

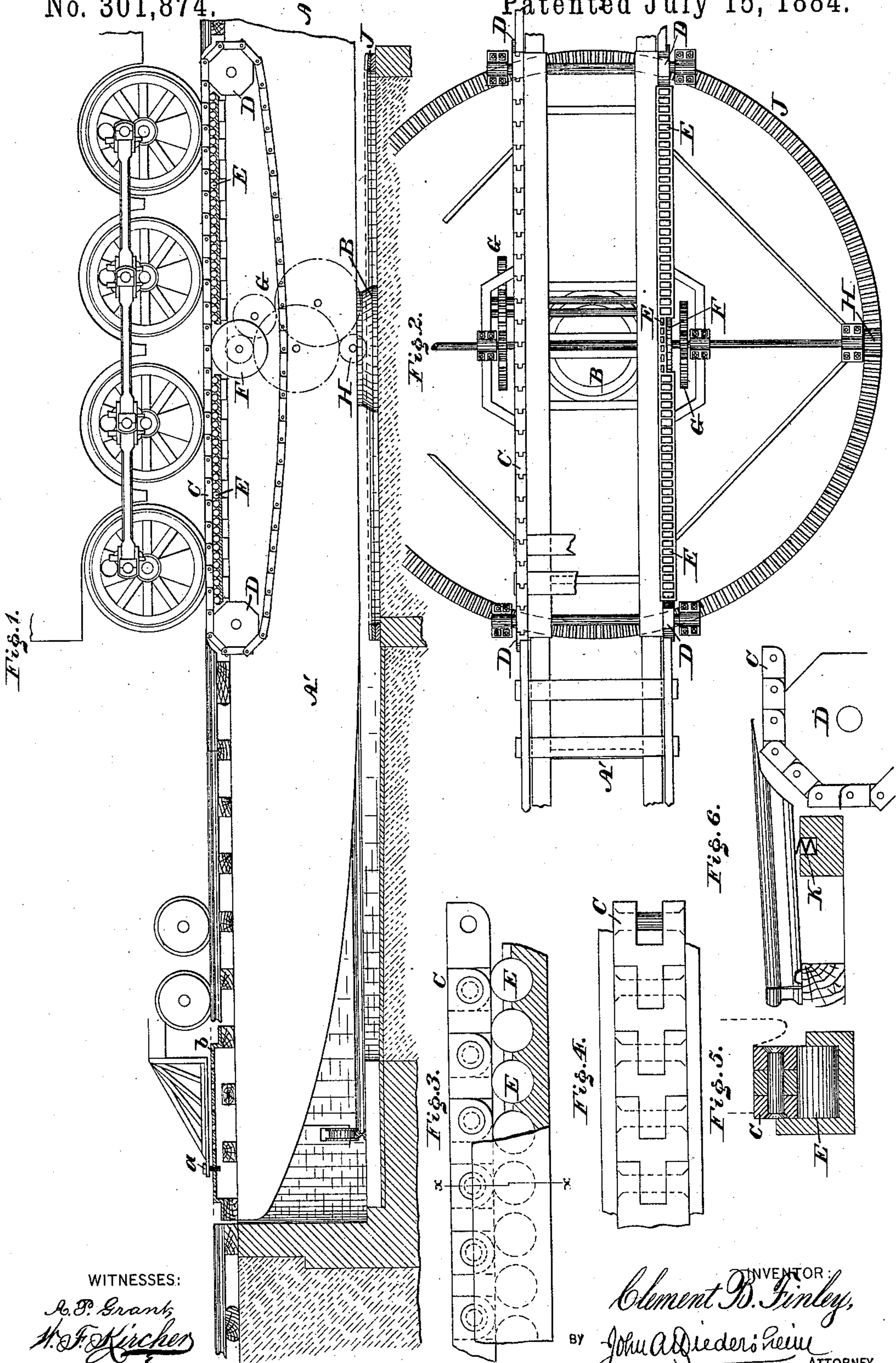
(No Model.)

C. B. FINLEY.

TURN TABLE.

No. 301,874.

Patented July 15, 1884.



UNITED STATES PATENT OFFICE.

CLEMENT B. FINLEY, OF HUNTINGDON, PENNSYLVANIA.

TURN-TABLE.

SPECIFICATION forming part of Letters Patent No. 301,874, dated July 15, 1884.

Application filed June 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, CLEMENT B. FINLEY, a citizen of the United States, residing at Huntingdon, in the county of Huntingdon and State of Pennsylvania, have invented a new and useful Improvement in Turn-Tables, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation of a portion of a turn-table embodying my invention. Fig. 2 is a top or plan view of a portion thereof. Fig. 3 is a side elevation of a portion enlarged. Fig. 4 is a plan view of Fig. 3. Fig. 5 is a vertical section in line *x x*, Fig. 3. Fig. 6 is a view of a portion of Fig. 1, enlarged.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a turn-table, which is adapted to be operated or rotated by the action of the locomotive-engine thereon, said table being provided with endless travelers, each consisting of a chain of flat links having its broad faces horizontal, whereby it is adapted to support the wheels of the locomotive.

Referring to the drawings, A represents a turn-table, and B the central bearing or step thereof. The rails, at or about the place occupied by the driving-wheels of a locomotive-engine when the latter is run on the table, are removed, and in lieu thereof there are employed two endless chains or travelers, C C, which are supported on their ends on drums or pulleys D D, and intermediate thereof on friction-rollers E, all of which are properly mounted on the rotating frame A' of the table. These chains consist of flat links, and are arranged horizontally, so that the locomotive-wheels travel on their upwardly-presented broad faces.

F represents friction-wheels, which are mounted on frame A', and located in contact with the under side of the travelers C; and G represents gearing, which receives power from said wheels F and communicates the same to pinions H, which are also properly mounted on the frame A', the gearing of one side having an idler whereby said pinions rotate in reverse order.

On the floor of the pit, around the central bearing or step B, is placed a circular rack, J,

which is firmly secured in position and has the pinions mesh therewith.

The operation is as follows: The locomotive-engine is run on the table so that the driving-wheels of the engine occupy the travelers C, after which the engine is stopped and coupled with the frame A', the means employed for coupling in the present case being shown at the left hand of Fig. 1, and consisting of a pin or bolt, *a*, which is passed through an opening in the cow-catcher into a perforated plate, *b*, secured to the frame, A'. The engine is again started, and as the driving-wheels are in contact with the travelers C, the latter are set in motion, the effect of which is to operate the gearing G and pinions H. As the rack J is stationary, the pinions H ride around thereon, thus carrying with them and turning the entire table and superimposed engine, &c.; or, in other words, the locomotive-engine provides the necessary power for turning the table on which it has been placed. When the proper track is reached, the engine is stopped and the table ceases to turn. The coupling is released and the engine again started, whereby it runs from the table to the track for which the table has been turned.

The means for communicating the power of the travelers when in motion to the pinions H may be varied. Pulleys may be connected or gear with the drums D and engage with the gearing G; or the friction-wheels F may be substituted by spur-wheels or pinions, and the sides or bottoms of the travelers may be of the form of racks which mesh with such spur-wheels or pinions.

If desired, means may be employed for locking the travelers when the engine is running over the table, to prevent accidental motion of said travelers. The links of the travelers are made to produce the best results, so that proper treads are provided for the engine-wheels to run thereover, the continuity of the rails is virtually preserved, there is no slip of the wheels, unnecessary friction is avoided, and the travelers, with their superimposed weight, are firmly supported.

In order that the ends of the rails that are adjacent to the ends of the travelers may be properly supported, and to obviate the existence of any spaces between the rails and trav-

elers, the rails are cut away on their under
 side, and overhang the travelers, as more
 plainly shown in Fig. 6. Furthermore, said
 rails are slightly elevated by means of springs
 5 K, supported on the frame of the table, and
 bearing against the rails, whereby, when the
 travelers are in motion, the rails are not in
 contact therewith, and thus do not interfere
 with the same. When the engine-wheels reach
 10 and ride over the elevated rails, they depress
 the same and cause them to bear on the trav-
 elers, thus providing proper supports there-
 for. As soon as the wheels leave the rails in
 question, and the engine is located to operate
 15 the travelers, the rails are permitted to rise,
 and as they are now entirely relieved of the
 weight of the engine they do not interfere
 with the operation of the travelers.

Having thus described my invention, what
 20 I claim as new, and desire to secure by Let-
 ters Patent, is—

1. A turn-table provided with endless trav-
 elers, each consisting of a chain having its
 connecting-pivots horizontal, and means of
 25 supporting the chains and their load with fa-
 cility of travel when thus arranged, said trav-
 elers being adapted to receive motion from a
 locomotive-engine run on said travelers, where-
 by the table may be turned by said engine,
 30 substantially as set forth.

2. A turn-table formed with tracks and end-
 less travelers arranged with the pivots of their
 links horizontal, and means of supporting the
 chains or travelers and their load when thus
 35 arranged, said travelers being adapted to re-
 ceive motion from a locomotive-engine run
 upon them, said travelers being continuous
 of said tracks, and adapted to be occupied by

the driving-wheels of the locomotive-engine
 on the table, whereby, by means of gearing, 40
 the table may be turned, substantially as de-
 scribed.

3. A turn-table having endless travelers and
 means for supporting the same with facility
 of travel, said travelers consisting of chains 45
 having their connecting-pivots horizontally
 arranged, in combination with gearing and a
 stationary circular rack, said travelers being
 operated by the driving-wheels of the loco-
 motive-engine on the table, whereby the table is 50
 turned, substantially as described.

4. A turn-table provided with travelers,
 substantially as described, and having the
 rails adjacent thereto adapted to be supported
 on the travelers and raised therefrom, as stated. 55

5. A turn-table provided with locomotive-
 fastening devices adapted to be rotated by the
 operation of a locomotive-engine thereon, pro-
 vided with means for coupling the engine with
 the table, consisting of a perforated plate, *b*, 60
 secured to said table, and a fastening pin or
 bolt, *a*, adapted to pass through an opening
 in the cow-catcher, and also through one of the
 perforations or openings in said plate, sub-
 stantially as and for the purpose set forth. 65

6. A turn-table having its rotary frame pro-
 vided with horizontally-arranged endless trav-
 elers, supporting drums, friction-rollers, and
 gearing, and engaging stationary gearing on
 the bed or pit, substantially as and for the 70
 purpose set forth.

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Witnesses:

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 R. A. ORBISON.