(No Model.) 2 Sheets—Sheet 1.

F. T. REESE & C. A. WILLIS.

COMBINED SLEEPING AND PARLOR CAR.

No. 562,242. Patented June 16, 1896.

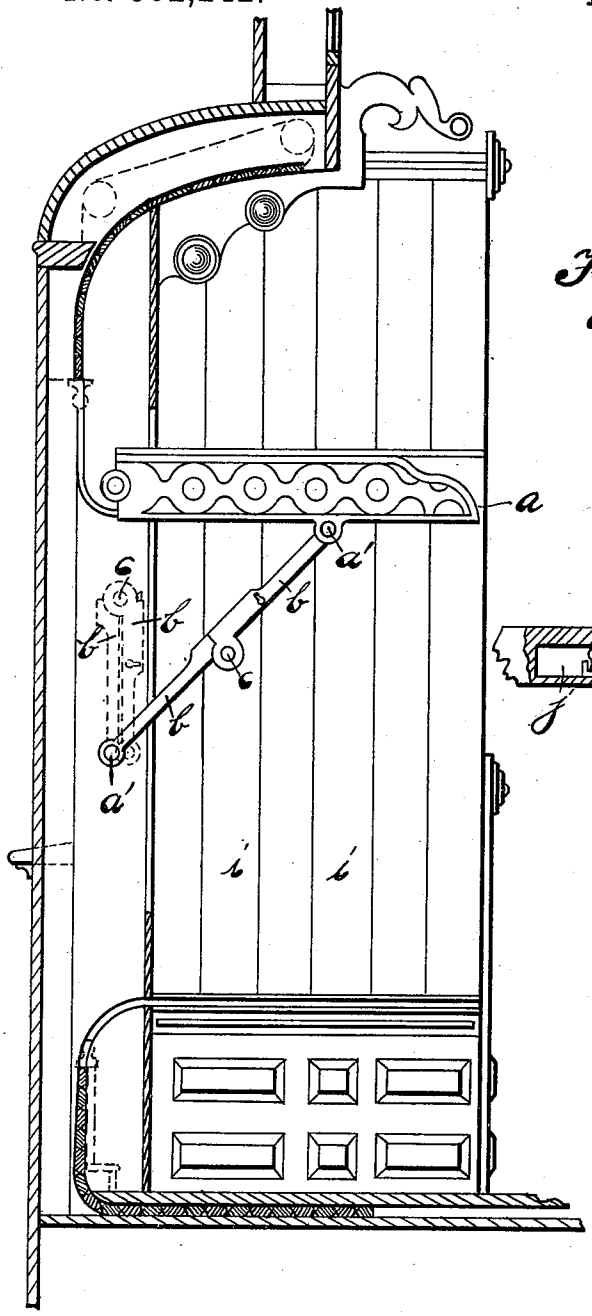

Fig. 1.

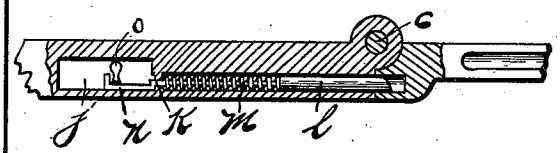

Fig. 3.

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(No Model.) 2 Sheets—Sheet 2.

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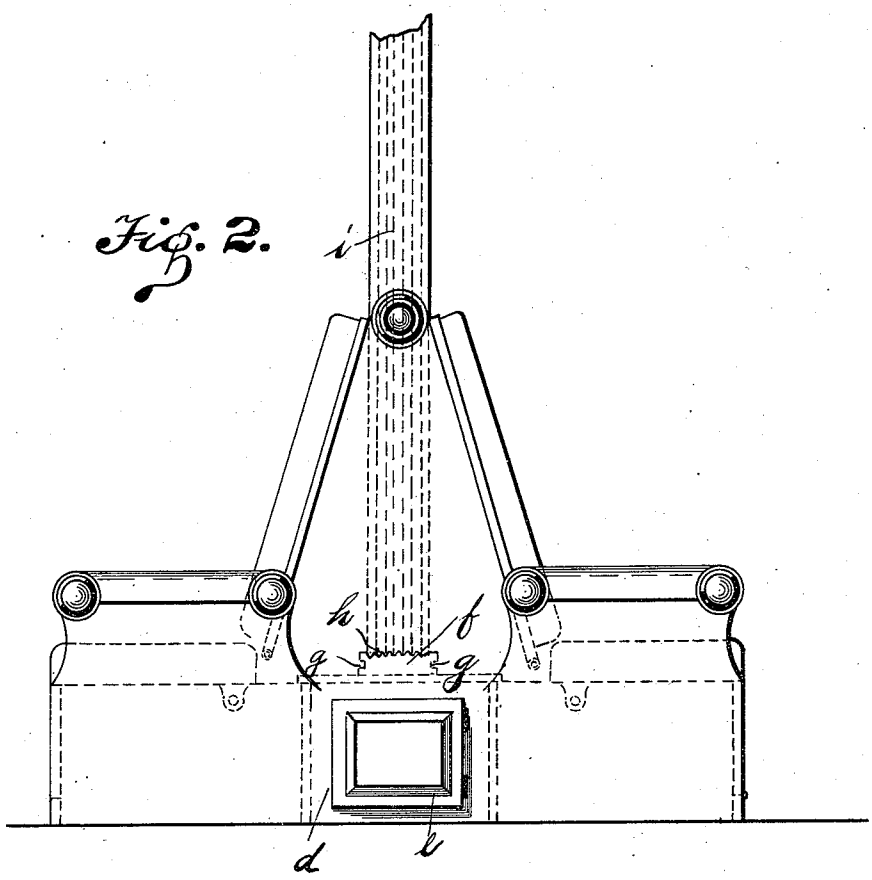
Fig. 2.



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UNITED STATES PATENT OFFICE.

FRANKLIN T. REESE AND CHARLES A. WILLIS, OF CARNEGIE, PENNSYLVANIA.

COMBINED SLEEPING AND PARLOR CAR.

SPECIFICATION forming part of Letters Patent No. 562,242, dated June 16, 1896.

Application filed January 2, 1896. Serial No. 573,990. (No model.)

To all whom it may concern:

Be it known that we, FRANKLIN T. REESE and CHARLES A. WILLIS, citizens of the United States of America, residing at Carnegie, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in a Combined Sleeping and Parlor Car, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in combined parlor and sleeping cars in general, and relates more particularly to a berth and support for the same.

This application should be considered in connection with one filed by us on November 21, 1895, Serial No. 569,710, and is an improvement on the same.

The invention has for its object the provision of new and novel means for supporting a berth in sleeping-cars, boats, hotels and the like that can be brought into service quickly when desired, and when not desired for use can be folded in a minimum amount of space in such a manner as to be entirely out of the way.

A further object of the invention is to provide a berth and support as above referred to and simple and efficient means for locking the support in its position, and for releasing the same when desired.

A still further object of the invention is the construction of a berth and support as above described that will be extremely simple in its construction, strong, durable, effectual in its operation, and comparatively inexpensive to manufacture.

With the above and other objects in view the invention finally consists in the novel construction, combination and arrangement of parts to be herinafter more particularly described, and specifically pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like letters of reference indicate similar parts throughout the several views, in which—

Figure 1 is a transverse vertical sectional view of a car, showing the berth-bracket and supporting-brace in position. Fig. 2 is an end view of the seats and lower-berth bracket, showing sliding panels forming the partition in dotted lines. Fig. 3 is a longitudinal sectional view of the berth-support, showing the locking mechanism.

In the drawings, *a* represents the bracket of the upper berth, and *b b* the two sections of the supporting-brace. These sections are hinged together at or near their center, as shown at *c*, and are constructed so that when in the supporting position the sections will engage each other, forming a perfectly rigid support and are hinged to the side of the car and to the berth-bracket, as shown at *a'*.

The construction of the seats shown in Fig. 2 we have described and shown in our previous application as stated above, with the exception of the box *d*, which is constructed between the seats and is provided on the side next the aisle with a door *e*. By the construction of this box or receptacle, an additional space is provided for the storing of bedding, &c. On the top of this box *d* is secured a metallic plate or casting *f*, which is grooved, as shown at *g g*, and is formed on the upper face with a series of grooves or tracks *h h h*, in which the vertical sliding panels *i i*, forming the partitions, are adapted to operate. The grooves *g g* are adapted to receive the sliding slats forming the berth-bottom for the lower berth, the operation of which has also been described in our previous application.

In one of the sections of the supporting-brace is formed a groove *j*, which extends in alinement therewith a short distance into the other section of the brace. In this groove is secured a shank *k*, carrying a locking-bar *l*, which is provided with an inclined face and is adapted to engage the other section of the brace. A spiral spring *m* is provided on the shank *k*, which forces the locking-bar into engagement with the engaging half of the brace. A bell-crank *n* is also provided on the shank at a point where it will engage the key when the same is inserted in the keyhole *o* for releasing the lock.

The operation of our improved berth-sup-

port is as follows: The supporting-brace is hinged to the side of the car and to the bracket in any suitable manner, as shown in Fig. 1 of the drawings. When the bracket *a* is raised to its horizontal position, it will withdraw the brace from its receptacle in the wall, and when the same is in the supporting position, as shown in this view, the locking-bar *l*, carried by one section of the brace, will engage in the groove of the other section and retain the brace in the supporting position. When it is desired to release the brace, a key is inserted in the keyhole *o*, and engages the bell-crank *n*, which when operated will release the locking-bar *l* from engagement with the engaging half of the brace, and when the bracket *a* is folded it will also fold the supporting-brace in the recess provided therefor in the wall of the car.

The operation of the vertical sliding panels we have fully shown and described in our previous application heretofore referred to as operating on the floor of the car; but by the construction of the box *d* we have provided an additional space for the storing of bedding and the like, and the metallic strip located on the top of the same forms a track for the vertical panels to operate upon, and the panels may be grooved on their base to operate on the tracks, thus dispensing with the rubber-tired wheels.

Access can be had to the box *d* by means of the door *e*, provided in the end of the same, as it will be noted that the front next the aisle is adapted to be solid, as in the ordinary construction.

The berth-supports may be made of aluminium should it be found necessary or desirable to assist in reducing the weight of the car, securing at the same time, with the lightness of construction, durability and strength; furthermore, affording a means for easy manipulation, as will be readily apparent from the foregoing description and for this reason consuming but a minimum amount of time in the construction of the berths.

It will be noted that various means may be used for locking the supporting-brace in its position, and we therefore do not wish to limit ourselves to the use of the key for releasing the same, as shown, as a thumb-screw or other means may be used for this purpose in lieu of the key.

It will be noted that various other changes may be made in the details of construction without departing from the general spirit of our invention.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A lower berth formed of two end supports located between the seats having grooves arranged on the sides extending downward between the walls of the car and floor thereof, in combination with a movable bottom, substantially as shown and described.

2. In an upper berth formed of two supporting end brackets provided on their inner face with a groove adapted to retain flexibly-connected slats forming the bed-bottom, a supporting-brace pivotally secured to the bracket and the side of the car, said brace being hinged at its center, and provided with projections or engaging lips, a locking-bar secured in said brace adapted to retain the brace in a supporting position, and means for releasing said bar whereby the brackets and supporting-brace may be allowed to fold in a recess, substantially as shown and described.

3. In an upper berth formed by two supporting end brackets hinged at their inner ends, of flexibly-connected slats adapted to slide therein and extending upwardly between the walls of the car, a supporting-brace pivotally secured to the bracket and the side of the car, said brace being hinged at its center and provided with suitable locking mechanism substantially as shown and described.

4. In a lower-berth support, a box or receptacle located between the seats, a metallic strip secured on the top of the box and to the side of the car, grooves provided in the said strip adapted to receive the sliding slats forming the bed-bottom, and a series of tracks or grooves arranged on the upper face of the metallic strip, substantially as shown and described.

5. In a lower-berth support, a box or receptacle between the seats, said box being provided with a door, a strip or block secured to the top of the box, said strip or block having grooves for the reception of the slats forming the bed-bottom, and a series of tracks or grooves arranged on the top of said strip or block, substantially as shown and described.

6. In a lower berth a movable bottom sliding downward in a receptacle arranged between the outer and inner walls of the car and the floor thereof, substantially as shown and described.

7. In a lower berth formed by two end supports having grooves on their inner sides continuing downward between the walls of the car of flexibly-connected slats adapted to slide therein, substantially as shown and described.

8. In a sleeping-car a lower-berth bed-bottom formed of slidably flexibly-connected slats adapted to slide downwardly in a recess between the walls of the car and the floor thereof, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

FRANKLIN T. REESE.
CHARLES A. WILLIS.

Witnesses:
JOHN F. LUYSCHWET,
M. CARNAHAN.