

(No Model.)

2 Sheets—Sheet 1.

J. A. SCHMITZ.

COMBINED PARLOR AND SLEEPING CAR.

No. 251,737.

Patented Jan. 3, 1882.

Fig. 1.

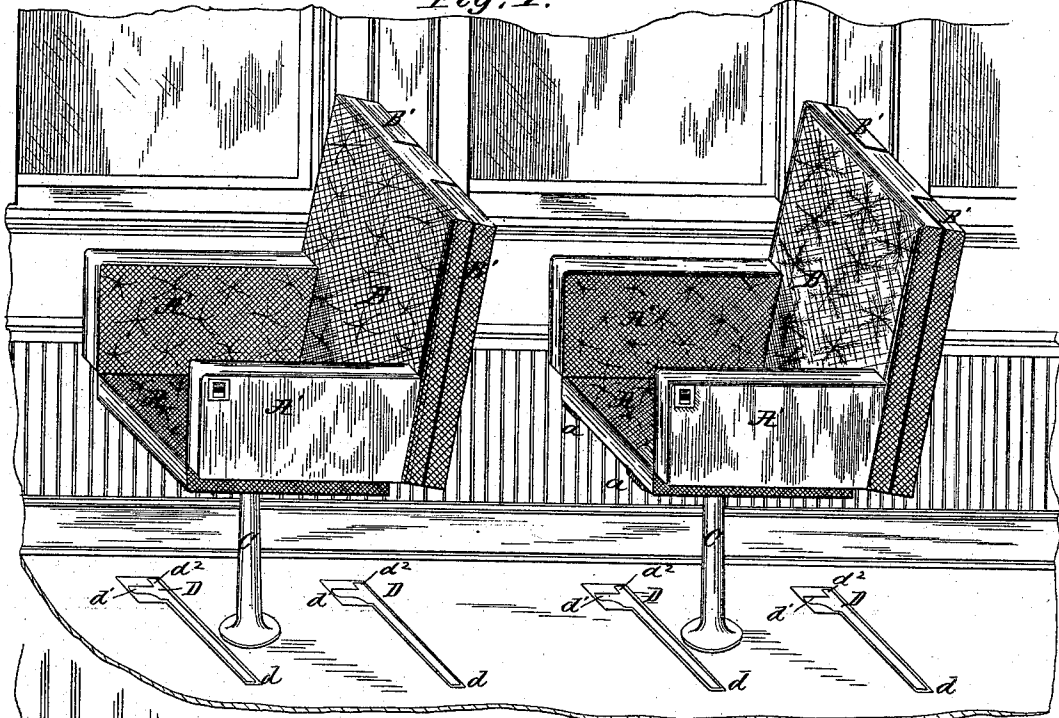
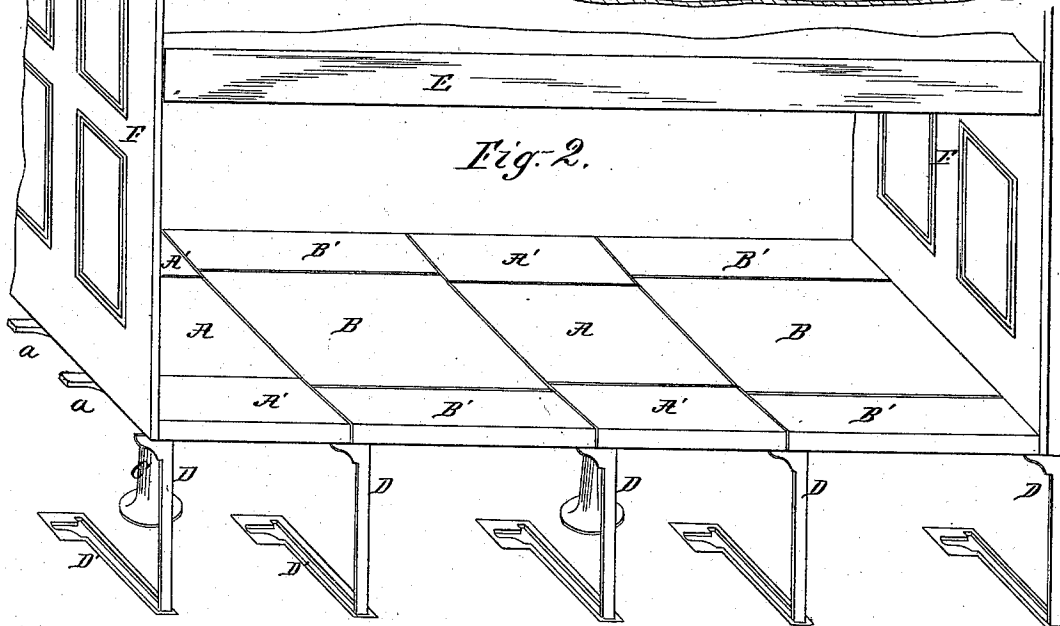


Fig. 2.



WITNESSES
 F. W. Adams
 W. C. Adams

INVENTOR
 J. Adolph Schmitz
 per W. C. Adams
 Attorney

J. A. SCHMITZ.

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Fig. 5.

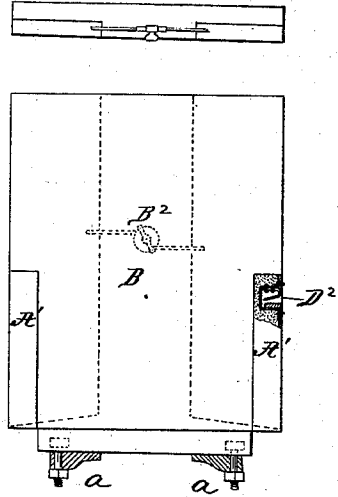


Fig. 3.

Fig. 4.

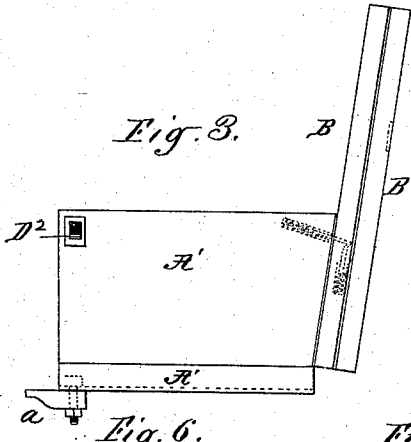


Fig. 6.

Fig. 7.

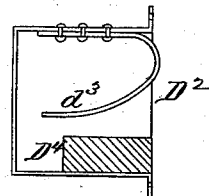
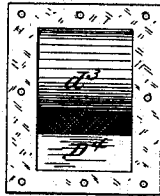


Fig. 11.

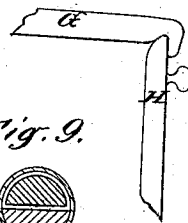


Fig. 8.

Fig. 9.

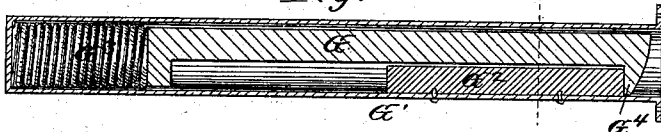


Fig. 12.

Fig. 10.

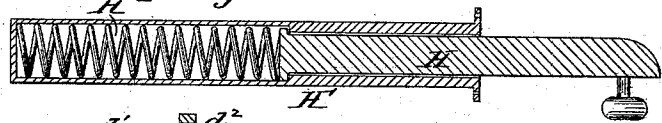
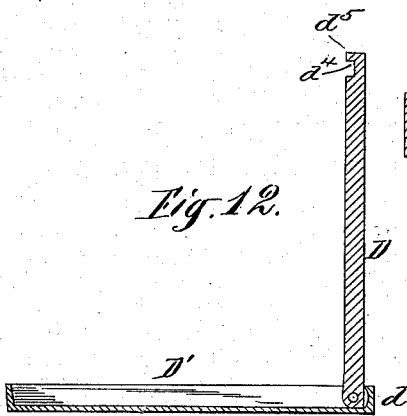
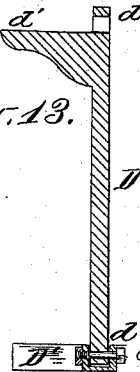


Fig. 13.



WITNESSES
 F. V. Adams
 W. Adams

INVENTOR
 J. Adolph Schmitz
 per W. E. Darton
 Attorney

UNITED STATES PATENT OFFICE.

J. ADOLPH SCHMITZ, OF LAKE FOREST, ILLINOIS.

COMBINED PARLOR AND SLEEPING CAR.

SPECIFICATION forming part of Letters Patent No. 251,737, dated January 3, 1882.

Application filed September 17, 1881. (No model.)

To all whom it may concern:

Be it known that I, J. ADOLPH SCHMITZ, of Lake Forest, in the county of Lake and State of Illinois, have invented certain new and useful Improvements in Combined Parlor and Sleeping Cars; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention has for its object to provide an improved construction of car-chairs which shall correspond generally with the ordinary chairs of parlor-cars as distinguished from the seats of sleeping-cars, but which may be unfolded or extended to form berths.

By means of my improvement I shall be enabled to construct cars having the special advantages imparted by the chairs for day travel, and transformable into sleeping-cars equally with those now distinctively known by that name, upon which the seat rotates in the usual manner of parlor-car chairs.

To this end my invention consists in certain features of construction hereinafter fully set forth, and designated in the claims.

In the drawings, Figure 1 is a fragmentary interior view of a car provided with my improvements, showing the chairs arranged for sitting or day use. Fig. 2 is a perspective of a lower berth in the car, formed of two adjacent chairs extended for this purpose. Fig. 3 is a side elevation of one of the chairs without its support. Fig. 4 is a front elevation thereof. Fig. 5 is a top view of the chair-back when folded. Figs. 6 to 11, inclusive, are details. Fig. 12 is a vertical section of a support for the outer fold of the berth, taken transverse to the car. Fig. 13 is a vertical section of the same, taken longitudinally of the car.

The same letter indicates the same part in all figures of the drawings.

The chair as here shown has its several extensions pivotally or flexibly joined together.

A is the chair-seat. A' A' are the sides or arms. B is the back, and B' B' are side extensions or wings of the back, and C is the chair support or standard.

To form a berth from these chairs, the arms, the back, and the wings of the backs are un-

folded in to the horizontal plane of the seat A. Their connecting-hinges, if such be employed, are therefore in or near the upper face of the extended parts. Obviously the dimensions of the several unfolding or extending parts are contrived to give a uniform width to the berth, and also to form a single berth from the parts of two adjacent chairs, the inner edge of which reaches to the adjacent side of the car. It is found that such dimensions may be given them and preserve a comely appearance in the chair.

The wings A' and B', which extend to the car-wall, may rest on a ledge there permanently fixed. The outer wings may be supported by pivoted arms, which fold beneath or within the chair, out of the way, or by supports D, as shown in the drawings, which, during the day, lie flush with the car-floor.

In order to give proper incline to the chair-back, the arms A' are inclined at their rear edges, which, to give proper continuity of surface in the berth, requires that the back and back wings be similarly inclined at their lower edges, as they are distinctly shown to be in Fig. 2.

As a support for the back of one chair or of the partition dividing one berth from another, brackets *a a* are provided, which swing in and out from the front edge of each chair seat. In this construction it becomes necessary, in making up any single berth not at the rear end of the car, to use the forward chair of the next section at the rear. The partitions F, resting on the supports *a a*, are obviously longer than the partitions of sleeping-cars having fixed seat-backs.

The back and arms of the chair are held in their elevated positions by the spring-catches shown in dotted lines in Fig. 3 and in detail enlarged and detached in Figs. 8, 9, 10, and 11. The catch G, set in a tube or shell, G', is fixed in the rear edge of the arm A', and the catch H, preferably similarly incased, is fixed in the rear surface of the back B in a vertical position. The catch G is thrown outward by a spring, G³, and is provided with a hook, G⁴, on its lower side and on its outer end, which engages with the spring bolt or catch H, as seen in Fig. 11. A fixed part, G², within the shell G' limits the throw of the catch G, which obviously must be thrust inward when the chair-wings are extended.

The side wings, B', of the chair-back are held in their backward-folded position by any suitable fastening. At B², Figs. 4 and 5, a familiar form of double spring-catch is shown, having a central turn-pin handle located in the middle of the chair-back.

Other forms of fastening may obviously be employed in place of the catch G and bolt H for securing the chair-back to the arms, or the back and arms may be sustained by fastenings connecting them with the seat, and therefore independent of each other.

The supports D D, as here shown, are intended to not only sustain the side wings which rest upon them, but also to hold them down as well, and to this end are provided with projections *d*², having the hooks *d*⁵. For the reception of said projections a metal box, D², is set firmly in the outer or under face of the arms or wings A', said boxes having the interior shoulder, D⁴, over which the hook *d*⁵ engages, and the yielding spring *d*³, which admits the said hook and holds the same in engagement with the shoulder D⁴. The lateral arm *d*' of the standard D gives support to the outer back wing of the adjacent chair, as well as to the outer edge of the partition F at the end of the berth. Said standard D is preferably provided with a permanent case, D', let into the floor flush therewith, and is hinged at its foot *d*', so as to rise and fall readily and accurately into place.

In order that the chair contrived for the purpose of extension, as stated, may afford room for the knees of the occupant when turned toward the car-side, the standard C may be pivotally connected with the seat somewhat nearer the front edge of the latter than would otherwise be necessary.

I do not restrict myself to the construction shown, wherein the arms A' are hinged to the seat, as such arms or side extensions or wings may be wholly separate or separable from the seat, and as they may, if preferred, be constructed to swing up or draw out into a horizontal position to laterally extend the chair-seat to form the berth wider than said seat.

I claim as my invention—

1. In a combined parlor and sleeping car, two adjacent chairs having their backs and sides shaped and contrived, substantially as

described, to form, with the seats of said chairs, a rectangular berth wider than the chair-seats, when arranged in a horizontal plane therewith, substantially as and for the purposes set forth. 55

2. In a car, two adjacent chairs having the back and arms both extensible into a horizontal position to form a berth, combined with mechanism whereby the extended parts are supported, substantially as described. 60

3. In a car, two adjacent rotating chairs having downwardly-folding backs, arranged and constructed to form a continuous horizontal surface by having the back of one chair fall into proximity with the seat of the next, substantially as and for the purposes set forth. 65

4. In a car, the chair described, having side extensions for the seat and back, and also having the back constructed to lie in the same plane with the seat, whereby said chair may form a berth or part of a berth, substantially as set forth. 70

5. In a combined parlor and sleeping car, two adjacent chairs laterally and rearwardly extensible, whereby said chairs are convertible into a berth, substantially as described. 75

6. In a car, a chair provided with the retreating projections *a a*, combined with an adjacent chair having its back extensible into the same plane with the seat, substantially as described, and for the purposes set forth. 80

7. In combination with a series of chairs having their backs and arms extensible into the plane of the seats, the partitions F, extended to the level of the seats, substantially as described. 85

8. In a car-chair wherein the back is provided with lateral extensions and wherein the back and arms are constructed to fall into the plane of the seats, the arms having an inclined rear edge and the back wings similarly inclined on their lower edges, whereby the parts closely approximate when in horizontal position, substantially as described. 90

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses. 95

J. ADOLPH SCHMITZ.

Witnesses:

M. E. DAYTON,
WILLIAM M. STANLEY.