J. KITSON.

TURN TABLE.

APPLICATION FILED FEB. 19, 1909.

935,994.

Patented Oct. 5, 1909.

Fig. 1.

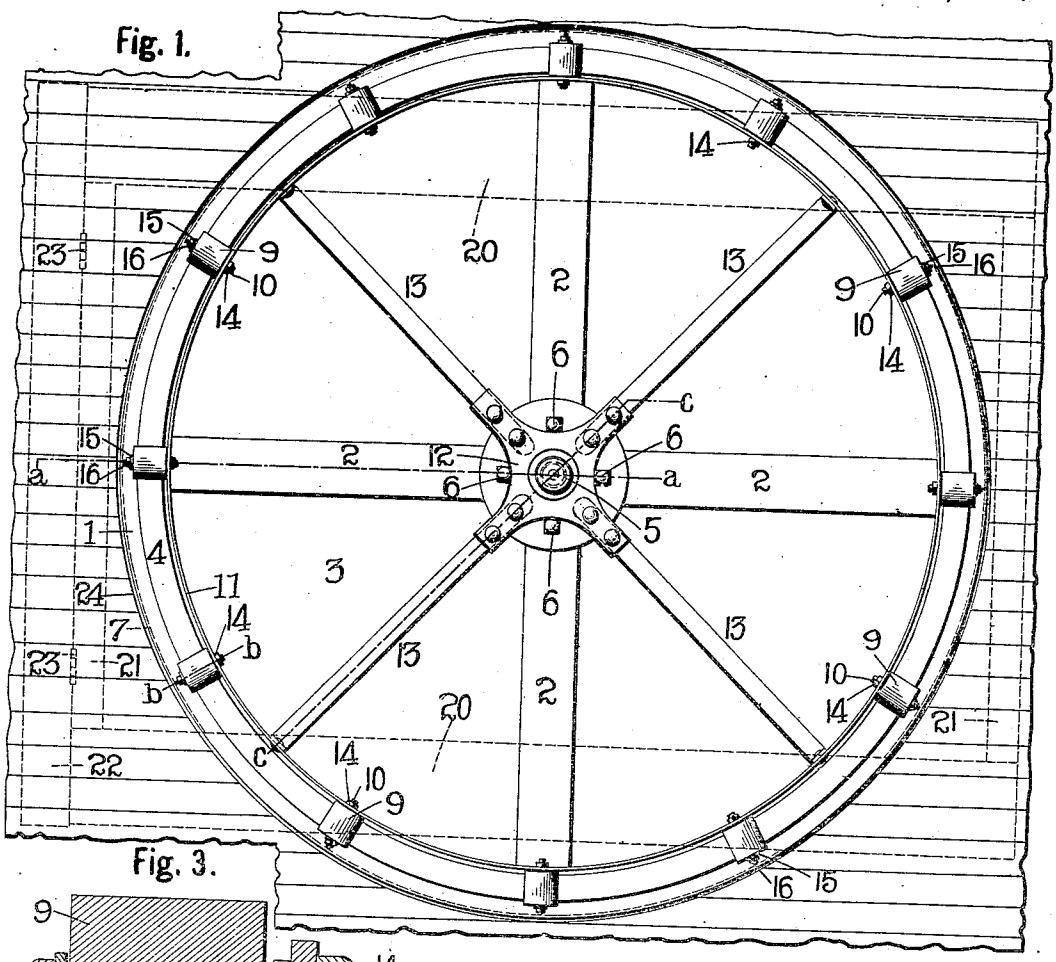


Fig. 3.

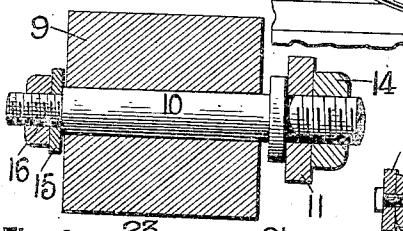


Fig. 4.

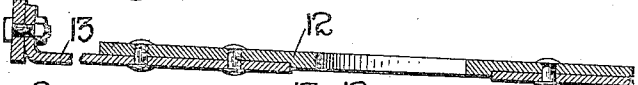
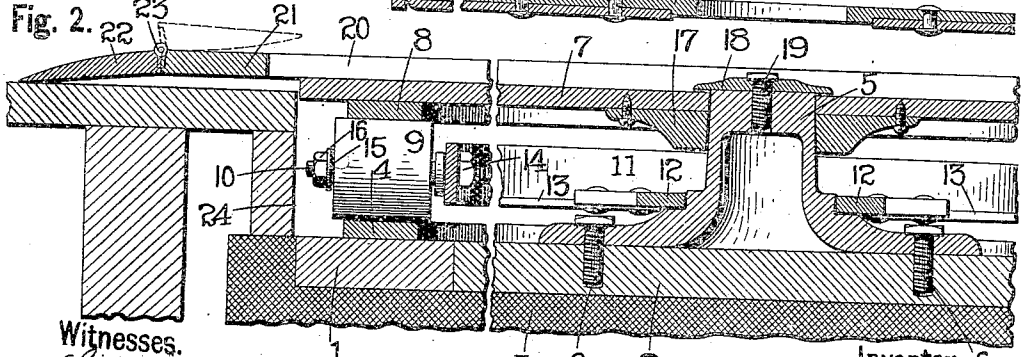


Fig. 2.



Witnesses.

L. M. Daugster.

George A. Neubauer.

Inventor.

James Kitson.

By A. J. Daugster

Attorney

ANDREW. B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES KITSON, OF BUFFALO, NEW YORK.

TURN-TABLE.

935,994. Specification of Letters Patent. Patented Oct. 5, 1909.

Application filed February 19, 1909. Serial No. 478,935.

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 a certain new and useful Improvement in Turn-Tables, of which the following is a specification.

This invention relates to improvements in turn tables and the object of the invention is to produce a turn table of simple and light construction which will be strong and capable of supporting heavy weights and yet require but a minimum of power to operate it.

The invention also relates to certain details of construction all of which will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which:—

Figure 1 is a plan view of the improved turn table, the revoluble platform being shown in dotted lines. Fig. 2 is an enlarged fragmentary vertical section on line *a a*, Fig. 1. Fig. 3 is an enlarged central section through one of the rollers and its supporting frame, on line *b b*, Fig. 1. Fig. 4 is an enlarged fragmentary section through the frame for supporting the rollers on line *c c*, Fig. 1.

In referring to the drawings for the details of construction, like numerals designate like parts.

This improved turn table is designed to be used particularly in garages and similar places for handling automobiles and other vehicles, although it can be constructed so as to support much heavier loads such as steam or electric locomotives.

The turn table, in general, consists of a base supported upon a suitable foundation and carrying a track, a revoluble platform carrying a track upon its under surface, and a series of rollers interposed between the two tracks for revolubly supporting the platform.

In the adaptation of the invention as illustrated in the accompanying drawings, the turn table is located in an opening in the floor of suitable depth so that the top surface of the revoluble platform is raised a slight distance above the level of the floor.

The base of the turn table consists of a circular member 1 which is strengthened by transverse and longitudinal members 2 which contact at their outer ends against the circular member, the whole being firmly embedded in a foundation 3 of cement or other suitable material.

A circular track 4 is supported upon the circular member 1 of the base, and is fastened thereto in any well known way, and a central pivot 5 formed substantially as shown in Fig. 2, is securely fastened by bolts 6, to the transverse members 2 of the base, centrally within the track 4. The central pivot is extremely short with a wide flanged bottom through which the bolts 6 pass so it is held in place very rigidly and with extraordinary strength.

A revoluble platform 7 of circular form has a track 8 secured to its bottom surface, which is of substantially the same size and form as the track 4. A series of rollers 9 are interposed between the two tracks 4 and 8 so that the platform is revolubly supported upon the rollers. The rollers 9 are supported upon short pins or studs 10 carried by a circular ring 11 which is connected to a central hub 12 by radiating arms 13. These arms 13 are preferably formed of metal and are lapped upon and riveted at their inner ends to short connecting arms of the hub. The outer ends of the arms 13 are bent at right angles and are bolted or riveted to the ring 11 as shown in Fig. 4. The pins 10 are arranged at equal distances around and extend radially out from the supporting ring 11 and are fastened thereto by nuts 14, screwed upon the inner ends of the pins. The rollers 9 are loosely mounted upon the pins and are retained thereon by washers 15 and nuts 16 screwed upon their outer extremities. The central hub 12 of the roller supporting frame has an opening through which the central pivot 5 projects.

The revoluble platform 7 has a central boss 17 fastened to its under surface and is provided with an opening through which the central pivot 5 passes. A cap 18 is fastened by a bolt 19 to the upper end of the pivot 5 and serves to prevent any possible misplacement of the platform. The revoluble platform is provided with suitable devices to receive the wheels of the vehicle it is intended to place thereon. In the accompanying drawings, two parallel smooth surfaced strips of wood 20 are fastened thereon to receive the wheels of an automobile, for instance. These strips 20 are connected at their ends by transverse bars 21 which serve as braces. An inclined strip 22 is arranged

transversely at one end of the turn table and is secured to one of the transverse bars 21 by hinges 23, so that it can be turned up as shown in dotted lines in Fig. 2. The purpose of this strip 22 is to provide an inclined surface to enable the vehicle to readily mount the revoluble platform. When the vehicle is in place thereon the strip is turned up off the floor so as not to interfere with the turning movement of the platform. The recess or opening 24 in the floor in which the turn table is located is slightly larger in diameter than the platform 7 so that said platform can be located partly within said opening, see Fig. 2.

The chief advantage of this improved turn table is that the entire weight of the vehicle carried by the platform is borne by the lower track, the supporting pins of the rollers and the roller supporting frame acting simply to maintain the rollers in their proper positions with respect to each other and the tracks.

Another great advantage is that the friction is largely reduced owing to the fact that the upper track revolves upon the rollers, and the rollers revolve upon the lower track so that but a minimum of power is necessary to rotate the turn-table.

I claim—

1. In a device of the class described, a base embedded in cement and having a circular member, a short center pivot extending from the base, a rotatable frame rotatably mounted on an intermediate portion of the pivot and consisting of a center hub, arms extending from the hub and a circular ring at the outer ends of said arms, studs attached at intervals to the circular ring and rollers rotatably mounted on the studs.

2. In a device of the class described, a base consisting of cross members and a circular member embedded rigidly in cement, a movable platform above the base and a movable element arranged between the base and the movable platform and including a center hub, arms radiating from the hub, a circular ring surrounding and attached to the outer end of the arms, short studs extending at intervals from the ring and rollers rotatably mounted on the studs.

3. In a device of the class described, a stationary base, a movable platform above the base and a rotatable frame arranged between the stationary base and the movable platform and having a circular outer ring, studs arranged at intervals around the ring and rollers rotatably mounted on the studs.

4. A turn table comprising a base having a circular member, a short central pivot having a wide flanged bottom attached to the base, a rotatable supporting frame journaled on the central pivot and having an outer circular ring and carrying rollers and a platform located above the supporting frame and pivotally supported on the upper terminal of the central pivot.

5. In a device of the class described, a base embedded in cement and having a circular member, a short center pivot extending from the base, a rotatable frame rotatably mounted on an intermediate portion of the pivot consisting of a center hub, arms extending from the hub, a circular ring at the outer ends of said arms; the outer end of the arms being bent at right angles and fastened to the circular ring, studs attached at intervals to the circular ring and rollers rotatably mounted on the studs.

JAMES KITSON.

Witnesses:
L. M. SANGSTER,
GEORGE A. NEUBAUER.