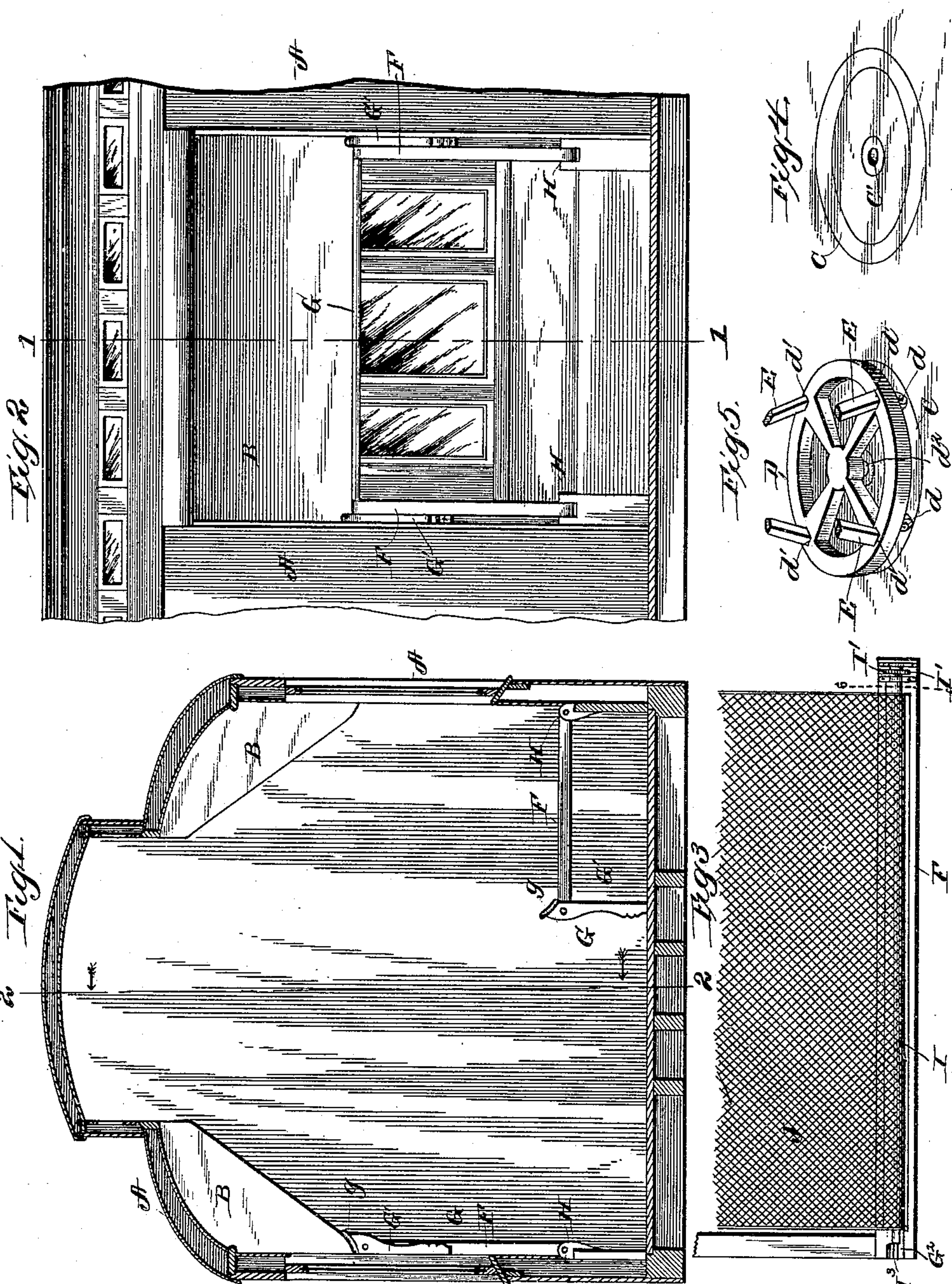


(No Model.)

M. H. THROOP, Jr.
SLEEPING CAR.

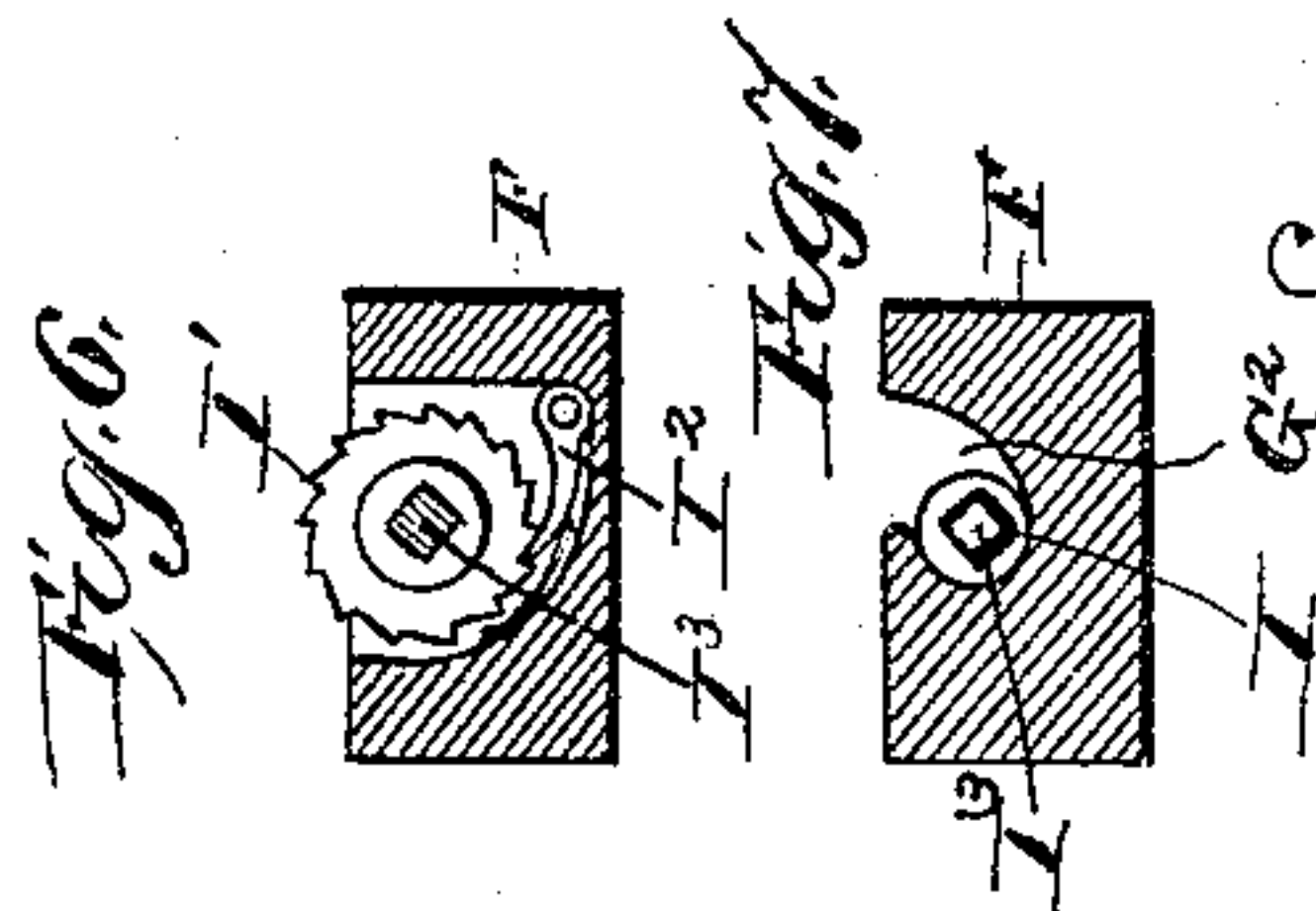
No. 444,468.

Patented Jan. 13, 1891.



Witnesses:

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Inventor
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UNITED STATES PATENT OFFICE.

MONTGOMERY H. THROOP, JR., OF CHICAGO, ILLINOIS.

SLEEPING-CAR.

SPECIFICATION forming part of Letters Patent No. 444,468, dated January 13, 1891.

Application filed October 27, 1890. Serial No. 369,452. (No model.)

To all whom it may concern:

Be it known that I, MONTGOMERY H. THROOP, Jr., a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Combined Parlor and Sleeping Car, of which the following is a specification.

My invention relates to improvements in the construction of the lower berth of the car, steamer, or other vehicle in which two sleeping-berths—an upper and a lower one—are placed, and in a stand whereon reclining or other chairs used when the berth is stowed away can rest.

The object of my invention is to obtain a construction of a lower berth wherein it can be readily removed from the position in the car in which it is adapted for occupancy and stowed away in any suitable place, as in the upper berth, and the space thereby left open, as it can be used for the placing of chairs upon the base provided therefor, and herein described.

The chairs designed to be used in combination with my invention are preferably folding chairs, as when so constructed they may be folded and placed underneath the lower berth when such lower berth is prepared for occupancy; but chairs not folding can be employed provided a suitable place for the stowing away of such chairs can be obtained in the car, steamer, or other vehicle when the berth is ready for occupancy. I attain these objects by means of the devices illustrated in the accompanying drawings, in which—

Figure 1 is a sectional view on line 1 1 of Fig. 2 of a car having my invention therein with the frame of the lower berth on the left-hand side thereof closed against the side of the car, and with the frame of the berth upon the right-hand side thereof down in position to have placed thereon the mattress and other material forming the bed. Fig. 2 is a longitudinal section of a portion of the car on line 2 2 of Fig. 1, viewed in the direction of the arrows. Fig. 3 is a plan view of a portion of the spring or canvas mattress used by me and of the rod attached to one end thereof forming the head or foot of the bed. Fig. 4

is a perspective view of a track, preferably metal, placed in the floor of the car, and of a pivot-hole in the center of such track, and Fig. 5 is a perspective view of a revoluble frame or carriage having a pivot in the center thereof adapted to fit into the pivot-hole, (in the drawing illustrated in Fig. 4,) with casters adapted to run upon the track, (illustrated in Fig. 4,) and having holes on the upper face thereof adapted to receive the legs of a folding or other chair. Fig. 6 is a sectional view of one end of the end rail of the frame of the berth, and Fig. 7 is a sectional view of the other end of such rail.

Like letters refer to like parts throughout the several views.

A is a car.

B B are the upper berths thereof, illustrated in Figs. 1 and 2 in a closed position.

C is a track, which may be let into the floor of the car in the manner illustrated in Figs. 4 and 5.

C' is a pivot-hole located at the center of track C.

D is a circular carriage or frame, having casters d d on the under side thereof and holes d' on the upper surface thereof.

d^2 is a pin in the center of frame D, adapted to fit into hole C'.

E E E are the legs of a chair, inserted in holes d' .

As the construction of the chair forms no part of my invention, I have illustrated so much of the legs of the chair as will serve to illustrate the manner in which the chair is made revoluble by being mounted upon the revoluble frame D.

F F are the end bars of the lower berth.

G is a bar or rail connecting the end bars of the lower berth.

G is a bar or rail connecting the end bars F F, and H H are pivots upon which the end rail F F may turn.

G' G' are bars pivoted to the outer end of end bars F F and form, when the end bars are lowered into position to support the lower berth, legs for the frame formed by the end bars F F and the uniting-rail G, such frame forming the support or bed-frame of the lower berth.

When the frame F F G G' is down in position for use as a berth, the inner end of the

end bars F F, pivoted to the sides of the car on pivots H H, as hereinbefore described, the inner end of the side bars are supported thereby and the legs G' are from the pivotal point thereof to the floor of substantially the length which the pivot H is above the floor of the car. The end bars F F are of equal length and of such length that when placed against the side of the car in the position illustrated in Fig. 2 they shall extend from pivotal point H to the upper berth B, and so that the bar or rail G connecting the end bars F F shall rest against the upper berth B. In appearance I prefer that this rail resemble in a more or less perfect manner a molding or ornamentation to the panels of the upper berth B. *g* is that portion of the rail G which comes in contact with the upper berth B when closed against the same, and may, if desired, be upholstered.

G² is a groove in end rail G extending the entire length thereof.

I is a roller which forms the end bar of the mattress fitting into groove G².

I' is a ratchet-wheel on roller I, and I² is a dog on bar F, adapted to allow the roller I to be rotated in one direction and to prevent its rotation in the other direction.

I³ I³ are the square ends of the roller. The ratchet-wheel I' is rotatable in bar F, and has a square hole in its center in which the squared end of collar I fits. A properly-fitted wrench can be placed on the outer squared end of roller I and the roller turned thereby.

J is the mattress, which may be constructed of woven wire or canvas or other suitable material. The mattress J is secured to roller I, having such a roller at both ends thereof.

In order to prepare a berth for occupancy, when constructed in a manner to embody my invention, it is first necessary to remove the chairs from the space in the salon of the car, boat, or other vehicle to be occupied by the berth, and this is readily done by lifting the legs E E with the chair off of the revolvable frame D. Where the folding chair is employed, it may be then folded and laid upon the floor. The frame of the lower berth, consisting of the end bar F, connecting-rail G, and legs G' G', is then brought forward and downward, revolving on the pivots H H until the legs G' G' rest upon the floor of the car. The mattress J may then be taken from the receptacle provided therefor, and in which it is contained when the car is to be used as a drawing-room car, (such receptacle may be the upper berth of the car,) along with the necessary bedclothing for such lower berth, and one of the rollers I of such mattress dropped into the groove G² in the bar F at one end of the bed and the other of the rollers dropped into the like groove in the bar F at the other end of the bed. The mattress J may then be brought sufficiently taut to have placed thereon the necessary bedclothing by placing a wrench on the outer squared end I³ of the bar I and turning such

bar in the groove G². When the mattress J is sufficiently taut, the dog I² in contact with teeth I', or some equivalent mode of preventing rotation of roller I, holds it there, and the berth is then prepared for occupancy in the usual way. Where the face *g* of the rail G is upholstered the rail furnishes a suitable seat or rest for the person preparing to occupy the berth.

By the use of a berth constructed in the manner herein described the floor of the salon in which it is placed, whether in a car, boat, or other vehicle, can be used in the same manner as an ordinary drawing-room or salon during the day, when such berths are closed, for the placing therein of the voluble seats or other seats, and when the berths are open such lower berths, it will be readily seen, can be prepared to form a bed very much like the ordinary spring or canvas mattress bed.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a combined sleeping and drawing salon, a frame pivoted to the side of the salon, adapted to swing upward against the side thereof or extend outward therefrom into the salon and form a frame upon which the mattress of the berth can be placed, in combination with a mattress having bars secured to the ends thereof, adapted to fit on the end bars of the pivoted frame, substantially as described.

2. A frame consisting of bars pivoted to the side of a salon, such bars having a groove on one side thereof, a bar secured to the outer end of such pivoted bars and extending from one to the other thereof, and legs pivoted to the outer end of such pivoted bars, whereby the frame may be placed against the side of the car or extended horizontally, in combination with a mattress having bars secured to the ends thereof adapted to fit into the grooves in the pivotal bars and form therewith the frame and mattresses of a berth in such salon, substantially as described.

3. In a combined sleeping and drawing salon, a frame consisting of bars pivoted to the side of the salon, such bars having a third bar secured to the outer ends thereof and extending from the one to the other, and legs pivoted to such frame, whereby the frame may be placed against the side of the salon or extended horizontally, a rotatable ratchet-wheel on the end bars of such frame, such ratchet-wheel having a hole in the center thereof, in combination with a mattress having bars secured to the ends thereof, such mattress-bars having squared ends, one of such ends adapted to fit into the square hole of the ratchet-wheel and the other of such ends adapted to have placed thereover a wrench, whereby when the mattress-bars are placed on the horizontal frame the mattress can be drawn taut by the turning of such mattress-bars, substantially as described.

4. In a combined sleeping and drawing salon, a frame pivoted to the side of the salon, adapted to swing upward against the side thereof or extend outward therefrom into the
5 salon and form a frame upon which the mattress of a berth can be placed, in combination with a mattress having bars secured to the ends thereof, adapted to fit on the end bars of the pivoted frame, pivoted legs upon the
10 end bars of the pivoted frame, and the side rail

of the pivoted frame adapted to come against the panel of an upper berth and form an ornamentation therefor when such pivoted frame is against the side of the salon, substantially as described.

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