

No. 756,772.

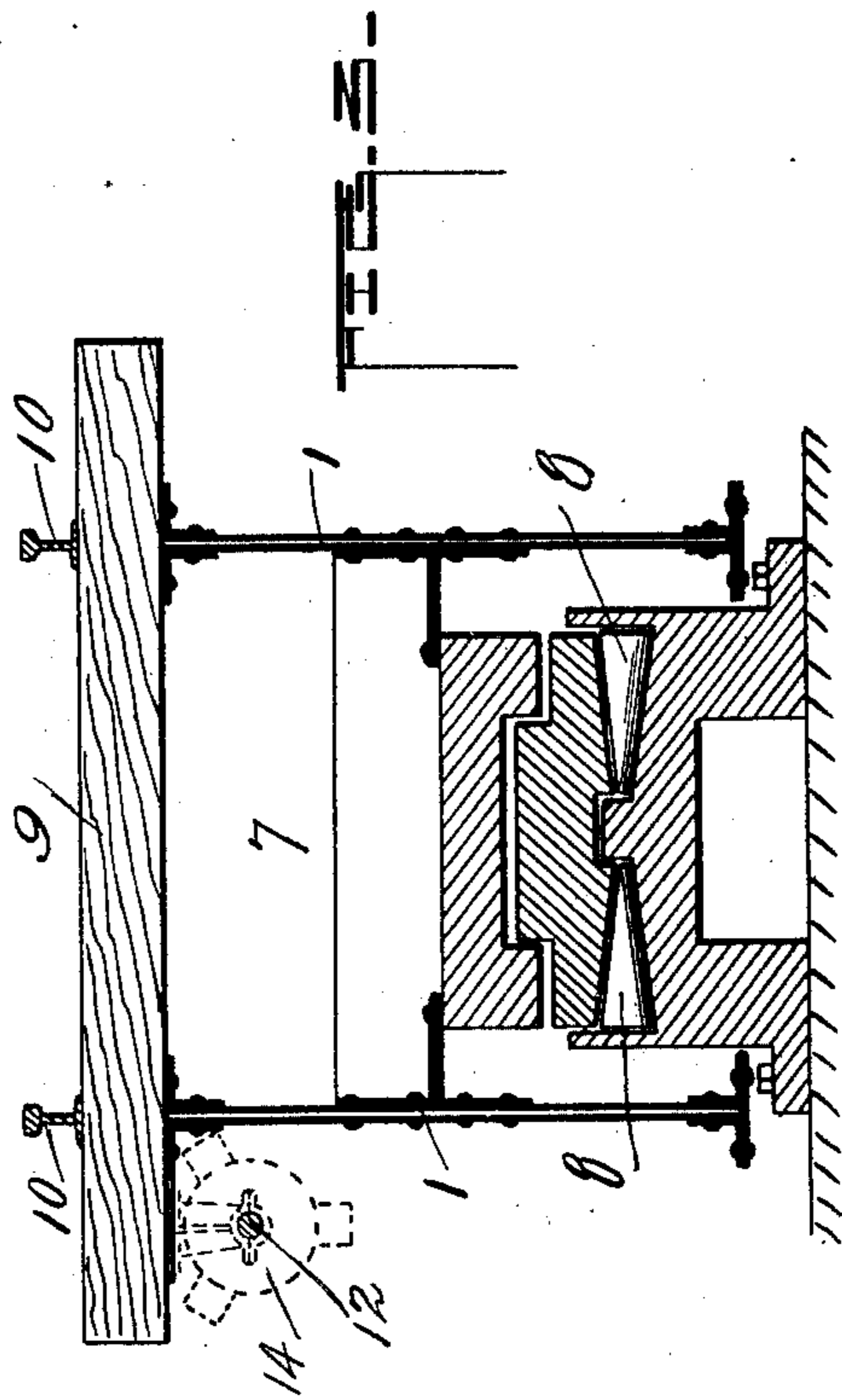
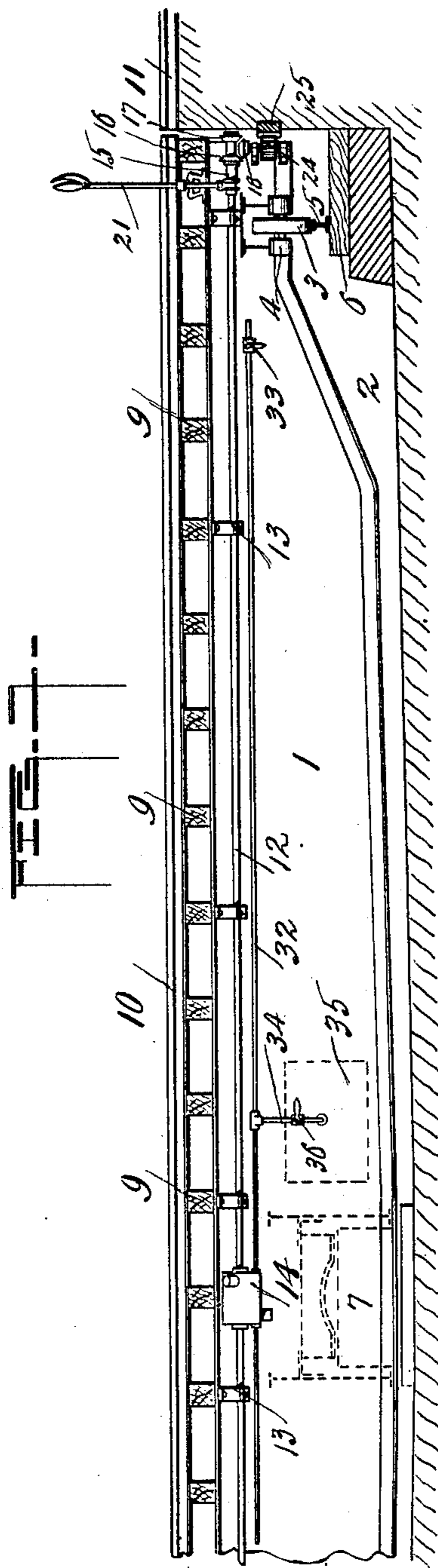
PATENTED APR. 5, 1904.

L. BATES.
POWER DEVICE FOR TRANSFER TABLES.

APPLICATION FILED NOV. 2, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:
Ernst Kuhn

Inventor:
Lafayette Bates
By *Chas. La Porte*, Atty.

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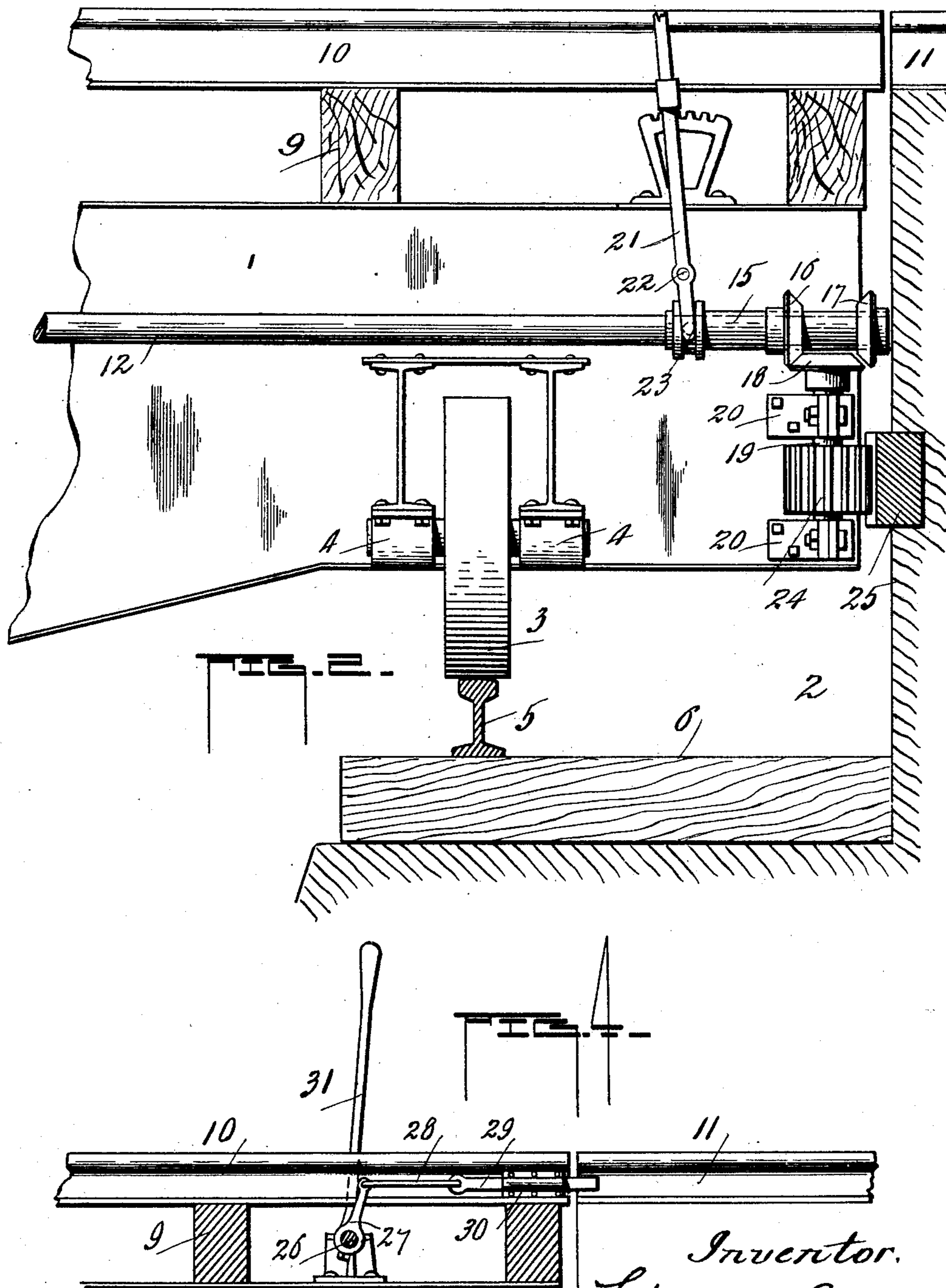
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Witnesses
C. E. Stone
Ernest Kuhn

Inventor.
Lafayette Bates
By Charles H. Potts, Att'y.

UNITED STATES PATENT OFFICE.

LAFAYETTE BATES, OF MATTOON, ILLINOIS, ASSIGNOR OF ONE-THIRD
TO CHARLES BATES, OF MATTOON, ILLINOIS.

POWER DEVICE FOR TRANSFER-TABLES.

SPECIFICATION forming part of Letters Patent No. 756,772, dated April 5, 1904.

Application filed November 2, 1903. Serial No. 179,465. (No model.)

To all whom it may concern:

Be it known that I, LAFAYETTE BATES, a citizen of the United States, residing at Mattoon, in the county of Coles and State of Illinois, have invented certain new and useful Improvements in Power Devices for Transfer-Tables; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention has reference to turn-tables or transfer-tables, and especially to a power device for operating said tables.

The invention has for its object to utilize the air-power from a locomotive air-pump for the purpose of turning or shifting the table upon which it rests when it is desired to transfer such locomotive from the table to tracks leading thereto.

A further object of the invention is an air-motor supported by a turn-table connected with mechanism whereby the table may be turned or shifted by air-power, the object being to utilize the air from a locomotive resting upon said table, and, further, in the provision of an air-reservoir under pressure to be used with such motor for use on "dead engines" adapted to be transferred by said table.

Further objects and aims of the invention will be further understood from the following specification and drawings attached thereto and forming a part thereof, in which—

Figure 1 is an elevation of more than half of a table, on a greatly-reduced scale, showing my improvements attached thereto, both ends of the table appearing substantially alike. Fig. 2 is an elevation, enlarged somewhat over Fig. 1, showing one end of the table and devices whereby when they are set in motion are adapted to shift the table to the right or the left. Fig. 3 illustrates in section and in detail the pivot-stand upon which said table rotates. Fig. 4 is a sectional detail in elevation, showing the manner of locking the table when it is desired to connect the rails of the table

with coadjacent rails on the surface of the ground.

While I have illustrated in the accompanying drawings a rotating table, it is to be understood the power devices may be employed with equal facility on a table which is adapted to be reciprocated.

In the drawings, 1 indicates a table of the usual construction set in a depression 2 of the ground, the opposite ends of the table provided with one or more wheels or rollers 3, journaled in bearings 4 and rolling upon the tramway or track 5, secured to the base or foundation 6. The pivot-stand of the table (indicated as 7 and provided with roller-bearings 8) is one of the many forms of pivot-stands that may be employed in a complete device and supported in the bottom of the depression 2. The table is provided with the usual transverse ties 9, to which the longitudinal rails 10 are secured, extending from end to end of the table and adapted to coact with rails 11 on the surface of the ground, leading off in all directions from such table.

12 indicates a power-shaft extending longitudinally of the table 1 and may be supported at any point and in any suitable manner; but I have shown the same journaled in boxings 13, supported by the ties 9, as shown, the center of the shaft passing through and operatively connected with working parts of an air-motor 14, which may be of any suitable design and containing sufficient number of horsepower. On the opposite ends of the shaft 12 is carried a sleeve 15, feathered thereon, and secured to the sleeves are the bevel-gears or friction-wheels 16 and 17, adapted to mesh with a gear 18, fixed to a shaft 19, journaled in boxings 20, supported by the table 1. It is adapted to shift the sleeve 15 for the purpose of interchanging the gears 16 18 and 17 18 for rotating and shifting the table in opposite directions. This is accomplished by means of the lever 21, having a pivotal connection at 22 with the table, and lower bifurcated ends 23 engaging the sleeve for the purpose of shift-

ing the same. The lever extends up above the table a desirable distance, and combined with the usual pawl-and-rack connection for locking the position of the sleeve 15 on the shaft 12 after shifting.

The gearing by which the table is propelled consists of a pinion 24 on the shaft 19, which meshes with a rack 25, seated in the wall of the depression 2 of the ground and as shown in the drawings. Thus it will be seen, power being imparted to the gears 24 by their engagement with the rack 25, the table may be shifted in opposite directions. To lock the table when the rails of the table coincide with the rails on the surface of the ground, I have provided the transverse shaft 26, journaled in the boxings, supported by the table, to which is connected a finger 27, the finger having connected therewith a link 28, which at its opposite end is attached to a rod, bar, or finger 29, slidable in a casing 30, attached to the rails of the table, and its free end adapted to engage the end of a rail on the surface of the ground, substantially in manner shown in Fig. 4, the means of operating the shaft 26 being an operator's lever 31, attached to one end of the shaft 26.

To the motor 14 is connected the air tube or pipe 32, at its opposite ends controlled by the valves 33, and 34 indicates a lead from the pipe or tube 32, connected with an auxiliary reservoir or tank 35, supported by the table, the pipe 34 having connected therewith intermediate the tank and pipe 32 a valve for controlling the supply to the pipe 32. Suitable means (not shown) may be provided for filling the tank 35 with air.

When an engine is run onto the table, the tube which connects with the air-supply is coupled onto one end of the pipe 32, the valve 33 opened, which imparts power to the motor 14 and through its shaft 12 to the gearing 16 and 17 and from such gearing to the pinion 24, which shifts the table through its connection with the rack 25. If the air-supply of the engine is dead, the supply from the tank 35 is admitted to the motor 14, which serves in the same capacity as the air from the engine.

The mechanism seen in Figs. 2 and 4 is du-

plicated upon opposite sides of the table for convenience in handling the apparatus from either end thereof, all of which, it is believed, will be understood from the foregoing.

Minor changes may be made and details resorted to both in the construction and arrangement of the apparatus, and I do not wish to be confined to the showing made, but to include all equivalents of such devices.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In combination with a transfer-table, a motor supported thereby, a shaft directly connected with the motor and extending to opposite ends of said table, a fixed cog-rack, pinions intermeshing with said rack, and means for communicating power from the motor-shaft to said pinions.

2. In combination, a turn-table, an air-motor supported thereby, a power-shaft connected with said motor, an air-pipe connected with said motor and adapted to be connected with an air-supply under pressure, and mechanism adapted to be intermittently connected with said power-shaft and thereby propel said table.

3. In combination with a transfer-table, an air-motor supported thereby, means for supplying said motor with air under pressure, an auxiliary air-reservoir connected with said motor, a power-shaft, gearing whereby when said motor is in operation said table may be propelled, and mechanism for intermittently connecting said gearing and motor.

4. In combination with a transfer-table, a motor supported thereby, a shaft connected with said motor, a fixed rack, pinions meshing with said rack, gearing on the motor-shaft adapted to actuate aforesaid pinions and means for shifting the gearing on the shaft and thereby control the direction of rotation of said table, substantially as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

LAFAYETTE BATES.

Witnesses:

JOSEPH WILHELM,
CHAS. I. CLEARY.