

C. H. LEWIS.

Car Bumper.

No. 14,508.

Patented Mar. 25, 1856

Fig. 1.

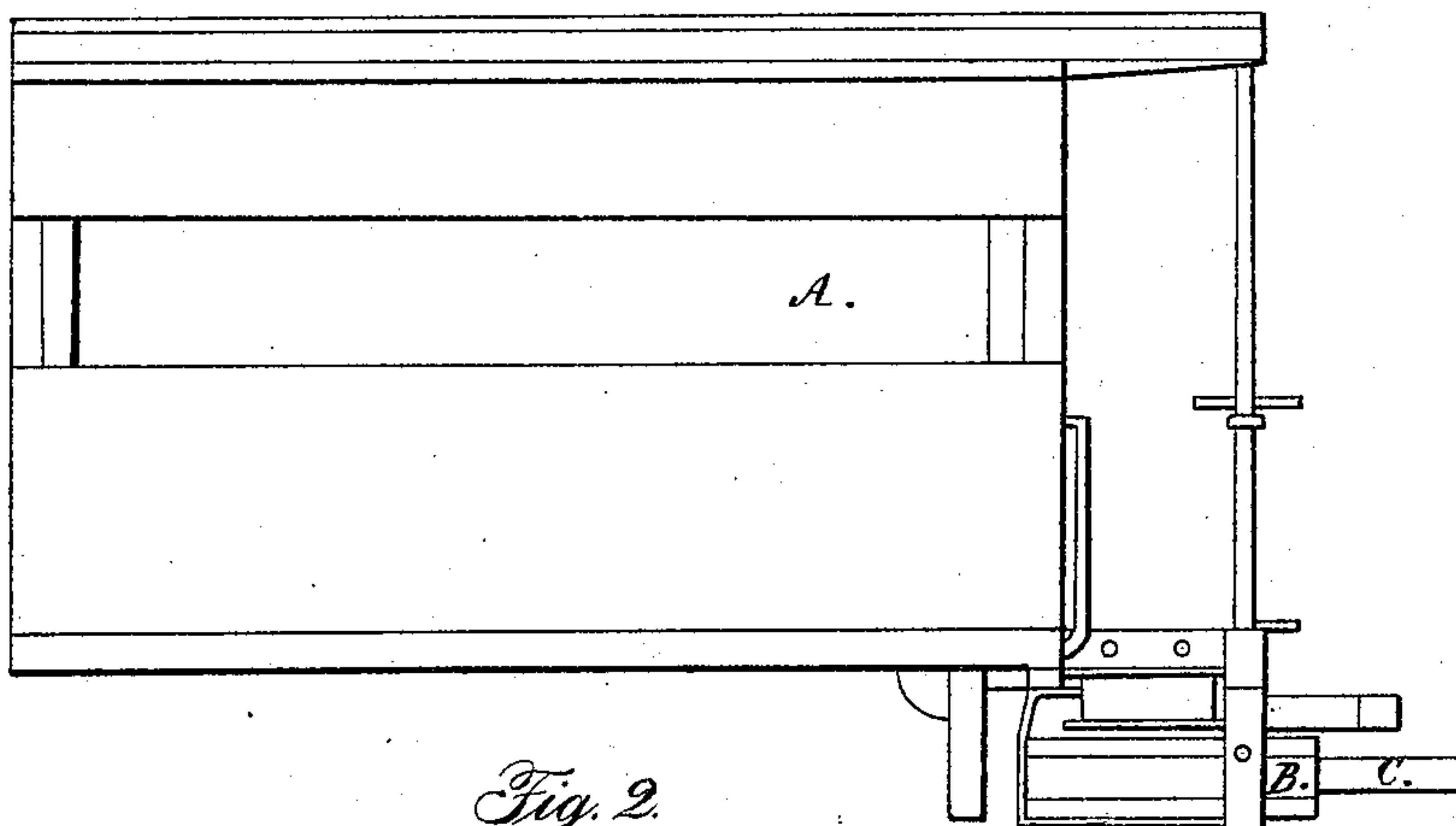


Fig. 2.

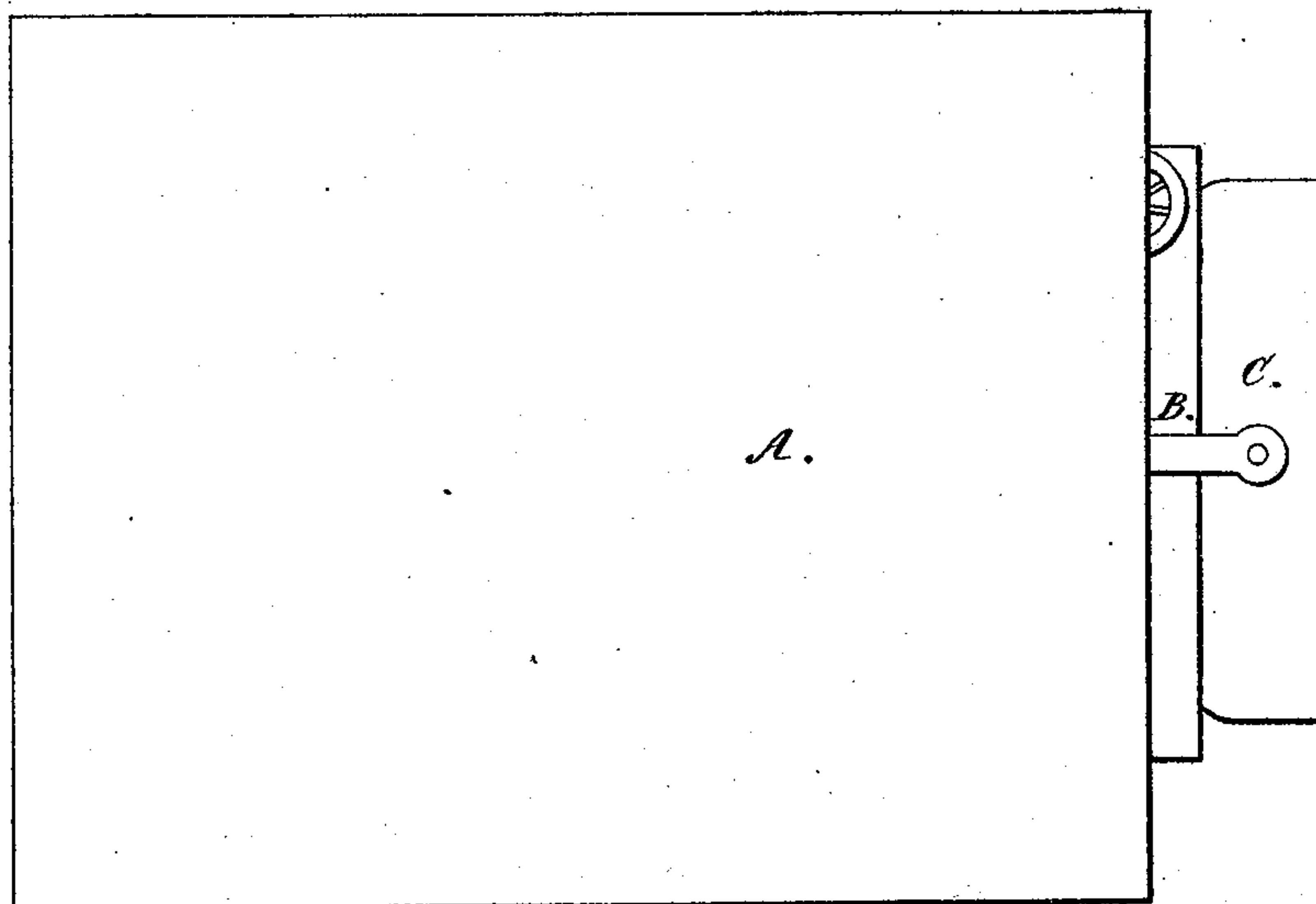
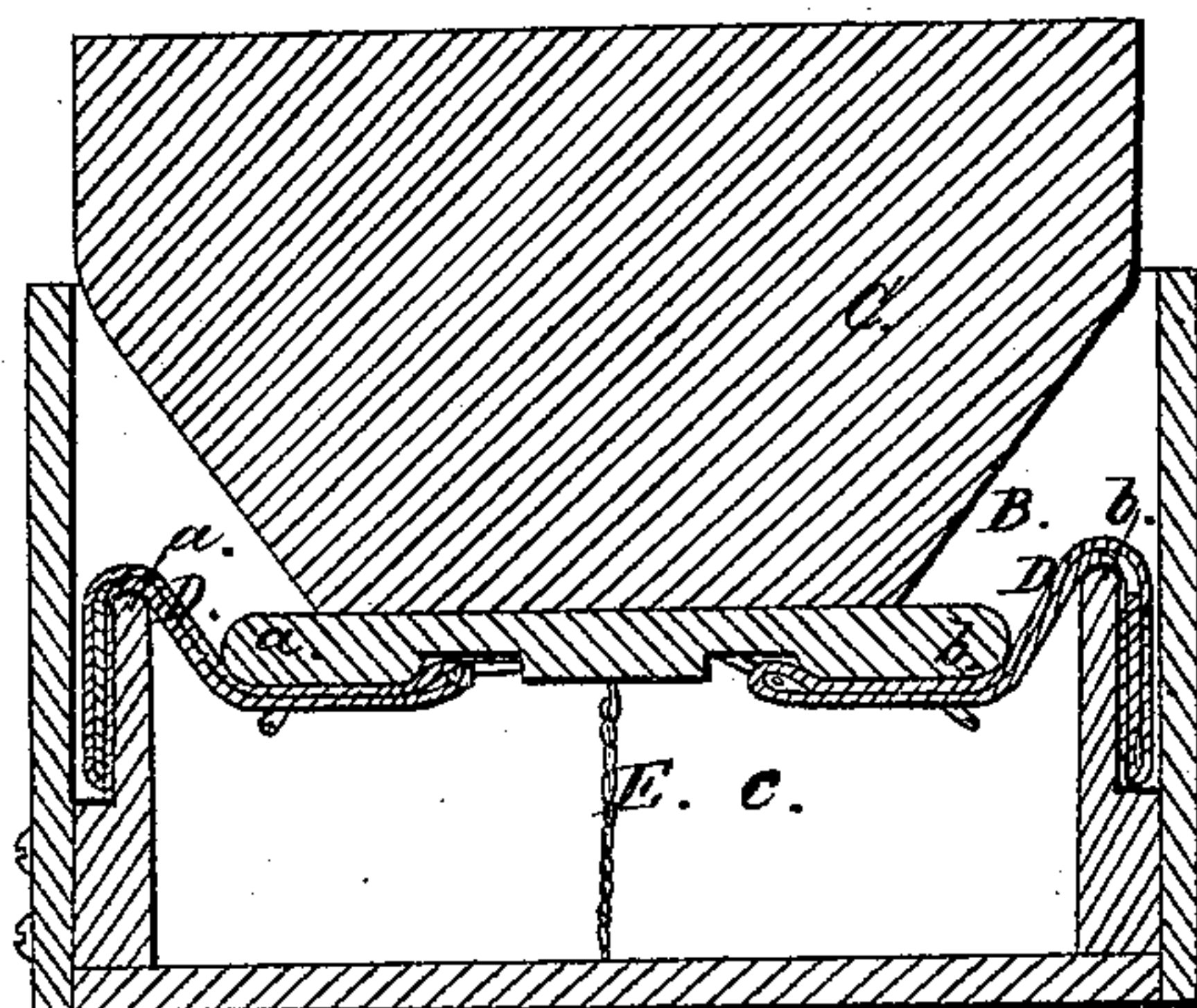


Fig. 3.



UNITED STATES PATENT OFFICE.

CHARLES H. LEWIS, OF MALDEN, MASSACHUSETTS.

SPRING-PLATFORM FOR RAILROAD CARS.

Specification of Letters Patent No. 14,508, dated March 25, 1856.

To all whom it may concern:

Be it known that I, CHARLES H. LEWIS, of Malden, in the county of Middlesex and State of Massachusetts, have invented a new and useful or Improved Safety Spring Guard or Platform for Railway-Carriages; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, figures, letters, and references thereof.

Of the said drawings Figure 1, denotes a side elevation, and Fig. 2, a top view of part of a railway car, having my invention applied to it; Fig. 3, is a horizontal section of the box platform and guard to be herein after described.

In the said drawings A denotes the car, B, the box platform, and C, the guard, the latter being arranged within the platform and formed as seen in Fig. 3, in order that it may not only be capable of being moved in and out of the same longitudinally with respect to the car body but turn horizontally as occasion may require, in order to adapt itself to the movements of the car or cars, with which it acts in connection, the box platform being made to project from one end of the car.

In using the guard it is intended that there should be one of them at each end or to each platform of a car or carriage so that when two cars are arranged in train the guard at one end of one shall abut at its front end against the similar end of the adjacent guard of the other carriage. The guard is affixed to the box platform by flexible elastic band, springs D, D, which are arranged and bent around bearings as seen at *a, a, b, b*. Besides these the guard is also connected to the rear part of the chamber *c*, of the box platform by means of a check chain E, whereby its outward movement is not only arrested at a proper time; but it is permitted to play inward and laterally as circumstances may require. The guard arranged and applied to a car becomes not only a safety apparatus to prevent persons from falling between the cars

and upon the railway track, but it serves in a measure to prevent dust from rising between the carriages. Its connection with the platform enables it not only to adapt itself to the changes of direction assumed by the carriages while in motion on the tracks but to maintain in the curvatures a close contact with the adjacent guard of the one immediately succeeding or preceding it as the case may be.

I am fully aware that a safety platform to operate or slide backward between parallel guides and against metallic springs has been applied to a railway carriage, therefore I do not claim such. In such case, however the platform was not connected to the body by the springs, nor were band or tension springs used as in my improvement. Neither was there any flexible check or hold back chain employed to act against the tension of the springs and also allow of the lateral movements of the safety guard. The above described new and peculiar mode of connecting the guard to the box platform, viz, by elastic band springs and a check chain arranged as described is an important method of applying such guard, as by means of such the front end of the guard can be made straight, and the guard is not only allowed, by the springs, to have forward and back motions, but lateral or turning movements.

Therefore I claim—

Connecting the guard to the box platform by elastic band springs and a check chain or its flexible equivalent arranged substantially in manner as described and so as to enable the guard not only to adapt itself to the movements of the carriage but to maintain its place, or be arrested in its outward movement in the platform as stated.

In testimony whereof I have hereunto set my signature this eighth day of September A. D. 1855.

CHARLES H. LEWIS.

Witnesses:

R. H. EDDY,
F. P. HALE, JR.