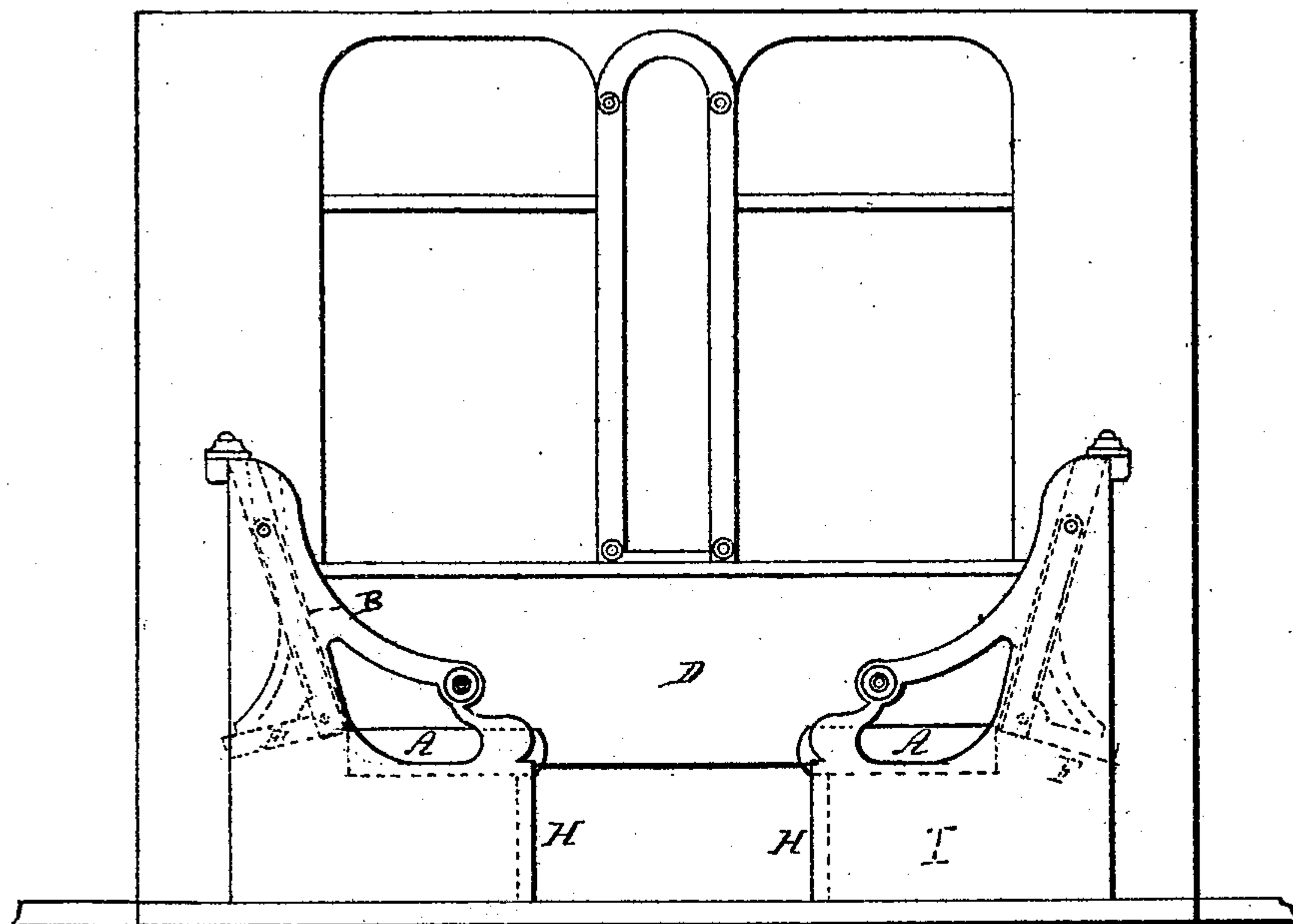


J. R. RENIFF.  
Sleeping-Cars.

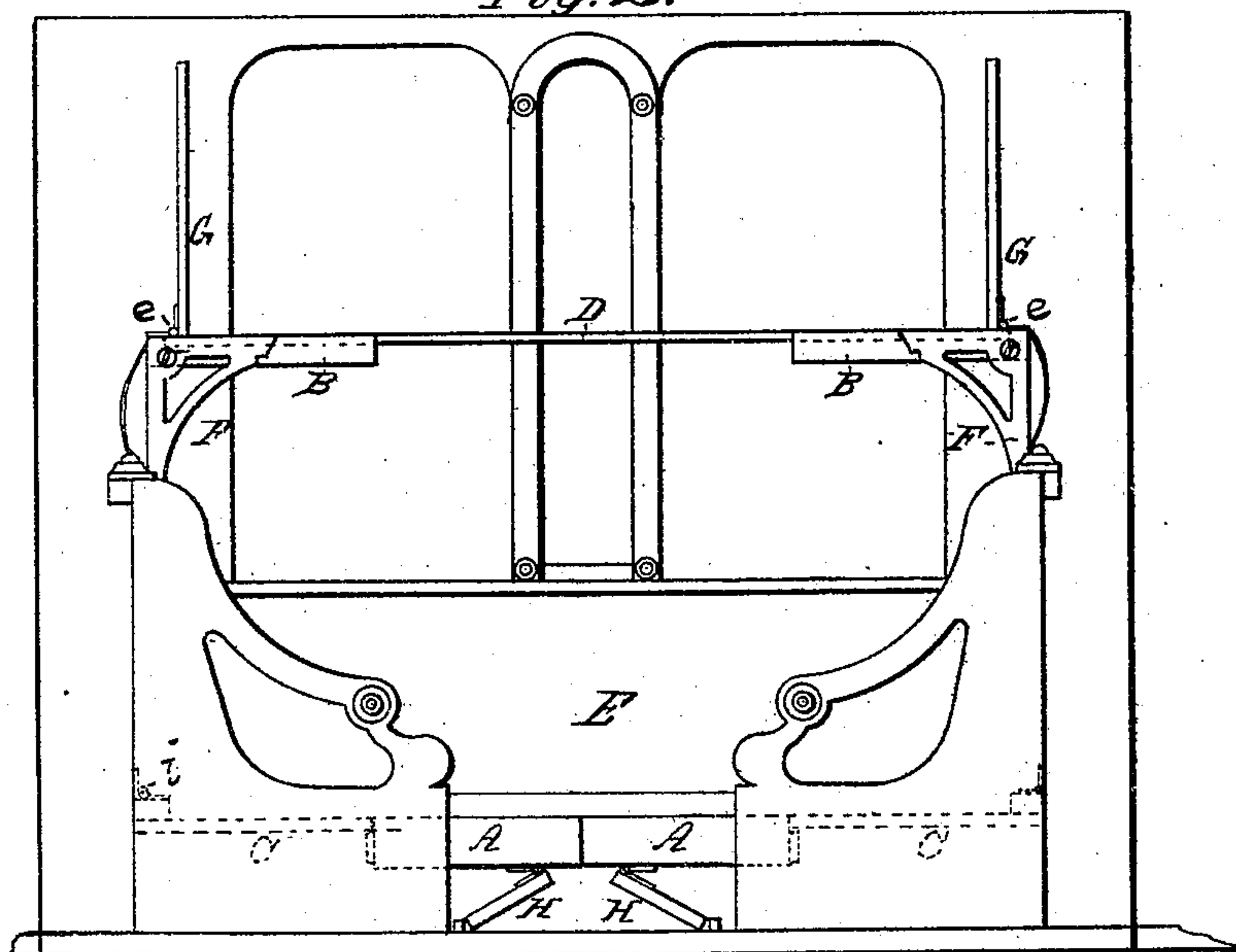
No. 147,171.

Patented Feb. 3, 1874.

*Fig. 1.*



*Fig. 2.*



*Witnesses.*

*J. R. Reniff*  
*Edmund C. Cleveland*

*Inventor.*

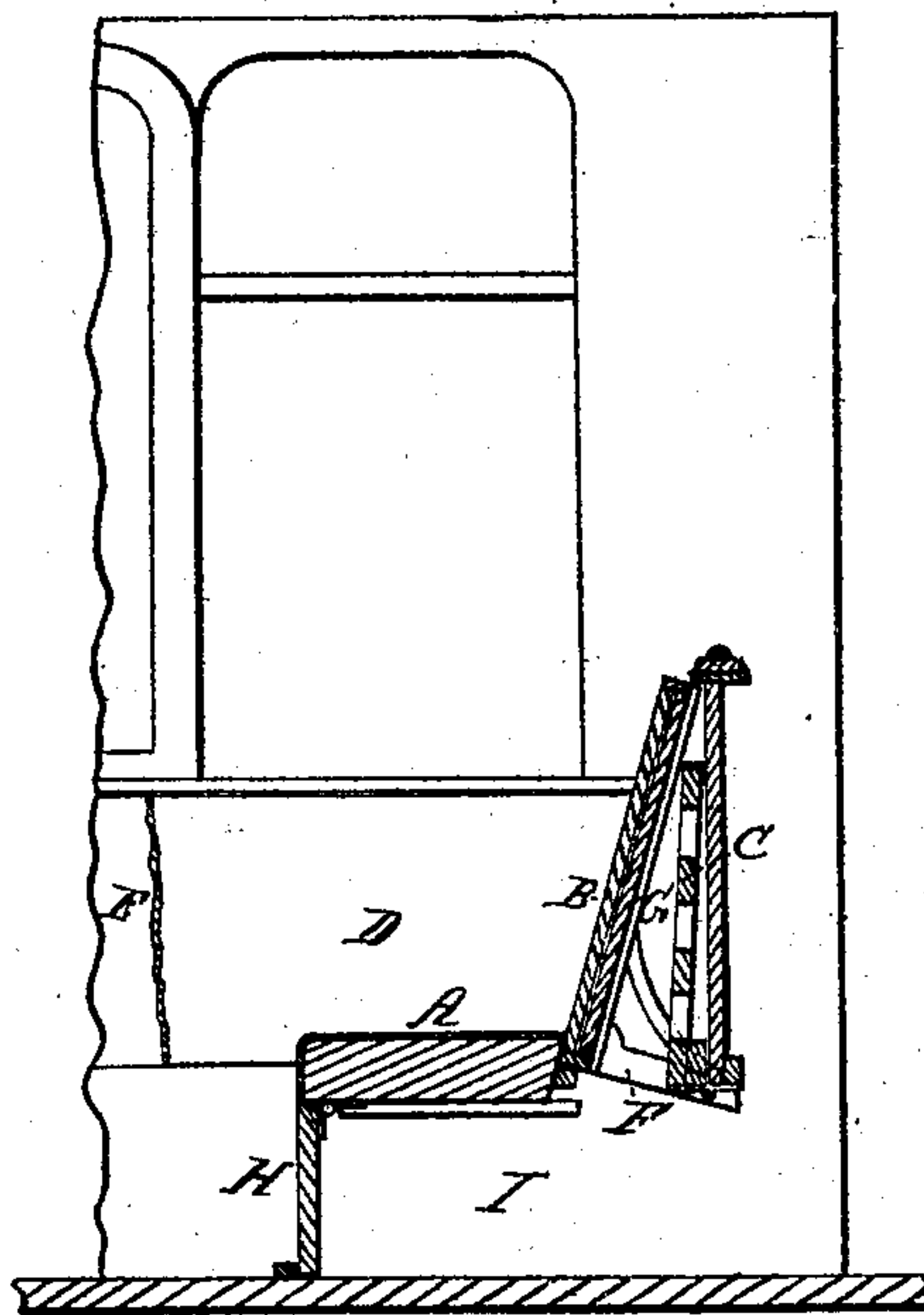
*James R. Reniff*

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Sleeping-Cars.

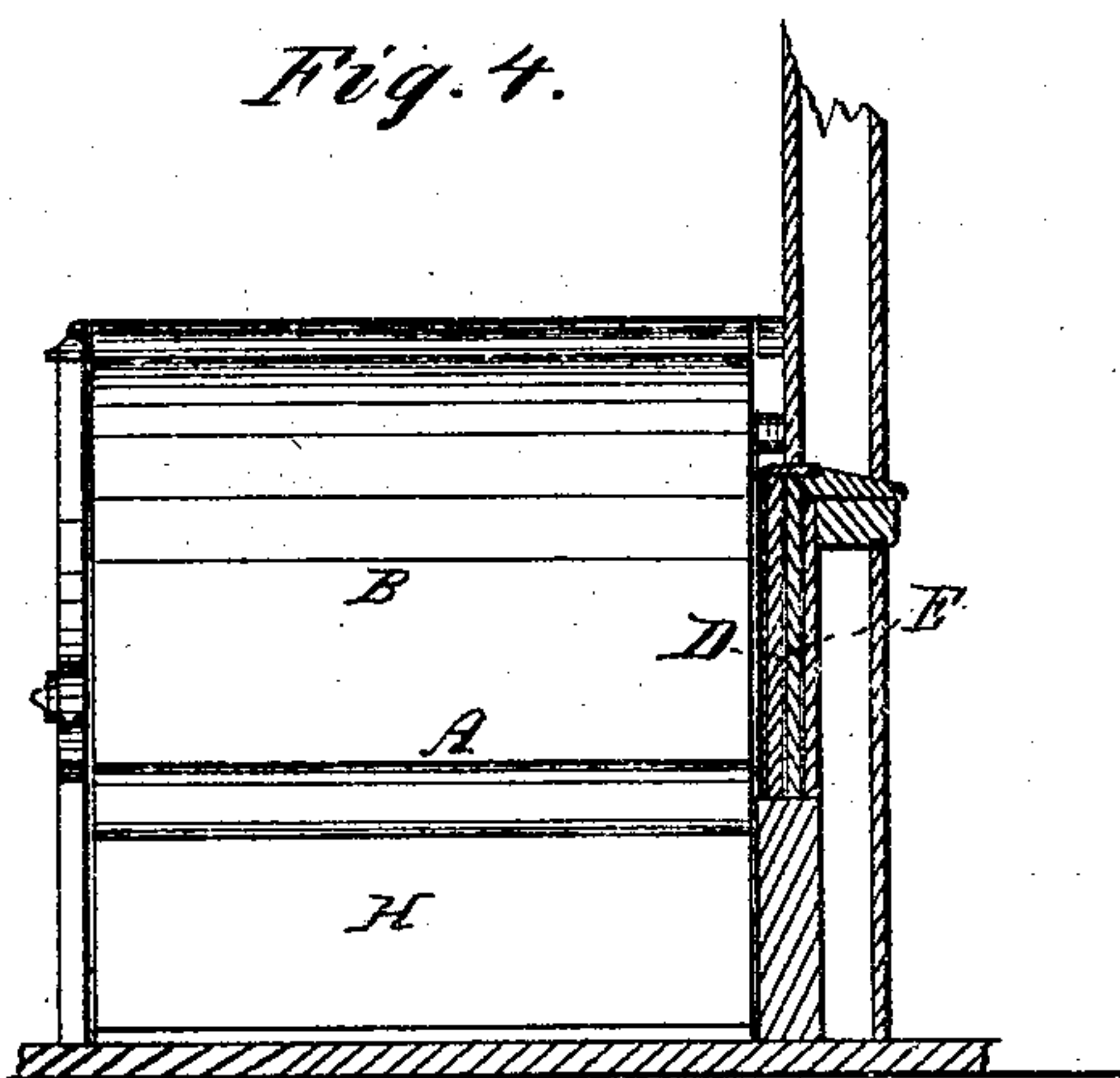
No. 147,171.

Patented Feb. 3, 1874.

*Fig. 3.*



*Fig. 4.*



Witnesses

*R. Reniff*  
*Edmund O. Cleveland*

Inventor

*James R. Reniff*

# UNITED STATES PATENT OFFICE.

JAMES R. RENIFF, OF BLOOMINGTON, ILLINOIS.

## IMPROVEMENT IN SLEEPING-CARS.

Specification forming part of Letters Patent No. 147,171, dated February 3, 1874; application filed September 11, 1873.

*To all whom it may concern:*

Be it known that I, JAMES R. RENIFF, of Bloomington, in the county of McLean and State of Illinois, have invented Improvements in Sleeping-Cars, of which the following is a specification:

This invention relates to that class of sleeping-cars in which the seats, together with frames attached to partitions between sections, by means of hinges, can be converted into couches, and the second tier of couches is provided by raising or swinging up and inverting the seat-backs to a convenient height, together with a frame laid across the backs for support.

Figure 1 is an elevation of section for day use. It shows the positions of the backs B, arm F, frame C, seat A, and upper couch-frame D; also space I under the seats for storing bedding of the lower couch.

Fig. 2 is an elevation of section for night use. In this the backs B are first dropped down onto seat, and then swung up, being inverted by the process of swinging up the pivoted arm F to a convenient height. The seats A are moved to center of section, and lowered the thickness of seat, while the hinged foot-boards H, which are attached to bottom and outer edge of seats, form supports in an inclined position for the lower couch. The slatted frames C, being attached to partitions by means of hinges *i*, are dropped down and even with top of seats, thus forming the lower couches.

The head-boards G are fitted to inside of backs B, and attached to same by the use of hinges *e*, and swung up, forming a partition between the upper couches, as represented in Fig. 2.

The frame D is placed inside of the backs, covering the backs and space between the backs, thus making the upper couches, the whole being supported by the pivoted arms F, and kept in place by the frame D.

Figs. 3 and 4 is a cross-sectional view of wall of car, showing the pocket E, in which the upper couch-frame D is placed when not in use, the frame D being in two sections and hinged together.

I claim—

1. The hinged arm F, in combination with the backs B and frame C, substantially as and for the purpose specified.

2. The pivoted arm F, having attached thereto the folding back B and hinged head-board G, all combined as and for the purpose set forth.

3. The movable seats A, having the hinged foot-boards H, forming supports for said seats, in combination with the slatted frame C, for the purpose specified.

4. The section-boards G, hinged to the back B, and combined to fold flush therewith when stowed away for day use.

JAMES R. RENIFF.

Witnesses:

RUFUS RENIFF,  
EDMUND O. CLEVELAND.