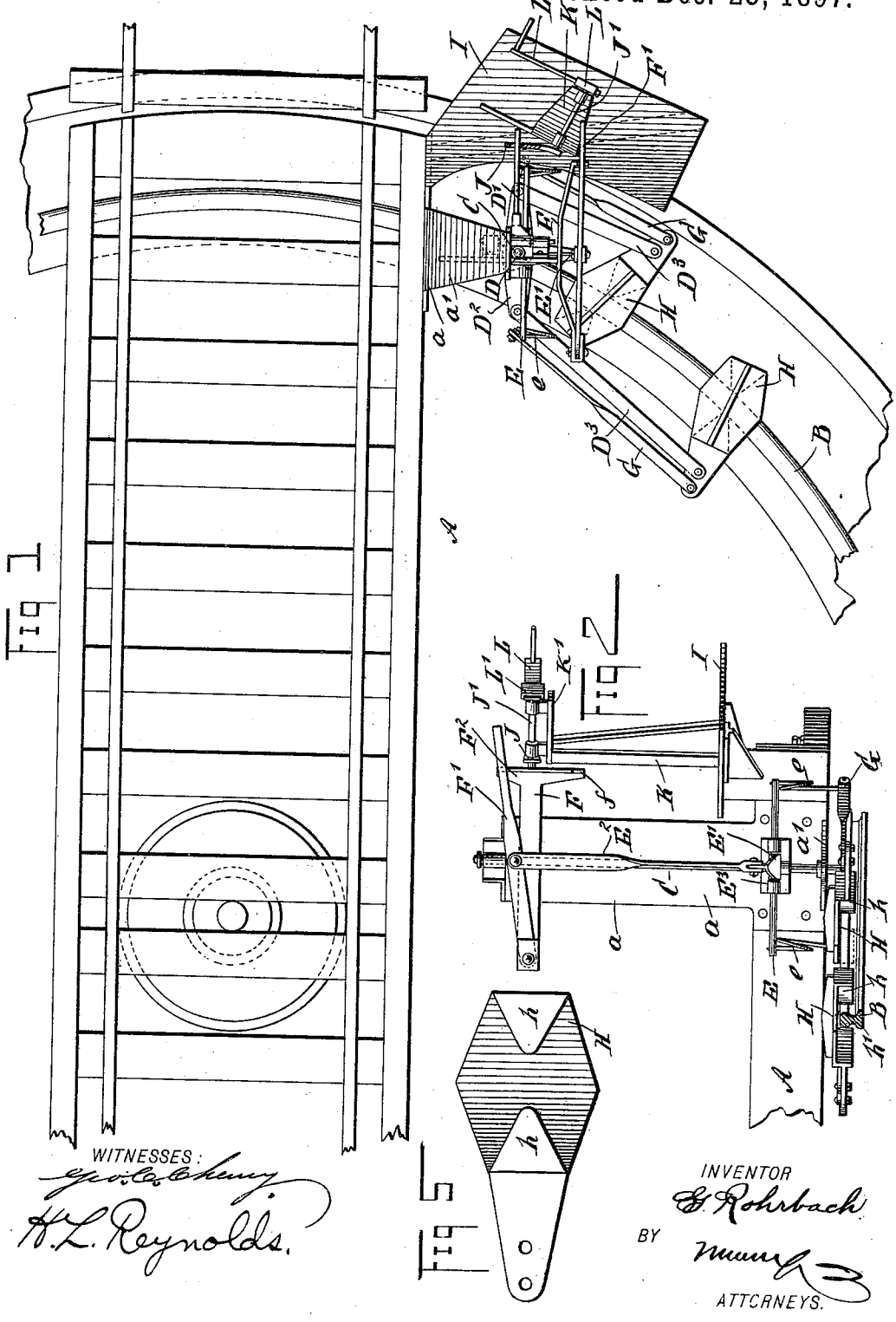
(No Model.)

2 Sheets—Sheet 1.

G. ROHRBACH.

TURN TABLE.

No. 596,382. Patented Dec. 28, 1897.



WITNESSES:
Geo. C. Sherry
H. L. Reynolds.

INVENTOR
G. Rohrbach
BY
Munn & Co
ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

G. ROHRBACH.

TURN TABLE.

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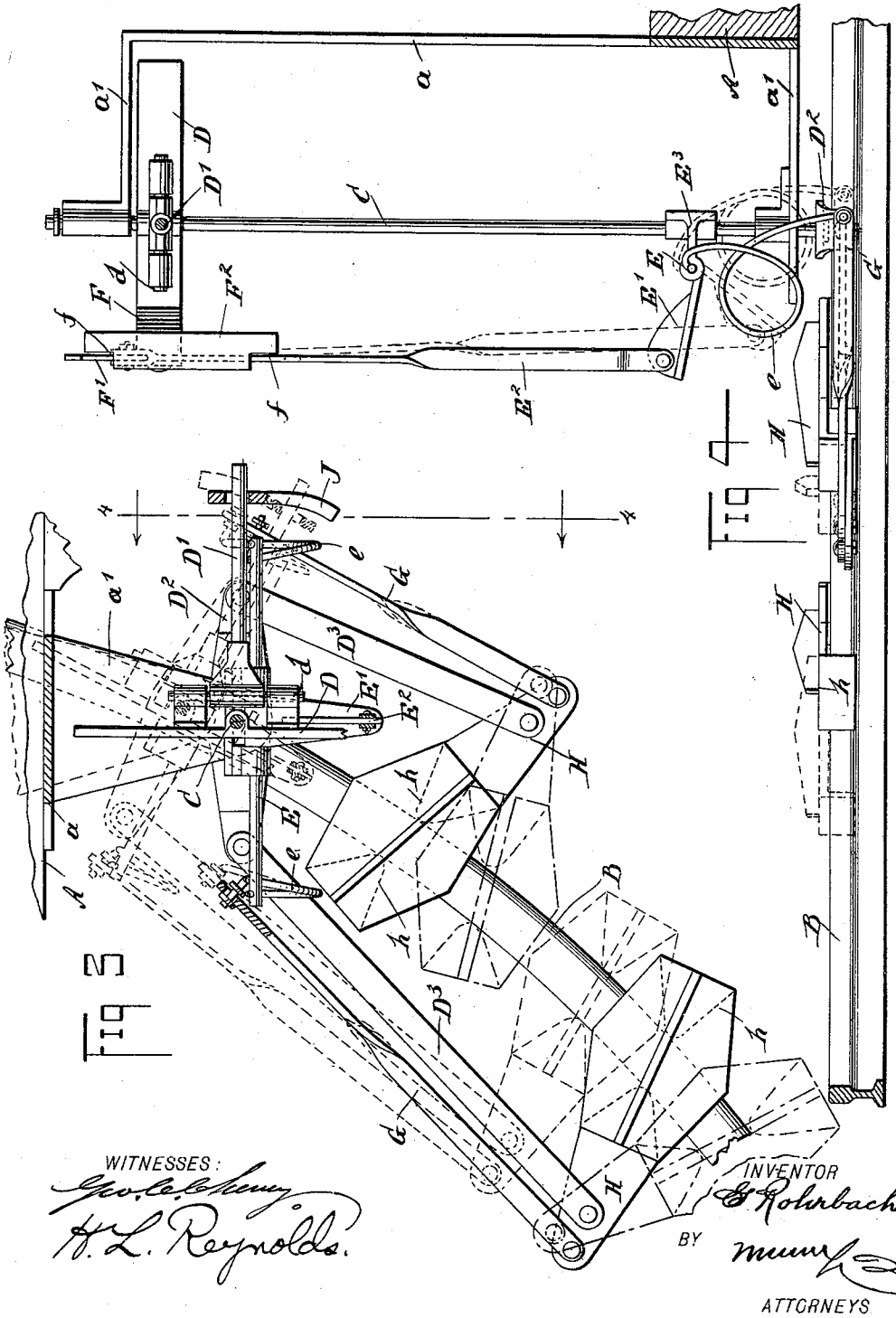

WITNESSES:
Geo. C. Schaney.
H. L. Reynolds.

INVENTOR
G. Rohrbach.
BY
Munn & Co
ATTORNEYS

UNITED STATES PATENT OFFICE.

GABRIEL ROHRBACH, OF DEL RIO, TEXAS.

TURN-TABLE.

SPECIFICATION forming part of Letters Patent No. 596,382, dated December 28, 1897.

Application filed September 11, 1897. Serial No. 651,334. (No model.)

To all whom it may concern:

Be it known that I, GABRIEL ROHRBACH, of Del Rio, in the county of Valverde and State of Texas, have invented a new and Improved Turn-Table, of which the following is a full, clear, and exact description.

My invention relates to an improvement in turn-tables, and is an improvement on that particular kind of turn-table shown and described in Patent No. 517,304, granted to me on the 27th of March, 1894.

The improvement consists in the means by which the motion of the turn-table is secured, and the novel features will be particularly described and claimed hereinafter.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of a portion of the turn-table, showing my improved operating mechanism attached thereto. Fig. 2 is an elevation of one end of the turn-table and the means by which it is operated. Fig. 3 is a top plan view of the same on an enlarged scale, parts being in section. Fig. 4 is an end elevation of the same, taken at right angles to the position shown in Fig. 2 and partly in section on the line 4 4 in Fig 3; and Fig. 5 is a bottom plan view of one of the clutch-dogs of the turn-table-operating device.

The bridge or part of the turn-table which carries the engine, the pit within which the turn-table is mounted, and the rail upon which the turn-table turns are all of any ordinary construction and are herein only partially shown and described.

To one end of the bridge A, carrying the engine, is mounted at one side a standard *a*. This standard supports the operating mechanism and has arms *a'* projecting to one side at the top and bottom and carrying bearings within which a vertical shaft C is journaled. This shaft has a bar D fixed thereto at its upper end (see Fig. 3) and also has a side projecting lever D' pivoted at one end in bearings *d* upon one side of the bar D. The lever D' is free to swing vertically, but not to swing horizontally relative to the bar D.

Carried upon the side of the bridge A is a small platform I, upon which the operator stands. Extending upward from this platform is an upright K, having an arm or projection at its upper end carrying bearings for a crank-shaft J', having a crank L mounted upon one end thereof. The other end of the shaft has a crank J mounted thereon, and said crank is provided at its outer end with an aperture within which the free end of the lever D' is placed. As the crank L is revolved the arm or lever D' vibrates upon its pivot at *d* and oscillates the shaft C on its axis.

To the lower end of the shaft C is attached a cross-bar or lever D^2. Links D^3, pivoted to each end of this cross-bar or lever, extend parallel with the supporting-rail B and are pivoted to the outer ends of the clutch-dogs H. These dogs are similar to those shown and described in my previous patent, and consist of a plate having two triangular-shaped projections *h* upon the lower side thereof and placed with their points at such a distance apart as to easily slip over the head of the circular rail B of the turn-table. It is obvious that if power is applied to the outer ends or handles of the dogs the projections *h* will be caused to bite the rail firmly while the dogs are pushed in one direction, but will slide smoothly over the rail so long as the relative angular position of the dogs is maintained.

The dogs are held in their adjusted angular position by means of links G, attached to the outer ends of the dogs outside of the point at which the links D^3 are pivoted to said dogs. The links G are connected at their other ends with spring-arms *e*, carried upon the outer ends of a shaft E, which shaft has an arm E' fixed thereto and extending horizontally. To the outer end of the arm E' is connected a link E^2, which extends upwardly and is connected to the center of a lever F'. The lever F' is pivoted at one end to a bar F, supported upon one end of the bar D, and will thus oscillate with the shaft C, to which the bar D is connected. One end of the bar F is provided with vertically-extending arms F^2, which at top and bottom are provided with locking-notches *f*, adapted to receive the lever F' and hold it either in a raised or depressed position. When the lever F' is raised, the shaft E is oscillated. As a result the links G, connected to the outer ends thereof by the spring-arms *e*, are forced outward or away

from the shaft C. As the links G lie upon opposite sides of the rail B, the clutch-dogs will be thrown into position for engaging the rail when they are moved in one direction and will slip freely over the rail when they are moved in the opposite direction. When the lever F′ is depressed, the links G will be drawn toward the shaft C and set the clutch-dogs at the opposite angle and so that they will engage the rail when moved in the opposite direction from their previous position. In this way the device may be set for swinging the turn-table in either direction.

The spring-arms E provide for any inaccuracy of adjustment and maintain a measure of flexibility in the device, so that it may accommodate itself to obstructions or inequalities in the rail B. By shifting the lever F′ the turn-table may be moved in either direction desired and independent of the direction in which the crank L is revolved. The crank L consists of a plate or bar mounted in a slide L′, so that it may be pulled out in order to get a long leverage or pushed farther in so as to increase the speed, although at a decrease of power. The long leverage is used when the turn-table is started and the short leverage after it has been gotten under way.

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

1. A turn-table-operating device, comprising a circular rail, dogs adapted to grip and release said rail, a vertical shaft journaled on the turn-table, a horizontal bar fixed to said shaft, a cross-shaft pivoted on the vertical shaft, parallel with said bar, links connecting said bar and cross-shaft with the dogs, and means for oscillating said vertical and cross shafts, and actuating the dogs and changing their direction of engagement with the circular rail, substantially as described.

2. A turn-table-operating device, comprising a circular rail, dogs adapted to grip and release said rail, a vertical shaft journaled on the turn-table, a horizontal bar fixed to said shaft, a cross-shaft pivoted on the vertical shaft, parallel with said bar, links connecting said bar and cross-shaft with the dogs, and means for oscillating said vertical and cross shafts, and actuating the dogs and changing the direction of travel of the dogs on the circular rail, substantially as described.

3. A turn-table-operating device comprising a circular rail, clutch-dogs adapted to engage the circular rail when moved in one direction, a vertical shaft mounted upon the turn-table, a horizontal bar fixed to said shaft and connected at opposite ends to the clutch-dogs, an arm or lever pivoted by a horizontal pivot to the vertical shaft, and a crank-arm having a hole receiving the outer part of said pivoted arm or lever, substantially as described.

4. A turn-table-operating device comprising a circular rail, clutch-dogs adapted to engage the circular rail when moved in one direction, a vertical shaft mounted upon the turn-table, a horizontal bar fixed to said shaft and connected at opposite ends to the clutch-dogs, a cross-shaft journaled on the vertical shaft parallel to said bar, spring-arms attached to the ends of the cross-shaft, connections between the spring-arms and the clutch-dogs, means for oscillating the cross-shaft, and means for oscillating the vertical shaft, substantially as described.

5. A turn-table-operating device, comprising a circular rail, clutch-dogs adapted to engage the circular rail when moved in one direction, a vertical shaft mounted upon the turn-table, a horizontal bar fixed to said shaft and connected at opposite ends to the clutch-dogs, an arm or lever pivoted by a horizontal pivot to the vertical shaft, a crank-arm having a hole receiving the outer part of said pivoted arm or lever, and means for shifting the position of the clutch-dogs and their direction of engagement with the circular rail, substantially as described.

6. A turn-table-operating device comprising clutch-dogs adapted to engage a circular rail, a vertical shaft mounted upon the turn-table, a horizontal bar fixed thereto and engaged at opposite ends to the clutch-dogs, links connected to the clutch-dogs by which their angular position may be changed, a lever for operating said links, spring connections between said levers and links, and means for oscillating the vertical shaft, substantially as described.

GABRIEL ROHRBACH.

Witnesses:
JOHN K. PEIRCE,
PETER GEIB.