

(No Model.)

L. D. CRAIG.
REMOVABLE SIDE WALL FOR CARS.

No. 501,677.

Patented July 18, 1893.

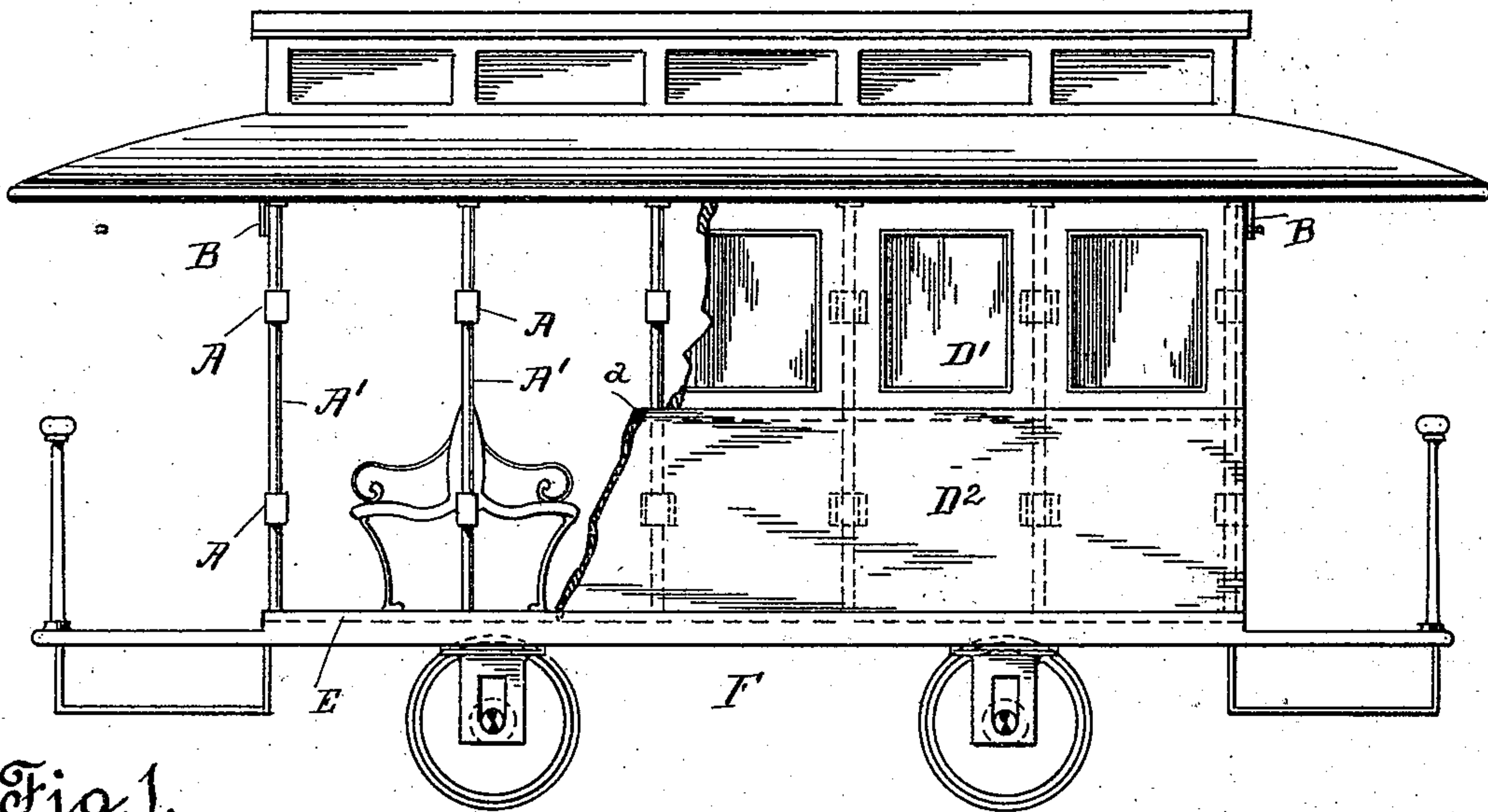


Fig. 1.

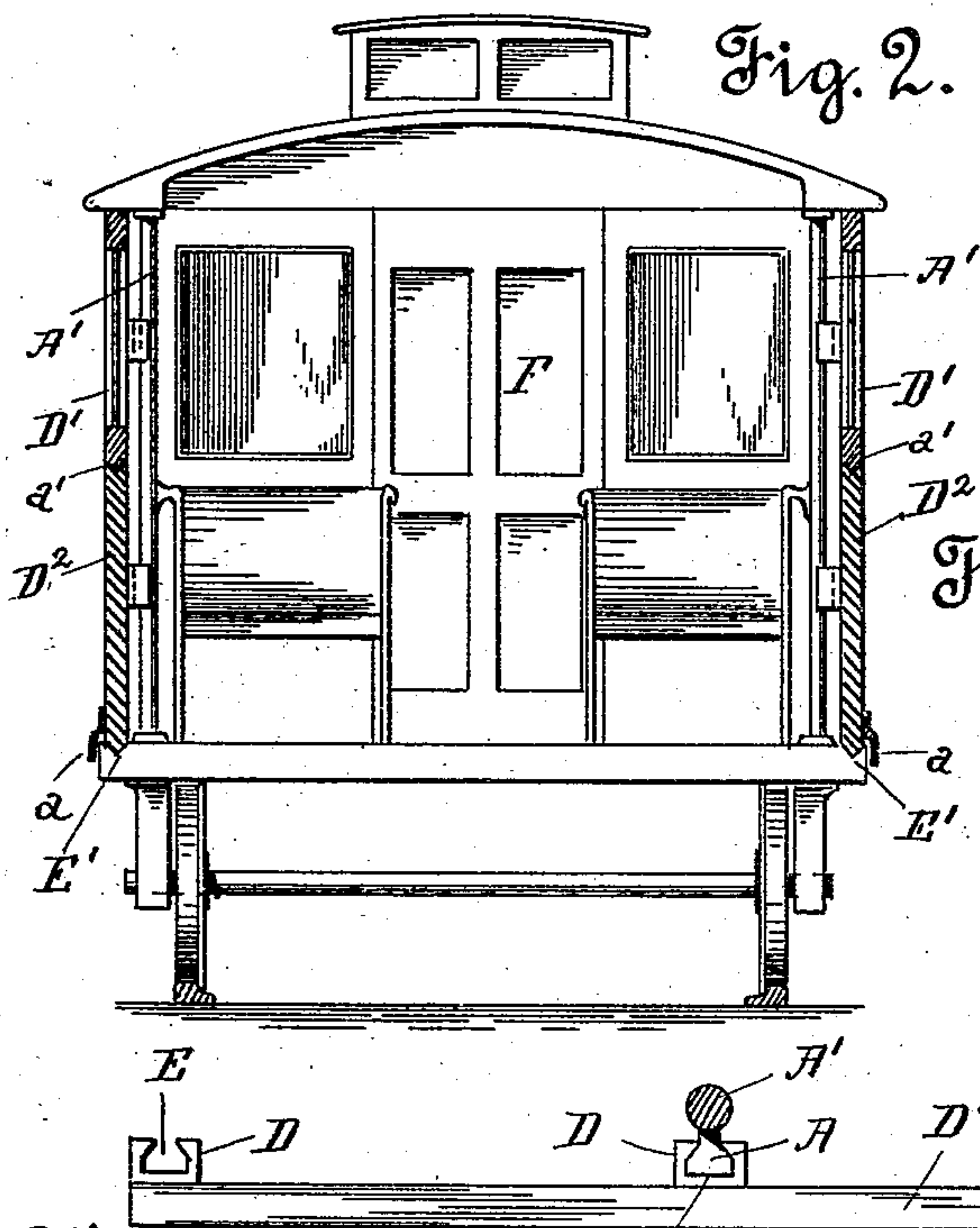


Fig. 2.

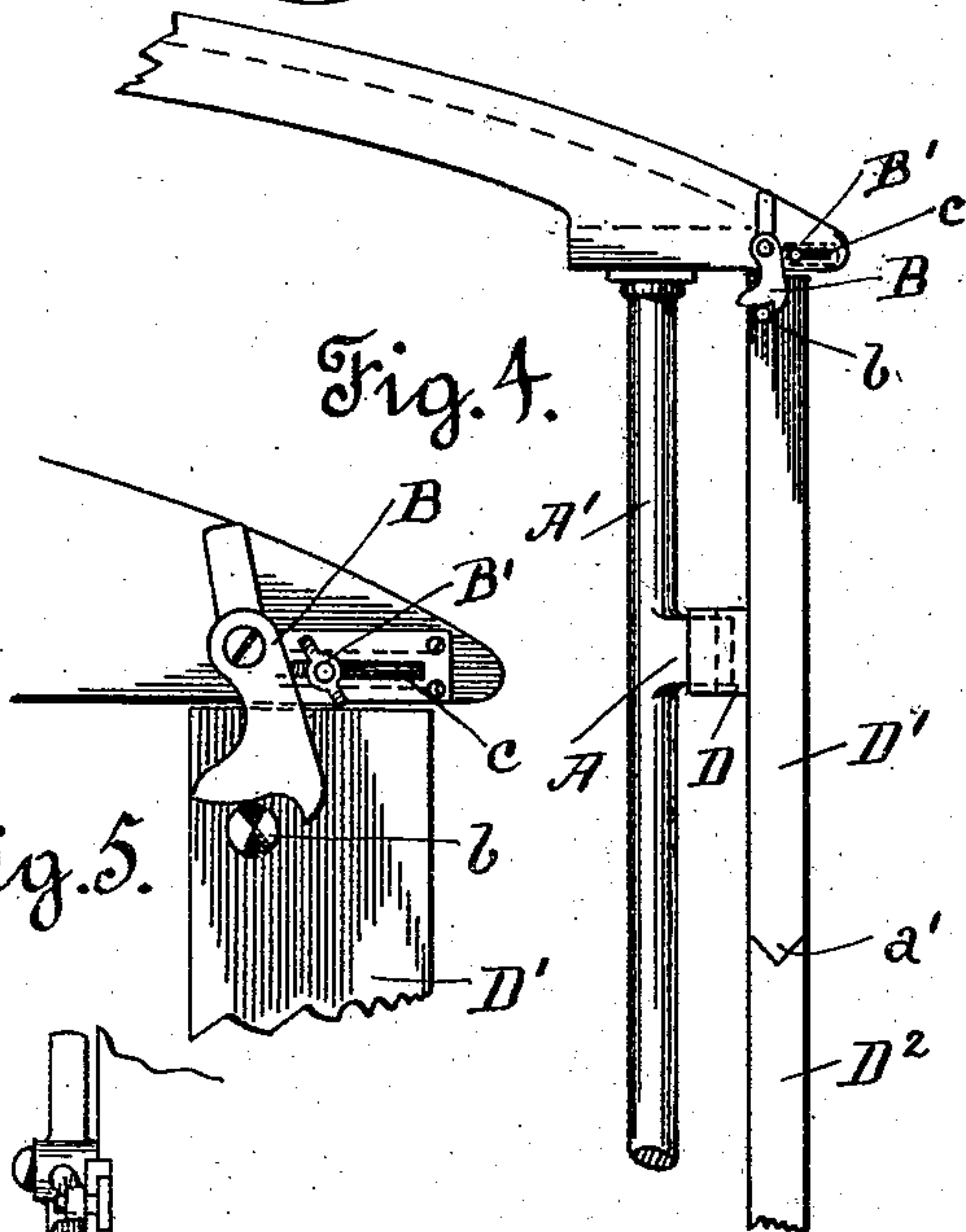


Fig. 4.

Fig. 5.

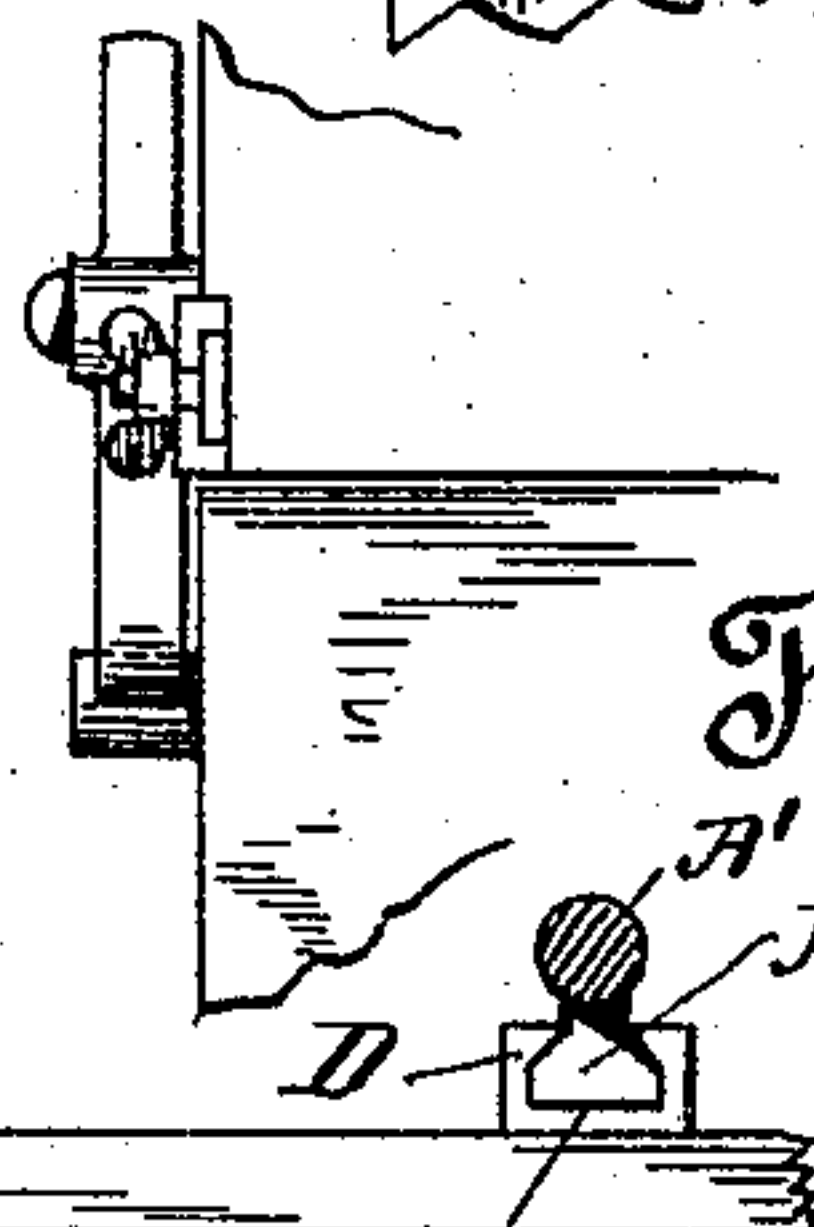


Fig. 6.

Fig. 3.

Witnesses.

W. Houteverde,
Walter R. Craig

Inventor.

L. D. Craig

UNITED STATES PATENT OFFICE.

LEE D. CRAIG, OF SAN FRANCISCO, CALIFORNIA.

REMOVABLE SIDE WALL FOR CARS.

SPECIFICATION forming part of Letters Patent No. 501,677, dated July 18, 1893.

Application filed December 12, 1892. Serial No. 454,928. (No model.)

To all whom it may concern:

Be it known that I, LEE D. CRAIG, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented a new and useful Improvement in Movable Adjustable Side Walls for Railway-Carriages, of which the following is a specification.

My invention relates to certain novel arrangements in the construction of railway carriages, and is intended to secure convenience and comfort to passengers riding in such conveyances, especially in street cars, by enabling the operators of such vehicles to change the carriage from a closed car to an open, or observation car, without loss of time or inconvenience, the arrangement being such that any unskilled person can quickly and effectively make the change from an open to a closed car, or vice versa. I accomplish this by certain new methods of construction, the details of which are hereinafter fully described, and illustrated by the accompanying drawings, in which—

Figure 1. is a side elevation, in part broken, of my improved car. Fig. 2. is an end sectional view of same. Fig. 3. is a top edge view of a panel forming sides of car. Fig. 4. is a detail elevation of panel arrangement at one side of car. Fig. 5. is a detailed front view of locking attachment for panels. Fig. 6. is a detailed side view of same.

A. represents iron lugs, cast or otherwise secured, and permanently fastened to the upright iron or wooden stanchions A' of an ordinary open street car, F. These lugs are beveled or dovetailed in their particular sides, as shown in C., Fig. 3. The lugs marked D. on the panels D' D², Fig. 3, are countersunk or indovetailed as shown in letter E., to fit and correspond with those attached to the stanchions A'. These are firmly fastened to the woodwork of the panels in proper position, to meet and fit securely in the lugs A. when in use. The panels are tongue-grooved on one side and beveled on the other, as shown in Fig. 4, with an apron lapel, a. on the other side. These panels are made the full length of the car carriage, and are fitted firmly: first to the stanchions by means of a dovetailed lug-fastener, and second, in the beveled groove E'. at the floor on the side of the car. The lower panel D² is constructed one-half of the side of a car, and is all woodwork. The

second, or upper panel, D', containing the windows, is similarly placed, the lower edge being beveled to fit into the groove A' in the top of the lower panel, and being pressed firmly down in place, and securely fastened at the top to the side of the coach or car by means of the clamping cam B., Fig. 5, thereto attached. This clamp locking into pin b, on side of upper panel D' holds same in place, and is, itself, held locked in position by the set screw B' working in longitudinal groove c. This adjustment in construction makes a close and comfortable carriage in inclement weather, while it can be, by removing the sides, transformed into an open observation car in pleasant weather. Two persons can make the change from one condition to the other in two minutes, or as quickly as a carriage can be opened or closed.

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

1. A dovetailed or beveled panel, substantially as herein described, for movable sides to street or railroad cars, when secured in place by dovetailed lugs, or equivalent, and cam-bearings, substantially as herein described.

2. In a railway car or carriage, the upright stanchions A' provided with lugs D, having dovetail grooves in combination with side panels D², having lugs adapted to fit the grooves in the lugs D., and a locking device for fastening the panels to the car, substantially as described.

3. In a railway car or carriage, side panels D² adapted to interlock with the lower transverse beam of the car, and having a lapel (a) adapted to cover the joint, in combination with an upper panel D', and locking device, substantially as described.

4. In a railway car or carriage, the movable side panels adapted to interlock at their meeting edges, and to be connected with upright stanchions of the car by means of dovetailed lugs and grooves substantially as described.

In witness whereof I have hereunto subscribed my name in the presence of two witnesses.

LEE D. CRAIG. [L. S.]

Witnesses:

C. E. KELLEY,
B. M. WILSON.