. 2 it will be seen that the lateral flange of the ring 11 and the ears 10 are partially embedded in the concrete forming the sides of the well 2. By this construction it will be obvious that the pivot stud 3 is held centered and supported in a very simple but highly effective manner.

Revolubly mounted on one of the shoulders of the stud 3 is a hub 14 which carries a plurality of radial spokes or arms 15 twisted as at 16 and having their ends bolted between inturned ears 17 of a plurality of arcuate rim sections 18. The spokes 14 are preferably braced to the rim by twisted brace bars 18′. Each rim section 18 carries a plurality of brackets or yokes 19 through which, and said sections 18 pass bearings 20 having rollers 21 journaled thereon. These rollers 21 are adapted to travel on the track 8. Supported at its outer edge by the rollers 21 and at its center by a washer 22, seated on one of the shoulders of the stud 3, is a revolving table 23 which is of a size to freely revolve within the ring 11 and yet large enough not to cause any unnecessary space to occur between it and said ring 11. If desired, I may also employ a plurality of brackets 24 for holding the track 8 and the ring 11 in concentric relation, and I may depress a portion of the brackets 9 and 24 as shown at 25 and provide the bottom of the well 2 with a drain channel 26 opening at 27 to a suitable discharge main.

Although I have described my invention with considerable minuteness, I do not wish to be unduly limited to details other than those pointed out in the appended claims.

What I claim as my invention is:

1. In a device of the character described, a pivot member, radial arms rigidly attached to said pivot member, and having their outer ends bent upwardly, a track carried by said arms and a ring carried by said upturned ends and partially embedded in an annular wall of concrete, whereby said pivot member is held against radial movement.

2. In a device of the character described, a concrete base having a well in its top, a pivot stud centrally located on the bottom thereof, a lateral flange carried by said stud, radial arms rigidly secured to said flange and resting on the bottom of said well, radial brackets rigidly and removably carried by said arms, and having upturned ends provided with lateral ears, an angle-iron ring

secured to said ears; said upturned ends, their ears, and said angle-iron ring being partially embedded in the wall of said well, anchored nuts in the bottom of said well, and bolts passing through the flange of said pivot stud and the joined ends of said radial arms and brackets, and threaded into said nuts.

3. In a device of the character described, the combination with a pivot stud, a table revolubly mounted thereon and an annular track, of a hub journaled on said stud beneath said table, flat radial arms rigidly carried by said hub and having their inner portions lying in a horizontal plane and their outer ends twisted to lie in a vertical plane, a rim formed in arcuate sections, the ends of each section being inturned and bolted to the twisted extremities of one of said arms, brackets carried by the outer sides of said rim sections, rollers mounted within said brackets and braces connecting said rim sections and said radial arms, said rollers being disposed between said table and said track.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES KITSON.

Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."