E. J. SANDERS AND J. W. MORRISON.

AUTOMATIC TURNTABLE.

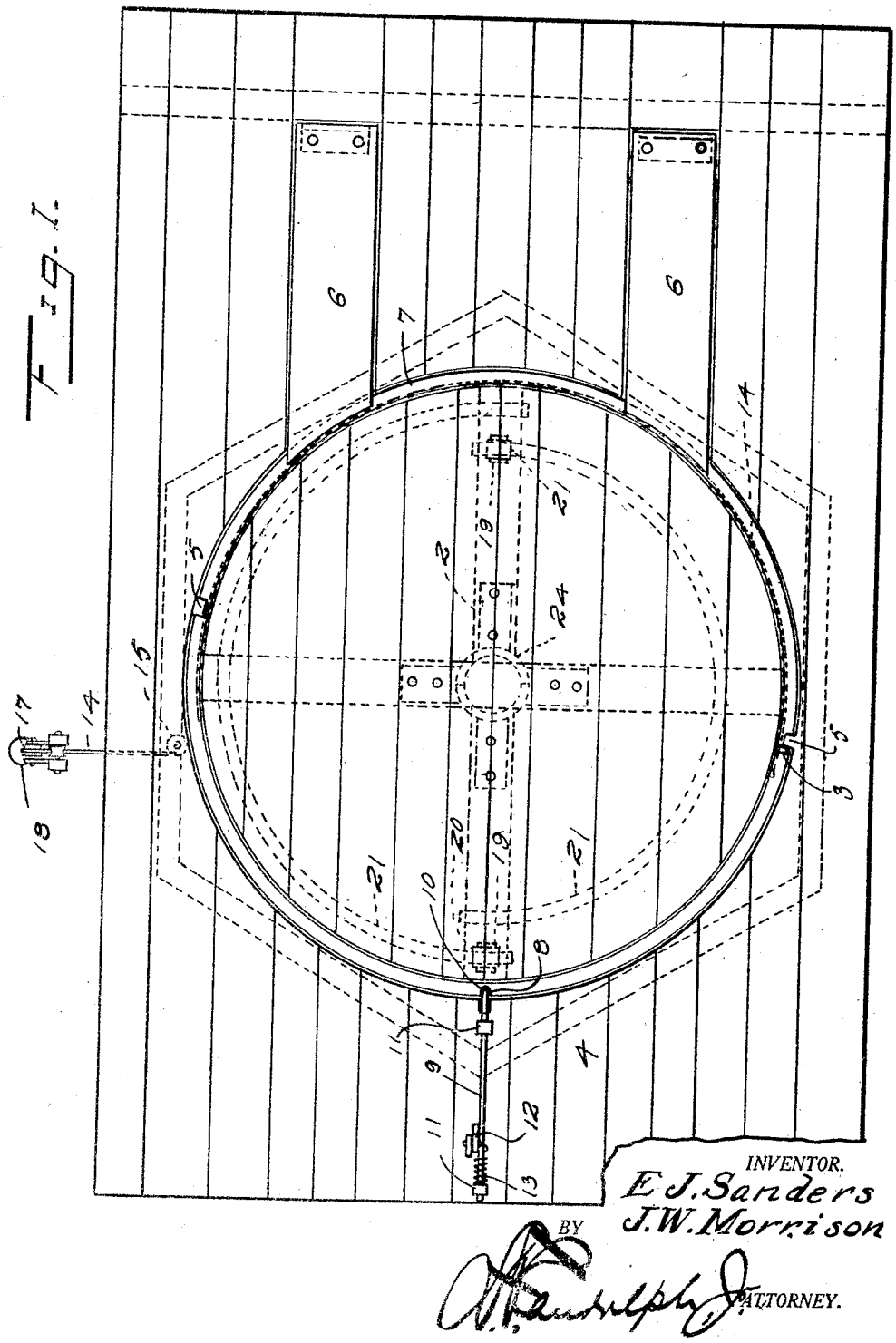
APPLICATION FILED MAY 14, 1920.

1,367,507.

Patented Feb. 1, 1921.

2 SHEETS—SHEET 1.

Fig. 1.



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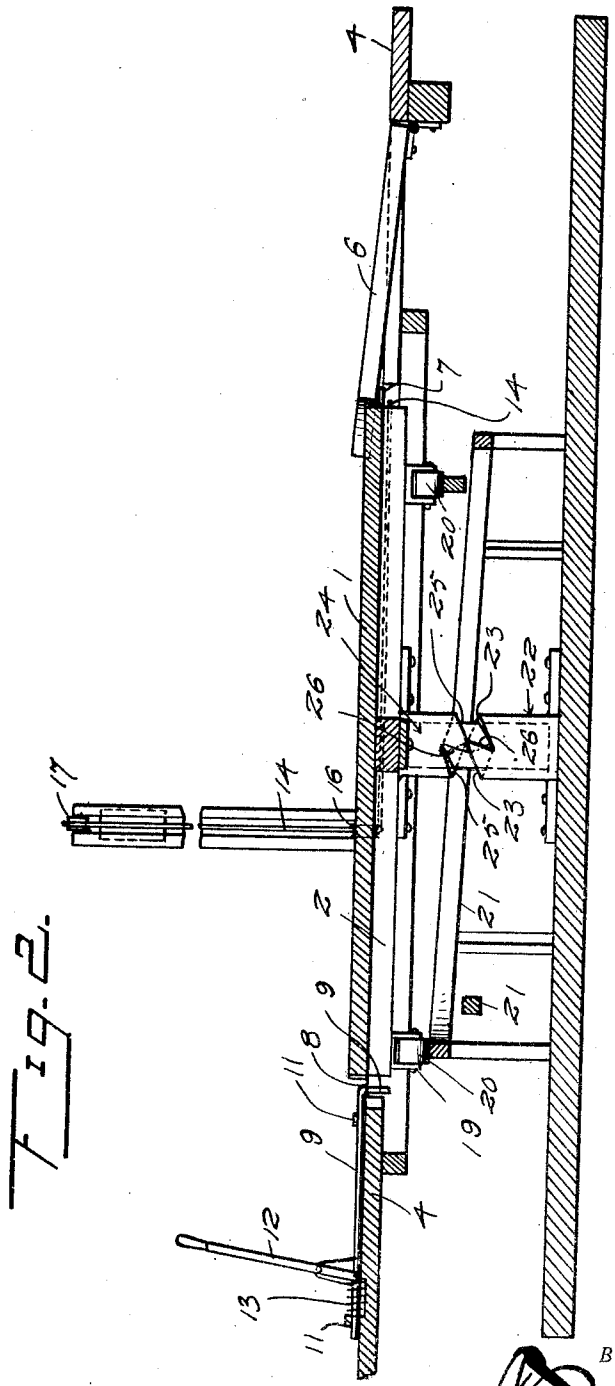


Fig. 2.

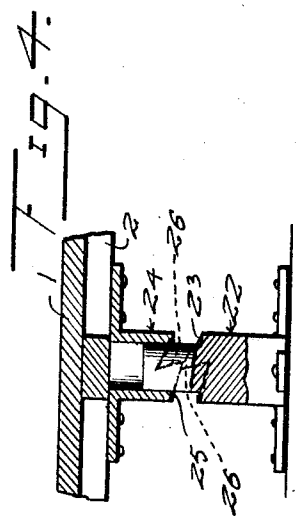


Fig. 4.

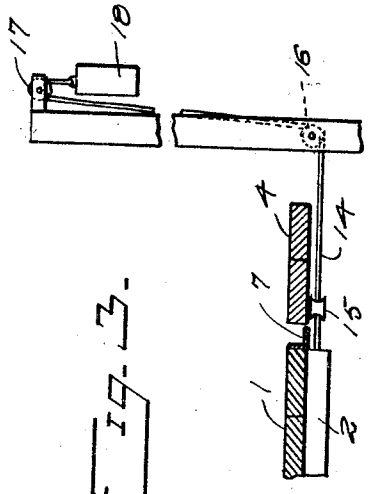


Fig. 3.

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AUTOMATIC TURNTABLE.

1,367,507. Specification of Letters Patent. Patented Feb. 1, 1921.

Application filed May 14, 1920. Serial No. 381,374.

To all whom it may concern:

Be it known that we, EDWIN J. SANDERS and JOHN W. MORRISON, citizens of the United States, residing at Sherman, in the county of Grayson and State of Texas, have invented certain new and useful Improvements in Automatic Turntables; and we 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 automobile turn tables and it consists in the novel features hereinafter described and claimed.

An object of the invention is to provide a turn table of simple and durable structure adapted to be placed in the floor of a small garage or at other points, and which will automatically operate when an automobile is run upon the same to effect the complete turning of the automobile machine in order that the machine may enter the garage while traveling in a forward direction and leave the garage in a similar manner.

With this object in view the turn table comprises a post composed of sections having helically disposed surfaces which engage each other. The lower section of the post is adapted to be placed upon a suitable foundation and the upper section of the post is connected with a table proper. Inclined tracks are mounted under the edge portion of the table proper and brackets are attached to the table proper and carry at their lower ends wheels which are adapted to travel along the said tracks as the table proper makes a turn. Means are provided for temporarily restraining the table proper against turning movement. Floor sections are hingedly mounted adjacent the table proper and are provided with free edge portions which engage the table proper and the free edge portions of the said floor sections may swing vertically as the table proper rises and descends as will be explained.

The arrangement of the parts is such that the table proper is normally held at an elevated position with relation to the foundation under the influence of weights which are operatively connected with the same. When an automobile machine is run upon the table proper and the locking device is released the weight of the machine will cause the sections of the post to move with relation to each other whereby the helical edges thereof together with the rollers carried at the edge portion of the table traveling upon the track sections will cause the table proper to make a one-half revolution and consequently when the table proper arrives at the lowest position that it may assume the automobile machine which has been run upon the same is turned completely around.

In the accompanying drawing:

Figure 1 is a top plan view of the turn table.

Fig. 2 is a vertical sectional view of the same.

Fig. 3 is a fragmentary sectional view of an edge portion of the turn table.

Fig. 4 is a sectional view of the intermediate portion of the turn table.

As illustrated in the accompanying drawing the turn table comprises a table proper 1 which is mounted upon a suitable cruciform frame 2. The table proper is circular in plan and is provided at its edge with an outstanding lug 3. A platform 4 is located at one side portion of the table proper 1 and is provided at spaced intervals with stops 5 with which the lug 3 may engage to limit the turning movement of the table proper 1 as will be explained. Floor sections 6 are hingedly mounted at the opposite side portion of the table proper 1 and their free edges rest upon a flange 7 provided at the edge of the table proper 1. A notch member 8 is mounted at the edge of the table 1 and a rod 9 is slidably mounted upon the platform 4 and is provided with an angularly disposed end portion 10 which may engage in the notch of the member 8 and hold the table 1 against rotation. The outer end portion of the rod 9 is slidably received in an eye 11 which is fixed to the platform 4 and a lever 12 is fulcrumed upon the platform 4 and is pivotally connected with the intermediate portion of the rod 9. A spring 13 is interposed between the eye 11 and the lower end of the lever 12 and is under tension with a tendency to hold the angularly disposed end portion 10 of the rod 9 against the edge of the table 1. When it is desired to turn the table 1 the lever 11 is swung whereby the spring 13 is compressed and the rod 9 is moved longitudinally and its angular extremity 10 is moved out of engagement with the notch in the member 8.

A cable 14 is attached at one end to the periphery of the table 1 and is trained around a pulley 15 journaled at the edge of

the platform 4. The cable 14 is then trained under a pulley 16 and over a pulley 17 and extends downwardly from the same and carries at its outer end a weight 18. When there is no weight applied to the table 1 the weight 18 is at a lowered position and the cable 14 holds the lug 3 in engagement with one of the stops 5 limiting the turning movement of the table 1 in one direction.

Brackets 19 depend from the edge portions of the table proper 1 and rollers 20 are journaled in the said brackets. Track sections 21 are mounted under the edge portions of the table 1 and the rollers 20 engage the said track sections. The said track sections are semi-circular in plan and are inclined spirally or downwardly from one end to the other.

A post structure is mounted at the center of the table 1 and the said post structure comprises a section 22 which is mounted upon the foundation or floor and which is provided with spiral or cam surfaces 23. The upper portion of the post section 22 is received in a post section 24 which is attached to the under side of the table proper 1. The section 24 is provided at its upper end with cam surfaces 25 which contact with the cam surfaces 23 of the post section 22. The sections 22 and 24 are provided at the upper ends of their cam edges with under-cut shoulders 26 and these shoulders come in contact with each other when the table proper 1 is at the lowest position that it may assume with relation to the platform.

The operation of the turn table is as follows: An automobile machine is driven upon the table proper 1 by passing over the floor section 6 when the table proper 1 is at an elevated position and the inner edge of the floor section 6 is raised. The operator then manipulates the lever 12 whereby the end of the rod 9 is withdrawn from the notch in the member 8. This releases the table proper 1 and under the weight of the automobile machine which is upon the same the rollers 20 will travel along the track 21 and the cam edges 25 of the upper post section will move along the cam edges 23 of the lower post section and consequently the table top 1 is turned so that the lug 3 is moved out of engagement with one of the stops 5 and moved into engagement with the other stop 5. When this occurs the table top 1 has described one half of a complete revolution and the machine upon the table top has been turned in an arc of 180 degrees. As the table top 1 descends during its turning movement the free edge of the floor sections 6 follow the table top and consequently when it is desired to run the machine off of the table top 1 the engine is started and the machine is run up over the floor sections 6. When the table top 1 and the floor sections 6 are relieved of the weight of the automobile machine the cable 14 is moved under the influence of the weight 18 and the table proper 1 is turned back to its original position and the floor sections 6 are swung from a lower position to an elevated position and under the influence of the spring 13 the angularly disposed extremity 10 of the rod 9 engages in the notch of the member 8 and consequently the table proper 1 is locked at its elevated position. When the table proper 1 returns to its elevated position the lug 3 is swung back into engagement with the stop 5 with which it originally had contact.

From the foregoing description taken in conjunction with the accompanying drawing it will be seen that a turn table of simple and durable structure is provided and that the same may be automatically operated by the weight of a machine which is placed thereon to effect the turning of the table proper whereby the automobile machine may be turned. As hereinbefore stated the turn table is especially adapted to be used in garages where space is limited or it will be obvious that the turn table device may be used at other places where it is desirable to turn automobile machines and where space for turning the same is limited.

Having described the invention what is claimed is:

A turn table comprising a table proper, means for supporting the table proper for vertical and simultaneous turning movement, means for limiting the turning movement of the table proper, means for returning the table proper, and a floor section hingedly mounted and having sliding engagement with the table proper.

In testimony whereof we affix our signature in presence of two witnesses.

EDWIN J. SANDERS.
JOHN W. MORRISON.

Witnesses:
JNO. C. TANNEL,
S. L. TALLEY.