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PERAMBULATOR FOR INVALIDS

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2 Sheets-Sheet 1

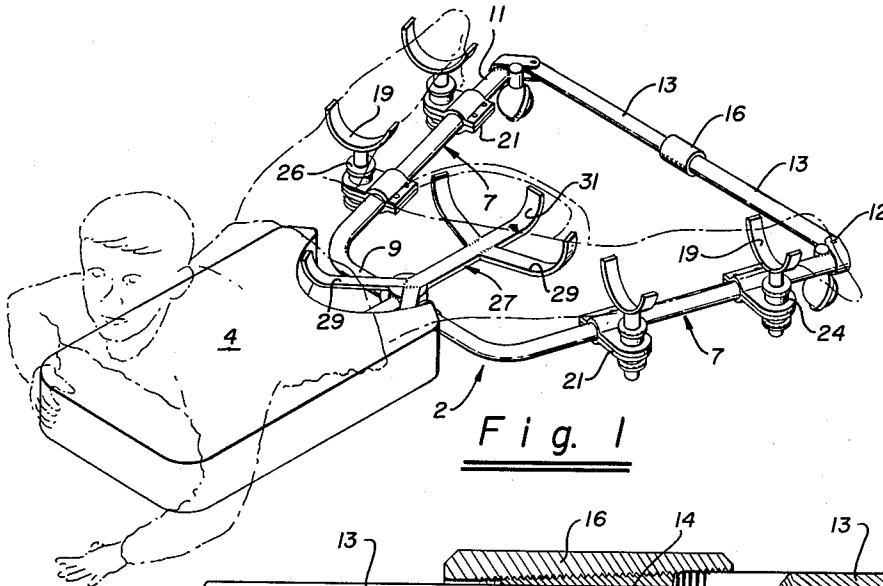


Fig. 1

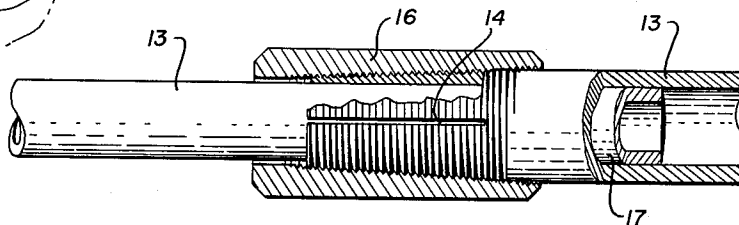


Fig. 7

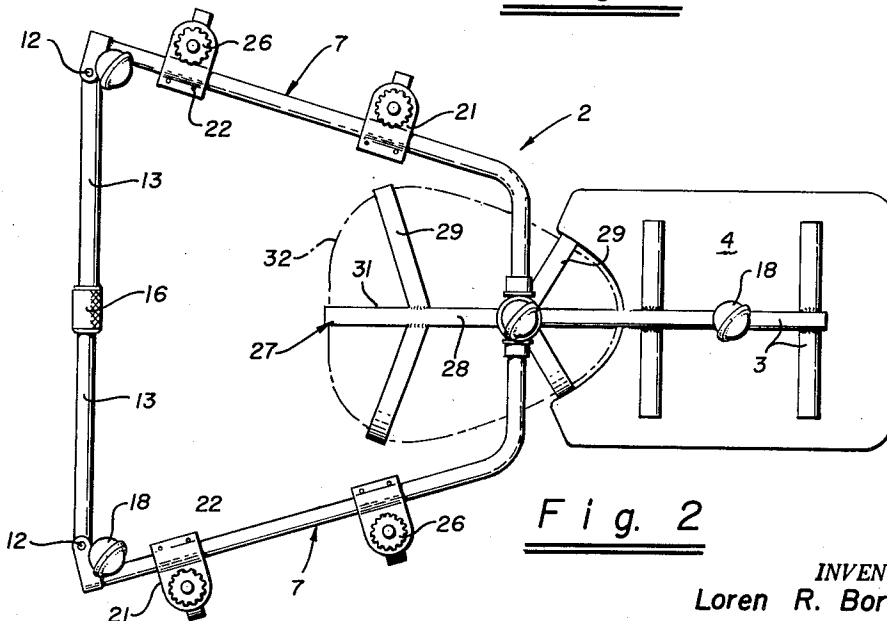


Fig. 2

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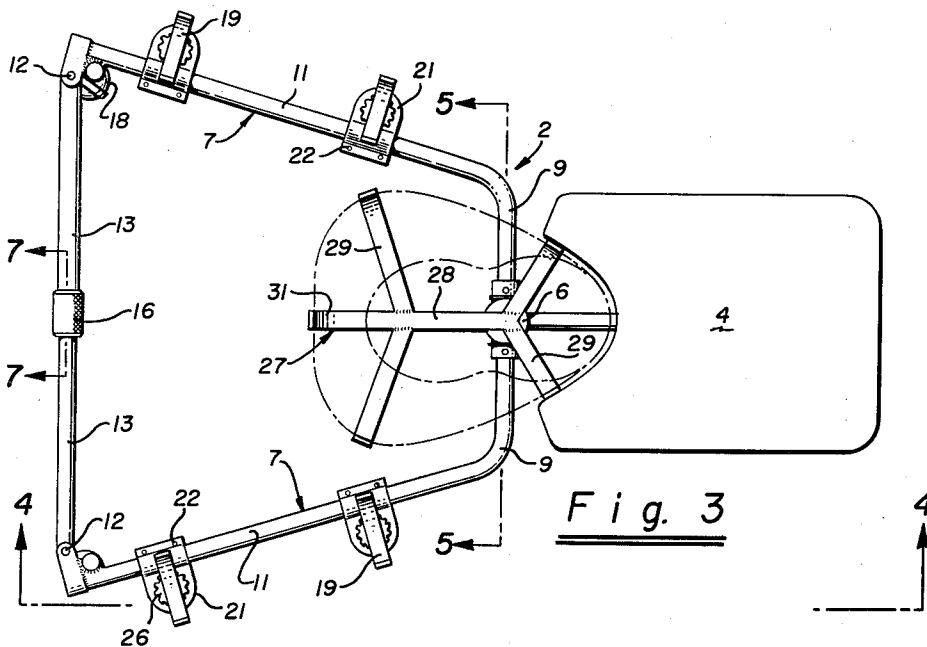
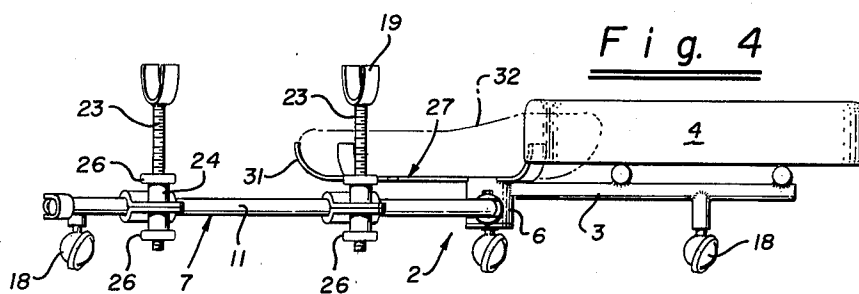
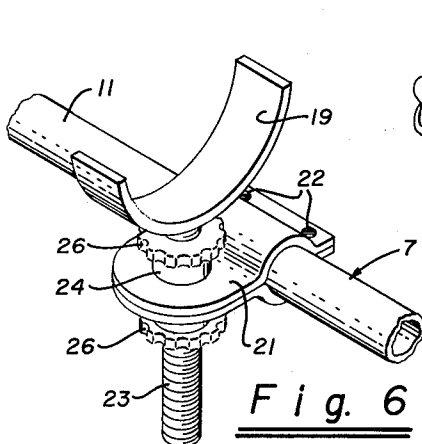
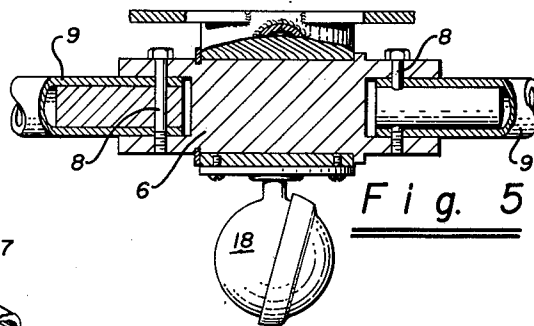
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PERAMBULATOR FOR INVALIDS

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This invention relates to perambulators, and more particularly to a perambulator adapted for individuals having immobilized legs, which may be in casts, but who have the use of their trunks and arms.

There are many occasions where an invalid particularly a child of adolescent age, is immobilized because of his legs being in a cast or perhaps paralyzed. In the case of a child, this offers a very distressing situation because he is unable to move around; and because of the energy of a child, he constantly requires attention to take him from place to place. In this connection, the child is usually unable to operate wheeled invalid carriages. A situation where the invention hereof has found great applicability is one where a young child is immobilized because of a congenitally dislocated hip. The legs are in casts but with the perambulator hereof, the child has been able to propel himself around and occupy himself with comfort and content.

Summarizing the invention, the perambulator comprises a frame structure including rear spaced apart frame members for supporting the legs of an individual, and a front frame part for supporting his trunk with his stomach facing downwardly. The front frame part is sufficiently narrow or in other words of such width as to enable the individual to propel himself by pushing his hands against the surface, such as a floor or pavement, upon which the frame structure is supported on freely movable rollers or casters.

The rear frame members which support the individual's legs, are mounted in spaced apart relationship and are angularly related to accommodate the legs in spread apart position. Also, adjustable means is provided to enable adjustment of the legs in a fixed selected comfortable position. In the space between the leg supporting frame members, an auxiliary frame is provided for accommodating a comfort pan, such as a bed pan, removably mounted on the auxiliary frame to enable the invalid, in the case of a child, to relieve himself when necessary.

From the preceding, it is seen that the invention has as its objects, among others, the provision of a perambulator of the character described which is of simple and economical construction and which can be employed to meet the requirements indicated above. Other objects of the invention will become apparent from the following description.

Referring to the drawings for a more detailed description,

FIG. 1 is an isometric view of the perambulator illustrating in phantom lines an invalid child supported thereon;

FIG. 2 is a bottom plan view of the perambulator;

FIG. 3 is a top plan view;

FIG. 4 is a side elevation;

FIG. 5 is a fragmentary sectional elevation taken in a plane indicated by the line 5-5 in FIG. 3, illustrating pivotal mounting of the leg supporting frame members enabling adjustment thereof;

FIG. 6 is a fragmentary isometric view of a portion of a leg supporting frame member illustrating an adjustable yoke carried thereby for supporting a leg in a comfortable position;

FIG. 7 is a fragmentary sectional elevation taken in a plane indicated by the line 7-7 in FIG. 3, illustrating adjustable means for fixedly connecting the leg supporting frame members in a selected adjusted position.

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The frame structure 2 of the perambulator is desirably economically formed of metal tubing such as stainless steel or aluminum tubing. However, any other material can be employed. It comprises front frame part 3 which supports a soft cushion 4 upon which the invalid's trunk may rest comfortably with his stomach down. The rear end of front frame part 3 terminates in a hub member 6 which provides a pivotal support for rear leg supporting frame members 7. As can be seen best from FIG. 5; each of leg supporting frame members 7 is pivotally mounted on hub 6 by means of a pivot pin 8, the forward portions 9 of leg supporting frame members 7 being turned inwardly transversely with respect to the main frame structure, and the rear portions 11 being spaced apart and angularly related so as to diverge from the rear of front frame part 3 to accommodate the legs of the individual in spread apart condition, which is necessary for comfort when the individual is in casts.

Means is provided for adjusting the angular relationship between leg supporting members 7 for accommodating the individual's legs in a selected comfortable position, and for fixedly connecting the frame members in such position. For this purpose, each of frame members 7 has pivotally connected thereto at 12 a connecting tube 13 which forms part of the rear frame. As can be seen from FIG. 7, one of tubes 13 is split at 14 and is provided with a tapered threaded connection upon which a nut 16 having a complementary tapered threaded connection is screwed. The other connecting tube 13 is telescoped at 17 within the threaded tube so as to be slidable therein. When nut 16 is loosened, the angular relationship between frame members 7 can be adjusted to any desired position; and when nut 16 is tightened, split tube 13 becomes fixedly clamped in such selected adjusted position in the other connecting tube.

From the preceding, it is seen that the frame structure is generally Y-shaped with front frame part 3 of sufficient narrow width to enable the individual to propel himself by pushing his hands along the sides of cushion 4 against a supporting surface, such as a floor or pavement, upon which the frame structure may be supported. Free rolling casters 18 are mounted adjacent the rear of frame members 7, on hub 6 and on front frame part 3 to enable easy propulsion of the perambulator.

Adjustable means is provided on each leg supporting frame member 7 for further making comfortable the position of the individual's legs to accommodate the same. Such means comprises adjustable yokes 19, a pair of which is desirably mounted on each frame member 7. Each yoke is mounted on a split bracket 21 which can be adjusted longitudinally of a frame member 7 by loosening fastening screws 22 which thus allow the bracket to be shifted; and when tightened, the yoke is held in a longitudinally adjusted fixed position.

Vertical adjustment of each yoke 19 is obtained by means of a screw 23 which supports the upper end of the yoke, and which is threaded in a sleeve 24 on a bracket 21. Upper and lower clamping nuts 26 can be loosened to provide for elevation of the yoke and also for holding the same in a suitable angularly adjusted position. The adjustable yokes are desirable when it is considered that most individuals employing the perambulator have their legs in cast, and the adjustments of the yokes provide not only for accommodation of the legs but also for positioning them in proper position to conform to irregularities that may exist in the casts. However, flat relatively wide leg supporting members can be employed without adjustable leg supporting means but which support cushions for the individual's legs.

As was previously mentioned, the desired perambulator is particularly adapted for comparatively young children who may find it necessary to relieve themselves

from time to time thus obviating the necessity of removing them from the perambulator for this purpose. Means is provided to support a bed pan comprising an auxiliary frame 27 positioned between frame members 7. Such auxiliary frame has a base arm 28 rigid with the perambulator frame structure from which extend laterally projecting arms 29 and a rear arm 31 having curved upwardly extending ends to conform to the configuration of a bed pan 32 (shown in phantom lines) which is removably supported on the auxiliary frame.

Desirably, front frame part 3 and cushion 4 are of such length as to support not only the torso of the individual when the individual's midsection is approximately over hub part 6 but also his head in case he desires to rest it on cushion 4. When supported on the perambulator, since the individual has full use of his hands he can propel himself readily from place to place, and in the case of a child he can also play with blocks or other toys because of having full use of his hands. Although the perambulator has been found particularly useful for an invalid child, it is to be understood that it is not limited to such use as it can be employed for supporting any person whose legs are immobilized but has use of his trunk and arms.

I claim:

1. A perambulator for an invalid having immobilized legs comprising a generally Y-shaped frame structure including a pair of spaced apart angularly related independent rear frame members diverging with respect to each other from adjacent their front ends for supporting the legs of the individual in spread apart position, means mounting said rear frame members for adjustment relative to each other in said diverging relationship and in substantially the same horizontal plane to vary the angle therebetween for accommodating the individual's legs in a selected comfortable position; a front frame part for supporting the individual's trunk, the space between said rear frame member adjacent said front frame part being open; and roller supporting means on said front frame part and on said rear frame members,

2. A perambulator for an invalid having immobilized legs comprising a generally Y-shaped frame structure including spaced apart independent rear frame members diverging with respect to each other from adjacent their front ends for supporting the legs of the individual in spread apart position, a front frame part connected to said rear frame members for supporting his trunk, the space between said rear frame members adjacent said front frame part being open, the front frame part being of such width enabling the individual to propel himself by pushing his hands against a surface upon which the frame structure is supported, an auxiliary frame supported by said frame structure in the space between said rear frame members adjacent the connection thereof with said front frame part for removably supporting a bed pan, and roller supporting means on said front frame part and on said rear frame members.

3. A perambulator for an invalid having immobilized legs comprising a generally Y-shaped frame structure including a pair of spaced apart independent rear frame members diverging with respect to each other from adjacent their front ends for supporting the legs of the individual in spread apart position, pivot means mounting said frame members adjacent their front ends for angular adjustment with respect to each other in said diverging relationship and in substantially the same horizontal plane, adjustable means for fixedly connecting said frame members together in a selected adjusted position,

a front frame part connected to the fronts of said rear frame members for supporting the individual's trunk, the space between said rear frame members adjacent the front frame part being open, the front frame part being of such width enabling the individual to propel himself by pushing his hands against a surface upon which the frame structure is supported, an auxiliary frame supported by said frame structure in the space between said rear frame members adjacent the connection thereof with said front frame part for removably supporting a bed pan, and roller supporting means on said front frame part and on said rear frame members.

4. The perambulator structure of claim 3 having an adjustable yoke on each rear frame member upon which the individual's legs can rest.

5. The perambulator structure of claim 3 having a plurality of vertically, angularly and longitudinally adjustable yokes on each rear frame member upon which the individual's legs can rest.

6. A perambulator for an invalid having immobilized legs comprising a generally Y-shaped frame structure including a front frame part for supporting the individual's trunk, and which is relatively narrow to enable the individual to propel himself by pushing his hands against a surface upon which the frame structure is supported, a pair of spaced apart independent rear frame members for supporting the legs of the individual, means connecting the fronts of said rear frame members to the rear of said front frame part for angular adjustment of said rear frame members relative to each other in substantially the same plane and in diverging relationship from the front frame part to support the legs of the individual in a selected comfortable spread apart position, adjustable means connected between said rear frame members adjacent their rear ends for fixedly securing said rear frame members in a selected adjusted position, the space between said rear frame members adjacent said front frame part being open, an auxiliary frame supported by said frame structure in the open space between said rear frame members adjacent the connection thereof with said front frame part for removably supporting a bed pan, and roller supporting means on said front frame part and on said rear frame members.

7. The perambulator of claim 6 in which said roller supporting means on said front frame part are completely underneath said front frame part so as not to interfere with propulsion of said perambulator by said hands.

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