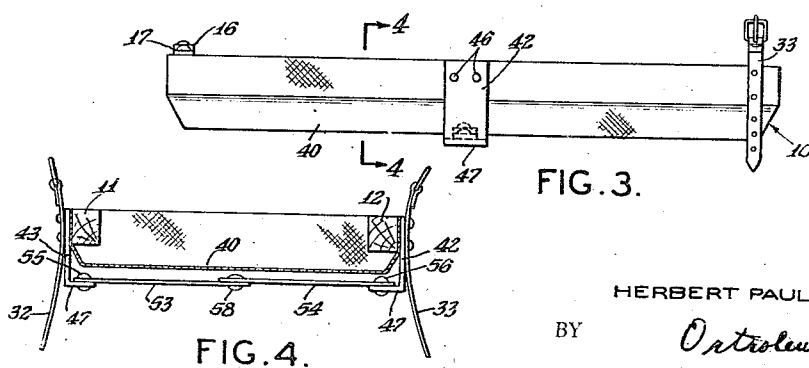
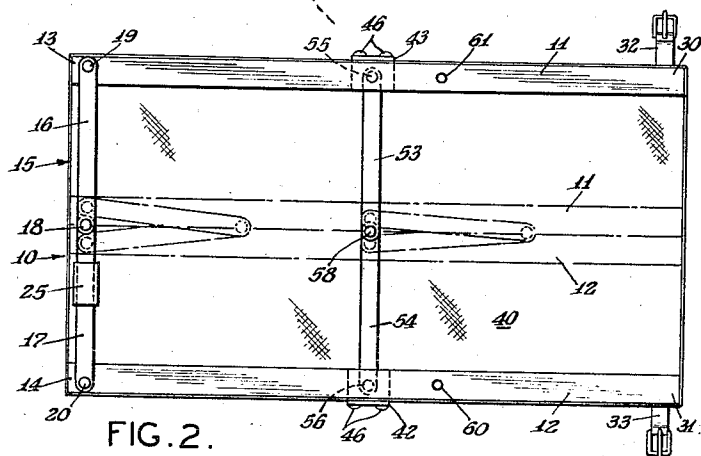
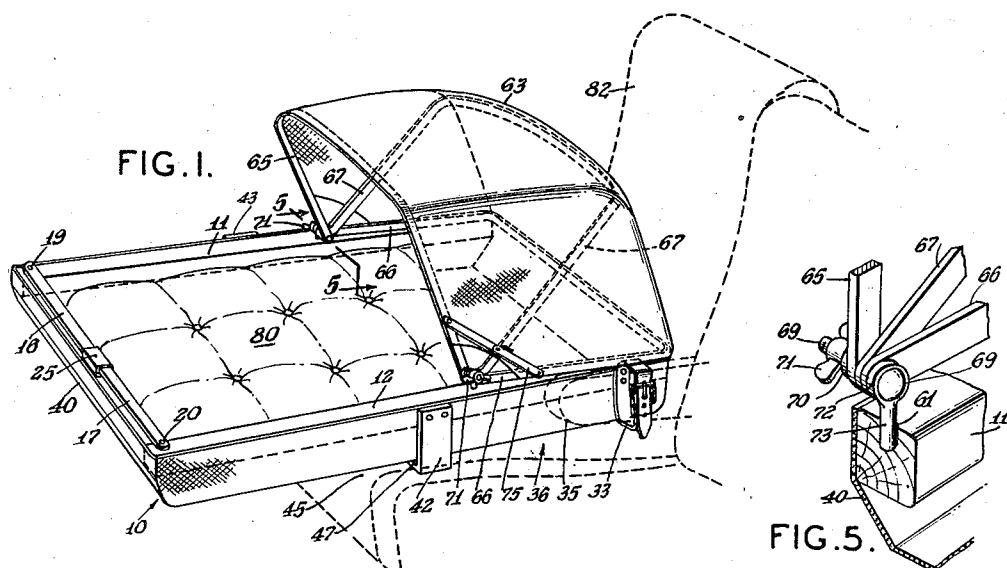


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COLLAPSIBLE INFANT BERTH

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COLLAPSIBLE INFANT BERTH

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My present invention relates to a collapsible crib, more particularly to a small size collapsible infant berth adapted for use in connection with railroad coach seats.

Essentially, my collapsible infant berth comprises a flexible base which may be made of any suitable material, such as fabric, leather, flexible plastic sheeting or the like, held between a pair of longitudinal members combined with means for maintaining the longitudinal members at an appropriately spaced distance with respect to each other in order to stretch the flexible base and further combined with specific means for supporting the berth on the coach seat and securing the same thereto.

Heretofore, when small children and infants have been carried on railroad coaches, it has been customary for the passenger to carry the child in a bassinet or traveling basket and to place the same across two coach seats which were turned so that they faced the adjacent pair of coach seats. The mother or other attendant then occupied one of the adjacent pair of coach seats facing the child, so that mother and child actually occupied four coach seats, thus diminishing the carrying capacity of the coach.

This has been the case not only in connection with travel of small infants in bassinets, but also in connection with travel of children up to about the age of four or thereabouts, where, in the absence of a bassinet or basket, the person accompanying the child has wrapped the child in blankets or clothing and permitted the child to sleep across two of the seats while sitting opposite the child.

This has become a particular problem especially in view of extensive increase in travel of families and particularly of mothers and their children occasioned by various war and post-war conditions which are well known. In fact, the problem has grown to such an extent that in many long distance trains, several sets of four seats in each of the coaches have each been used by a single mother and child.

Apart from the fact that this reduction in available coach seats has inconvenienced other passengers, the coach seats themselves were not designed for the purpose of forming cradles or cribs for children and the bassinet or bundle of clothing and blankets used for bedding has scarcely furnished a comfortable berth for the child.

An object of my present invention, therefore, is primarily to furnish a comfortable berth for an infant or small child in a railroad coach.

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Another object of my invention is the provision of a collapsible berth or crib particularly adapted for use in connection with a railroad coach seat.

A further object of my invention is the provision of a collapsible infant berth adapted for use in connection with one of a pair of railroad coach seats, so that the other seat of the pair is available for occupancy by the child's attendant.

Still another object of my invention is the provision and arrangement of a simplified collapsible crib or berth.

The foregoing and many other objects of my invention will become apparent in the following description and drawings in which:

Figure 1 is a view in perspective of my novel collapsible infant berth with the hood removed showing the same mounted on one of a pair of coach seats.

Figure 2 is a top plan view of my novel collapsible infant berth with the hood removed showing the manner in which the same may readily be collapsed.

Figure 3 is a side view of my novel collapsible infant berth with the hood removed.

Figure 4 is a view partly in cross-section taken from line 4—4 of Figure 3 looking in the direction of the arrows.

Figure 5 is a cross-sectional view in perspective taken on line 5—5 of Figure 1, showing the manner of securement of the hood to the collapsible infant berth.

Figure 6 is a view in perspective of modification of the central support member of Figure 1.

Referring now to the figures, my novel collapsible infant berth 10 comprises a pair of longitudinal members 11, 12 preferably of a light material, such as wood, although the same may be made of plastic or metal having any suitable cross-section such as a tubular section or a channel, L-shaped or other angular form.

The forward ends 13, 14 of the longitudinal members 11 and 12 respectively are connected by a spreader 15 comprising the links 16, 17 pivotally connected together at the pin 18. The end of link 16 opposite the pin 18 is pivotally connected at 19 to the end 13 of longitudinal member 11. The end of link 17 opposite the pin 18 is pivotally connected at 20 to the end 14 of the longitudinal member 12.

The links 16 and 17 are rotatable at the pin 18 and are respectively rotatable at the pins 19 and 20 so that the longitudinal members 11 and 12 may be brought close to each other as shown

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by the dotted lines in Figure 2 in order to collapse the crib or berth.

When the longitudinal members 11 and 12 are pulled apart to their widest dimension, the spreader 15 comprising the links 16 and 17 is

straightened. The spreader 15 is provided with a slidable tubular locking sleeve 25, which sleeve is slidable over the links 17 and 16 but is a closed frictional fit over the joined ends of the links 16 and 17 at the pin 18.

When the spreader 15 is straightened as shown by the solid lines of Figures 1 and 2, the sleeve 25 is slid over the pivot 18 and thus prevents collapse of the spreader 15 away from the solid line position to the dotted line position of Figure 2.

The forward ends 13 and 14 of the longitudinal members 11 and 12 may thereby be separated to be spaced from each other by a distance predetermined by the length of the expanded and locked spreader 15.

The rear ends 30 and 31 of longitudinal members 11 and 12 respectively are provided with the straps 32 and 33. The straps as shown in Figure 1 are buckled around the arm rests 35 on opposite sides of the coach seat 36; these arms 35 include the center arm and the arm adjacent the window of the railroad coach. By this means, therefore, the rear ends of the longitudinal members 11 and 12 are appropriately spaced and at the same time, the infant's berth is securely but removably attached to the seat. The berth is held in expanded position at the front end by the spreader 15 as previously pointed out and at the rear end by the straps 32 and 33 at the arm rests.

A flexible base 40 made of appropriate material, as for instance, a suitable fabric, leather, plastic sheeting, or other suitable material, is connected between the longitudinal members 11 and 12 forming a bottom for the infant's berth 10 when the same is expanded and secured to the coach seat.

Leg rests 42 and 43 are secured respectively to the longitudinal members 12 and 11. These leg rests, as shown more particularly in Figure 1, are so designated that they will rest on the forward or raised portion 45 of the seat 36 and are of a predetermined height so that they will cooperate with the straps 32 and 33 to maintain the infant berth level. The leg rests 42 and 43 as shown are secured to their respective longitudinal members in any suitable manner, as for instance, by the bolts 46.

The leg rests 42 and 43 are preferably angular members having a flange 47 resting on the forward portion 45 of the seat 36. The legs 42, may, if desired, as shown in Figure 6, each be hinged at the hinge 50 and the connection between the flange 47 and each leg 42 may also be a hinged connection 51, so that the leg rests 42 and 43 may be folded up when the infant crib is folded up.

In order, however, to maintain the longitudinal members 11 and 12 substantially parallel to each other during collapse and in order to avoid undue strain on the pivots 19 and 20 when the infant crib is collapsed, the legs 42 and 43 and the flanges 47 may be made rigid at the hinges and the opposite flanges 47 may be interconnected by links 53, 54 respectively, pivotally secured at 55 and 56 at their outer ends to the opposite flanges 47. The links 53 and 54 may be connected where they meet by the pin 53. The links 53 and 54 may collapse as shown by the dotted line in Figure 2 in the same manner as do the links 16 and 17.

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Also, if desired, although this is not essential, a sleeve similar to the sleeve 25 may be mounted on the link 54 or 53 to maintain the linear alignment of links 53 and 54 when the infant berth is expanded in the same manner as the sleeve 25 operates in connection with links 16 and 17.

The longitudinal members 11 and 12 may be provided with holes 60, 61 in the upper surface thereof; holes 60, 61 to serve as a support for the folding hood 63 which may be secured therein in the manner hereinafter described.

The hood 63 may have the form of the collapsing hood usually associated with baby carriages and comprises essentially a front U-shaped rib 65, a rear U-shaped rib 66, and a central U-shaped rib 67, all rotatably mounted on the bolt 69 at each side of the hood.

The bolt 69 (as shown in Figure 5) passes through a securing spring washer 70 and the wing nut 71 which tightens the ribs of the hood in any angular position. The bolt 69 also passes through boss 72 carrying the pin 73 on each side of the hood. Pins 73 are received in opposite openings 61 and 60 in members 11 and 12 to removably support the hood on the infant berth. The initial dimension of the hood is slightly wider than the distance between openings 60 and 61. The hood is squeezed laterally to enable pins 73 to enter openings 60 and 61 where they are frictionally held against accidental removal but may readily be removed when desired.

Since the ribs 65, 67 and 66 are flexible, the hood pins 73 may readily be mounted in and removed from the openings 60 and 61. The hood is held in stretched position as shown in a well known manner as by the toggle 75 and may be collapsed by breaking the toggle 75 upward to a collapsed position so that the hood becomes substantially flat.

A rubber foam mattress 80 or a mattress of any other suitable material may be mounted in the infant berth and supported by the bottom 40 when the infant berth is expanded.

The infant berth is stored in collapsed condition in a small package with the longitudinal members 11 and 12 and the links 16 and 17 and 53 and 54 collapsed together as shown in the dotted line position of Figure 2.

The construction is such that the longitudinal members 11 and 12 may be brought up against each other. The mattress 80 is also folded up into a roll around the longitudinal members 11 and 12 and the hood 63 is collapsed and bound up with the infant crib arrangement of Figure 2.

Should it be desired to collapse the hood to an even smaller volume, the upper or horizontal portions of the U-shaped ribs 65, 66 and 67 may be each formed of a pair of links similar to the links 16-17 or 53-54 pivotally connected to the leg portions of the U-shaped ribs. This will permit even smaller collapse of the hood 63.

The length of the longitudinal members 11 and 12 is such that the infant berth extends from the front surface 82 of the back of the reclining seat when the reclining seat is pushed back up to the back surface of the reclining seat ahead with the back of the said forward reclining seat pushed back. Thus, the operation of the seat ahead is not interfered with. Preferably also, the infant crib is installed on the outside seat of the pair of seats, furthest from the aisle, so that the child's attendant may have free access to his or her own seat adjacent the infant berth.

In placing the infant berth in position, the mattress, hood and berth elements are separated.

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The longitudinal members 11 and 12 are pulled apart to the solid line position of Figure 2 straightening the links 16—17 and 53—54. The sleeve 25 is slid over the pivot 18 to maintain the links 16—17 linearly rigid. The straps 32 and 33 are secured over the opposite arms 35 of the seat with the back 82 of the seat tilted back as shown and with the rear ends 30 and 31 of the longitudinal members 11 and 12 pushed against the back 82. The legs 42 rest on the front portion 45 of the seat and the infant berth is ready to receive the mattress and the hood.

The mattress 30 is placed in the berth and any other suitable bedding is placed thereon if desired. The hood 63 is expanded and mounted in the openings 60 and 61. The entire operation requires but a minute or two and the infant berth is ready for use.

When it is desired to remove the infant berth, it is only necessary to open the straps 32 and 33, remove the belts and carry the berth away. The infant berth need not be collapsed before removal, but may be collapsed by the porter in another portion of the coach.

By this means, therefore, a simplified and readily usable infant berth is provided which may be easily expanded by the unskilled user to its full position and installed by a few easily performed operations requiring no technical knowledge or ability.

A comfortable and easily installed removable berth is thus provided for an infant permitting the infant to ride while asleep in a preferred direction, with his body parallel to the path of movement of the coach. A pair of coach seats thus serves comfortably to accommodate both the infant and his attendant, thus obviating the previous practice wherein the sleeping infant and his attendant actually occupied four seats.

In the foregoing, I have described my invention solely in connection with a specific preferred embodiment thereof. Since many variations and modifications of my invention should now be obvious to those skilled in the art, I prefer to be bound not by the specific disclosure herein contained but only by the appended claims.

I claim:

1. A collapsible infant berth comprising a pair of longitudinal members; a flexible base secured between said longitudinal members; a collapsible connection between the longitudinal members at one end of the infant berth for maintaining said longitudinal members in spaced relation at that end to stretch said base; and additional means for spacing the opposite ends of the longitudinal members and for securing said opposite ends of the longitudinal members to the opposite arm rests of a railroad coach seat; said last mentioned means comprising a strap individual to each of the said opposite ends of the longitudinal members.

2. A collapsible infant berth comprising a pair of longitudinal members; a flexible base secured between said longitudinal members; a collapsible connection between the longitudinal members at

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one end of the infant berth for maintaining said longitudinal members in spaced relation at that end to stretch said base; and additional means for spacing the opposite ends of the longitudinal members and for securing said opposite ends of the longitudinal members to the opposite arm rests of a railroad coach seat; said last mentioned means comprising a strap individual to each of the said opposite ends of the longitudinal members; and an additional support connected to each of the longitudinal members and adapted to rest on substantially the front portion of the said railroad coach seat.

3. A collapsible infant berth comprising a pair of longitudinal members; a flexible base secured between said longitudinal members; a collapsible connection between the longitudinal members at one end of the infant berth for maintaining said longitudinal members in spaced relation at that end to stretch said base; and additional means for spacing the opposite ends of the longitudinal members and for securing said opposite ends of the longitudinal members to the opposite arm rests of a railroad coach seat; said last mentioned means comprising a strap individual to each of the said opposite ends of the longitudinal members; and an additional support connected to each of the longitudinal members and adapted to rest on substantially the front portion of the said railroad coach seat; said infant berth when secured in position extending from the front of surface of the back of the seat to which it is secured to the back surface of the seat directly ahead.

4. A collapsible infant berth comprising a pair of longitudinal members; a flexible base secured between said longitudinal members; a collapsible connection between the longitudinal members at one end of the infant berth for maintaining said longitudinal members in spaced relation at that end to stretch said base; and additional means for spacing the opposite ends of the longitudinal members and for securing said opposite ends of the longitudinal members to the opposite arm rests of a railroad coach seat; said last mentioned means comprising a strap individual to each of the said opposite ends of the longitudinal members; and an additional support connected to each of the longitudinal members and adapted to rest on substantially the front portion of the said railroad coach seat; and a collapsible hood removably supported between the longitudinal members.

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