(No Model.) 3 Sheets—Sheet 1.

C. O. H. FRITZSCHE.

TURN TABLE.

No. 266,955. Patented Oct. 31, 1882.

Fig. 1

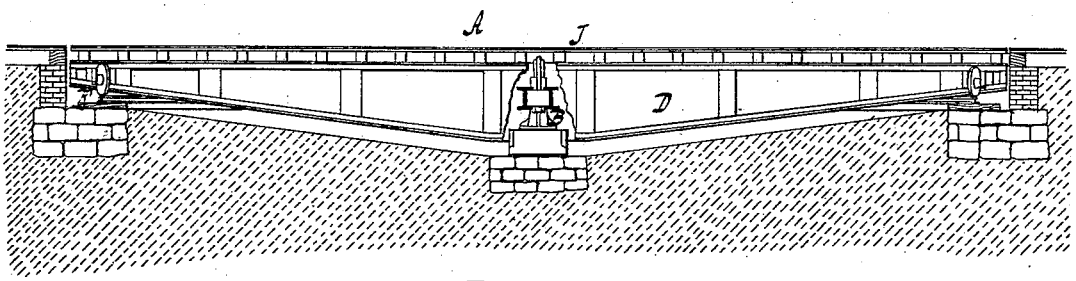
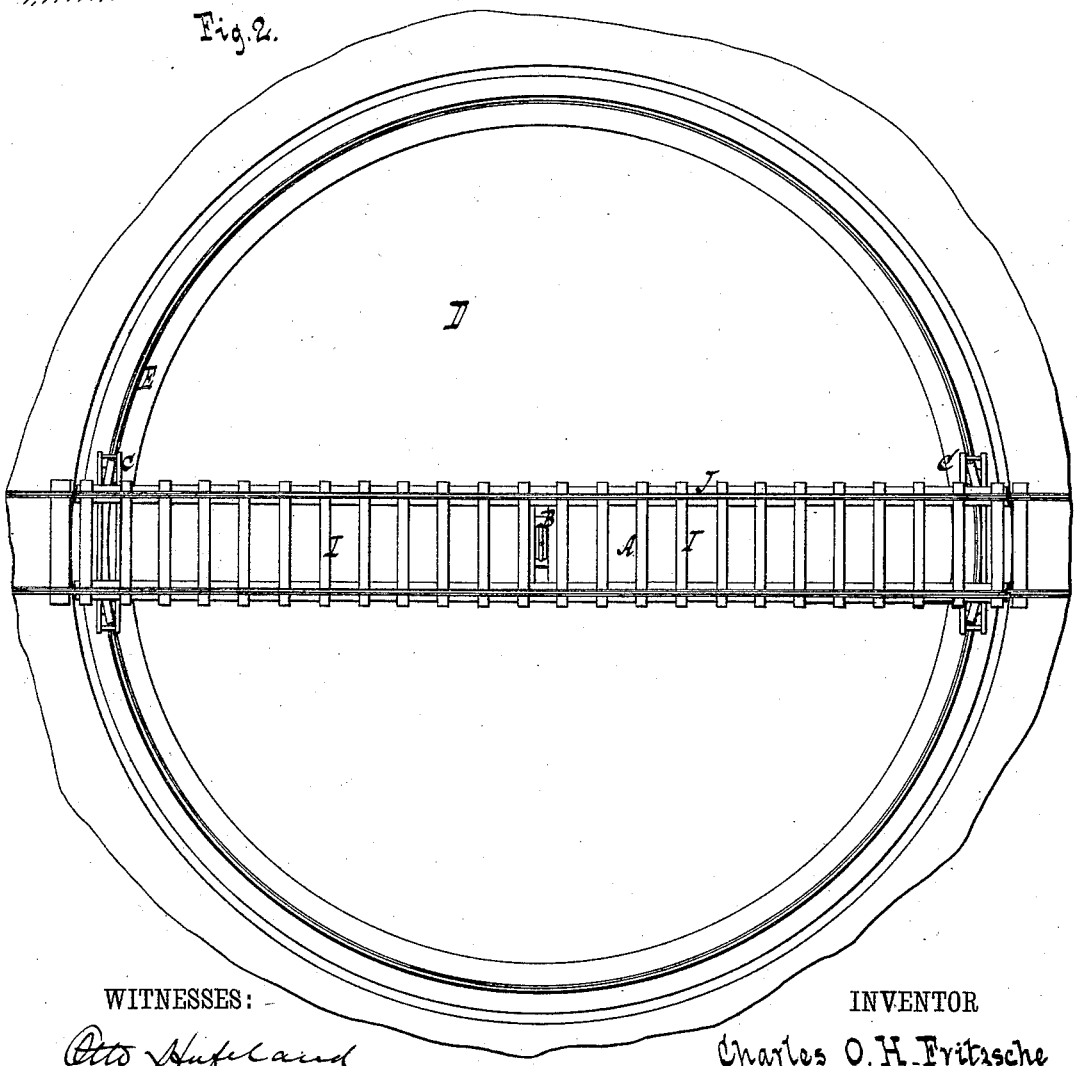


Fig. 2.



WITNESSES:

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INVENTOR

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C. O. H. FRITZSCHE.

TURN TABLE.

No. 266,955. Patented Oct. 31, 1882.

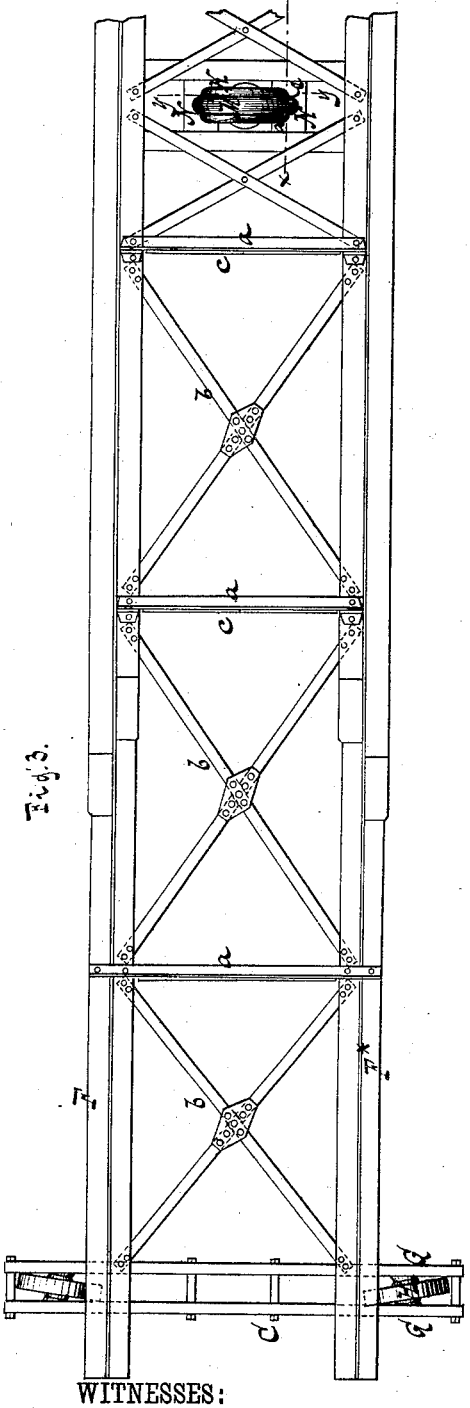

Fig. 3.

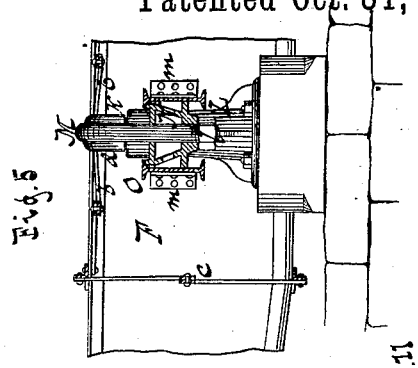

Fig. 5

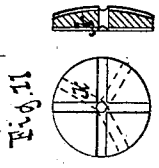

Fig. 11

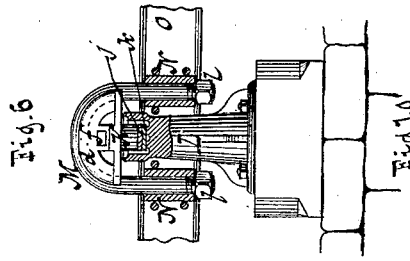

Fig. 6

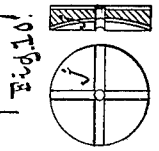

Fig. 10

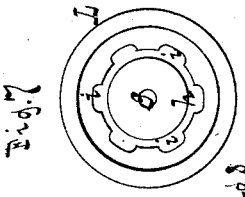

Fig. 7

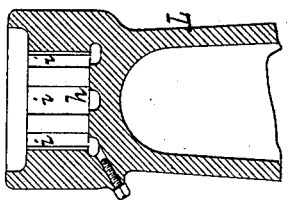

Fig. 8

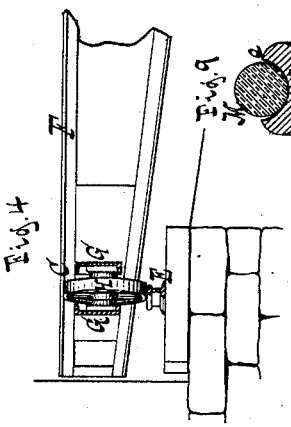

Fig. 4

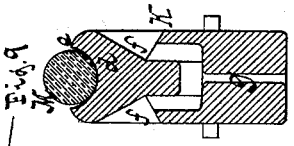

Fig. 9

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C. O. H. FRITZSCHE.

TURN TABLE.

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Fig. 14.

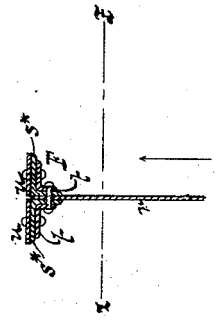


Fig. 15.

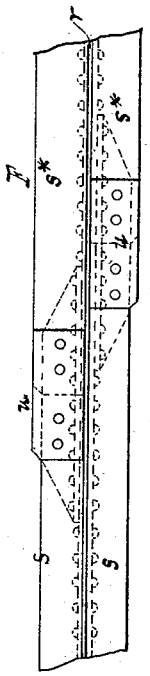


Fig. 16.

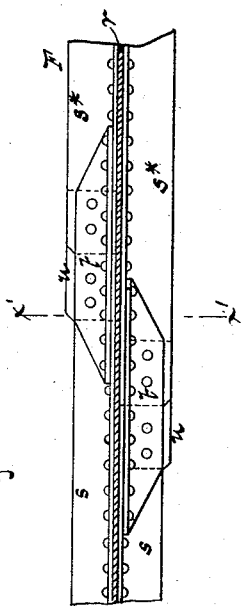


Fig. 12.

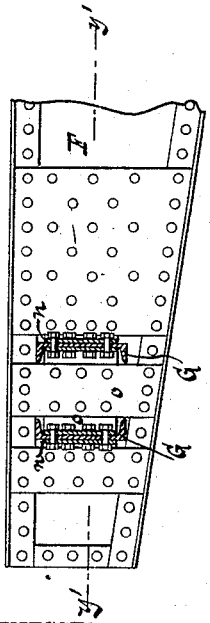
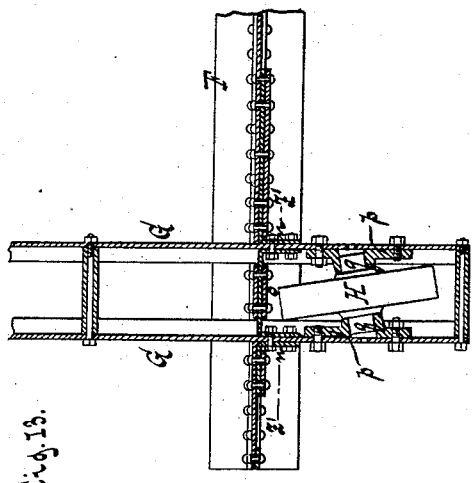


Fig. 13.



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UNITED STATES PATENT OFFICE.

CHARLES O. H. FRITZSCHE, OF NEW YORK, N. Y.

TURN-TABLE.

SPECIFICATION forming part of Letters Patent No. 266,955, dated October 31, 1882.

Application filed June 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES OTTO HERMANN FRITZSCHE, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Turn-Tables, of which the following is a specification.

This invention relates to certain improvements in the construction of turn-tables, which are pointed out in the following specification.

In the accompanying drawings, Figure 1 represents a longitudinal vertical section. Fig. 2 is a plan or top view. Fig. 3 is a partial plan on a larger scale than the previous figures. Fig. 4 is a side view of one end of the wheel-carriage. Fig. 5 is a section in the plane *x x*, Fig. 3. Fig. 6 is a section in the plane *y y*, Fig. 3. The remaining figures are details, which will be referred to as the description progresses.

Similar letters indicate corresponding parts.

In these drawings the letter A designates the turn-table; B, the center post; C, the wheel-carriage; D, the pit, and E the circular track. The turn-table A is constructed of two main girders, F F*, each of which is constructed of a web-plate and two angle-irons above and two below, united by rivets, as will be hereinafter more fully explained. The two girders are connected by transverse braces *a*, by horizontal cross-braces *b*, and by vertical cross-braces *c*, Figs. 3 and 5, and through the girders, near each end, extend the channel-plates G, which form the bearings for the axles of lounge-wheels H. On the top of the main girder are secured the sleepers I, which support the rails J.

The center pin, K, of the turn-table is stepped in a post, L, which rises from the bottom of the pit D. Fig. 7 represents a top view of this part; Fig. 8, a central section of the same, and Fig. 9 a transverse section of the center pin, all on a larger scale than the previous figures.

By referring to Fig. 6 it will be seen that the center pin has an oval head, *d*, with a semicircular groove, *e*, (see Fig. 9,) and with openings *f*, Figs. 6 and 9, through which oil can be introduced, a central channel, *g*, being provided, Fig. 9, through which the oil passes down to the bottom of the step *h* in the pit L. The center pin fits the cavity of the step, and in the sides of this cavity are recesses *i*, Figs. 7 and 8, to allow the oil to rise and to distribute itself over the entire bearing-surface of the center pin. On the bottom of the step *h* are placed two disks, *j k*, detached views of which are shown in Figs. 10 and 11. One of these disks has a concave and the other a convex surface, to be placed against each other, and both surfaces of each disk are grooved, so that the lubricating material can readily distribute itself. These disks are by preference made of steel. The center pin, K, is connected to the turn-table A by a yoke, M, which fits the semicircular groove *e*, (see Figs. 3, 5, 6, and 9,) and the shanks of which extend down through blocks N, which are situated on opposite sides of the post L and fit between transverse girders O, Fig. 5. When the nuts *l*, Fig. 6, on the shanks of the yoke M are drawn up tight the blocks N bear against the top flanges of the transverse girders, and the center pin, K, is held down firmly on the disks in the cavity of the step *h*. The transverse girders O are secured to the main girders F F′ by angle-irons *m*, Fig. 5, or by any other suitable means.

By the use of the yoke the number of suspension-points for the entire weight of the turn-table and its load is reduced to two, and at the same time the center connections are firm and durable, thereby insuring an easy action on the center pin.

The channel-plates G, which extend through the main girders, as previously stated, are fastened to the same by angle-irons *n o*, as shown in Figs. 12 and 13, Fig. 12 being a transverse vertical section in the plane *z′ z′*, Fig. 13, and Fig. 13 being a horizontal section in the plane *y′ y′*, Fig. 12. By referring to these figures it will be seen that the U-shaped angle-iron *o* is placed between the channel-plates G G and fastened to the same and to the main girders by rivets or bolts. On the outside of each of the channel-plates is an angle-iron, *n*. On the inner surfaces of the channel-plates G G are secured the boxes *p p*, which form the bearings for the axles *q* of the lounge-wheels H. By means of the channel-plate I am enabled to raise the bearings for the lounge-wheels to the middle of the height of the main girders, and the diameters of said lounge-wheels can be in-

creased without raising the lower edges of the girders much above the circular track E, so that an easy motion of the turn-table is insured, and if the turn-table should run off its circular track it can drop only a trifle, so that it can be replaced in its working position with little trouble. Furthermore, by raising up the bearing of the lounge-wheels the depths of the pit can be reduced and a saving in labor and in mason-work is effected.

In Figs. 14, 15, and 16 I have shown the construction of the main girders, Fig. 14 being a transverse section in the plane $x' x'$, Fig. 16, Fig. 15 a top view, and Fig. 16 a horizontal section in the plane $z z$, Fig. 14, looking upward. In these figures the letter r designates the web-plate of one of the main girders, and the letters $s\ s\ s^*\ s^*$ are angle-irons, which are riveted to the opposite sides of the web-plate. By means of these angle-irons the web-plate is strengthened, and, since it is desirable to increase the strength of the main girders toward the center of the turn-table, the horizontal flanges of the angle-irons $s^*\ s^*$ are of greater width than the horizontal flanges of the angle-irons $s\ s$. For the purpose of splicing the angle-irons s and s^* I use angle-irons t and plates u.

By these means a turn-table of great strength and durability can be constructed with economy in labor and stock.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, substantially as hereinbefore described, of the main girders F F, the channel-plates extending transversely through these girders, and the lounge-wheels mounted between said channel-plates.

2. The combination, substantially as hereinbefore described, of the turn-table A, the center pin, K, having a transversely-grooved head, d, the post L, forming a step for the center pin, and the yoke M, resting in the grooved head of the center pin and having the lower ends of its two shanks adjustably attached in position on opposite sides of the post, to turn with the center pin when the turn-table is rotated.

3. The combination, substantially as hereinbefore described, of the turn-table A, the center pin, K, having a transversely-grooved head, d, the post L, forming a step for the center pin, the blocks N, rigidly fixed in position on opposite sides of the post, and the yoke M, resting in the grooved head of the center pin, and having its two shanks passing through the said blocks and adjustably confined in place by nuts l, to turn with the center pin when the turn-table is rotated.

4. The combination, substantially as hereinbefore described, of the turn-table A, the center pin having a transversely-grooved head, d, the post L, forming a step for the center pin, the rigidly-fixed blocks N, the transverse girders O, arranged at opposite sides of the post and the blocks, and the yoke M, resting in the grooved head of the center pin and having the lower ends of its two shanks adjustably connected with the blocks, to turn with the center pin when the turn-table is rotated.

5. The combination, substantially as hereinbefore described, of the web-plate r, the angle-irons $s\ s^*$, of different width, the angle-irons t, and the plates u.

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

CHARLES O. H. FRITZSCHE. [L. S.]

Witnesses:
W. HAUFF,
E. F. KASTENHUBER.