No. 684,693.

Patented Oct. 15, 1901.

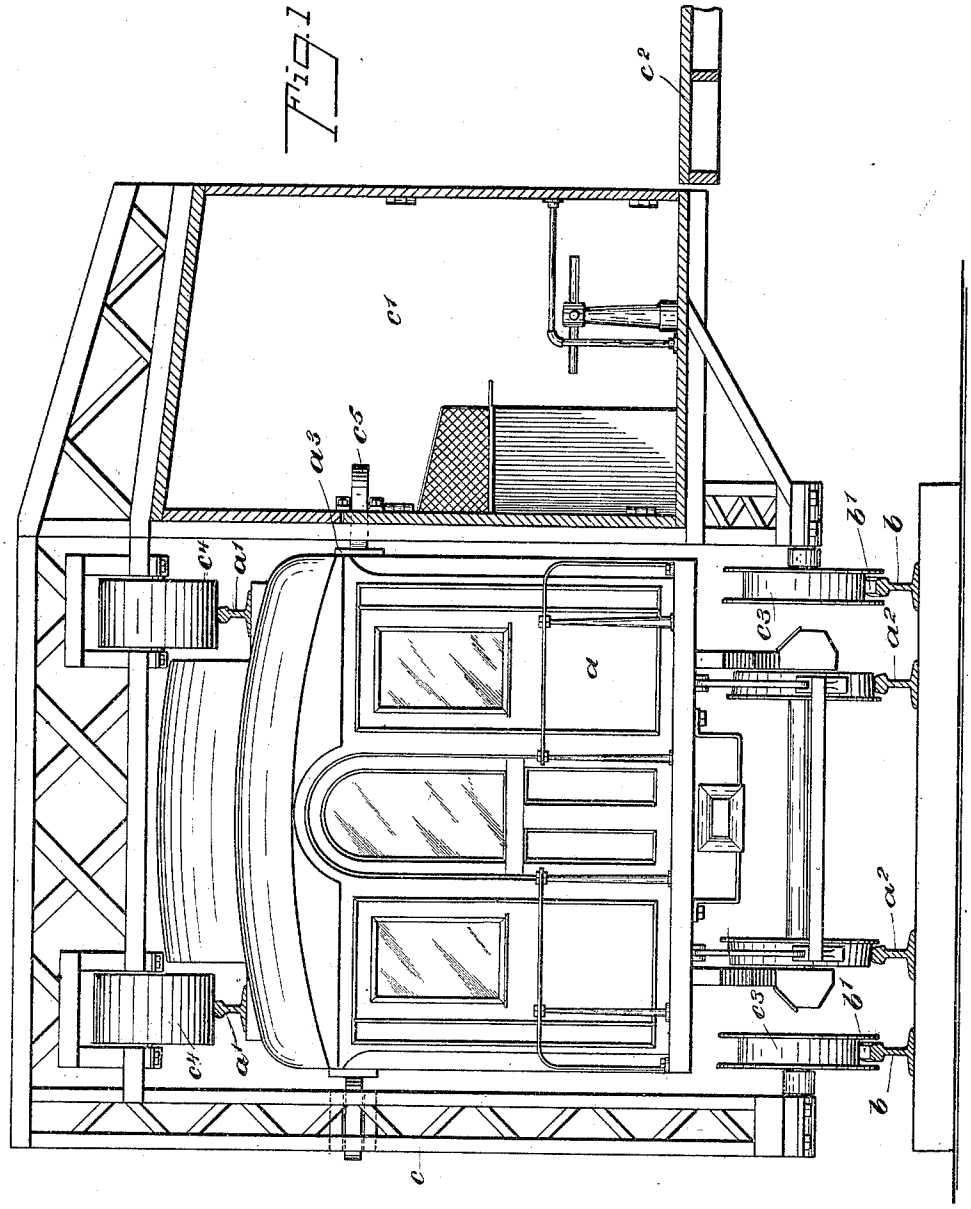
J. W. JENKINS.

RAILWAY SYSTEM.

(Application filed Jan. 31, 1901.)

(No Model.)

3 Sheets—Sheet 1.



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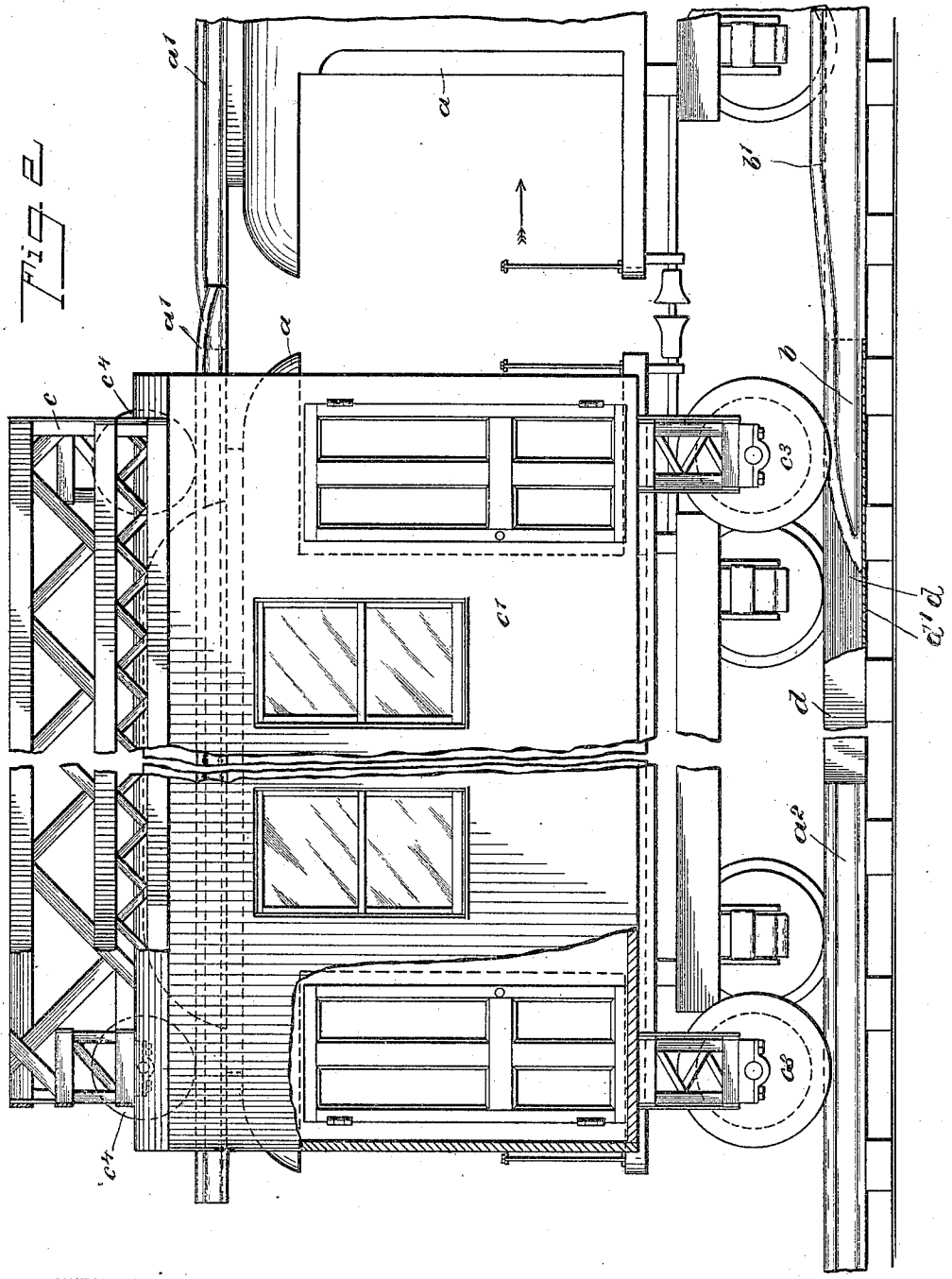

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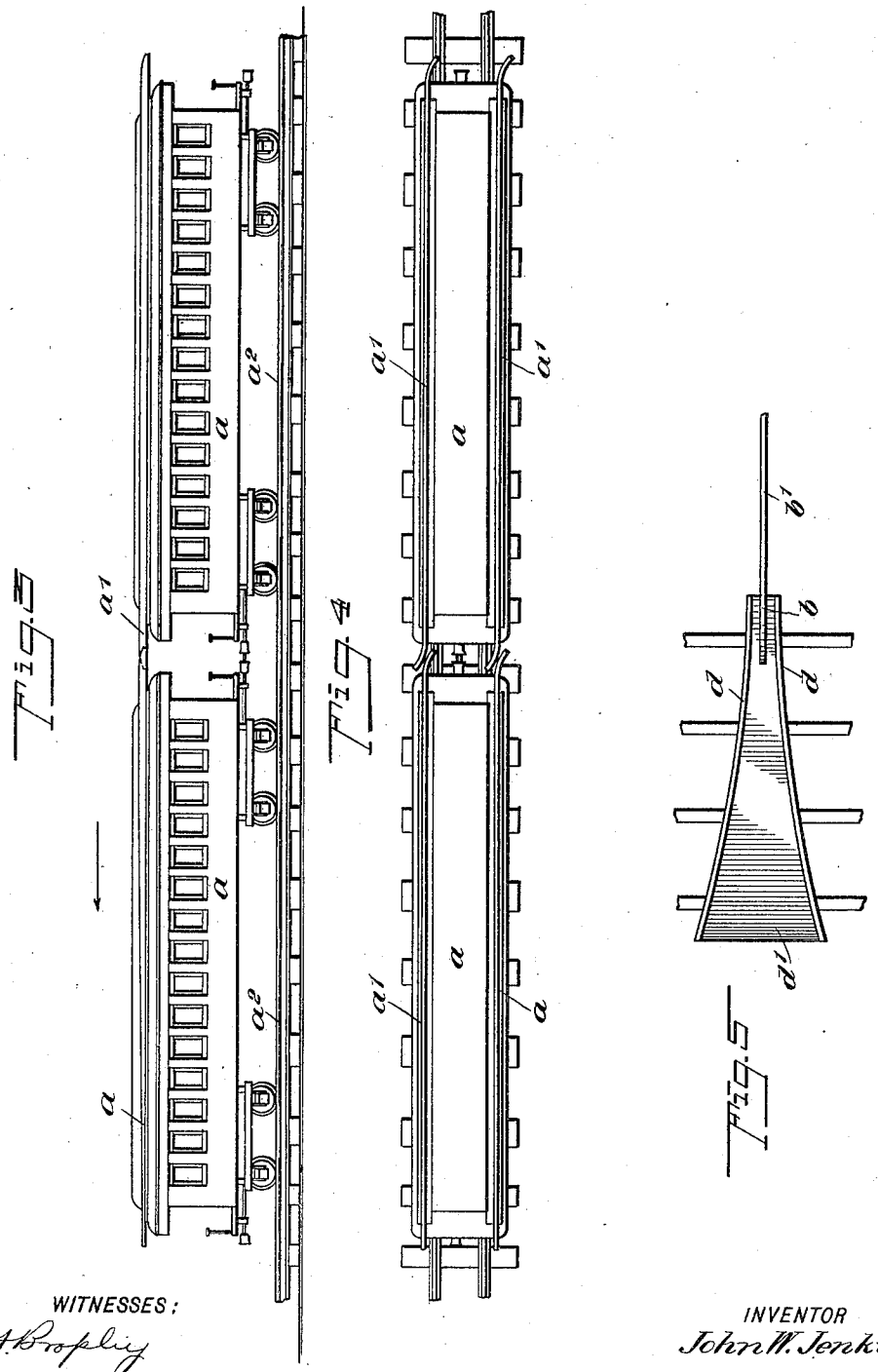

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UNITED STATES PATENT OFFICE.

JOHN W. JENKINS, OF NEW YORK, N. Y.

RAILWAY SYSTEM.

SPECIFICATION forming part of Letters Patent No. 684,693, dated October 15, 1901.

Application filed January 31, 1901. Serial No. 45,448. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. JENKINS, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Railway System, of which the following is a full, clear, and exact description.

The purpose of this invention is to so improve a railway system that passengers may be loaded on and unloaded from a car or train of cars without stopping the movement of the cars, to which end I employ a number of riders or saddle-cars which are successively taken up and dropped from the moving train and through the medium of which passengers may enter or leave the train without interrupting the progressive movement thereof.

This specification is a specific description of one form of the invention, while the claims are definitions of the actual scope thereof.

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

Figure 1 is a rear elevation of the invention, showing part of the saddle-car in section. Fig. 2 is a side elevation with parts broken away. Fig. 3 is a reduced view showing two railway-cars equipped for use with the saddle-car of my invention. Fig. 4 is a plan view of the same, and Fig. 5 is a plan view of a detail to be hereinafter described.

The railway-cars may be of the usual construction and are indicated at a in the drawings. Each car is provided at its top with two rails a', and the cars run on the usual standard rails a^2 in use in all railways. As shown best in Fig. 4, the rails a' have their ends projected beyond the ends of the cars and curved laterally, so that they will lie side by side at the ends and form a continuous track for the saddle-car; nor will the turning movement of the cars a break the continuity of this track, owing to the peculiar formation of the ends of the rails. Alongside of the rails a^2 of the railway and respectively outside thereof are arranged rails b for the saddle-car or rider. These rails b do not extend continuously throughout the length of the railroad-track, but are only located at the stations at which points it is desired to load and unload the passengers. The rails b are each provided with raised portions b' adjacent to the ends toward which the cars a move, and said ends of the rails b are tapered, all of which is shown in Fig. 2. The other ends of the rails b are reduced to a height equaling that of the rails a^2.

The saddle-car comprises a suitable skeleton-like structure c, which is adapted to straddle the cars a, so that the train may pass under the structure c. The saddle-car also comprises a compartment c', in which the passengers stand when passing to and from the train and which compartment may, if desired, be provided with a ticket-office and appliances for registering passengers, as indicated in Fig. 1. The floor of the compartment c' is adapted to register with the stationary platform c^2 at the station. (See Fig. 1.) The saddle-car is provided with four grooved or double-flanged wheels c^3, which are adapted to bear on the rails b when the saddle is not engaged with the cars a. The upper end of the saddle-car is provided with broad-faced wheels c^4, which are adapted to run on the rails a'. These wheels c^4 are made broad, so that there will be no danger of their missing the rails a'. When the wheels c^4 are engaged with the rails a', as shown in Figs. 1 and 2, the saddle-car, with the wheels c^3 thereof, will be lifted off of the lower parts of the rails b; but the raised parts b' of the rails b are sufficiently elevated to raise the entire saddle-car from the cars a when the wheels c^3 engage the high parts b' of the rails b and in so raising the saddle-car to lift the wheels c^4 off of the rails a'. As illustrated in Fig. 3, the rails a' on the front car a are tapered downward, so that the rails a' will readily engage under the wheels c^4. In Fig. 3 the cars a are supposed to be traveling in the direction of the arrow. The car a has a broad flat rail or wear plate a^3 at each side thereof, whereon are arranged to bear wheels c^5, carried by the saddle-car, so as to prevent the cars a and c from striking against each other. As shown in Figs. 2 and 5, guide-rails d are provided and placed one at each side of the tapered ends of the rails b. These guide-rails converge toward the rails b and serve to insure that the wheels c^3 properly engage said rails. The guide-rails may be of any construction desired and are

here shown as connected by a web d', forming a sort of frog.

In the use of the invention one of the saddle-cars will be placed at each station on the railroad, and as a train approaches the saddle-car should rest on the lower or main part of the rails b, beyond the raised parts b' thereof. The tapered ends of the rails a' will then run under their wheels c^4, and the saddle-car will be lifted off of the rails b and carried away with the train, thus enabling the passengers to pass from the saddle-car into the cars a. The passengers in the railway-car who desire to get off at the next railway-station will then pass into the saddle-car, and as the train approaches the next station the wheels c^3 will engage with the raised part b' of the rails b and the saddle-car will be lifted off of the train, thus permitting the train to pass on and leaving the saddle-car at the station. When the saddle-car is thus dropped, the train immediately runs into the second saddle-car, which is placed on the farther end portions of the rails b, and takes the second saddle-car up with the passengers contained therein. The operation goes on in this manner, one car being left at each station and one car being taken up, and by this arrangement the train may move without a stop throughout the length of the road. In Fig. 2 the train is supposed to be moving in the direction of the arrow, and it will be seen that the saddle-car is just about to engage the raised parts b' of the rails b, so that said car will be on the rails b and the train allowed to move on without stopping.

In arranging the saddle-cars the car which is to be taken up by the moving train should be placed at the end of the rail which is distant from the end toward which the train is approaching, or, in other words, at a point beyond the raised part b' of the rail b. The purpose of this is to permit the saddle-car which is moving with the train to be left at the station by the engagement of the wheels c^3 with the raised parts b' of the rails b, and when this car has been left at the station the other saddle-car may then be taken up. The saddle-cars may be provided with brakes for arresting their movement, if desired. These brakes may be applied to the wheels c^4 or to any other point desired.

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

1. In a railway system, the combination with a railway car or cars having rails on the top thereof, of a saddle-car adapted to straddle the railway-car, and having wheels on the upper part thereof, such wheels being engaged by the rails on the car to carry the saddle-car on the railway-car.

2. In a railway system, the combination with the railway having auxiliary rails with raised portions and with a railway car or cars having rails on the top thereof, of a saddle-car with wheels running on the auxiliary rails of the track, and with additional wheels adapted to engage with and run on the rails on top of the car.

3. In a railway system, the combination with a railway-car and with an auxiliary rail arranged along the track and having a raised portion, of a saddle-car adapted to run on the railway-car and having a wheel engageable with the raised portion of the auxiliary rail, for the purpose specified.

4. In a railway system, a saddle-car adapted to run on the railway-car, and comprising a skeleton-like portion inclosing the car, and a room or apartment for passengers.

5. In a railway system, the combination with the railway and the railway-car, the former having an auxiliary rail with a raised portion, and the latter having a rail on its top, of a saddle-car having two wheels, one adapted to run on the rail of the car and the other adapted to bear on the auxiliary rail.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN W. JENKINS.

Witnesses:
ORI G. COOLE,
H. C. REINKEN, Jr.