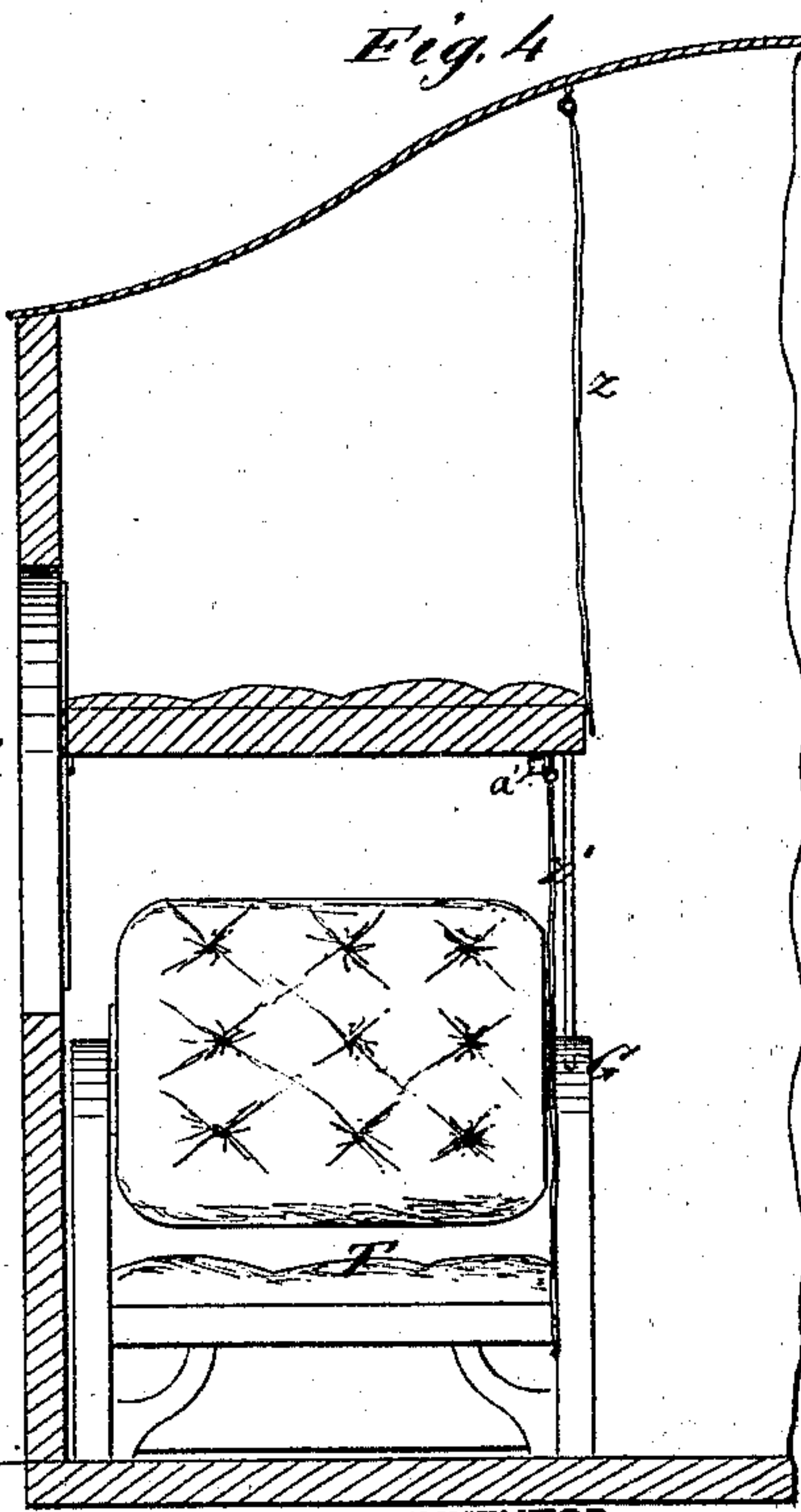
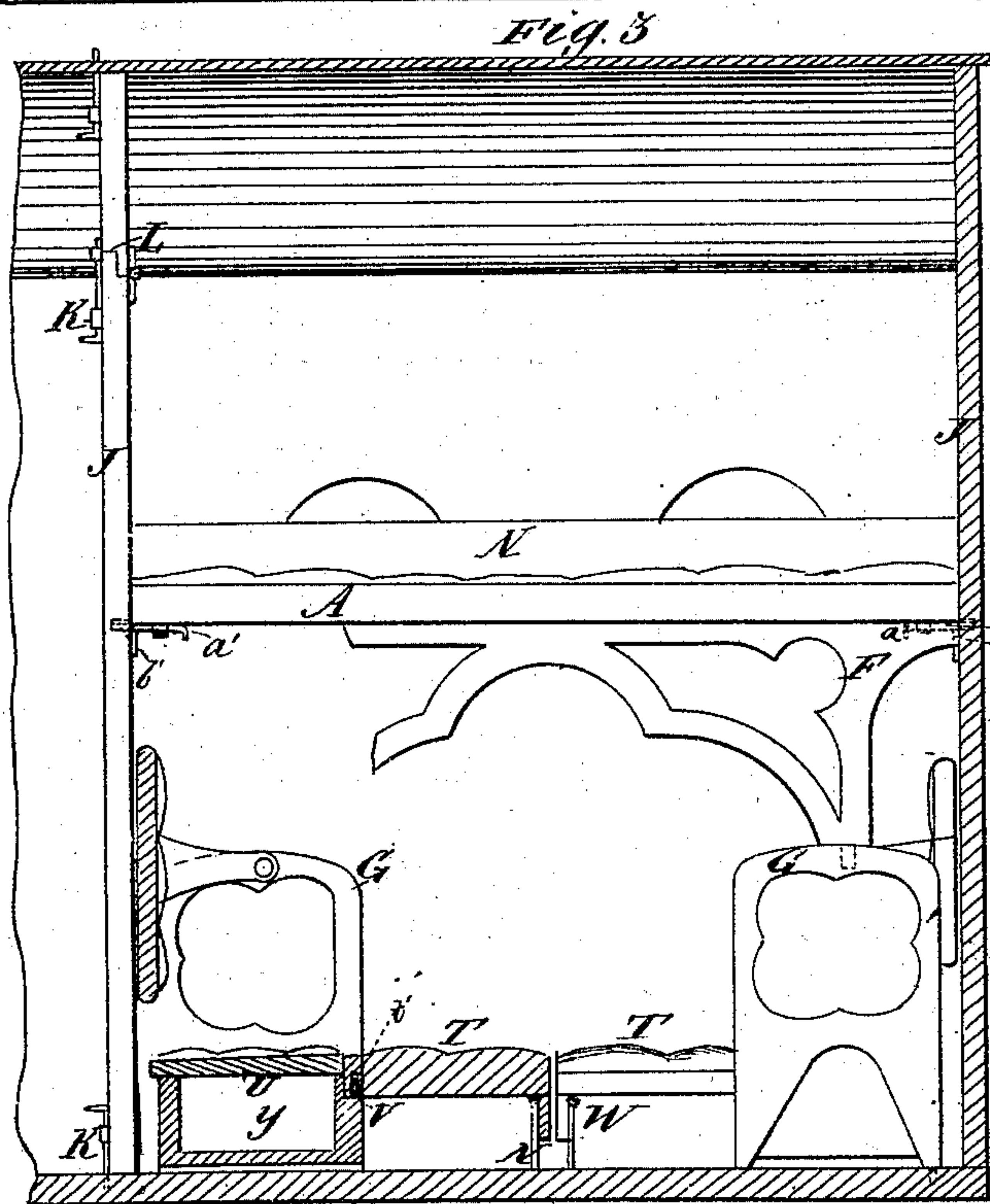
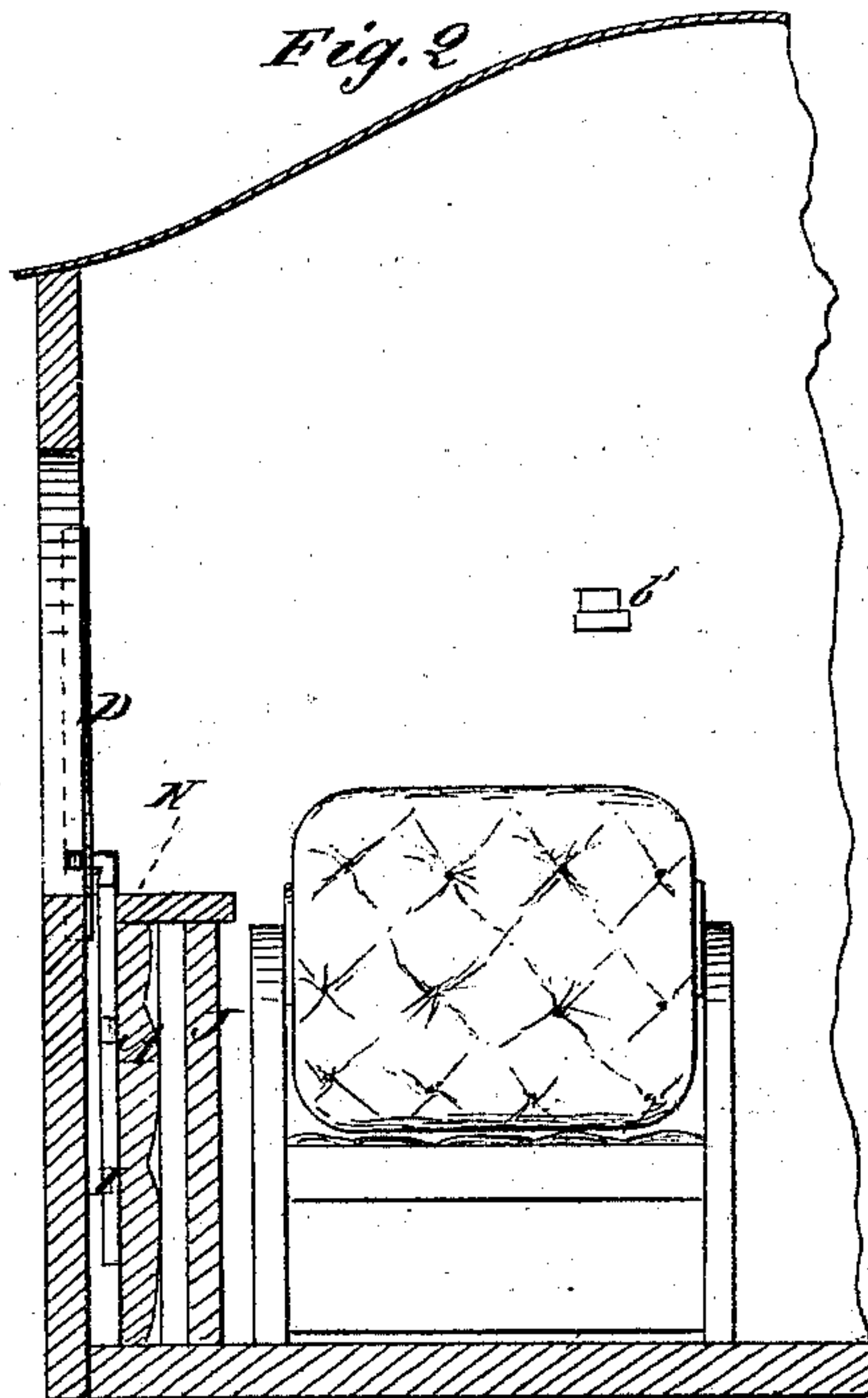
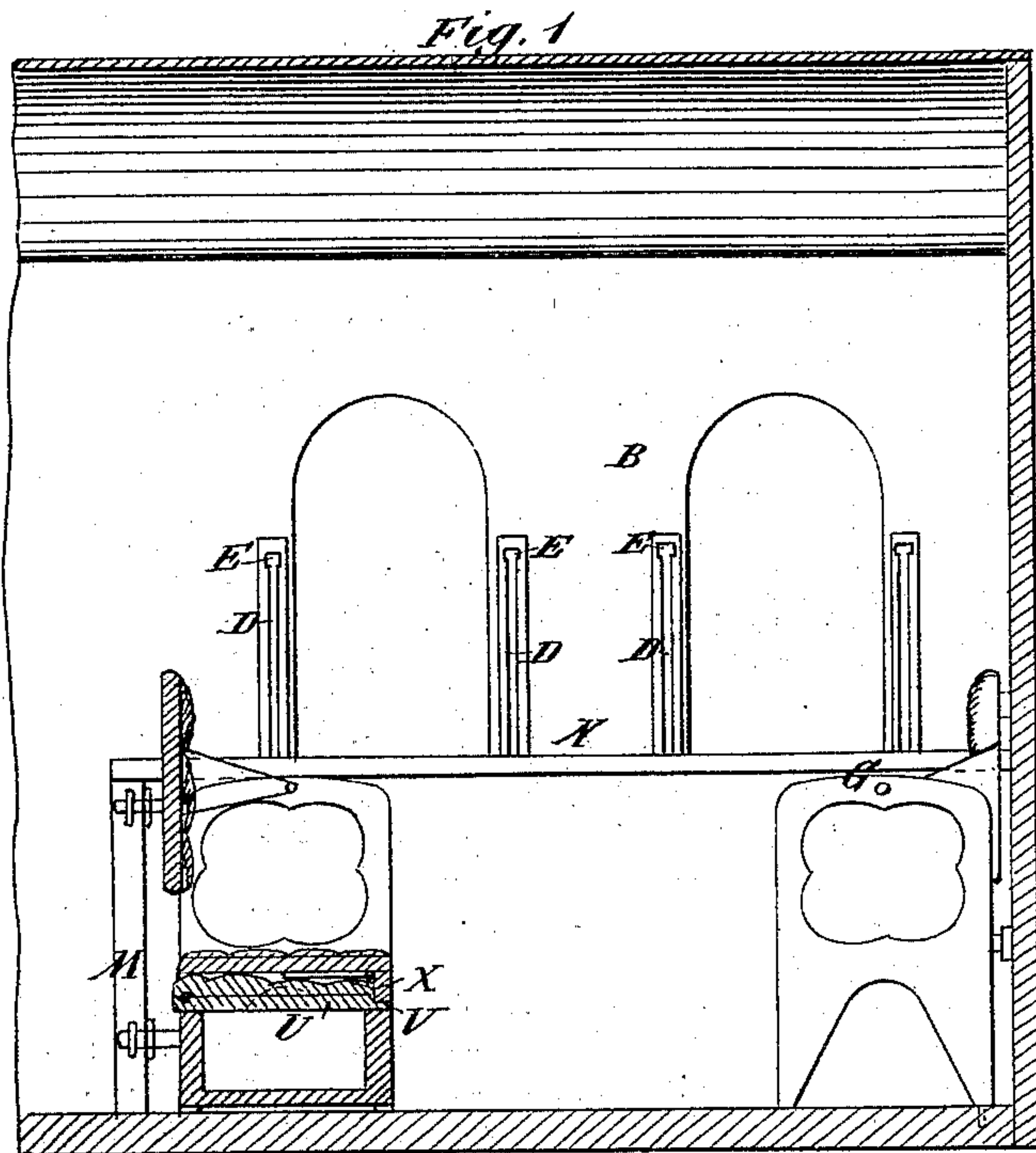


J. L. MITCHELL.  
SLEEPING-CAR.

No. 171,239.

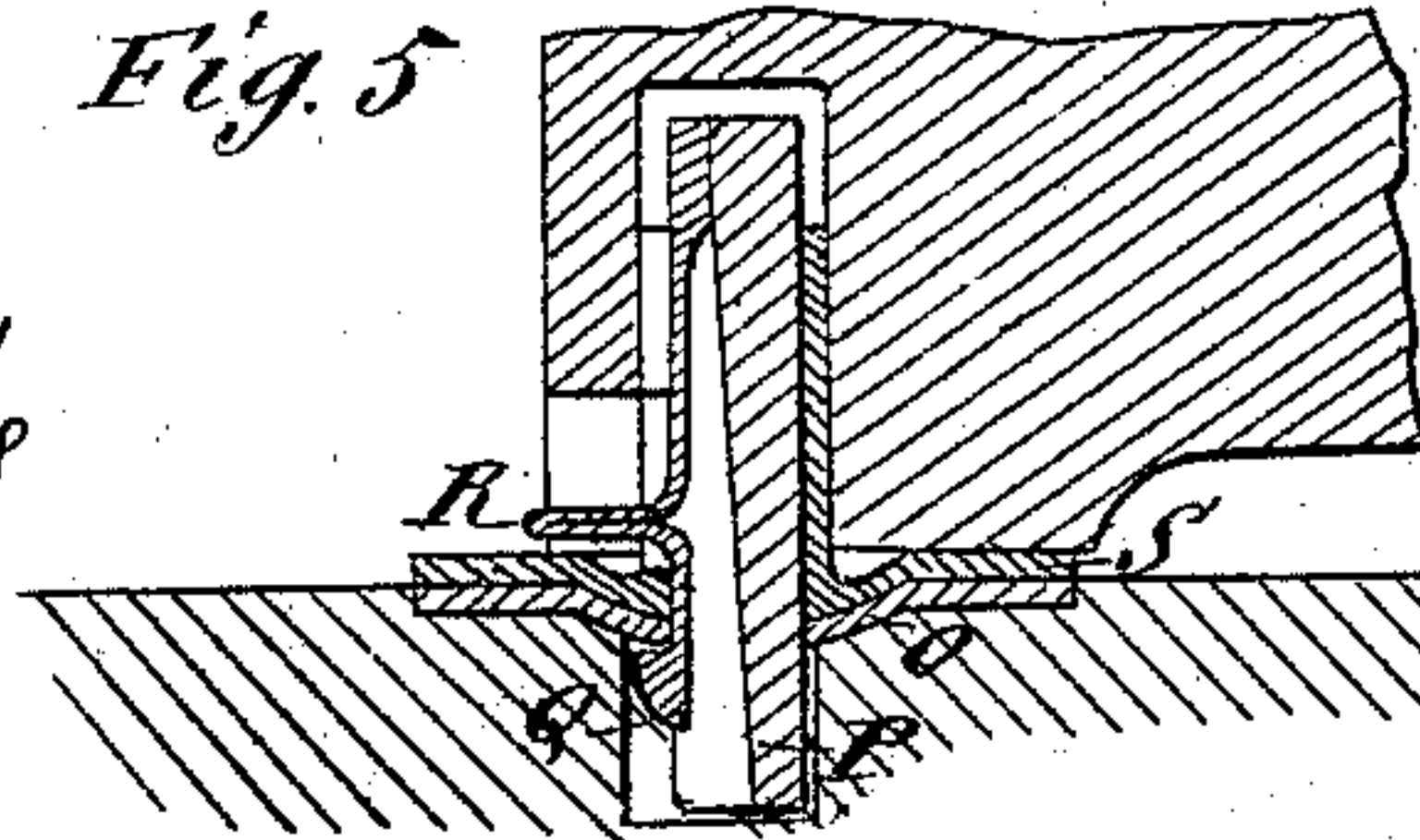
Patented Dec. 21, 1875.



WITNESSES:

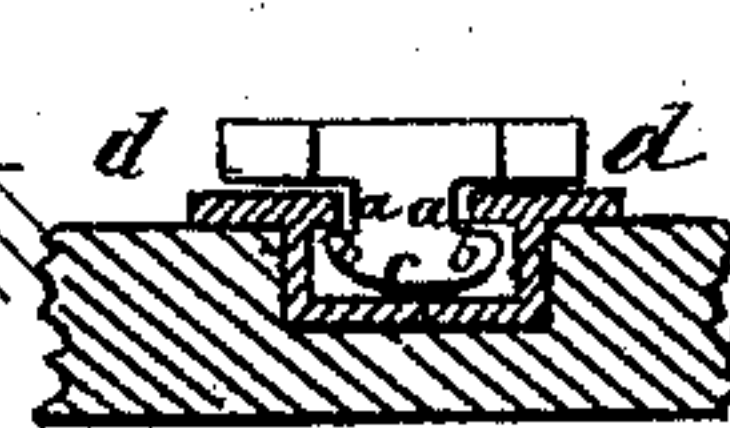
*C. Nevenax*  
*Alex. T. Roberts*

*Fig. 5*



INVENTOR:

*Fig. 6 J. L. Mitchell*  
BY



*Munn & Co.*  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

JAMES L. MITCHELL, OF PUEBLO, COLORADO TERRITORY.

## IMPROVEMENT IN SLEEPING-CARS.

Specification forming part of Letters Patent No. **171,239**, dated December 21, 1875; application filed November 27, 1875.

*To all whom it may concern:*

Be it known that I, JAMES L. MITCHELL, of Pueblo, in the county of Pueblo and Territory of Colorado, have invented a new and Improved Sleeping-Car, of which the following is a specification:

The invention relates to connecting the upper berth to the side or wall of the car by a sliding hinge, for allowing it to shift from one position to another, as required or not required for use, without becoming detached from the wall. It also relates to the construction of the hinge thereof, and a partition-section, adapted to be secured vertically, to aid in supporting the upper berth, or horizontally alongside the same. It also relates to the construction whereby a detachable middle section of the lower seat-section is adapted to be applied as a cover or top of said seats, sections, or an extension thereof. It also relates to other features, as hereinafter specified.

Figure 1 is a longitudinal section of a car with my improved sleeping-berth contrivance, the same being adjusted for day use. Fig. 2 is a transverse section of Fig. 1. Fig. 3 is a longitudinal section, showing the contrivance for night use. Fig. 4 is a transverse section of Fig. 3. Fig. 5 is a detail section of the contrivance for holding the seats, so that they may be shifted as required, and at the same time preventing them from moving out of place by the shaking of the car. Fig. 6 is a detail of the hook employed to connect the upper berth to the side of the car-body. Said figure also shows the arrangement of the hook, or its mode of connection with the slotted plate attached to the side of the car.

Similar letters of reference indicate corresponding parts.

A is the frame of the upper berth, which is connected to the side B of the car-body by hooks C and slotted plates D, so that it can be dropped down and folded against the side of the car-body under the window, as shown in Fig. 1, and also be supported at the upper end of the slotted plates for a bed, as shown in Figs. 3 and 4. The slots are wider at the top E than below, and the hooks have a narrow part, *a*, and a wide part, *b*, so contrived that when the berth swings down parallel to the side of the car-body, the part *a* allows the

berth to slide up or down freely; but when, after raising the hooks to the top of the slots, the berth is swung up level, the wide parts *b* of the hooks swing through the parts E of the slots and drop behind the shoulders, so that the berth is supported on said shoulders, and at the same time held securely against disconnecting from the wall. The hooks have shoulders *d* inside of the part *a*, which prevent the disconnection of the berth while sliding up and down, but they disconnect readily at the top of the slots whenever it may be required to do so for cleaning and for other purposes. The upper berth is supported at the front by the legs F resting on the seat-arms G, the legs being hinged to the bottom of the berth, so as to fold up against the bottom, as shown at I. The section-partition J, except a small portion, M, is made entirely independent of the car-seats, and fastened up detachably by bolts K, or other suitable means, and has a folding joint at L, so that it can be taken down and placed in front of the bed, and be fastened in that position by its bolts, which catch in small sections N of said partitions, which is permanently set up and made separate from the main portions, which section incloses at the end the space containing the bed. The back side rail N of the upper berth A forms the shelf or ledge under the window, corresponding to the ordinary projecting ledge of the car-body, but being a little wider than common. To allow of folding the top berth down this way the seats are contrived to move out from the wall; and to hold them so as to allow of such movements, and at the same time secure them against shaking out of place by the jarring of the cars, the legs will drop into little cavities *o* in the floor, and one leg will have a slide-bolt, P, passing through the plate O, forming the cavity, and fastening below by a spring-catch, Q, having a thumb-bit, R, by which to disengage it. On the bottom the legs will be shod with a convex plate, S, corresponding to the cavity-plate O, and being suitable for the seats to slide back and forth on when shifting from one position to the other. The middle sections T of the lower berth are constructed to rest on the end sections V, and form part of the seat in the day-time, and they are supported, when adjusted for the bed, in the rabbets V of the



end sections, and by hinged legs W, which fold under them when on the seat. The rabbets V are filled by the ribs X when the seats are made up, the said ribs hiding the cushions of the sections V, and making a suitable finish. Studs *t'* are set vertically in the rabbeted portion V, and coincident holes are formed in the under side of the rib X of sections V. The latter are secured to the seat U in either position by means of said studs.

By having the section-partitions independent of the seat-backs, the latter are forced to turn over for fronting either way, and by having the seats movable they can be shifted about to front the windows or the opposite seats, or in any desired direction. The seats are boxed below at Y, for stowing the bedding.

The curtains will be made separate for each berth, the upper one, Z, being suspended from the roof of the car, and the lower one, Z', from the upper berth.

When the berths are made up the seats will be shifted back toward the side of the car the width of the space made vacant by the removal of the upper berth and the partition, thus affording a little more middle space in the car at night. Two sets of cavities, *o*, will be provided for this purpose.

The upper berth has a hook-ended slide-bolt, *a'*, at each end, which slides out a certain distance, and hooks into a catch, *b'*, on the section-partition, to hold the berth temporarily when let down, till the supports F are adjusted. These bolts connect all the berths and section-partitions of one side of a car, and thus make all more substantial than they otherwise would be.

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

1. The upper berth N, having a sliding hinge-

connection with the side of the car, substantially as shown and described, whereby it is adapted to be raised and assume a horizontal position, or to be lowered and maintain a vertical position against or parallel to the wall, as shown and described.

2. The detachable partition-sections J, having the hinged and folding parts, and provided with fastenings, as described, whereby it is adapted to be secured in a vertical position as a partition, or horizontally alongside the upper berth, to form a panel-protector for the same, as shown and described.

3. The combination, with a lower seat-section having a rabbet along the front edge, and studs *t'*, set vertically therein, of a detachable part, T, having folding legs, and provided with holes in its ribs X, to receive said studs when in either of its allotted positions, as shown and described.

4. The combination, with the upper berth, arranged to fold down against the side of the car, of the side rail N, forming the ledge below the window, and the section J, forming the side panel of the car-body, substantially as specified.

5. The combination of the hooks C, having the parts *b a d*, and the slotted plates D, having upper wide notch E, with the upper berth and the car-body, substantially as specified.

6. The combination of convex plates on the seat-legs with cavity-plates O in the car-floor, substantially as specified.

7. The combination, with movable seats having a slide-bolt and spring-catch in the leg, of a catch-plate in the floor, substantially as specified.

JAMES L. MITCHELL.

Witnesses:

A. P. THAYER,

ALEX. F. ROBERTS.