

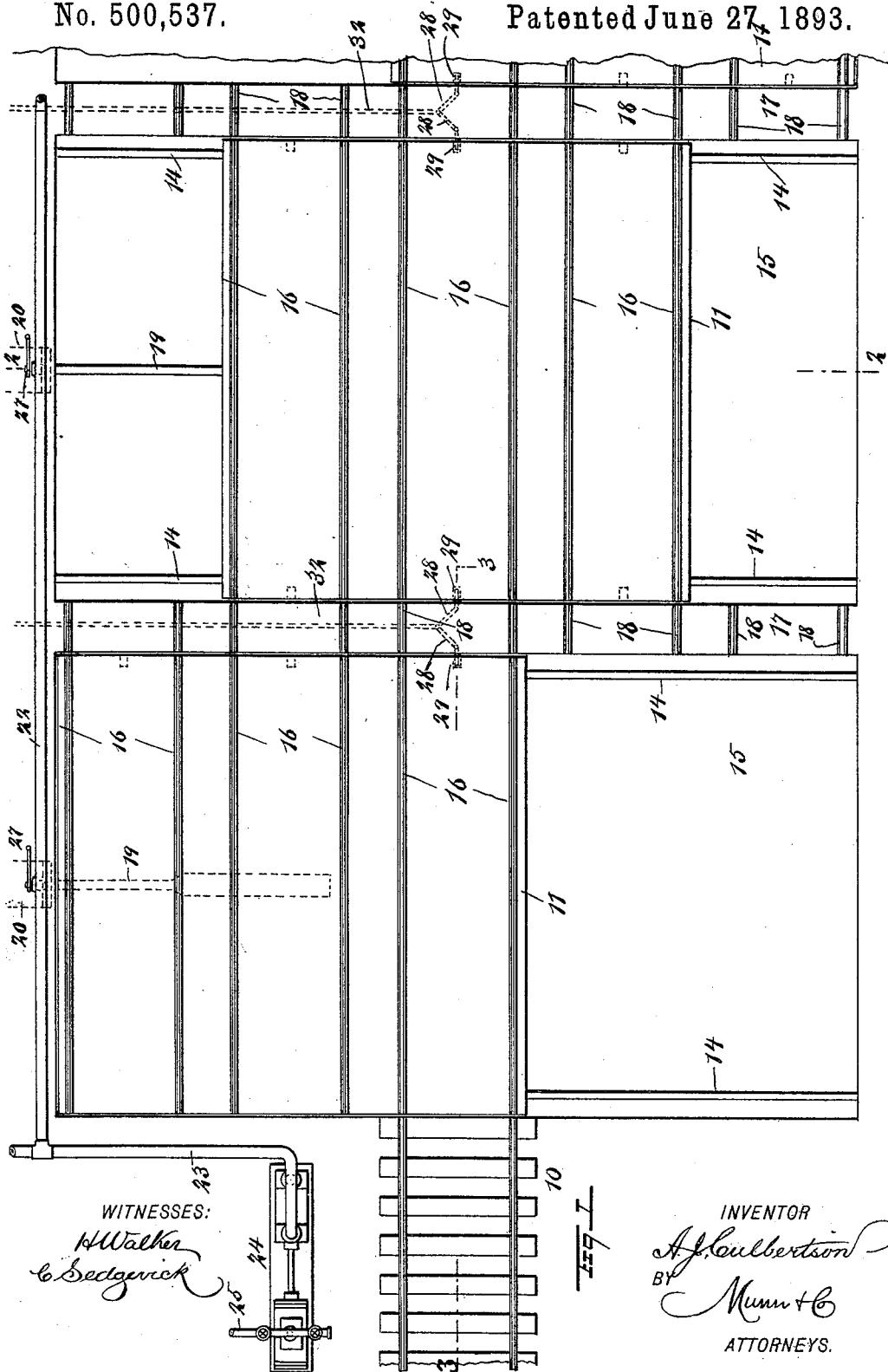
(No Model.)

2 Sheets—Sheet 1.

A. J. CULBERTSON.
TRAIN TABLE.

No. 500,537.

Patented June 27, 1893.



(No Model.)

2 Sheets—Sheet 2.

A. J. CULBERTSON.
TRAIN TABLE.

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Fig 2

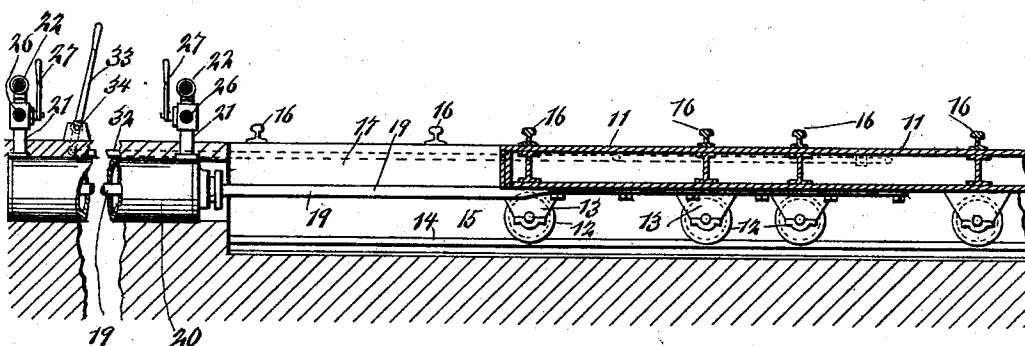
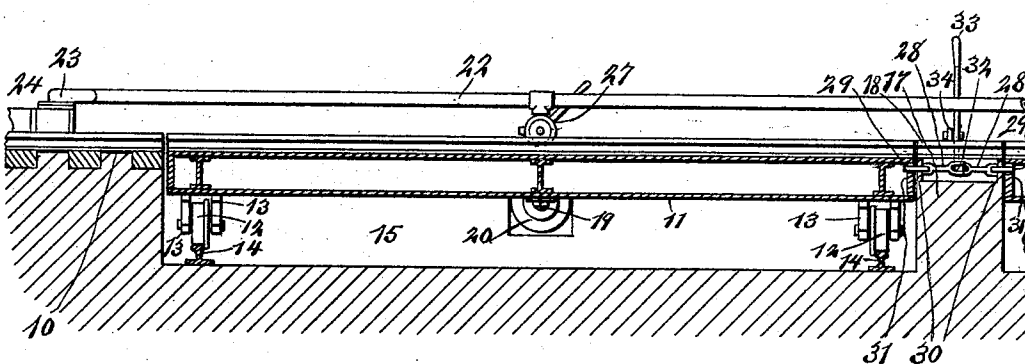


Fig 3



WITNESSES:

H. Walker
L. Badgerick

INVENTOR

A. Culbertson
BY *Munn & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ANDREW J. CULBERTSON, OF SAN ANDREAS, CALIFORNIA.

TRAIN-TABLE.

SPECIFICATION forming part of Letters Patent No. 500,537, dated June 27, 1893.

Application filed November 18, 1892. Serial No. 452,427. (No model.)

To all whom it may concern:

Be it known that I, ANDREW J. CULBERTSON, of San Andreas, in the county of Calaveras and State of California, have invented a new and Improved Train-Table, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of apparatus which is adapted to facilitate the making up of trains in a train yard.

The object of my invention is to produce a simple and substantial apparatus by means of which a number of cars on a siding may be quickly brought into line with the main line track so that they may be drawn off in a continuous train upon said track. It will be seen that to accomplish this the invention must operate somewhat in the nature of a switch, but the apparatus is also adapted to simultaneously shift and bring into alignment a great number of cars so that a train may be made up almost instantly.

To these ends my invention consists in certain features of construction and combinations of the same, as will be hereinafter described and claimed.

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

Figure 1 is a broken plan view of the apparatus embodying my invention. Fig. 2 is a broken cross section on the line 2—2 in Fig. 1; and 3 is a longitudinal section on the line 3—3 in Fig. 1.

The main line track 10 is arranged in the usual way and a plurality of parallel tables 11 are held to move transversely across the track, these tables being each wide enough to carry a car conveniently, while the car is in a position parallel with the main line, and to facilitate the easy shifting of the tables they are provided with wheels 12 on their under sides which are preferably suspended from hangers 13, and the wheels run on transverse track rails 14 which rails are laid in pits 15, these pits being of such a depth that the top surfaces of the several tables shall be level with the road bed of the track 10.

The tables 11 are each provided with numerous pairs of rails 16 which are arranged parallel with each other and parallel with the

main line, and the gage of the pairs of rails corresponds with the gage of the main line. Any desired number of these tables 11 may be used, but in practice seven is ordinarily sufficient, and the tables are arranged so that the main line will never be broken; that is, there will always be a pair of rails on each table which will align with the main track rails.

The pits 15 are separated by partitions 17 and on the tops of the partitions are rails 18 arranged in pairs and adapted to align with the rails 16 and with the rails of the main line 10. Any well known means may be used for reciprocating the tables 11, such as electric motors, steam engines, and the like, but in the drawings I have shown a means of operating them by compressed air or by hydraulic pressure.

As shown, each table is connected near one side, with a piston rod 19 which extends horizontally outward and into a long cylinder 20, see Figs. 1 and 2, and the length of the stroke of the piston rod corresponds to the movement of the tables. The piston rod 19 is provided with a common form of piston adapted to be worked back and forth in the cylinder 20. Each end of the cylinder 20 is provided with a pipe 21 adapted to admit air or water as the case may be, and these pipes 21 connect with branch pipes 22 leading from a main pipe 24 which connects with an air compressor 24, or if any hydraulic power is used, with a pump; the air compressor 24 is provided with an ordinary supply pipe 25 which may be connected with a source of steam supply so as to run the compressor. The compressor is not shown in detail, as any ordinary compressor or pump may be used. If desired the compressor may be run by steam from the train locomotive, a suitable steam connection being made with the pipe 25.

The pipes 21 are provided with exhaust exits 26 and are controlled by an ordinary three-way cock 27, not shown in detail, so that air may be admitted to one end of the cylinder and allowed to exhaust from the other according to the position of the cocks.

The tables 11 are locked in position by the toggle levers 28 and the pins 29; a pair of these toggle levers is arranged between every two tables and the pins 29, which are pivoted to the free ends of the toggle levers, are adapt-

ed to enter holes in the side plates 30 on the partition 17 and holes 31 in the sides of the tables 11. Each pair of toggle levers 28 is connected at the center with a rod 32 which extends laterally on the partition 17, and the rod is pivoted to the lower end of a lever 33, which lever is fulcrumed to a support 34 and by moving the lever the rod 32 and the toggle levers 28 may be actuated so as to throw the pins 29 either into or out of engagement with the tables 11. It will be noticed that the tables 11 may be moved so as to bring either track thereon into line with the main track 10, and consequently the tables may be nicely operated so as to bring a number of cars into alignment. This facility of adaptation is also brought about by the arrangement of the valve 27 and the motor for each table, the motor in the present case consisting of the cylinder 20 and its piston. This arrangement enables one table to be moved in one direction and another in the opposite direction. When a train is to be made up, the cars which are located upon the several tables are moved so as to bring the desired cars into alignment, when the said cars are coupled together and may be drawn off on the main track. It will be understood that the several tracks of a siding may be made to align with the several tracks of the movable tables if desired.

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

1. The combination with the main track, intersected by a transverse depression or pit, of independent transversely reciprocating parallel tables mounted in said depression or pit and each having a series of tracks parallel with the main track and adapted to align therewith; each of the table tracks being of a length to receive a single car thereon; where-

by a whole train may be made up by a single shifting of the respective tables, substantially as set forth.

2. The combination with the main track intersected by a transverse depression or pit, of the independent reciprocating parallel tables mounted in the depression or pit and each having a series of tracks parallel with the main track and adapted to align therewith, each of said tables being of a length to receive a single car thereon, a cylinder for each table and provided with a piston connected therewith and a fluid pressure supply pipe having suitable valved connections with the ends of each cylinder to operate the piston and slide the table in either direction, substantially as set forth.

3. The combination with the main track, interrupted by a plurality of transverse pits or depressions and series of short stationary tracks on the walls or partitions of the pit, certain of said tracks being parallel with the main line; one track of each series being in alignment with the main line, of the independent transversely reciprocating tables mounted in the pits and each provided with a plurality of parallel tracks to align said short tracks and the main line, and an independent operating mechanism for reciprocating said tables, substantially as set forth.

4. The combination of the main line track, the transversely movable tables having tracks thereon to align with the main track, and toggle levers arranged between each pair of tables and having pins at their ends adapted to enter holes in the tables and lock the tables, substantially as described.

ANDREW J. CULBERTSON.

Witnesses:

F. J. SOLINSKY,
W. S. COULTER.