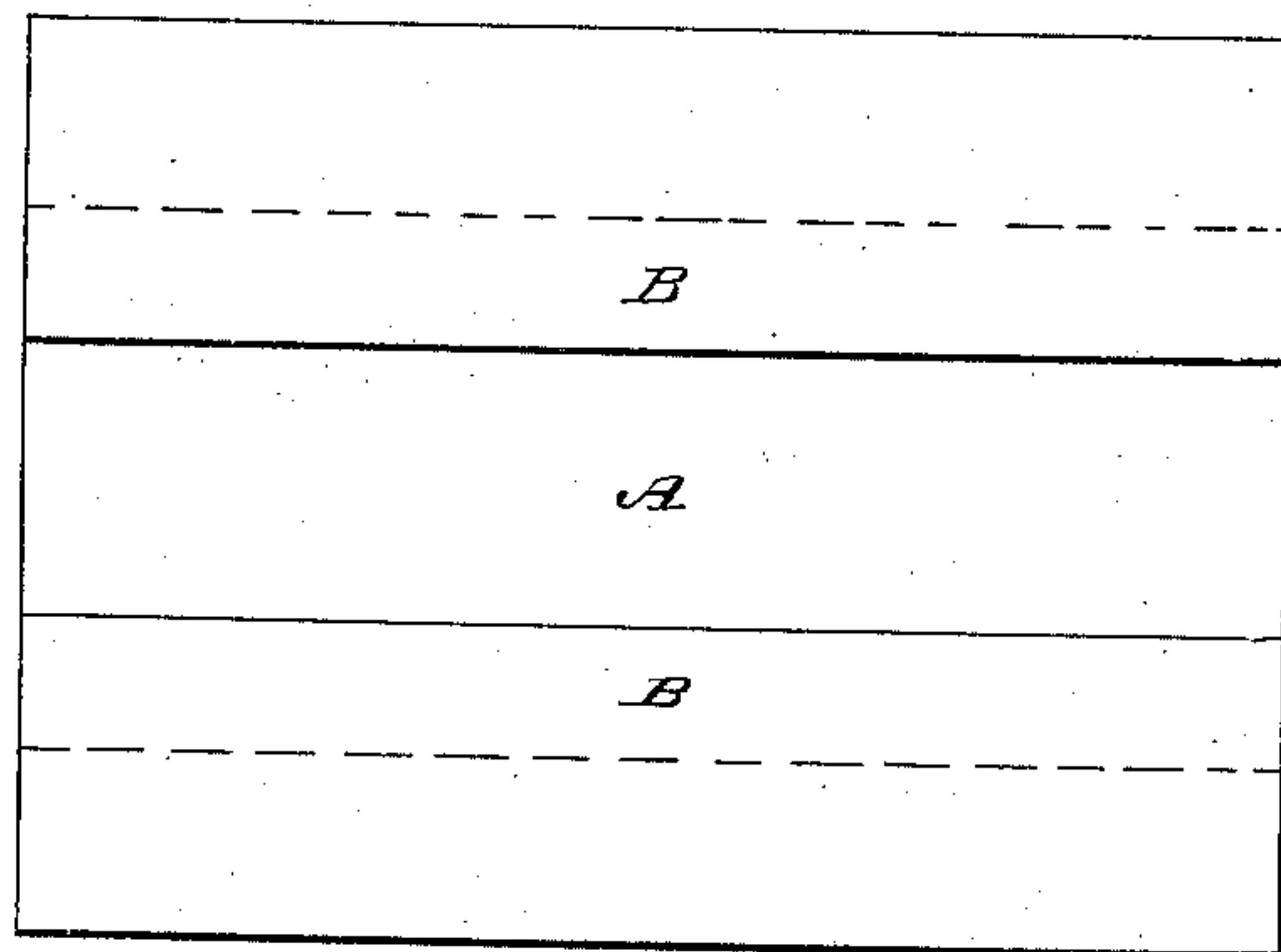


No. 31,283.

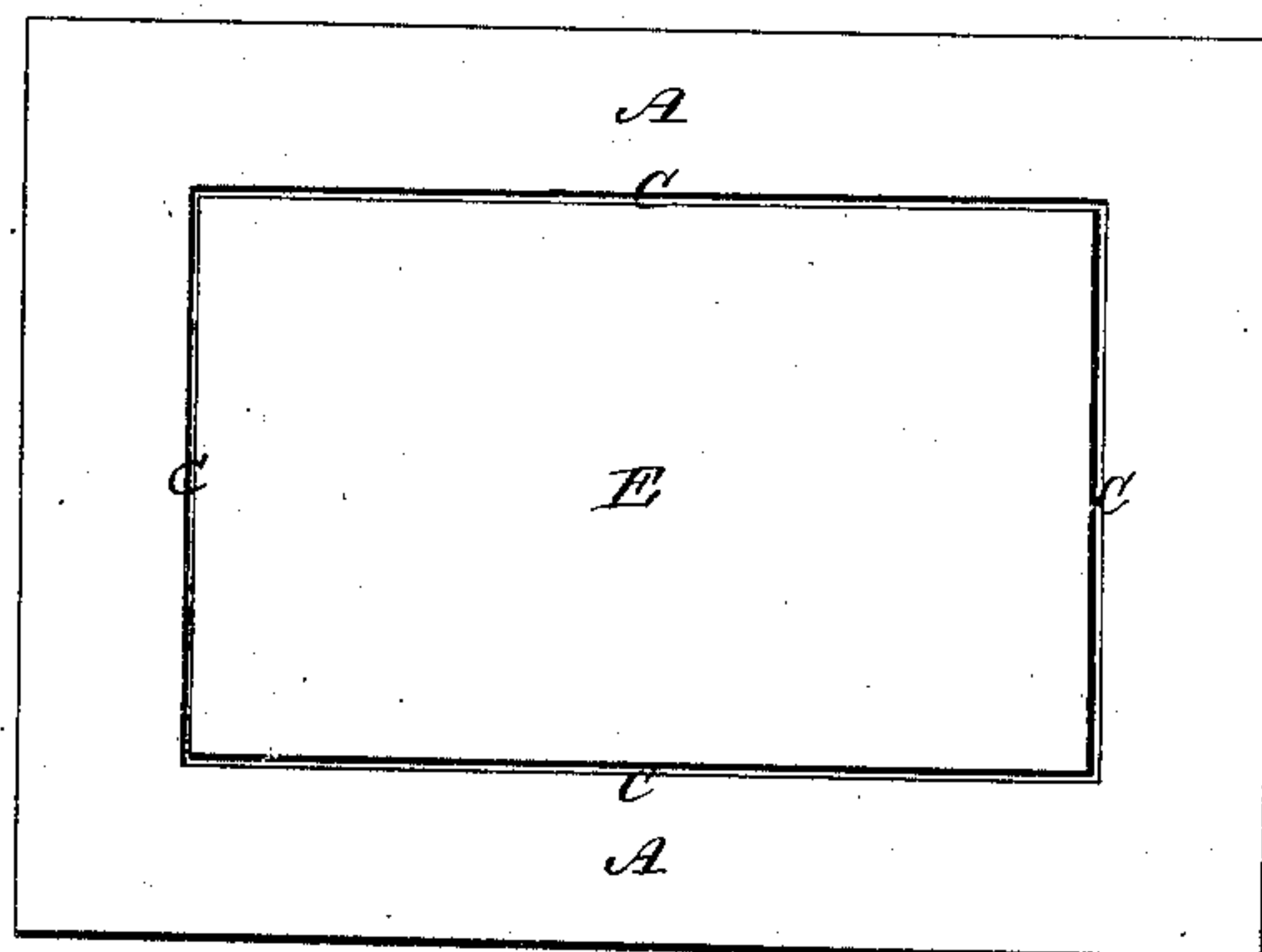
PATENTED JAN. 29, 1861.

E. WEIGHT.  
RAILROAD CHAIR.

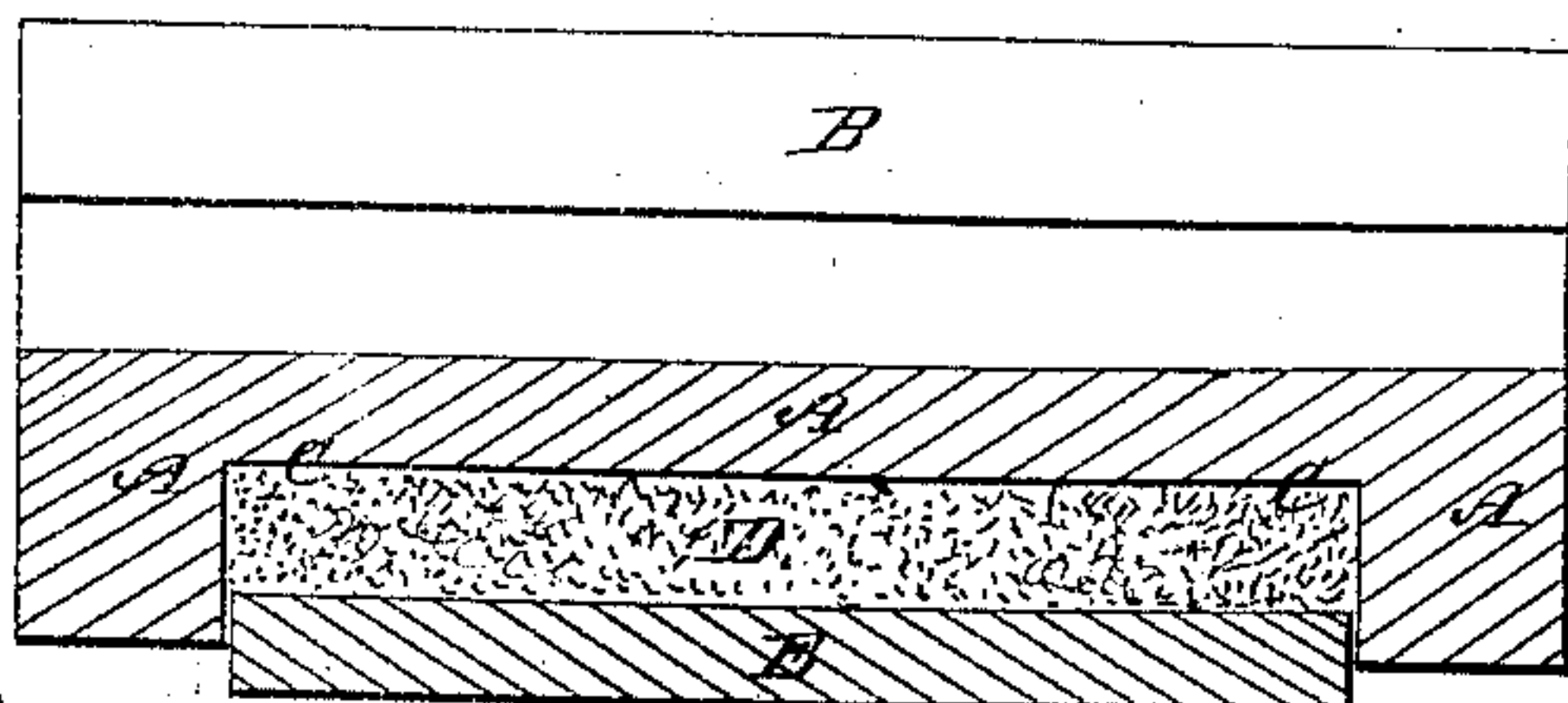
*Fig. 1.*



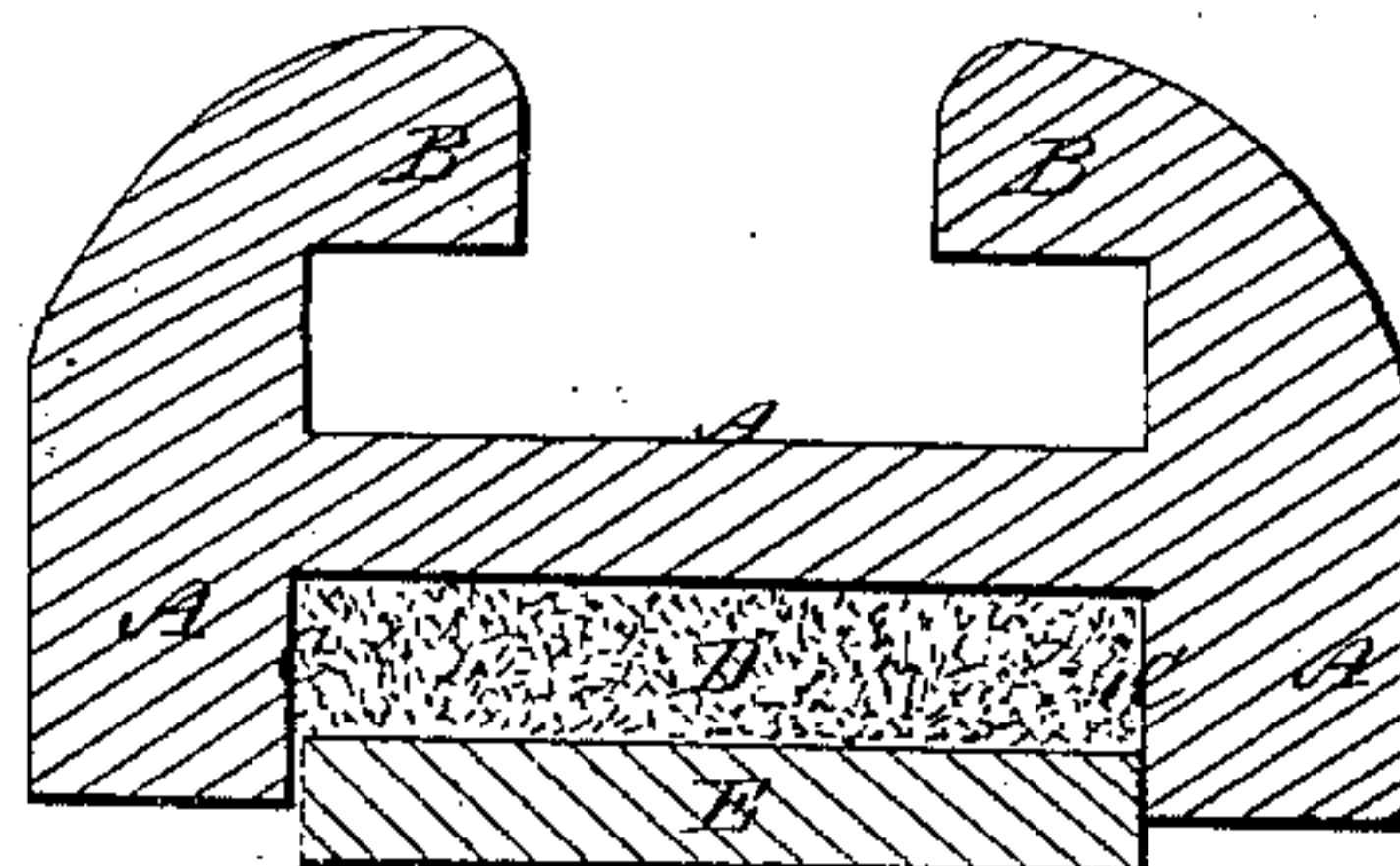
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses.

*C. P. Holup.*  
*Isaac B. Clapp.*

Inventor.

*Enoch Weight.*

# UNITED STATES PATENT OFFICE.

ENOCH WEIGHT, OF CHARLESTOWN, MASSACHUSETTS, ASSIGNOR TO HIMSELF, N. G. SIMONDS, AND I. B. CLAPP, OF SAME PLACE.

## RAILROAD-CHAIR.

Specification of Letters Patent No. 31,283, dated January 29, 1861.

*To all whom it may concern:*

Be it known that I, ENOCH WEIGHT, of Charlestown, in the county of Middlesex and State of Massachusetts, have invented  
5 an Improvement in Chairs for the Rails of Railways, and do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

10 Figure 1, denotes a top view; Fig. 2, a bottom view; Fig. 3, a longitudinal section, and Fig. 4, a transverse section of a chair constructed with my invention.

In the drawings, A exhibits the base portion and, B, B, the flanches or lips of a common railway chair. Within the said base A,  
15 a rectangular cavity, C, is formed, the same extending upward from and opening out of the underside of the said base A, as shown in the drawings. This cavity is to contain a sheet D, of elastic material, such as felt or vulcanized india rubber and is to have a cap plate, E, placed within it and against the underside of the rubber and so as to  
20 project beyond the lower surface of the said base. When the chair is in use, the cap plate rests directly upon the wooden sill of the superstructure of the railway, the chair being bolted to such sill, in the ordinary manner. The rail or rails bear directly on the top surface of the base A.

I do not claim so arranging in the base of a railway chair, a cavity or recess for the reception of an elastic bearing and its cap  
35 plate, that such cavity shall have its opening or mouth and cap plate in the upper side of the base and so that the rail or rails may rest directly on the cap plate, as in such a construction of the chair, which is  
40 common and well known, dust and water while the chair is in use, soon find their way into the cavity or recess and in a short time produce decay and wear of the elastic material placed within the recess. By my  
45 arrangement of the cavity, its mouth and cap plate, such cavity is effectually protected from the admission of dust and water,

and consequently the elastic bearing will be preserved from their injurious consequences, a much longer period of time, if not en- 50 tirely, than is the case when the mouth of its cavity and its cap plate are arranged on the upper side of the base of the chair.

I would also remark that I lay no claim to a chair made with an opening or elastic 55 bearing chamber to extend entirely through the body of the chair and have a separate bottom piece, as well as a separate cap plate, applied or arranged on opposite sides of the elastic cushion, the same being as shown 60 in the specification and drawings of the United States Patent No. 24443 as with my improvement, the chair body is made with a recess which does not extend through it and only opens out of the bottom surface of the 65 chair body, the said chair body being cast in one solid piece and so as to support the rail on the upper surface of the base plate in which the recess is made. In such a construction no dirt or water can pass down 70 through the chair and upon the elastic bearing. And furthermore, when the cap plate, E, of the recess is in place, it projects beyond the bottom of the chair body, which while resting on the elastic cushion is ca- 75 pable of being moved with and by the rail and relatively to the said cap plate. In other respects, my improved chair exhibits practical and important differences relative to many, if not all others in use. 80

I claim—

My improved mode of constructing the chair body, A, with a recess for the reception of the elastic cushion, and applying and arranging such elastic cushion and its 85 cap or supporting plate relatively to the recess and with respect to the bearing surface on which the rail rests, the whole being as above described and as represented in the accompanying drawings.

ENOCH WEIGHT.

Witnesses:

R. H. EDDY,

I. P. HALE, Jr.