

May 8, 1928.

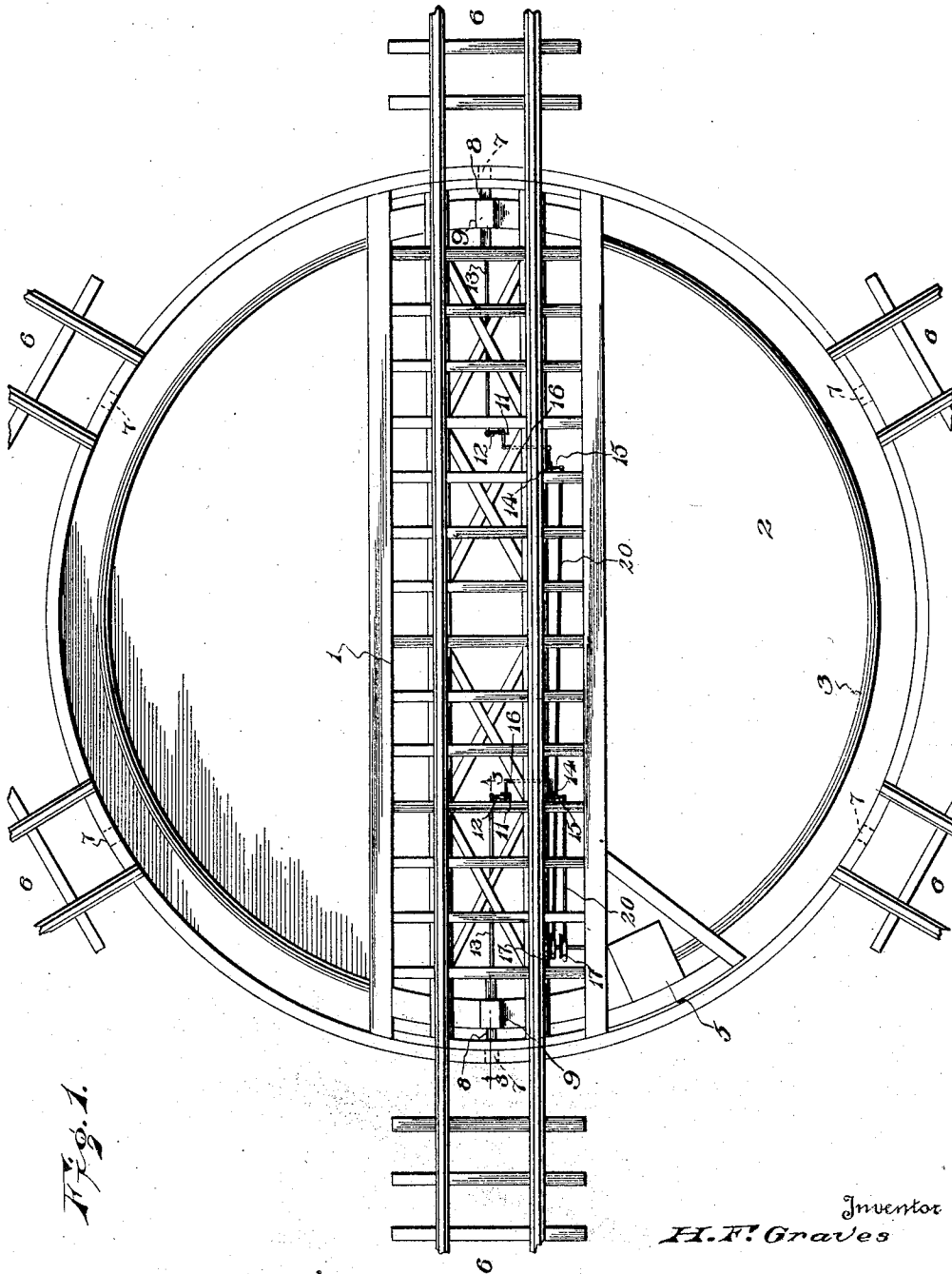
1,669,124

H. F. GRAVES

TURNTABLE

Filed April 28, 1927

2 Sheets-Sheet 1



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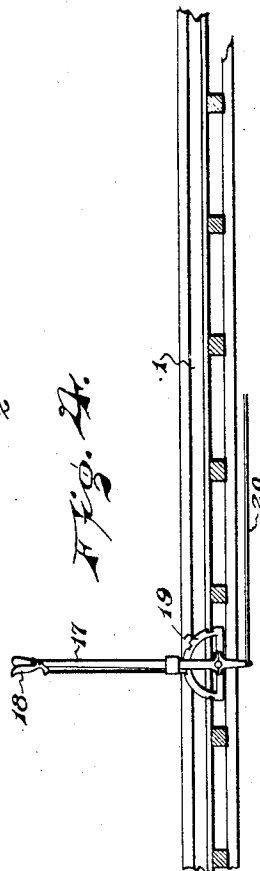
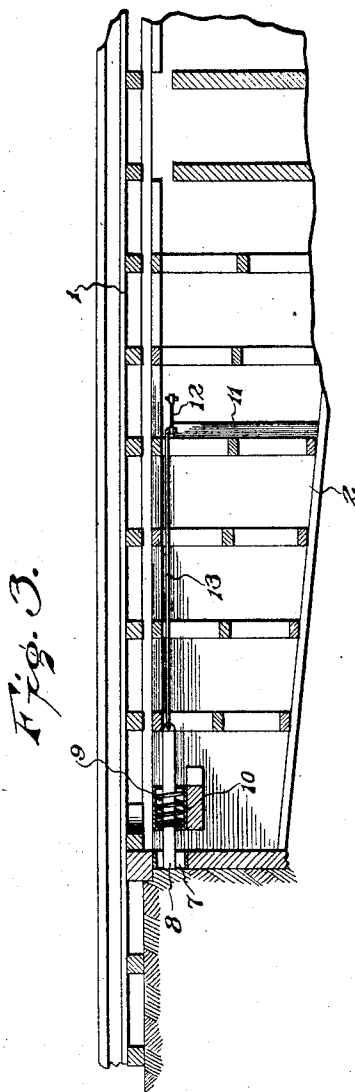
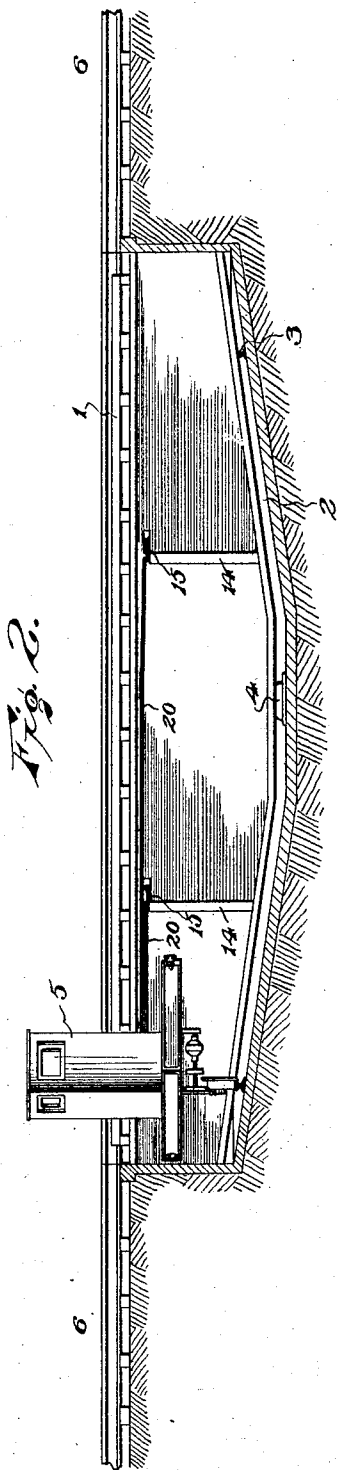
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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE.

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TURNTABLE.

Application filed April 28, 1927. Serial No. 187,258.

This invention relates to turn-tables, such as generally constructed for reversing and switching locomotive engines, and provides a novel locking means for holding the device in the desired adjusted position when it is required to release the structure preliminary to turning the same to meet existing conditions.

The invention contemplates a steel frame set in the wall of the turntable pit opposite each of the tracks connecting with the said pit, a lock bolt at each end of the turntable, an operating lever for each of the lock bolts, and a system of bell cranks and connections between each of the operating levers and a lock bolt, both operating levers being conveniently positioned to be actuated from the operator's cab, or other determinate point.

While the drawings illustrate a preferred embodiment of the invention, it is to be understood that in adapting the means to meet specific needs and requirements, the design may be varied and such other changes in the minor details of construction may be resorted to within the scope of the invention as claimed, without departing from the spirit thereof.

For a full understanding of the invention and the merits thereof, reference is to be had to the following description and the drawings hereto attached, in which,—

Figure 1 is a top plan view of a turntable embodying the invention.

Figure 2 is a vertical, approximately central sectional view thereof.

Figure 3 is an enlarged sectional view on the line 3—3 of Figure 1, looking in the direction of the arrows.

Figure 4 is a fragmentary elevational view of an operating lever and associated parts.

Corresponding and like parts are referred to in the following description and designated in the several views of the drawings by like reference characters.

The numeral 1 designates the turntable which may be of any approved construction and 2 is the pit in which the turntable is mounted. The usual circular track 3, in conjunction with the pivot 4, supports the turntable in a manner well understood. The operator's cab 5 is located at one end of the turntable and to one side of the track thereon. A plurality of tracks 6 lead from the pit and are adapted to connect with the

track carried by the turntable in a manner well understood.

In accordance with the invention the wall of the pit 2 is provided with an opening opposite the end of each of the tracks 6 and is adapted to receive a steel frame 7 which forms a socket to receive a lock bolt 8. There is provided a lock bolt 8 at each end of the turn-table and these lock bolts are adapted to coact with the reinforced sockets 7 to secure the turntable in the required adjusted position. A box or casing 9 mounted upon each end of the turn-table receives the lock bolt 8 which operates therethrough and receives a coil spring 10 arranged to hold the lock bolt in engagement with the socket into which it has been projected upon operating the lever. A post 11 is attached to the substructure of the turn-table and constitutes a mount for a bell crank 12. It is understood that a post 11 is provided for each end of the turntable. A wire 13, or other suitable connection, joins an arm of each of the bell cranks 12 with the cooperating lock bolt 8. Other posts 14 are arranged at one side of the turntable and attached to the substructure thereof and support bell cranks 15. A wire, or connection, 16 joins the other arm of the bell crank 12 with an arm of the respective bell cranks 15. Two operating levers 17 are located at one end of the turntable so as to be readily accessible to the operator for actuation when it is required to release the turntable preliminary to shifting the same, as required. The operating levers 17 are disposed within convenient reach of the operator's cab 5. Each of the levers 17 is provided with the usual hand latch 18 and a notch bar 19 whereby to hold the levers when moved to a position to withdraw the lock bolts 8 from engagement with the wall of the pit, thereby admitting of the turntable being rotated in the accustomed way. A wire 20, or other preferred connection, joins the other arm of each of the bell cranks 15 with an operating lever 17, and in this manner both of the lock bolts may be released from a given point which, as shown, is preferably adjacent the operator's cab 5.

It is observed that locking means are provided at each end of the turntable and both locking means may be operated from a determinate point. The turntable is, therefore made secure at both ends, and both sets

of locking mechanisms may be actuated from the operator's cab, thereby saving time and insuring the functioning of both locking mechanisms at all times.

5 The steel frames 7 are set into the wall of the pit when constructing the same. The springs 9 do not project the bolts 8 but hold them projected when shot into the sockets by operating the levers.

10 Having thus described the invention, I claim:

1. In combination with a turntable and its pit, of a locking member at each end of the turntable adapted to engage the wall of the
15 pit, a bell crank at each end of the turntable and having an arm connected with the locking member, a second bell crank at the side of the turntable and having an arm connected with the other arm of the first mentioned bell crank, juxtaposed operating levers adjacent an end of the turntable and a
20 connection between each of the operating levers and the other arm of the respective bell cranks mounted at a side of the turn-
25 table.

2. The combination with a turntable and its pit, of lock bolts at the ends of the turntable, posts secured to the said structure of the turntable and disposed some distance
30 from the ends thereof, bell cranks mounted upon said posts, connecting means between the lock bolts and an arm of the bell crank,

other posts at a side of the turntable and secured to the substructure thereof, bell
35 cranks mounted upon the last mentioned posts, connecting means between an arm of the side bell cranks and the other arm of the first mentioned bell crank, juxtaposed
40 operating levers adjacent an end of the turntable and connecting means between the operating levers and the other arm of the respective side bell cranks.

3. The combination with a turntable and its pit having openings in its wall adjacent the tracks connecting therewith, a spring
45 actuated lock bolt at each end of the turntable, a centrally disposed post secured to the substructure of the turntable a distance from each end thereof, means connecting the lock bolts with an arm of the respective bell
50 cranks, posts secured to a side of the substructure of the turntable a distance from each end thereof, bell cranks mounted upon the side posts, connecting means between an arm of the bell crank at the side of the
55 turntable and the other arm of the center bell cranks, juxtaposed operating levers adjacent an end of the turntable, and connecting means between the respective operating
60 levers and the other arms of the respective side bell cranks.

In testimony whereof I affix my signature.

HARRY F. GRAVES. [L. S.]