No. 822,777. PATENTED JUNE 5, 1906.

F. S. SEE.

DEVICE FOR TRANSPORTING PASSENGERS TO AND FROM MOVING TRAINS.

APPLICATION FILED JAN. 27, 1906.

3 SHEETS—SHEET 1.

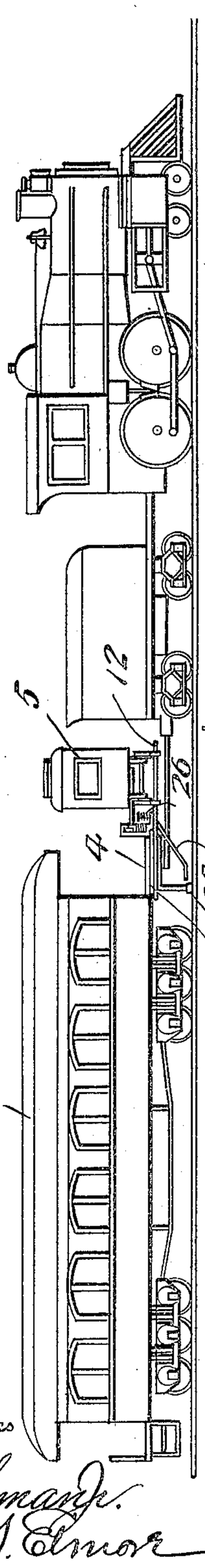

Fig. 1.

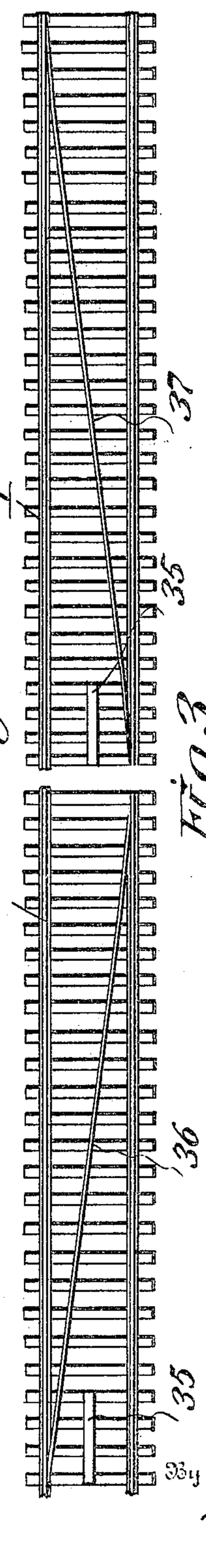

Fig. 2.

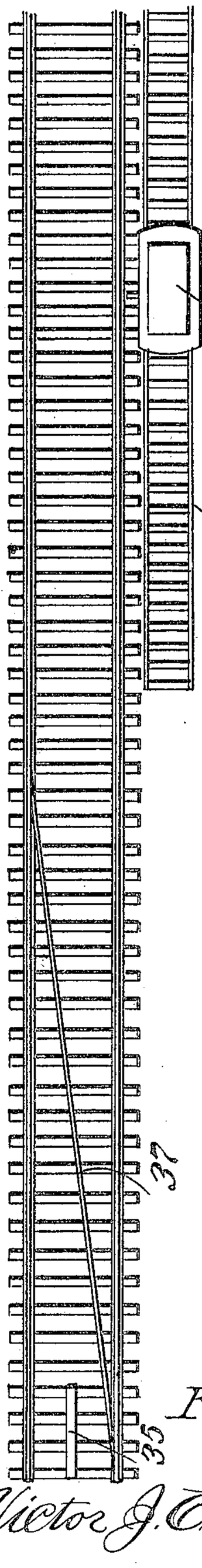

Fig. 3.

Witnesses

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3 SHEETS—SHEET 2.

Fig. 4.

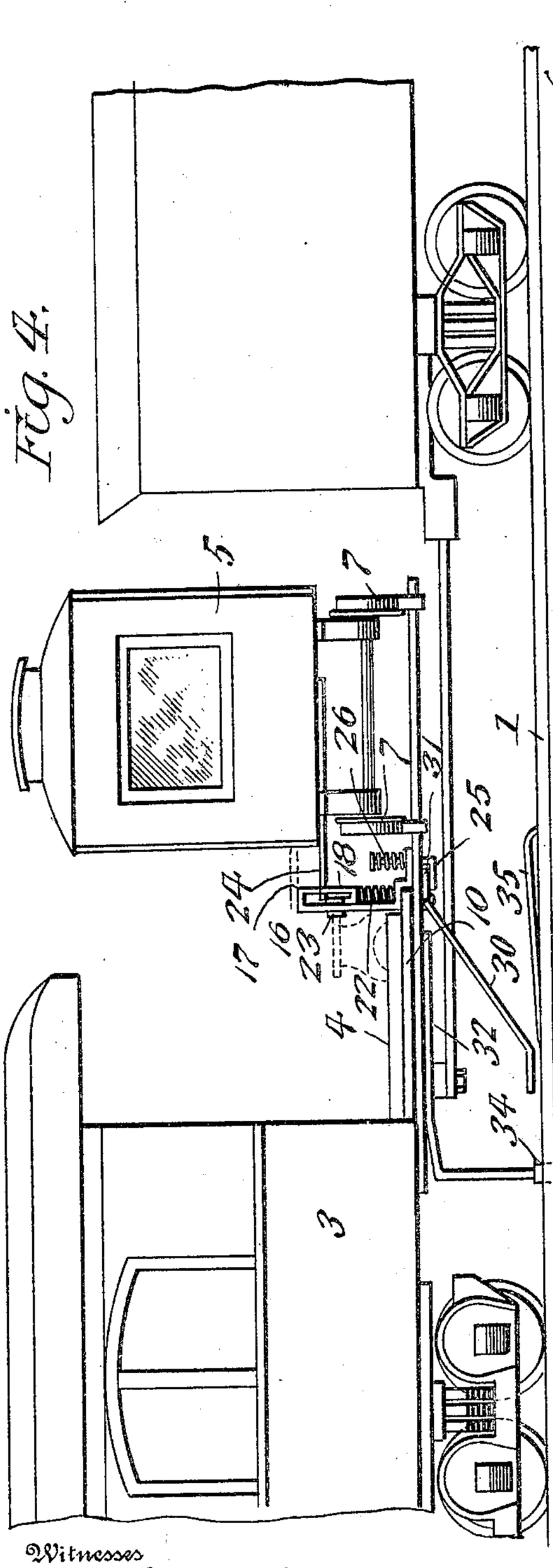
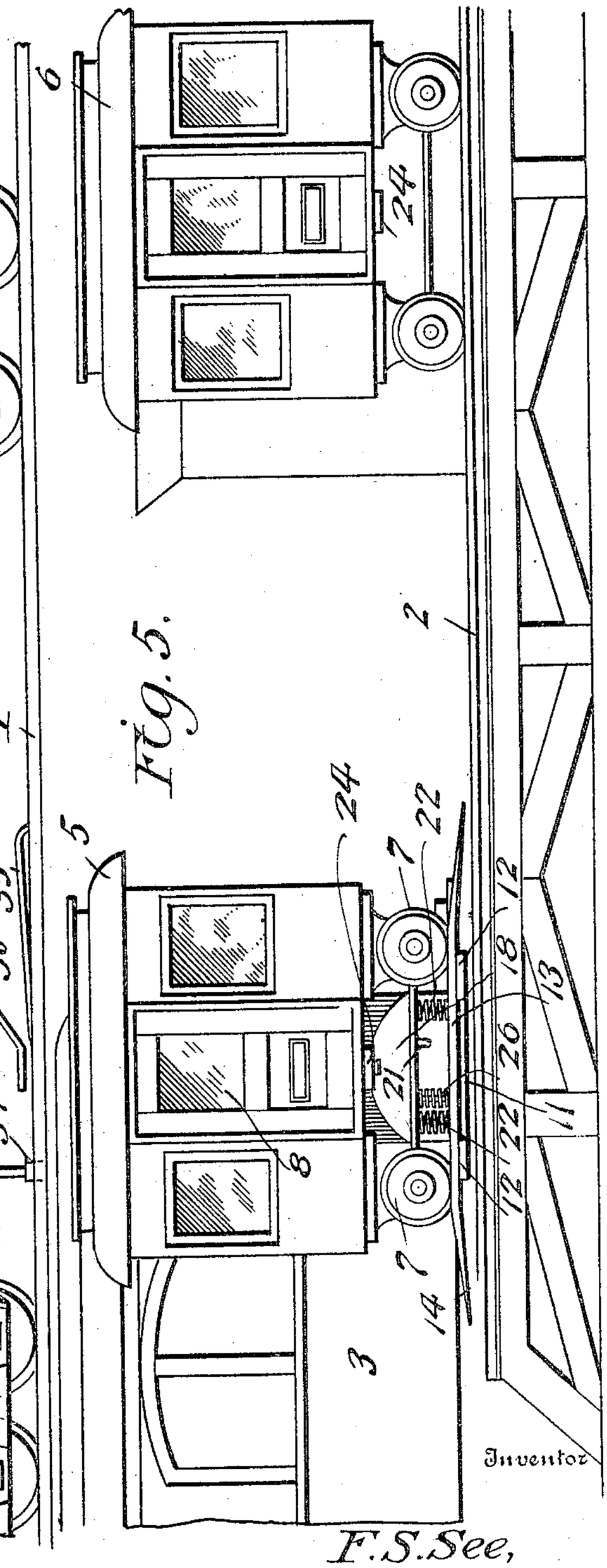


Fig. 5.



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3 SHEETS—SHEET 3.

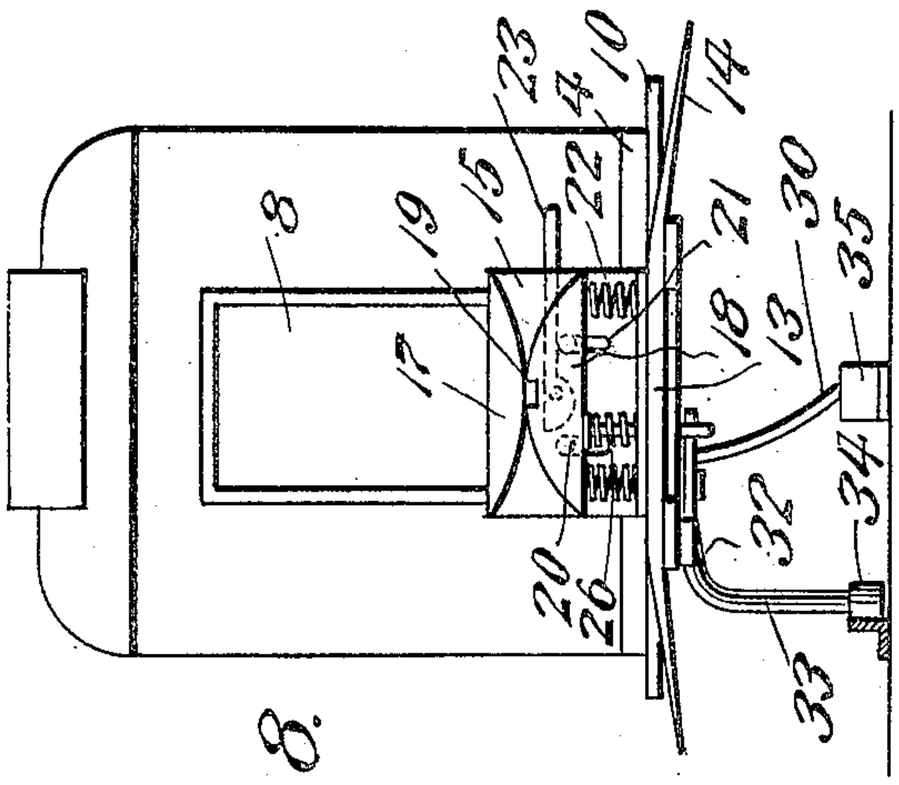

Fig. 8.

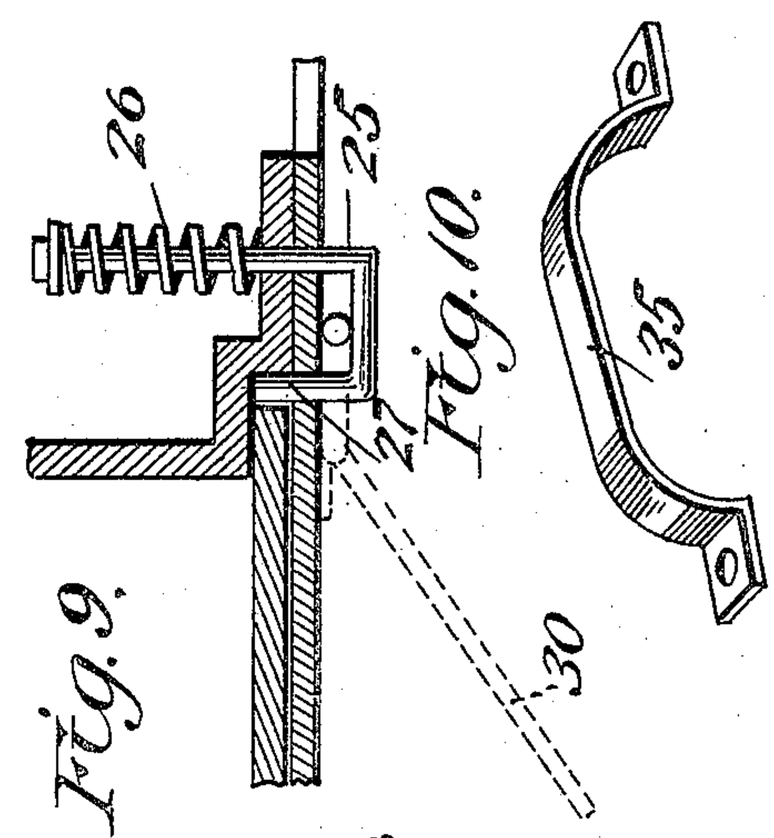

Fig. 9.

Fig. 10.

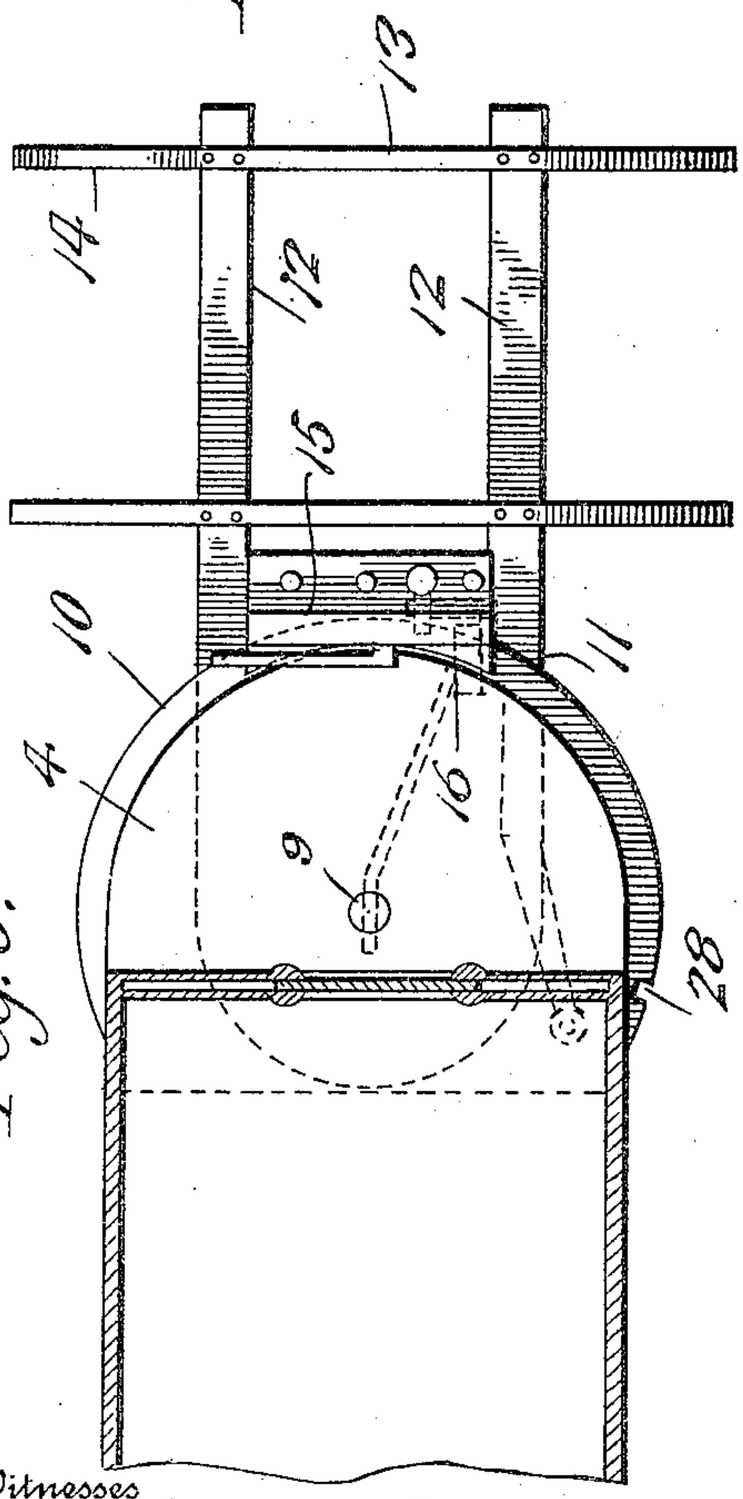

Fig. 6.

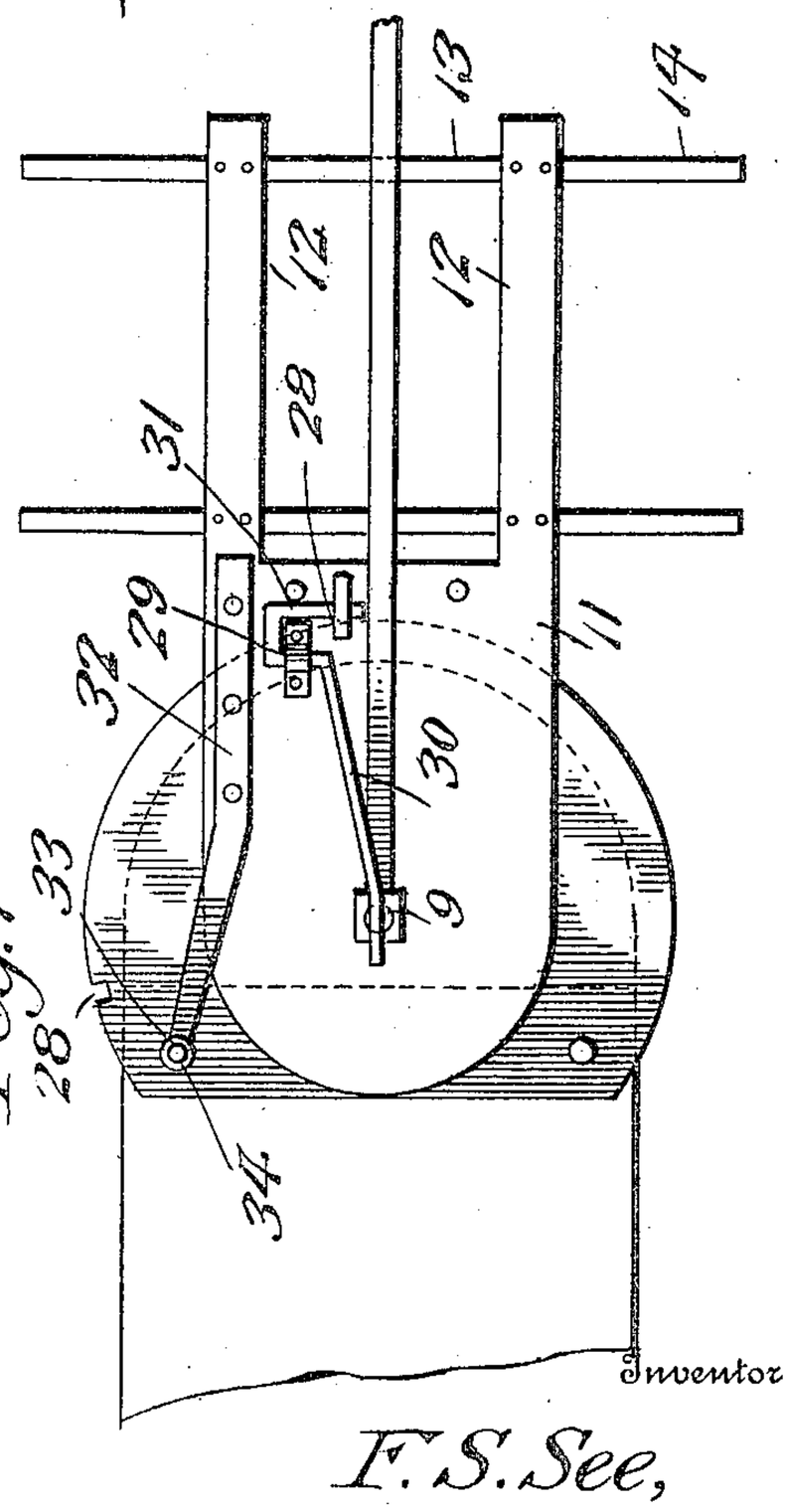

Fig. 7.

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Witnesses

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UNITED STATES PATENT OFFICE.

FILER SACKETT SEE, OF GEM, KANSAS.

DEVICE FOR TRANSPORTING PASSENGERS TO AND FROM MOVING TRAINS.

No. 822,777. Specification of Letters Patent. Patented June 5, 1906.

Application filed January 27, 1906. Serial No. 298,147.

To all whom it may concern:

Be it known that I, FILER SACKETT SEE, a citizen of the United States, residing at Gem, in the county of Thomas and State of Kansas, have invented new and useful Improvements in Devices for Transporting Passengers to and from Moving Trains, of which the following is a specification.

This invention relates to devices for transporting passengers to and from moving trains, and especially to devices of the type disclosed in my prior application, filed July 14, 1905, Serial No. 269,703, in which a passenger-transferring car is by suitable mechanism automatically received from and delivered to the rails of an auxiliary track extended parallel with the rails of the main track at the stations along the road.

The present invention has for its objects to provide a comparatively simple inexpensive device of this character in which the transferring-cars will during transit be carried in an unobstructing position beneath the cars of the train, one wherein the auxiliary or transferring car will be automatically moved to or from position between the cars, one in which the parts will be securely locked for holding the auxiliary car in proper position during transit, and one wherein the auxiliary car-supporting mechanism will be swung automatically to position for delivering the car at a station.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation of a railway-train, showing the supplemental transferring-car in position between the tender and first coach. Fig. 2 is a top plan view of a portion of the main rail, showing the tripping-rails for actuating the auxiliary-car-supporting device. Fig. 3 is a similar view showing the auxiliary track which receives the transferring-car. Fig. 4 is a side elevation, on a larger scale, of the transferring-car and portions of the tender and first coach. Fig. 5 is a similar view showing the parts in position for delivering one of the transferring-cars and receiving another. Fig 6 is a plan view, partly in section, of the supporting device for the auxiliary car. Fig. 7 is a bottom plan view of the same. Fig. 8 is an end view of the transferring-car. Fig. 9 is a detail view, partly in section, of the locking member. Fig. 10 is a perspective view of one of the abutments.

Referring to the drawings, 1 designates the rails of a main track, and 2 the rails of an auxiliary track disposed at one side of and parallel with the main track, upon which latter there is adapted for travel a passenger-car 3, having a platform 4, while arranged for travel upon the track 2, which is laid only at the stations along the main road, is a plurality of auxiliary or transferring cars 5 6, identical in construction and each equipped with transporting-wheels 7 and a pair of oppositely-disposed side doors 8. The foregoing parts may all be of the construction and arrangement as disclosed in my prior application or of other preferred construction adapting them for the performance of their functions.

Pivoted at 9 to the platform 4, the outer edge of which is rounded, as shown, and provided with an outwardly-projecting marginal flange 10 is a car-supporting platform or turntable 11, having a pair of outwardly-projecting parallel portions or arms 12, to which are bolted or otherwise secured relatively spaced supporting-rails 13, the ends of which are downwardly-inclined, as at 14, and have sharpened terminals for a purpose which will hereinafter appear, there being fixed upon the platform 11 at the inner ends of the arms 12 a vertical bearing member or plate 15, provided with a base-flange 16, adapted to override the flange 10 and sustaining a pair of cooperating clamping members or jaws 17 18, the opposed meeting faces of which are reversely curved, as shown. The movable jaw 18, which is provided with a notch or recess 19, is movably engaged with the plate 15 by means of fastening members 20, arranged in vertical slots 21, and is pressed to engaging position by means of a pair of normally expanded springs 22, there being pivoted to the bearing-plate 15 a cam-lever 23, adapted for operation to move the jaw 18 to releasing position, as and for a purpose which will be more fully hereinafter described.

Fixed beneath the car 5 and projecting transversely therefrom is an arm 24, adapted for engagement by the clamping-jaws 17 and 18 to fix the car in position upon the rail 13, while projecting upward through the bearing

member 15 is a vertically-movable substantially U-shaped locking member 25, having upon one of its arms a normally expanded spring 26 and presenting a vertical engaging portion 27, adapted for engagement with any one of a plurality of notches 28, formed in the flange 10 for locking the platform 11 against movement. Pivoted beneath the table 11 in a suitable bearing 29 is a downwardly and rearwardly inclined tripping-lever 30, having a transversely-projecting portion 31, engaged with the locking member 25, while rigidly secured to the table 11 at one side thereof is an arm 32, provided with a vertically-depending portion 33, equipped at its lower end with an antifriction-roller 34, there being fixed centrally between the rails 1 at appropriate intervals vertically-disposed tripping members or abutments 35, adapted for operating the lever 30, while extended diagonally between the rails 1 in relatively reverse directions are supplemental shifting members or rails 36 37, with which the arm 32 contacts for shifting the table 11.

In practice one of the transferring-cars 5 or 6 is normally carried on the table or platform 11 in advance of the passenger-car 3, or the transferring-car may, if preferred, be carried at the center of the passenger-car, which will of course under such conditions be constructed with a central space for the purpose of accommodating the transferring-car. When the transferring-car is in position on the platform, it rests upon the rails 13 and is fixed in place owing to engagement of the arm 24 with the seat 19 between the jaws 17 18, while the engaging member 27 of the locking member 25 seats in the central notch or keeper 28 for locking the turn-table against movement in the position illustrated in Figs. 4 and 6. As the train approaches a station the lower end of tripping-lever 30 rides upward over one of the tripping members 35, thus moving the locking member 25 against the action of spring 26 to release the turn-table 11 and permit the same to swing on pivot 9, while the lower end of arm 32 comes simultaneously into contact with the shifting rail 36 and is operated thereby for swinging the platform 11 to the position illustrated in Fig. 5, after which the lever 23 is operated for moving the jaw 18 to release the arm 24 and permit the car 5 to be deposited on the auxiliary track 2. As the train continues to advance the downwardly-inclined portions 14 of rails 13 ride beneath the wheels 8 of car 6, thus causing the latter to pass upward onto the platform-rails, after which the lower end of arm 32 comes into contact with the second shifting rail 37 for swinging the platform to normal position with the transferring-car disposed between the coach 3 and tender, as seen in Fig. 1. Thus it will be seen that as the train advances it will at each station deposit a transferring-car and receive a second such car, these operations being performed automatically and permitting the passengers to be received or deposited at the appropriate stations without stopping the progress of the train.

It will be understood that the auxiliary rails 36 37 are fixedly secured at points between their ends to the cross-ties and that their terminals, which are free from engagement with the rails, are sufficiently yieldable to permit the roller 34 to pass freely between the same and the rails 1. It is to be noted that owing to the ends of the rails 14 being downwardly inclined and having sharpened terminals they will travel flush under the auxiliary rails 2 for ready passage to or from beneath the wheels 8, thereby insuring the reception or delivery of the transferring-cars without unnecessary or objectionable jolting, and, further, that during transit the auxiliary cars will occupy an unobstructing position, whereby widening of the spaces between adjacent tracks is rendered unnecessary.

Having described my invention, what I claim is—

1. In a device of the class described, a main car, a turn-table carried thereby, an auxiliary car adapted to be sustained by the latter, and means for automatically swinging the turn-table to and from position in line with the main car.

2. In a device of the class described, a main car, a turn-table carried thereby and adapted to normally stand in axial alinement with the car, an auxiliary car to be carried by the turn-table, means for automatically moving the latter to and from normal position, and means for locking the table in the latter position.

3. In a device of the class described, a main car, a turn-table carried thereby and adapted to swing to and from a position in axial alinement with the car, tracks provided on the turn-table for the reception of an auxiliary car, means for locking the turn-table in normal position, and means for automatically releasing and moving the turn-table to position to receive or discharge the auxiliary car.

4. In a device of the class described, a main car, a turn-table carried thereby and adapted to stand normally in axial alinement with the car, means for locking the turn-table in normal position, track devices for automatically releasing the turn-table and swinging the same to a position transversely of the car and to return the same to normal position, and an auxiliary car adapted to be received upon, carried by and discharged from the turn-table.

5. In a device of the class described, a main track, an auxiliary track extended at one side thereof, main and auxiliary cars designed for travel respectively on said tracks, a turn-table carried by the main car and adapted for movement to position to receive the auxiliary

car, means for automatically moving the turn-table, and means for locking the same against movement.

6. In a device of the class described, main and auxiliary tracks arranged in parallel relation, main and auxiliary cars adapted for travel respectively on said tracks, a turn-table carried by the main car and having rails to receive the auxiliary car, said turn-table being movable to position to bring its rails into line with the auxiliary track, means for locking the turn-table against movement, and means for automatically releasing and swinging the turn-table.

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

FILER SACKETT SEE.

Witnesses:
R. W. BORDEN,
EUGENE EATON.