Jan. 20, 1948. F. J. DITTRICH 2,434,841

RAILWAY DINING CAR

Filed Feb. 28, 1944 3 Sheets-Sheet 1

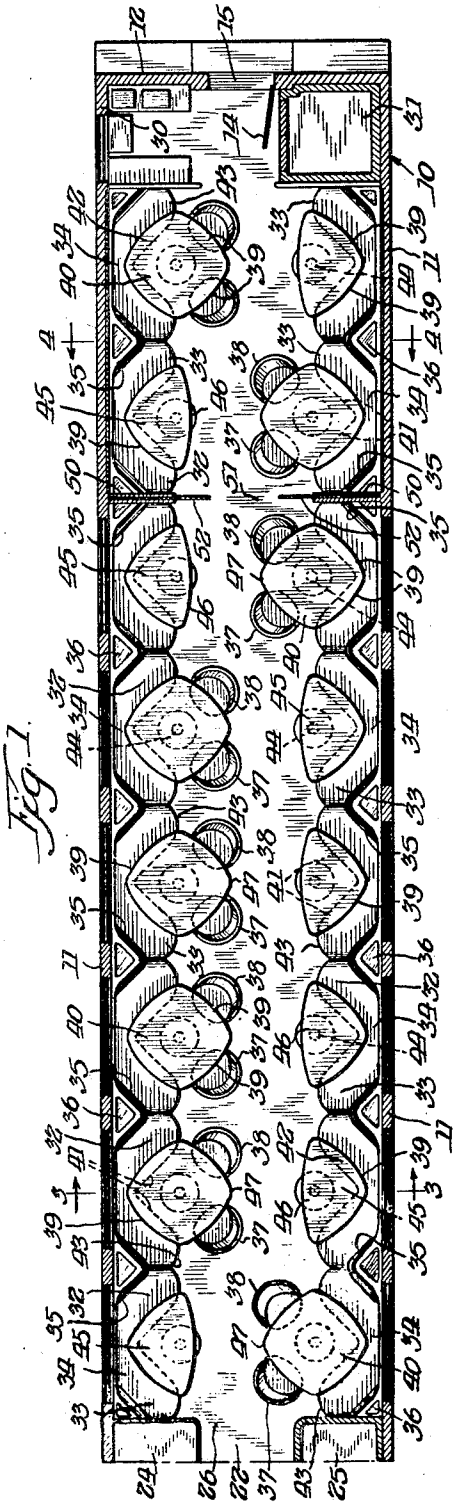

Fig. 1.

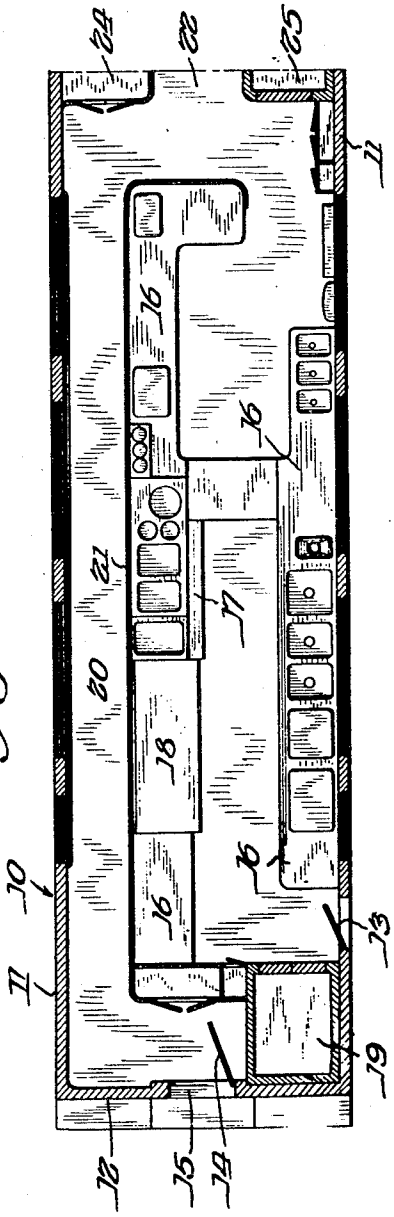

Fig. 2.

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Fig. 3.

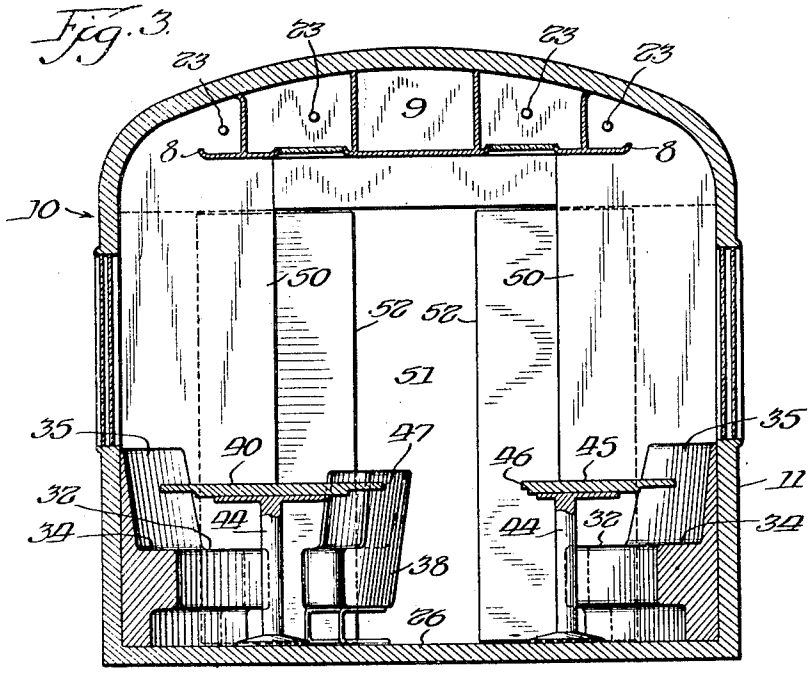
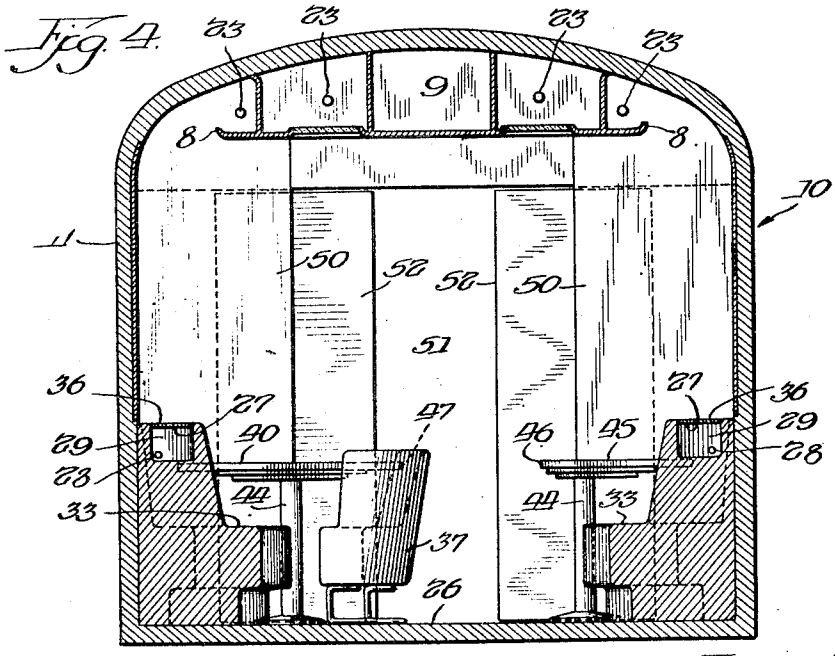


Fig. 4.



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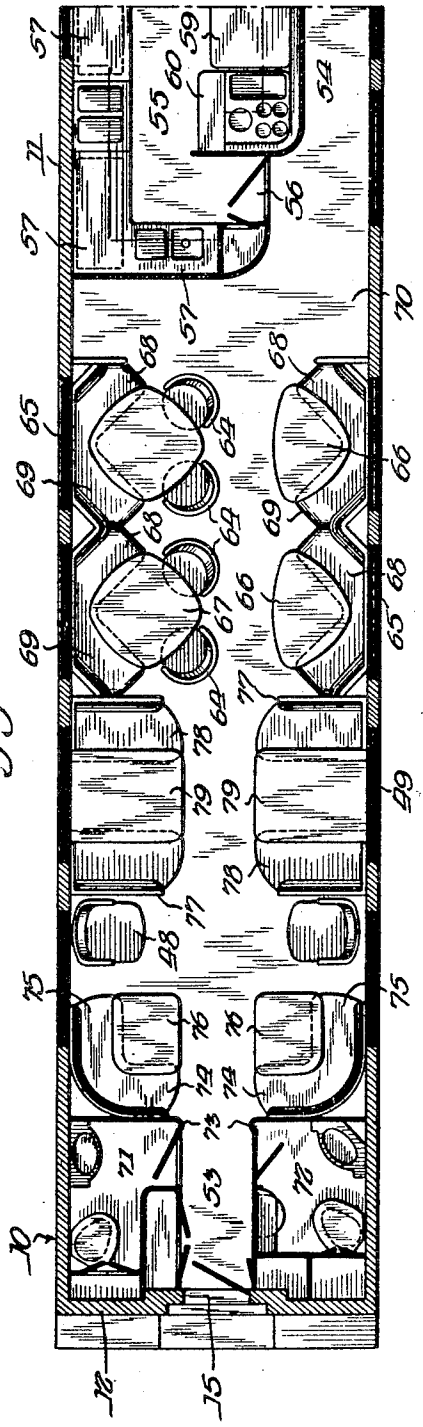

Fig. 5.

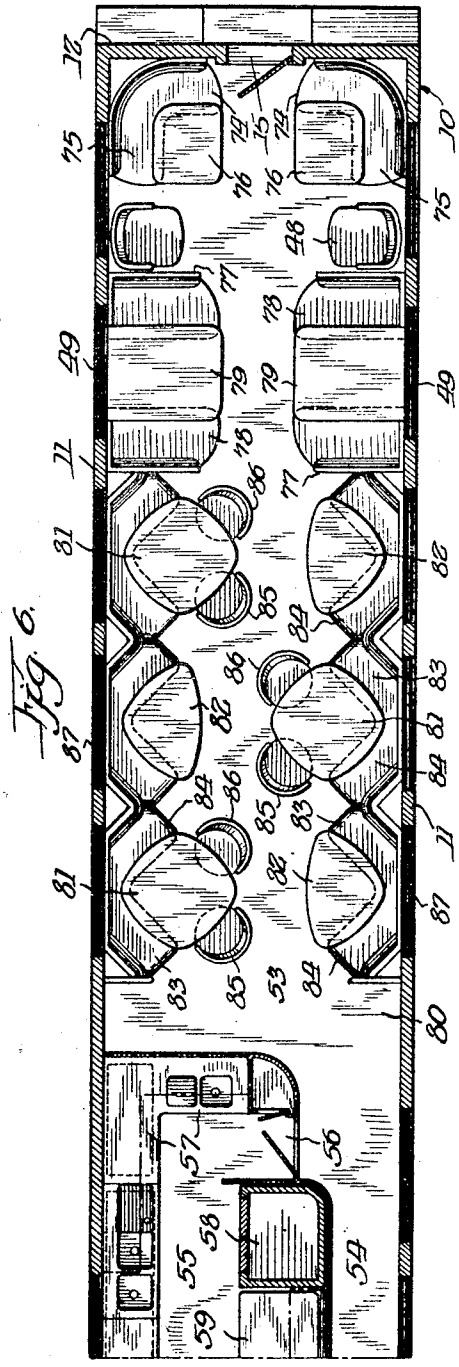

Fig. 6.

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UNITED STATES PATENT OFFICE

2,434,841

RAILWAY DINING CAR

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4 Claims. (Cl. 105—327)

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The invention relates to a railway dining car interior arrangement having particular reference to placement of table and seating facilities within the limits of a car of standard width, as determined by Association of American Railroads recommended practice.

A further object is to provide seats arranged in pairs along the side walls at an angle to the respective car sides and to each other and adapted to receive between the seats of each pair a table in position close to the wall to afford ample room for an aisle longitudinally of the car between the rows of tables at opposite walls.

An important object is to so dispose the tables and seats within the space available that the passengers may be served without encroachment upon occupants seated at adjoining tables or unduly hampering the passage of persons in the aisle.

A still further object is to provide a table and seating arrangement for railway dining car service wherein the system may be adapted for use in long run train service cars having kitchen equipment of regulation size or for cars equipped with kitchens of lesser size for use in relatively short run train service.

The foregoing and other objects, designed to achieve benefits resulting from the flexibility of the system and its adaptability to standard car interiors of various types, are attained by the arrangement illustrated in the accompanying drawings, in which—

Fig. 1 is a plan view of the dining room portion of a railway dining car, showing the table and seat arrangement in accordance with the invention;

Fig. 2 is a plan view of the regulation kitchen end of a standard size dining car designed for use in high speed main line train service;

Fig. 3 is a vertical cross-sectional view taken on line 3—3 of Fig. 1, looking in the direction indicated by the arrows and through a partition doorway toward the cocktail lounge portion of the dining room and showing the relative arrangement between tables on opposite sides of the passageway;

Fig. 4 is a similar view taken on line 4—4 of Fig. 1, but looking in the opposite direction as indicated by the arrows and through the same partition doorway toward the kitchen end of the dining room and showing similar relation between

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tables upon opposite sides of the passageway; and

Figs. 5 and 6 are complemental portions of a dining car modified to show the kitchen facilities intermediate the car ends with seating and table facilities in accordance with the invention disposed upon opposite sides of the kitchen and further showing, in this embodiment, the installation of toilet facilities at one end of the car.

In said drawings, 10 indicates the car as a whole and 11 and 12 the side and end walls, respectively. 13 represents a loading door in the side wall for servicing the car, and 14 the end doors for closing doorways 15 in the end walls giving passage to adjacent cars of the train. In the car, the doorway at the kitchen end gives access to passage 20 defined by kitchen wall 21 and extending to entrance 22 leading to dining room aisle 26. The entrance 22 is the space between linen locker 24 and refrigerator 25 which together serve to separate the kitchen section of the car from the dining room portion.

The kitchen installation represented in Fig. 2, is standard equipment for dining cars in main line train service designed for complete preparation of food served the passengers and includes a refrigerator 19, cooking range 18, steam table 17, work tables 16, and auxiliary equipment required for the proper handling of food and to facilitate its distribution to the dining room.

The dining room section of the car extends from linen locker 24 and refrigerator 25 to opposite end of the car and includes the steward's compartment 30 and refrigerator 31, disposed respectively on opposite sides of adjacent doorway 15. Between the linen locker 24 and steward's compartment 30 on one side of the car and between refrigerators 25 and 31 upon opposite side of the car, are disposed a plurality of elongated seats 32 and 33 arranged at an angle to respectively adjacent side walls, and in pairs, with the seats of each pair at an angle to each other. Thus positioned, the seats of each pair converge at the side wall 11 to which they may be secured to prevent shifting of the seats during car movement, and are preferably connected together, as shown in Fig. 1, to provide a seat portion 34 between the seat occupants for a child, or upon which they may deposit their belongings while dining. The seats are provided with back portions 35, suitably upholstered for comfort and extending along the

rear margins of the seats, and engaging the wall portions 36 presenting faces parallel to the seats as shown. Between the seats of each pair is positioned a table 40 having its top of polygonal configuration disposed with one of its corners nearest the adjacent wall of the car above seat portion 34 and with two of its sides diverging therefrom in substantial parallelism with the front margins 41 of the seats 32—33 and in overlapping relation therewith, as indicated at 42.

The particular table and elongated seat assembly shown affords ready access to places between respective seat backs and adjacent tables and in order to facilitate the seating of patrons the elongated seats 32—33 preferably extend with their ends 43 beyond respective seat backs 35 to expedite movement into and out of the space between the table and respective seat backs without displacing the table or disturbing others at table, or in adjoining seats. The tables are preferably of the pedestal type with the pedestals 44 positioned at the center of the table when four-sided tops are used so as to provide room for the feet of the occupants and to permit the tables to be placed closer to the walls of the car within the crotch formed by the angular disposition of the seats. The remaining two of sides 39 of the table may accommodate additional occupants in seats 37 and 38 at the aisle 26 without interfering with movements of the attendant waiter or persons passing along the aisle, or with occupants of seats along the aisle at adjoining tables.

To provide sufficient floor space for the aisle 26 between tables on opposite sides of the car the opposing tables are designed to complement each other to insure maintenance of such aisle space by reducing the size of the table 45 opposite each four-sided table 40 whereby that portion of the table on the aisle side of the pedestal 44 is dispensed with and only the portion of the table presenting two sides 39 and the corner above the seats 32—33—34, retained. Between the aisle side 46 of triangular table 45 and opposing corner 47 of table 40 there is thus maintained ample room for table service requirements without interfering with movement of passengers along the aisle.

As indicated in Fig. 1, a portion of the dining room may be set apart for use as a cocktail lounge by the installation of partition 50 between which and the end of the car a suitable number of seats 32—33 and tables 40 and 45 could be made available for that purpose. The partition is provided with a door opening 51 closed preferably by sliding doors 52 when it is desired to segregate the cocktail lounge from the remaining portion of the dining room.

The adaptability of the system to relatively short run service cars is indicated in Figs. 5 and 6 depicting a kitchen installation located substantially midway between the car ends, and seats and tables arranged in accordance with the invention disposed upon opposite sides of the kitchen. In this embodiment, the kitchen 55 may be of lesser capacity than that required in long run equipment as shown in Fig. 2, but contains steam table 60, range 59, refrigerator 58, work tables 57, service openings 56, and auxiliary appliances required for maintenance of the service to both dining rooms. The dining room 70 shown in Fig. 5 at one side of the kitchen connects with the dining room 80, shown in Fig. 6 at the other side thereof, by a passageway 54

along one wall of the car and merging with passageways 53 in both dining rooms extending to respective ends of the car.

The section shown in Fig. 5 is equipped with separate toilet rooms 71 and 72 arranged respectively upon opposite sides of aisle 53 and between partition 73 and adjacent car end. At said partition and upon opposite sides of the aisle are corner seats having seat portions 74 and 75 arranged respectively at an angle to each other, portions 74 being disposed transversely of the car parallel to partition 73, and portion 75 extending longitudinally of the car at the side walls 11. In the angle between the seats are tables 76 having their inner side portions overlapping inner margins of respective seats and their outer sides substantially flush with the ends of said seats, as shown. Suitably spaced from said tables and seats are stalls 77 containing each a pair of confronting seats 78 disposed transversely of the car with tables 79 between them, all arranged within observation zone of windows 49 on respective sides of the car.

Between said stalls 77 and adjacent side of kitchen 55 are installed the seats 69 and 68 and tables 67 and 66 in accordance with the arrangement of seats and tables shown in Fig. 1. In this embodiment it will be noted that each pair of seats 68—69 with their respective tables 66—67, are disposed within observation zone of respectively adjacent windows 65. The four-sided tables 67 are disposed all on one side of aisle 53 and may accommodate additional seats 64 at the aisle position as shown, while triangular tables 66 are positioned on opposite side of the aisle to further define the passageway.

The dining room 80 shown to the right of kitchen 55 in Fig. 6 is similarly fitted with corner seat and table assemblies on the order of those used in dining room 70 but arranged adjacent the car end wall 12 and upon opposite sides of doorway 15. The equipment includes also the installation of stalls on opposite sides of passageway 53 and containing each a pair of transverse confronting seats and interposed tables similar to those used in the dining room of Fig. 5, and the description appertaining thereto being applicable to the like arrangement shown in this figure, further reference to these items is not deemed necessary. However, between the kitchen 55 and stalls 77 of Fig. 6, a further embodiment of the invention involving the placement of the angularly disposed seats and tables, is depicted. As shown, the four-sided tables 81 and triangular tables 82 on opposite sides of the aisle are staggered with respect to each other merely to vary the treatment of the interior arrangement and further to illustrate the flexibility of the system inherent in the angular relation of the seats 83 and 84 with respect to each other and adjacent side walls 11 and the placement of the tables 81 and 82 between them. Thus disposed, the arrangement affords the fullest accommodation for patrons within the space available without unduly encroaching upon the aisle. In the modification proposed, the several pairs of seats 83—84 are arranged within the observation zone of respectively adjacent windows 87, and additional chairs 85—86 provided at the aisle side for occupants of tables 81, as in the other embodiments.

The relationship between the seats and tables on one side of the car and the seats and tables on the opposite side of the car, is shown in

Figs. 3 and 4, and is typical of the embodiments hereinabove described. From an inspection of these figures, it will be observed that the pedestals 44 of the four-sided tables 40 at the left in the figures are substantially midway of the corners of the table, while the pedestals 44 of the three-sided tables 45 at the right in said figures are positioned at the base or aisle side 46 of said last-mentioned tables to effect the clearance required for the aisle space between said tables. With the pedestals of tables 45 positioned at the base 46 of said tables, the remaining two sides 39 are disposed to converge at points immediately above seat portions 34 and projecting wall-ward from said pedestals 44 to provide ample table space and sufficient leg room beneath the tables for occupants of seats 32, 33 and 34.

The inwardly extending side wall portions 36 hereinbefore referred to as providing support for the seat backs 35, may be formed with receptacles 29 containing lighting means 28 and covered by a translucent top or grille 27 to supplement lighting means 23 arranged above the ceiling 8 of the car and upon opposite sides of air duct 9, supplying ventilation and lighting throughout the dining room portions of the car.

It will be apparent that the table and seat arrangement disclosed lends itself to various car interior treatments whereby all space available therefor may be utilized for dining room purposes without crowding, to provide a high standard of accommodation and service for patrons without hampering the movement of persons along the aisle of the car. Altho primarily intended for use in dining car service, it is obvious that embodiments of the invention may be advantageously installed in lounge and observation car units of a train with all advantages resulting from the flexibility of the system and its adaptability to car interiors of various types.

What is claimed is:

1. In a railway car of standard width having opposite side walls, identical seating facilities disposed along opposite portions of said side walls, each comprising a pair of straight elongated seats arranged at an angle to each other and obliquely with relation to one of said walls, with the junction of the front edges of the seats spaced from said wall by a distance less than the width of a seat at a point directly opposite the corresponding junction of the front edges of the pair of seats adjacent to the other side wall, seat backs paralleling the front edges of the seats and intersecting the adjacent side wall at spaced points along said wall, a substantially rectangular table having two of its sides arranged substantially parallel to the seats of one of said pairs and having the corner defined by said sides juxtaposed to the junction of the front edges of said seats, and a substantial y triangular table having two of its sides arranged substantially parallel to the seats of the other pair and having the corner defined by said sides juxtaposed to the junction of the front edges of said seats, whereby the tables at opposite sides of the car are set in close proximity to the side walls and a car aisle passageway is formed between a side of a substantially triangular table and a corner of a substantially rectangular table.

2. In a railway car of standard width having opposite side walls and a floor, identical seating facilities disposed along opposite portions of said side walls, each comprising a pair of straight elongated seats arranged at an angle to each other and obliquely with relation to one of said walls, with the junction of the front edges of the seats spaced from said wall at a point directly opposite the corresponding junction of the front edges of the pair of seats adjacent to the other side wall, seat backs paralleling the front edges of the seats, pedestals mounted on the floor at equal spacing from said junctions at opposite sides of the car, a substantially triangular table mounted on one of said pedestals having two of its sides arranged substantially parallel to the seats of one of said pairs and having the corner defined by said sides juxtaposed to the junction of the front edges of said seats, and a substantially square table of substantially twice the surface area of the triangular table mounted on the other pedestal having two of its sides arranged substantially parallel to the seats of the other pair and having the corner defined by said sides juxtaposed to the junction of the front edges of said seats, whereby corners of the tables at opposite sides of the car are set in identical spacing to the adjacent side walls and the areas defined by the table sides adjacent to the seats are substantially identical and a car aisle passageway is formed between a side of a substantially triangular table and a corner of a substantially square table.

3. In a railway car of standard width having opposite side walls, identical seating facilities disposed along opposite portions of said side walls, each comprising a pair of straight elongated seats arranged at an angle to each other and obliquely with relation to one of said walls, with the junction of the front edges of the seats spaced from said wall by a distance less than the width of a seat at a point directly opposite the corresponding junction of the front edges of the pair of seats adjacent to the other side wall, seat backs paralleling the front edges of the seats and intersecting the adjacent side wall at spaced points along said wall and with the inner end of each back intersecting the inner end of a next adjacent back and defining therewith and with the side wall a substantially triangular space, a cover for said space at approximately the level of the top of the backs, a substantially rectangular table having two of its sides arranged substantially parallel to the seats of one of said pairs and having the corner defined by said sides juxtaposed to the junction of the front edges of said seats, and a substantially triangular table having two of its sides arranged substantially parallel to the seats of the other pair and having the corner defined by said sides juxtaposed to the junction of the front edges of said seats, whereby the tables at opposite sides of the car are set in close proximity to the side walls and a car aisle passageway is formed between a side of a substantially triangular table and a corner of a substantially rectangular table.

4. In a railway car of standard width having opposite side walls and a floor, identical seating facilities disposed along opposite portions of said side walls, each comprising a pair of straight elongated seats arranged at an angle to each other and obliquely with relation to one of said walls, with the junction of the front edges of the seats spaced from said wall by a distance less than the width of a seat at a point directly opposite the corresponding junction of the front edges of the pair of seats adjacent to the other side wall, seat backs paralleling the front edges of the seats and intersecting the adjacent side wall at spaced points along said wall, pedestals

mounted on the floor at equal spacing from said junctions at opposite sides of the car, a substantially rectangular table mounted on one of said pedestals having two of its sides arranged substantially parallel to the seats of one of said pairs and having the corner defined by said sides juxtaposed to the junction of the front edges of said seats, and a substantially triangular table mounted on the other pedestal having two of its sides arranged substantially parallel to the seats of the other pair and having the corner defined by said sides juxtaposed to the junction of the front edges of said seats, whereby corners of the tables at opposite sides of the car are set in identical spacing from and in close proximity to the adjacent side walls and a car aisle passageway is formed between a side of a substantially triangular table and a corner of a substantially rectangular table.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,219,953	Kayser	Mar. 20, 1917
2,080,960	Dreyfuss	May 18, 1937

OTHER REFERENCES

Railroad Gazette, Sept. 29, 1905, vol. 39, page 99.