No. 749,930. PATENTED JAN. 19, 1904.

I. B. GUENZBURG.

SLEEPING APPLIANCE FOR PASSENGER CARS.

APPLICATION FILED SEPT. 10, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 2.

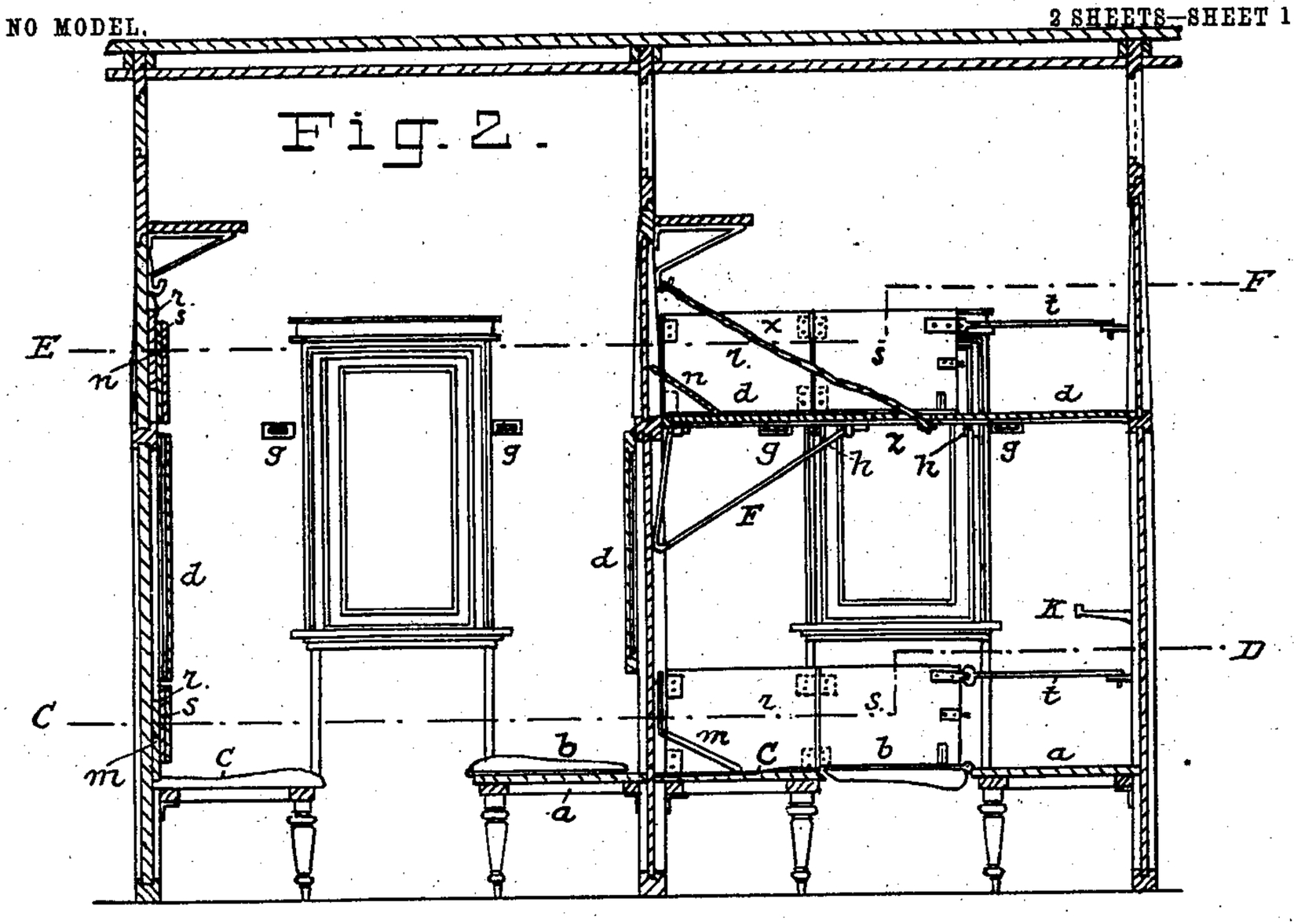
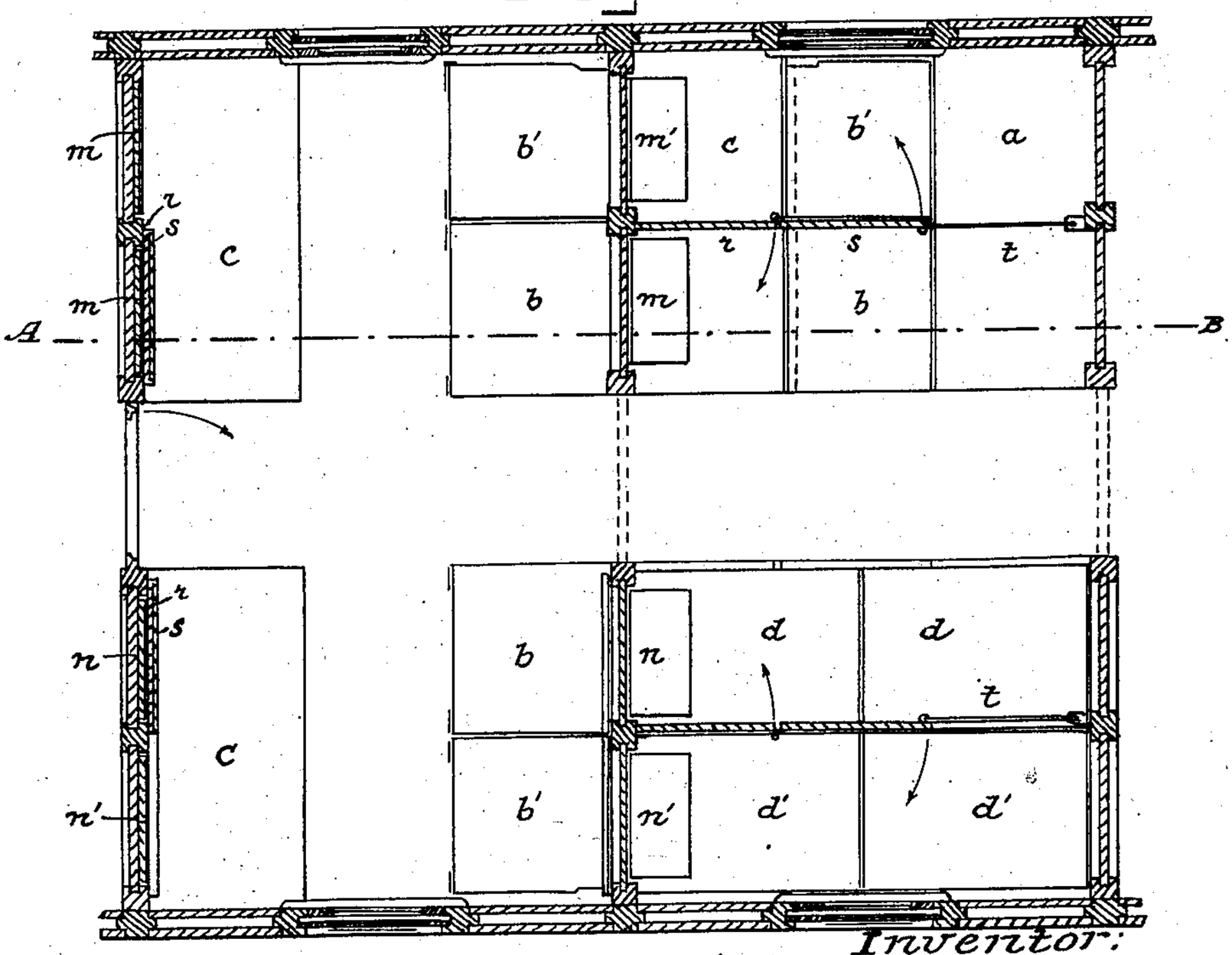


Fig. 1.



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By Richards & Co.
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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 6.

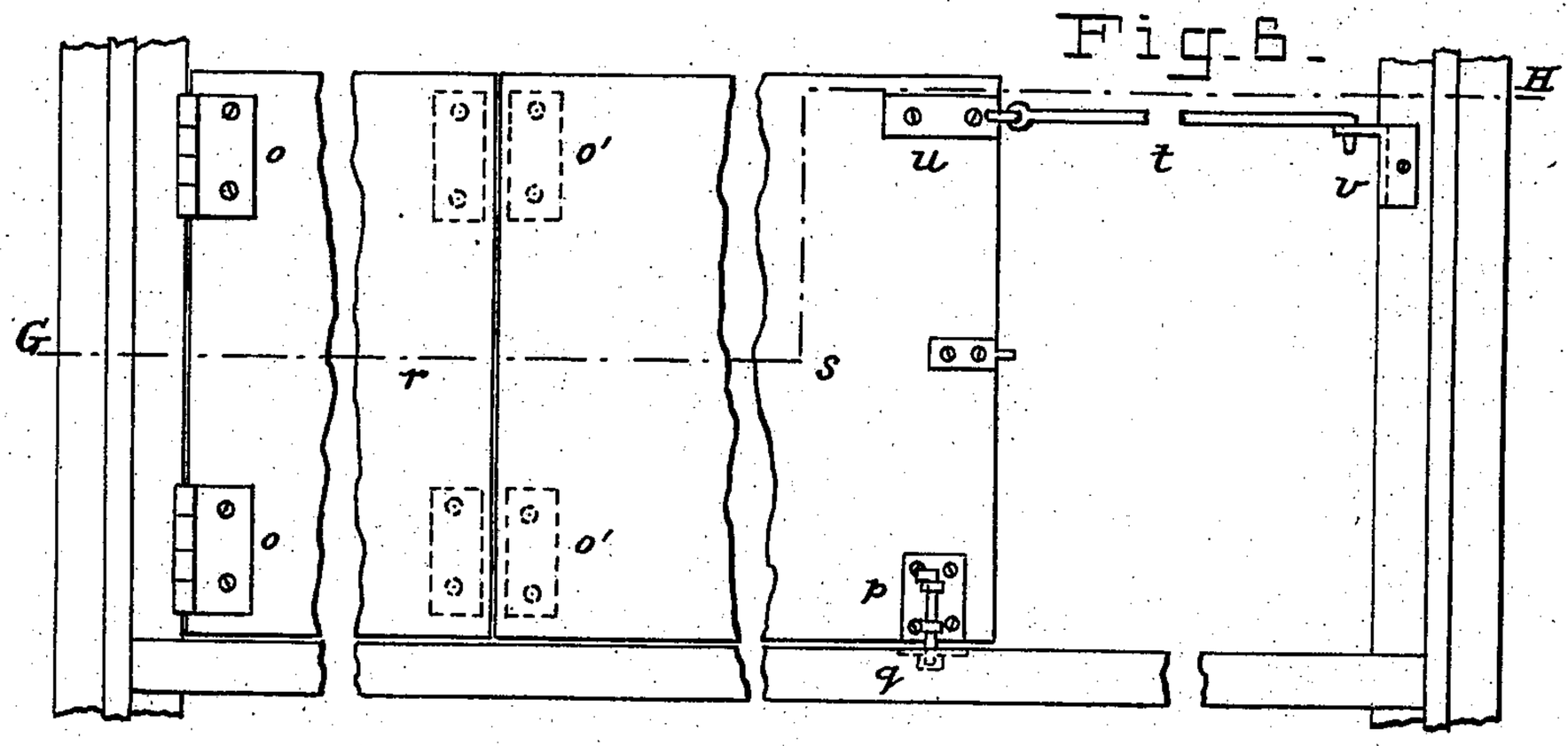

Fig. 7.

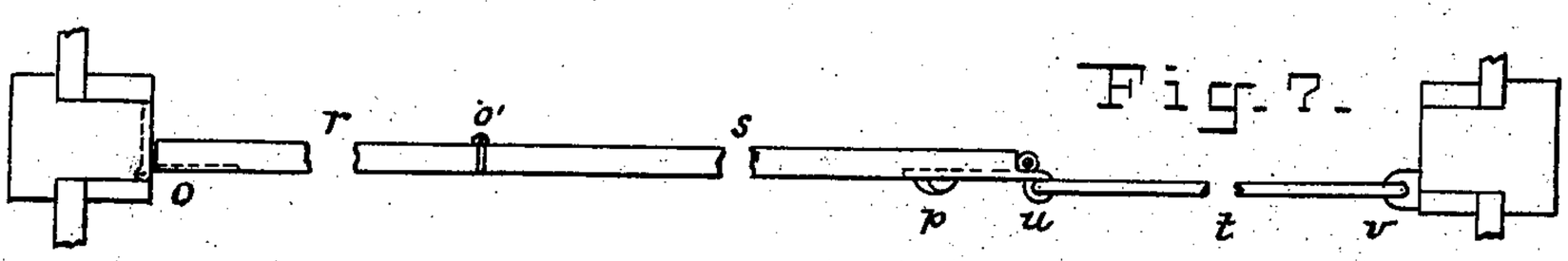

Fig. 9.

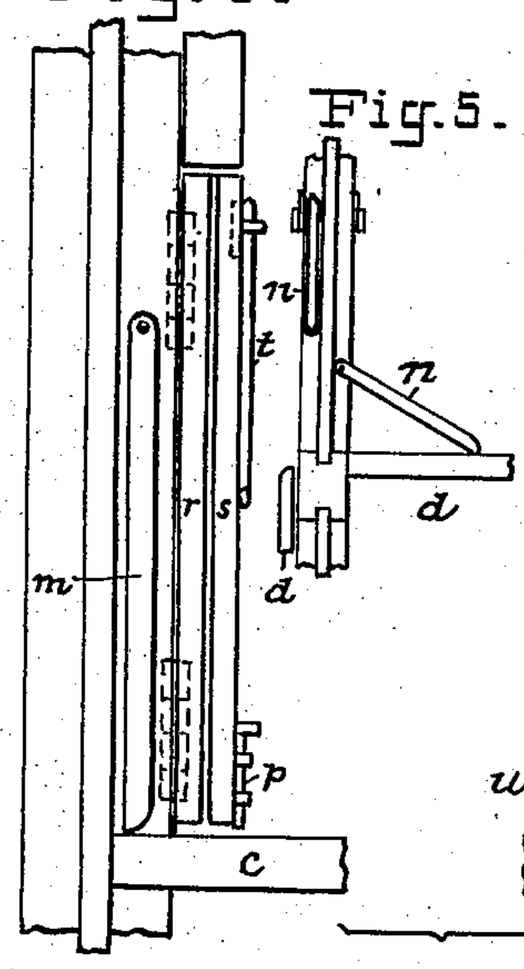

Fig. 5.

Fig. 8.

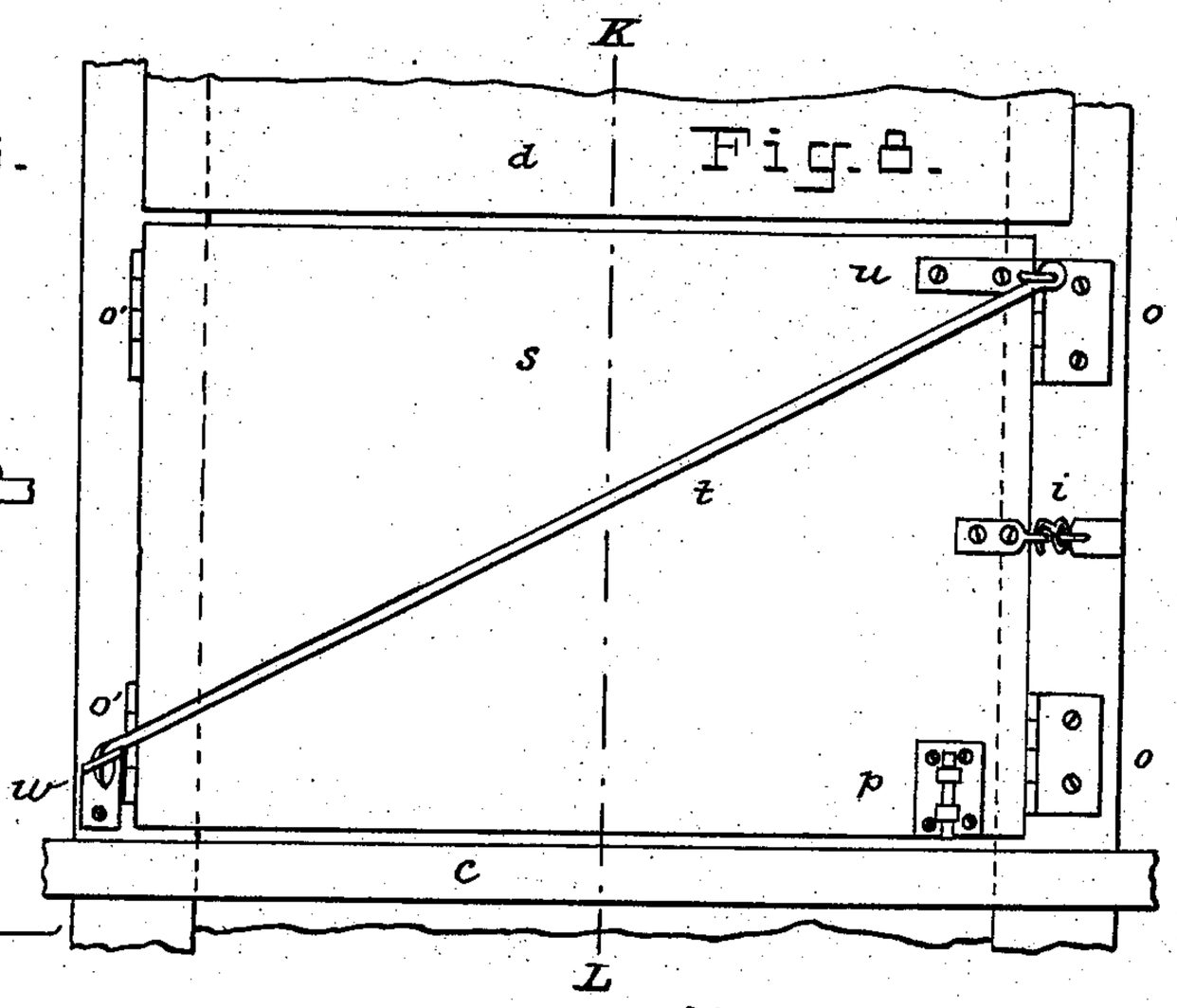

Fig. 3.

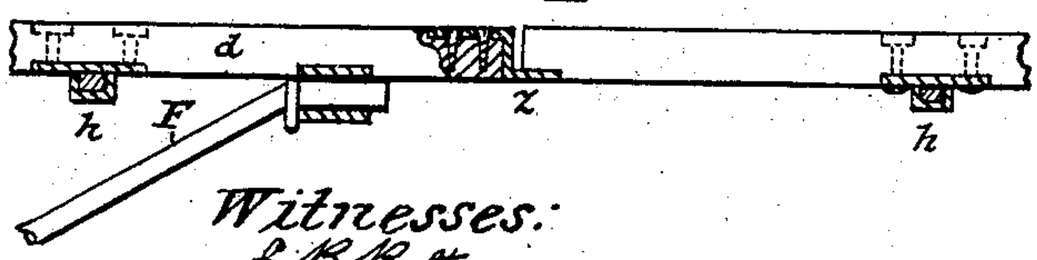

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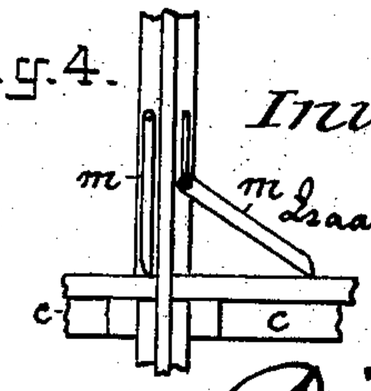
Fig. 4.



Inventor:
Isaac Ber Guenzburg
By
his Attorneys.

No. 749,930. Patented January 19, 1904.

UNITED STATES PATENT OFFICE.

ISAAC BER GUENZBURG, OF ST. PETERSBURG, RUSSIA.

SLEEPING APPLIANCE FOR PASSENGER-CARS.

SPECIFICATION forming part of Letters Patent No. 749,930, dated January 19, 1904.

Application filed September 10, 1903. Serial No. 172,676. (No model.)

To all whom it may concern:

Be it known that I, ISAAC BER GUENZBURG, a subject of the Emperor of Russia, residing in St. Petersburg, Russia, (whose post-office address is Kolokolnaya 2,) have invented certain new and useful Improvements in Sleeping Appliances for Passenger-Cars, of which the following is a specification.

On June 10, 1890, and on August 20, 1895, patents were granted in the United States to I. B. Guenzburg under Nos. 429,619 and 544,892, for sleeping arrangements in passenger-carriages. The advantage of the patented sleeping arrangements consists in the fact that in a carriage having the same external dimensions as an ordinary carriage of the same class, while preserving in it the same number of passenger-places, all the places become adapted for sleeping.

The hereinafter-described improvements consist in this that in the above-mentioned patented sleeping arrangements one essential part—namely, the construction of the supports for the upper apartment—is made quite differently, besides which new very essential details have been introduced so that the whole system of sleeping arrangements becomes far more effective.

In the accompanying drawings, Figure 1 is a plan of part of the carriage in which on both sides of the longitudinal passage are placed two four-berth compartments. The upper part, placed above the lengthwise passage, represents the plan of the lower apartment or a horizontal section of part of the carriage through the line C D shown in Fig. 2. The lower part, placed below the lengthwise passage, represents the plan of the upper apartment or a horizontal section through the line E F. On each side of the lengthwise passage the left compartment represents the appearance by day and the right compartment the appearance by night (scale about one twenty-fifth natural size;) Fig. 2, a longitudinal section through the line A B shown in Fig. 1. The left compartment represents the appearance by day and the right the appearance by night, (scale about one twenty-fifth natural size;) Fig. 3, the details of the supports of the upper apartment, (scale about one-fifth natural size;) Figs. 4 and 5, head-rests. Fig. 4 represents one form of head-rest, (in Fig. 2 shown in the lower apartment,) and Fig. 5 another form of head-rest, (in Fig. 2 shown in the upper apartment, scale about one-tenth natural size;) Figs. 6, 7, 8, 9, folding partition. Fig. 6 is a view of the partition when extended as in use at night; Fig. 7, a section of the former through the line I H. Fig. 8 is a view of the partition when shut and not in use by day, view from the side of the compartment; Fig. 9, a section of the latter through the line K L, (scale about one-fifth natural size.)

I. Construction of the upper apartment, (Figs. 1, 2, 3.)—In any four-seated compartment of a carriage in which are seated four passengers there may lie at night lengthwise of the carriage two in the upper apartment and two in the lower apartment. For the construction of the upper apartment serve opposite hanging boards, the rear boards d' d' to form the rear sleeping-place and the front boards d d to form the front sleeping-place. These boards by day serve as backs to the seat, and by night by raising two opposite boards to the horizontal position they form one long horizontal surface on which a person can lie lengthwise of the carriage. To keep these boards in the horizontal position, are employed supports, as follows: For the rear sleeping-place at the side of the carriage are two pivoted rods g g, a bracket F, and a bent iron piece Z. For the front sleeping-place next the lengthwise passage two slide-bars or bolts h h, a bracket F, and a bent iron piece Z. The rods g g are placed at the longitudinal side of the carriage on both sides of the window. They turn in a horizontal direction and serve as rear supports for the rear sleeping-place. The bracket F or F′ is placed under one of the two opposite boards d and d', as shown in the drawings, and is secured to the transverse wall of the compartment and serves as support to the board. The iron piece Z or Z′ has a transverse section of a **Z** shape. Its length is equal to the breadth of the board d or d'. It is placed at the free edge of the board, under which is the bracket. Its upper ledge, which is wider, is secured to this board, Fig. 3, and on its lower ledge rests the free end of

the opposite board for the whole width of the board. The bolts *h h* are fastened to the bottom of the rear boards *d d* at their front edge and serve as rear supports for the front sleeping-place. First are raised to a horizontal position the two opposite boards *d d'*, which are at the longitudinal wall of the carriage. The two rods *g g* are turned, and the bracket F' then receives the sleeping-place at the side of the carriage. Then the two opposite boards *d d* which are at the lengthwise passage are raised, the bolts *h h* are moved out, and the bracket F turned, whereupon the second (front) sleeping-place is obtained.

It would suffice for each sleeping-place to have supports only for one of the two opposite boards—namely, at that to which the piece Z is fastened—seeing that the second board rests on the first. However, it is better to have two rods *g g* and two bolts *h h*, as they occupy little room and an additional support is not superfluous. Only the bracket F or F' can be but one for each sleeping-place. This is so in order that in the lower apartment the passenger having the sleeping-place next the side of the carriage may be able to get out freely when the front sleeping-place is occupied by another passenger. He goes out on that side of the compartment at the feet of the lying passengers, where there are no brackets.

To prevent falling from the upper apartment, there is a chain *x*, Fig. 2. This chain (covered with leather) with one end turns about an axle fixed below the front edge of the board *d*, while the other end of it is put over a hook under the luggage-shelf. By day this chain is stowed away under this board.

The above-described system of construction of the upper apartment has this advantage that the latter is more easily arranged and more comfortable for lying down on than is the case with the system of construction of the second apartment by means of rods which are suspended from the ceiling, in consequence of which it is necessary to further considerably strengthen the construction of the ceiling.

II. Head-rests, (Figs. 1, 2, 4, 5.)—For the convenience of lying down are arranged on one side of the compartment in both the upper and lower apartments raised parts or head-rests. Fig. 4 is one form of head-rest. (In Fig. 2 shown in the lower apartment.) At the transverse wall of the compartment, at the bench *c* between the end posts and middle one, are placed vertically two boards *m* and *m'*. To the ends of the upper edge of the board are fixed studs, which enter vertical slots made in the posts. If the board be taken by its lower edge and drawn forward, its upper edge descends, (the studs slide down along the slots,) the board assuming an inclined position, forming a head-rest on which a pillow may be conveniently placed. Fig. 5 represents another form of head-rest. (In Fig. 2 shown in the upper apartment.) Between the end and middle posts are placed vertically two boards *n* and *n'*. To the ends of the upper edge of the board are fastened studs, which enter recesses made in the end and middle posts, the board turning about these studs as about a horizontal axis. If the board be taken by its upper edge and thrown down, the desired head-rest is obtained.

III. Folding partition, (Figs. 1, 2, 6, 7, 8, 9.)—In order to separate two passengers from each other as they lie beside each other in the lower or upper apartment, there is employed a folding partition. The partition consists of two equal boards (or of metal plates) *r* and *s* and a hook *t*. The length of each board is somewhat less than the breadth of the suspended (liftable) board *d* and its height in the lower compartment somewhat less than the height of the lower edge of the hanging board *d* when it is let down by day above the seat *c*. The board *r* is secured by hinges *o* to the middle post of the transverse wall of the compartment. The board *s* is secured by hinges *o'* to the first board *r*. The hook *t* at one end is secured by means of the plate *u* to the upper end of the board *s* and the other free end of it is put into the ring *v*, fastened to the middle post of the opposite transverse wall of the compartment. To the board *s* is fixed, below, the vertical bolt *p*, which descends into a recess *q*, made in suitable places in the hinged board *b* in the lower apartment and in the board *d* in the upper apartment.

By day when the partition is not in use the boards *r* and *s* and the hook *t* are folded together, as shown in Figs. 8 and 9. They are then placed at the transverse wall of the compartment, where are the head-rests, between the lower edge of the hanging board *d* and the seat *c* in the lower compartment and above this hanging board in the upper apartment. At the same time the hook *t* is stowed away in the diagonal of the board *s* and its free end is put into the ring *w*, fastened to the end post of the transverse wall *q*, the compartment at the lengthwise passage. In the lower apartment instead of a ring *w* may be used a recess in the seat *c* at the end of the partition. Then the hook *t* at the same time presses the folded partition at one end of it to the transverse wall of the compartment. To press the partition to the latter at its other end, there is a hook *i*, fastened to the middle post.

By night when it is desired to make use of the partition the hook is raised, the end of the hook *t* taken out of the ring *w*, the partition unfolded, and the end of the hook *t* put into the ring *v* on the opposite wall of the compartment, after which the bolt *p* is let down into the recess *q*. Thus a solid partition is obtained, completely dividing from each other the two adjacent sleeping-places.

For the passenger to get out of the rear sleeping-place situated at the longitudinal

wall of the carriage it is only necessary for him to take out the hook *t* from the ring *v*, when an open space will be formed at the end of the partition at the feet of the lying passenger through which the passenger can freely pass out.

The partition in the folded position is disposed at the head-rest of the front sleeping-place beside the lengthwise passage of the carriage. It is thus arranged in order that if only one passenger wishes to lie down he can arrange himself a sleeping-place at the side of the carriage and he has no necessity for a partition. When, however, subsequently a second passenger wishes to lie down beside the first, it is only then there is any need for the partition. At the same time the second passenger is obliged, even against his will, to unfold and set up the partition in order to be able to get the head-rest placed behind it.

I claim as my invention—

1. In combination in a sleeping-car, the upper and lower berths, said upper berth comprising the hanging boards, means situated beneath one board for supporting the same, said board supporting the other board, substantially as described.

2. In combination, in a sleeping-car, the upper and lower berths, said upper berth comprising the hanging boards, a bracket adapted to support one of said boards, and a Z-shaped plate secured to the end of said board, the other suspending board being supported by said plate, substantially as described.

3. In combination in a sleeping-car, the upper and lower berths, said upper berth comprising hanging boards, means situated below one of said boards for supporting the same and a chain on the front side to prevent the occupant falling out.

4. In combination in a sleeping-car, transverse walls dividing it into compartments, upper and lower berths in said compartments, and head-rests in said berths consisting of a portion having lugs at one end, said lugs engaging slots formed in the transverse walls, substantially as described.

5. In combination in a sleeping-car, berths therein, and partitions dividing the berth into two parts, said partitions being composed of hinged sections whereby they may be folded up when not in use, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ISAAC BER GUENZBURG.

Witnesses:
N. D. FOMINE,
N. TSCHEKALOFF.