



(51) International Patent Classification:

B62B 7/14 (2006.01)

(21) International Application Number:

PCT/GB2019/051342

(22) International Filing Date:

16 May 2019 (16.05.2019)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

1807917.8 16 May 2018 (16.05.2018) GB

1814917.9 13 September 2018 (13.09.2018) GB

(71) Applicant: DENUMENT ASSOCIATES LIMITED

[GB/GB]; 51 Rae Street, Dumfries Dumfries & Galloway DG1 1JD (GB).

(72) Inventors: SHAW, Richard; 51 Rae Street, Dumfries

Dumfries & Galloway DG1 1JD (GB). STURMEY, Tim; 51 Rae Street, Dumfries Dumfries & Galloway DG1 1JD (GB).

(74) Agent: MOHUN, Stephen; Mohun Aldridge Sykes Limited,

12 Park Square East, Leeds, West Yorkshire LS1 2LF (GB).

(81) Designated States (unless otherwise indicated, for every

kind of national protection available): AE, AG, AL, AM,

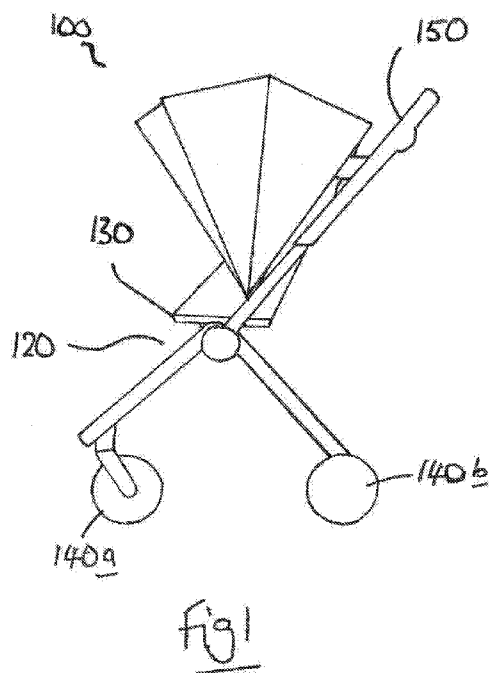
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report (Rule 48.2(g))

(54) Title: INFANT STROLLER



(57) Abstract: An infant stroller (100) comprises a chassis (120), a plurality of ground wheels (140) and a push handle (150). The chassis comprises a lower mounting part and an upper mounting part, for mounting an infant support seat (130), wherein the chassis is arranged to accommodate a plurality of different infant supports interchangeably, by engagement of the support and the lower mounting part, and in the case of some types of seat, by engagement with both lower and upper mounting parts.



Infant Stroller

The present invention relates to an infant stroller and to a method of operating an infant stroller.

5

Infants and young children are transported in unpowered wheeled vehicles of various styles and with numerous names. Babies and very young infants are generally accommodated in either flat beds or reclined seats mounted on a wheeled chassis and often referred to as a "pram", a "pushchair" or a "stroller". Older infants and toddlers may be transported in less substantial, mainly fabric seats, sometimes referred to as "buggies". The terms are often used interchangeably, and in the following description the term "stroller" will be used to cover all such vehicles for infants from birth to toddler size.

As the infant grows, the requirements of the vehicle change. For example, whilst new-born babies must be allowed to lie flat most of the time, an older baby will wish to sit up and look out at the world around him. Various solutions to this necessary transition are proposed in the prior art, including seats which can be adjusted between upright and lie-flat configurations, as well as modular systems in which a plurality of different vehicle bodies can be accommodated interchangeably on a common chassis.

In the stroller market, there are a variety of designs, which satisfy different requirements from users. From larger pushchairs with removable seat units, down to small compact buggies with fabrics seats fixed directly to the frame. Other than the differences in weight of each

stroller, the main difference is primarily down to what seat is used. Factors such as wheel size can give different "push" characteristics and can deal with different terrain, which are all variables in pushchair design.

5

To help differentiate, strollers are sometimes classified in two specific areas:

Removable seats: which give forward and parent-facing configurations. These generally have an attachment point around the centre of the chassis, which allows the seat to clip on and off - along with the provision to use that same fixing to put a carry cot or car seat in place.

15 "Fixed" seats: which are generally a "fabric sling" which is fixed directly to the chassis.

Various disadvantages exist in the prior art vehicles, including but not limited to excessive weight, bulkiness, difficulty of folding, versatility and cost. Embodiments of the present invention aim to provide a stroller in which at least some of the problems of the prior art are at least partly addressed.

25 The present invention is defined in the attached independent claims, to which reference should now be made. Further, preferred features may be found in the sub-claims appended thereto.

30 According to one aspect of the present invention there is provided an infant stroller comprising a chassis and a plurality of ground wheels, the chassis comprising a lower

mounting part and an upper mounting part, for mounting an infant support, wherein the chassis is arranged to accommodate a plurality of different infant supports interchangeably, by engagement of the support and the lower
5 mounting part only, in the case of at least one type of support, and by engagement of the support and both the lower mounting part and the upper mounting part, in the case of at least one other type of support.

10 At least one of the supports may be mountable only on the lower mounting part and at least one other support may be mountable on both the lower mounting part and the upper mounting part.

15 The support may comprise a seat or bed.

In this way, the lower fixing can be used to accommodate forward and rear facing seats, or a cot/bed to be used with the chassis, but when combined with the upper fixing a
20 lighter seat can be attached to the chassis. This allows a single chassis to fit different requirements and avoids the need to purchase another chassis.

According to another aspect of the present invention,
25 there is provided an infant stroller comprising a chassis, a plurality of wheels and a support for an infant, wherein the support comprises a first, lower portion that mounts on a lower mounting part of the chassis and a second, upper portion that releasably attaches to an upper mounting part
30 of the chassis.

The lower portion of the seat may comprise a seat base

portion and the upper portion of the seat may comprise a seat back portion.

5 The lower portion and/or the upper portion of the seat may comprise a sheet material. Preferably the material is a fabric.

10 In a preferred arrangement the upper portion releasably attaches to the upper mounting part of the chassis in at least two spaced-apart locations on the chassis, and more preferably on a handle portion of the stroller.

15 At least the second portion of the seat may be attachable to the chassis by engagement of a first attachment member mounted on the upper portion of the seat, and a second attachment member on the upper mounting part of the chassis.

20 According to another aspect of the present invention, there is provided a foldable infant stroller comprising a chassis including a handle portion, a plurality of wheels and a support for an infant, wherein the chassis comprises first and second leg portions connected for relative pivotal movement between a folded configuration and an
25 unfolded configuration, and wherein the stroller also includes a mounting part coupled to at least one of the first and second leg portions for pivoting movement in either of two directions with respect to the leg portions.

30 As the mounting part is able to rotate/pivot in either direction with respect to the legs/wheels, this permits a support (such as a seat) mounted thereon to fold forwards

or rearwards of the stroller in use.

In a preferred arrangement the mounting part is coupled to at least one of the first and second leg portions by a floating hinge so that the mounting part can rotate in two
5 directions with respect to the leg portions.

The mounting part coupled to the first and second leg portions may accommodate a mounting of the infant support, which may comprise a seat or bed. The mounting part may
10 comprise a lower mounting part on a chassis which may have an upper mounting part.

In a preferred arrangement the mounting part is coupled to the leg portions by a hinge pin that engages a first slot in the first leg portion and a second slot in the second leg portion so that the slots constrain movement of the
15 mounting part as the pin slides in the slots.

The mounting part may include a mounting portion for receiving a portion of the seat, so as to mount the seat on the chassis.
20

Preferably, one or both of the first and second leg portions comprises a pair of spaced apart legs joined by a strut.
25

The hinge member may comprise a retaining arm arranged to engage one, or more preferably both, of the struts to limit the range of pivoting movement of the leg portions.
30

The stroller may include a handle portion, which may be

integral with the chassis. Preferably the handle portion is arranged for pivoting movement with respect to one or both of the leg portions.

- 5 Preferably the handle portion is foldable with respect to the leg portions in two directions.

The handle portion may be arranged to engage at least one of the leg portions during an unfolding operation, so as to
10 cause the relative pivoting of the leg portions away from one another. In an unfolding operation the handle portion and leg portion may engage by sliding of a peg in, or along, a track to a limit region beyond which the peg bears against an abutment to effect relative pivoting movement as
15 the handle portion is pressed further.

According to another aspect of the present invention there is provided an infant stroller comprising a chassis, an infant seat and a plurality of wheels, wherein at least one
20 of the wheels is connected to the chassis by a wheel mounting member having a plurality of mounting portions for mounting the wheel, so that the wheel is mountable on the chassis in a plurality of positions.

- 25 The wheel mounting member may have a plurality of mounting portions for mounting a brake member, so that the brake member can be positioned optimally with respect to the wheel.

30 Alternatively, or in addition, the wheel may comprise one or more brake receiving portions for receiving a brake member to brake the wheel. The brake receiving portions may

be located around the wheel and may be located at a radial distance from the centre of the wheel so as to cooperate with the brake member.

- 5 The invention also includes a method of mounting a seat on a chassis of an infant stroller, the method comprising releasably mounting a lower portion of the seat on a lower mounting part and releasably attaching an upper portion of the seat to an upper mounting part.

10

The method may comprise a method of mounting a seat comprising sheet material such as fabric.

- The invention also includes a method of changing an infant
15 stroller between a folded configuration and an unfolded configuration, wherein the stroller has a chassis comprising first and second leg portions connected for relative pivotal movement between the folded configuration and the unfolded configuration, and wherein the stroller
20 also includes a mounting part coupled to the first and/or second leg portions for pivoting movement in either of two directions with respect to the leg portions.

- The coupling may be by a floating hinge so that the
25 mounting part can rotate in two directions with respect to the leg portions, the method comprising limiting relative pivotal movement between the leg portions by engagement of the mounting part with the leg portions.

- 30 The invention also comprises a method of mounting a wheel on an infant stroller, the method comprising connecting the wheel to a chassis of the stroller by a wheel mounting

member having a plurality of mounting portions for mounting the wheel, so that the wheel is mountable on the chassis in a plurality of positions.

5 The invention may include any combination of the features or limitations referred to herein, except such a combination of features as are mutually exclusive, or mutually inconsistent.

10 A preferred embodiment of the present invention will now be described, by way of example only, with reference to the accompanying diagrammatic drawings, in which:

Figure 1 shows schematically an infant stroller according
15 to an embodiment of the present invention;

Figures 2a to 2d show the stroller of Figure 1 with the seat in various configurations;

20 Figures 3a and 3b show the stroller of Figure 1 with a second seat type, in unmounted (Fig 3a) and mounted (Fig 3b) configurations;

Figures 4a and 4b show a flat bed and the flat bed mounted
25 on the stroller, respectively;

Figures 5a to 5d show the stroller of Figure 1 in various stages during folding;

30 Figure 6 is a schematic view of a first seat type and its connection to a chassis of the stroller of Figure 1;

Figure 7 is a more detailed view of an upper attachment of the seat of Figure 6;

Figure 8 is a schematic view of a lower mounting part of
5 the stroller;

Figure 9 is a schematic perspective view of a lower part of the chassis in a folded configuration, showing both lower mounting parts in neutral positions;
10

Figure 10 is a schematic perspective view of a lower part of the chassis in a folded configuration, showing both lower mounting parts in forward-folded positions;

15 Figure 11 shows one of the lower mounting parts in a rearwardly mounted position;

Figure 12 is a schematic exploded view of part of the chassis, showing one of the lower mounting parts, part of a front leg, part of a rear leg and part of a handle portion;
20

Figure 13 is a detailed view of part of the lower mounting part;

25 Figure 14 is a schematic perspective view of an alternative lower mounting part;

Figure 15 shows a wheel of the stroller mounted on the chassis;
30

Figures 16a - 16c show alternative mounting positions of the wheel;

Figure 17 shows schematically an alternative wheel mounting arrangement;

5 Figure 18 shows a wheel for use with the arrangement of Figure 17;

Figures 19a and 19b show schematically, respectively in side view and front view, an alternative embodiment of the
10 first seat type of Figures 6 and 7;

Figures 20a and 20b show stages in folding the seat of Figures 19a and 19b; and

15 Figure 21 shows schematically an upper attachment device for the seat of Figures 19-20.

Turning to Figure 1, this shows generally at 100 an infant stroller comprising a chassis 120, an infant seat 130, a
20 pair of front ground wheels 140a, a pair of rear ground wheels 140b and a push handle 150. The seat 130 is detachable from the chassis 120 as will be described below.

Figures 2a to 2d show the chassis 120 with the seat 130 in
25 various configurations. In Fig 2a the seat is shown separate. In Figure 2b a pair of seats are shown facing one another and sharing a common mounting platform. In Figure 2c the seat is shown in rearward-facing configuration on the chassis, and in Figure 2c the seat is shown in forward-
30 facing configuration on the chassis and reclined.

Figures 3a and 3b show an alternative seat 160 detached

from the chassis (Fig 3a) and attached (Fig 3b). The seat 160 is a lightweight seat type, which is of a fabric material and is mounted on the chassis at a lower part and also at an upper part, as will be described below.

5

Figure 4 shows a flat bed 170 separate (Figure 4a) and mounted on the chassis (Figure 4b).

10 The seats 130, 160 and bed 170 can be removably mounted on the chassis by engagement of mounting lugs 180 in a lower mounting part/member (not shown in these figures). In the case of the seat 160 an additional attachment is made at an upper part 190 located on the handle 150.

15 In order to stow the stroller, for example in a car, the stroller is fully foldable. Figures 5a to 5d show schematically the key stages in folding the stroller 100. In each case the seat has been omitted in the interests of clarity.

20

Figure 5a shows the stroller in an unfolded configuration. The chassis 120 comprises a pair of front legs 200 and a pair of rear legs 210. The front and rear legs are hinged together, left and right, so that the front and rear can
25 pivot about point P with respect to one another.

In Figure 5b a first latch (not shown) has been released and the handle 150 has been telescoped down to a collapsed position on the chassis 120. In Figure 5c a second latch
30 (not shown) has been released and the handle 150 has been folded forwards over the front legs. In Figure 5d a third latch (not shown) has been released and the front and rear

legs have been pivoted towards each other, placing the stroller in a fully folded configuration, where it can be locked using a fourth latch (not shown).

5 Figure 6 shows the seat 160 partly attached to the chassis. The seat 160 is of a type that comprises mainly sheet material - most usually fabric - and takes the form of a sling. The seat 160 attaches to the chassis at both lower and upper attachment points.

10

In particular, a lower, semi-rigid seat base portion 160a of the seat 160 is provided with two lower mounting lugs 220 which are removably located in sockets 230 of lower mounting members 240. In addition, at an upper, seat back
15 portion 160b two upper mounting lugs 250 are removably receivable in slots 260 of upper mounting members 270 located on either side of the handle 150. In this drawing the fabric portion of the seat is indicated by broken lines for clarity. The upper portion 160b of the seat has not yet
20 been attached to the chassis.

Figure 7 shows one of the upper lugs 250 located in slot 260 of an upper mounting member.

25 To deploy the seat 160, the base portion 160a is first mounted on the lower mounting members 240 and then the fabric back portion 160b is raised and the upper lugs 250 are attached to the upper mounting members 270.

30 Figure 8 shows one of the lower mounting members 240. The lower mounting member is located where the front and rear legs are pivotably connected. The lower mounting member

comprises a central portion 240a and a pair of retaining arms 240b which, when the chassis is fully unfolded, engage with front and rear struts 280a, 280b which connect the front legs 210 to each other and connect the rear legs 210
5 to each other respectively. The arms 240b place a limit on the angle between the unfolded legs.

The lower mounting member engages with the legs 200 and 210 as a floating hinge, as will be described below. This
10 allows the lower mounting member to pivot either forward or rearwards when the chassis is in the folded configuration, so that when a seat (not shown) is mounted on the chassis it can also fold in either direction.

15 Figure 10 shows the chassis in a folded configuration, with the legs 200 and 210 pivoted together and the lower mounting members pivoted towards the front legs 200.

Figure 11 shows part of only half of the chassis, with the
20 struts 280 truncated. The lower mounting member is pivoted towards the rear legs.

Figure 12 is a schematic exploded view showing the connection between the one of the front legs 200, one of
25 the rear legs 210, the handle 150 and the lower mounting member 240. Again, struts 280a and 280b have been truncated.

The handle 150 and the front 200 and rear 210 legs are
30 pivotally mounted together by a first pin 290 which passes through an aperture 300 in a connection portion 310 of the handle 150, then through an aperture 320 in a connection

portion 330 of the front leg 200 and finally through an aperture 340 in a connection portion 350 of the rear leg 210. A locking block LB locks the parts together.

- 5 The handle can be used to open out the chassis from a folded configuration. This is achieved by pressing the handle in the direction of arrow A which causes a lug L in the connection portion 310 of the handle to slide in aperture 320 of the connection portion 330 of the front leg
10 until it abuts a notch N in the latter which then forces the legs to pivot apart.

- The lower mounting member 240 is mounted for rotation about a second pin 360 which passes through an aperture in the
15 lower mounting member 370 and into arcuate slots S1 and S2 respectively in the connection portions 350 and 330 of the legs 280b and 280a. This creates a floating hinge connection between the lower mounting member and the front and rear legs, wherein the pivoting of the lower mounting
20 member is constrained by the pin 360 in the slots S1 and S2. This floating hinge is offset from the pivot between the front and rear legs and allows the lower mounting member (and any seat mounted in it) to pivot forwardly or rearwardly when the chassis is in the folded configuration.
25 As the legs 200 and 210 pivot apart, they reach a limit of their movement when the retaining arms 240b of the lower mounting member engage with the struts 280a and 280b.

- The lower mounting member 240 is thus able to rotate/pivot
30 in either direction with respect to the legs/wheels, thereby allowing a support (such as a seat) mounted thereon to fold forwards or rearwards in use.

Figure 13 shows the second pin 360 located in the slots S1 and S2.

5 Figure 14 shows a second embodiment of lower mounting member 240'. In this embodiment the mounting member 240' has a fixed pivot P with respect to legs 200 and 210. When the mounting member pivots in the direction of Arrow B in the drawing, a pair of spring-loaded locking pins LP enter
10 correspondingly placed leg sockets LS whereupon the mounting member 240' is locked in position with respect to the legs.

Again, the lower mounting member 240' is able to
15 rotate/pivot in either direction with respect to the legs/wheels, thereby allowing a support (such as a seat) mounted thereon to fold forwards or rearwards in use.

Turning to Figure 15, this shows one of the wheels 140 of
20 the stroller. The wheel 140 is connected to leg 210 by a wheel mounting member 380, which is itself secured to the leg 210. The wheel mounting member 380 has a plurality of mounting apertures 390 for receiving a rotatable spindle (not shown) of the wheel 140. The mounting apertures 390
25 are spaced at locations around the wheel mounting member 380 so that the wheel 140 can be accommodated at different positions on the wheel mounting member.

This means that wheels of different sizes can be used with
30 the stroller, which may be useful with different terrain. In addition, the different positions of the wheels can alter the effective wheelbase of the stroller which may

help with stability.

Turning to Figures 16a-16c, this shows a wheel 140 mounted on the wheel mounting member 380. The mounting apertures 390 can also be used to attach brake members 400 which act upon the wheel to prevent it from rotating. The brake members are actuated by one or more levers or cables (not shown). By selecting the appropriate mounting aperture the brake member can be positioned optimally with respect to the wheel, depending upon the size and position of the wheel. In the schematic example only three such apertures are shown. However, there may be more or fewer mounting apertures.

Turning to Figure 17, this shows schematically an alternative embodiment of wheel mounting member 380', which is located at the base of each of at least the rear legs (not shown) of the stroller.

The wheel mounting member 380' comprises a plastics body 382 with integrally moulded axle apertures 384 for mounting an axle of a pair of wheels (not shown) in one of several locations. The various locations allow the stroller to accommodate wheels of different diameters and to permit different wheelbases. A brake member 400', which in this example is in the form of a peg, is located within a brake member housing 402 and is displaceable axially by actuation of a brake lever 404, and releasable by actuation of a brake release button (not shown). The actuation and release controls may instead be provided according to alternative arrangements (not shown).

Figure 18 shows a wheel 140 for mounting on the wheel mounting member 380' of Figure 17. The wheel comprises a hub 142, spokes 144, a rim 146, with a tyre 146a, and a brake-engaging portion 148 comprising a plurality of sockets 148a for receiving the brake member 400' when axially displaced. The radial spacing of the sockets 148a is chosen to correspond with the wheel diameter, based upon the distance between the axle aperture and the brake member, so that the sockets may receive the brake member 400' whichever axle aperture is in use.

The chassis and/or wheels may be of any suitable material, such as but not limited to metal, such as steel, aluminium/alloy, or plastics. The support/seat/bed may be a combination of plastics and fabrics. The mounting parts may be of plastics or metal.

Embodiments of stroller according to the present invention allow the creation of multiple versions of pushchairs from a common, single chassis. In particular, the lower fixing/mounting provides the attachment point for a removable seat and the upper attachment/fixing connected to the handle, when combined with the lower fixing, allows a "fabric sling" to be attached easily.

Furthermore, the folding mechanism e.g. utilising the floating hinge allows the lower mounting member (attachment system) to fold with the chassis, making it more compact for storage and also making the stroller self-supporting/freestanding when in the folded configuration.

The wheel mounting arrangements allow differently sized wheels to be used.

5 The result is a stroller system that allows multiple seat/infant support configurations to be attached and detached from the chassis/frame. A lower fixing allows all the seats to be attached directly to the frame. This connection is common for all seats.

10 The second attachment point located on the upper part of the chassis/handle provides provision for the attachment of a soft sling which is attached to the handle and provides support for the upper portion of the seat, forming the sides of the seat, from which a back rest can be
15 supported.

A corresponding fixing is attached to the sides of the fabric sling, which allows the sling system to be quickly and easily detached from the frame and a different seat
20 attached in its place.

This fixing can be varied in design to allow for alteration of the lateral dimension of the seat.

25 The lower mounting member/fixing is actuated by the frame and supported when in its deployed position, preventing the collapse of the seat.

When folded, the two leg portions (supporting members)
30 articulate about a central pivot point allowing the lower mounting member (attachment) to rotate either forwards or rearwards into the frame/chassis.

This allows any seat connected to the lower mounting member/attachment to rest in a position that is over perpendicular to the corresponding leg portions (frame members).

The pivot point of the lower mounting member (attachment) is offset from the articulation point of the legs/frame members but rotates around the virtual axis of the legs/frame members when folding.

Concentric slots fix the pivot point of the lower mounting member/attachment in a constrained position when deployed and in use.

The stroller frame also includes a rear configuration that allows the attachment of wheels of different diameter for example in particular at the rear.

A track system in the rear allows an assembly to be moved into various positions allowing different wheel diameters to be attached to the frame without affecting the geometry of the stroller.

Turning to Figures 19a and 19b, these show schematically, respectively in side view and front view, an alternative embodiment of seat 1160 to that shown in Figures 6 and 7, for use with the stroller 100 described herein. The seat 1160 mounts to the chassis 120 of the stroller in two places. Firstly, there is a lower semi-rigid base portion 1160a that removably attaches to the chassis in substantially the same lug-and-socket arrangement of the

Figure 6 embodiment. However, the seat 1160 also has a pair of tubes 1170, one located on either side of the seat 1160, which act as a support for the fabric back of the chair (not shown) by passing through sleeves therein. The tubes
5 1170 are themselves telescopically/slidably mounted in mounting brackets 1180, one connected pivotally on each side of the handle 150. The tubes 1170 are pivotally connected to the base 1160a.

10 Figures 20a and 20b show the stroller being folded forwards of the handle 150 in the direction of the arrows C. As the handle 150 folds pivotally on the chassis, the tubes 1170 also pivot with respect to the base 1160a. In doing so they are able to slide within the brackets 1180, to accommodate
15 their displacement due to the space between the respective pivots.

Figure 21 is a more detailed view of the bracket 1180 showing part of the tube 1170 within. The bracket 1180 is
20 generally tubular and has a slot portion 1182 on an outer surface for accommodating a lug 1184 of the handle 150 (not shown in this drawing). The slot 1182 has a T-shaped profile for capturing and retaining the complementarily shaped lug 1184 with which it may engage slidably during
25 engagement and disengagement of the seat with the chassis 120.

Whilst endeavouring in the foregoing specification to draw attention to those features of the invention believed to be
30 of particular importance, it should be understood that the applicant claims protection in respect of any patentable feature or combination of features referred to herein,

and/or shown in the drawings, whether or not particular emphasis has been placed thereon.

CLAIMS

1. An infant stroller comprising a chassis and a plurality of ground wheels, the chassis comprising a lower mounting part and an upper mounting part, for mounting an infant support, wherein the chassis is arranged to accommodate a plurality of different infant supports interchangeably, by engagement of the support and the lower mounting part only, in the case of at least one type of support, and by engagement of the support and both the lower mounting part and the upper mounting part, in the case of at least one other type of support.
2. A stroller according to Claim 1, wherein at least one of the supports is mountable only on the lower mounting part and at least one other support is mountable on both the lower mounting part and the upper mounting part.
3. A stroller according to Claim 1 or 2, wherein the support comprises a seat or bed.
4. A stroller according to any of Claims 1-3, wherein the support comprises a first, lower portion that mounts on the lower mounting part of the chassis and a second, upper portion that releasably attaches to the upper mounting part of the chassis.
5. An infant stroller according to Claim 4, wherein the lower portion of the support comprises a seat base portion and the upper portion of the support comprises

a seat back portion.

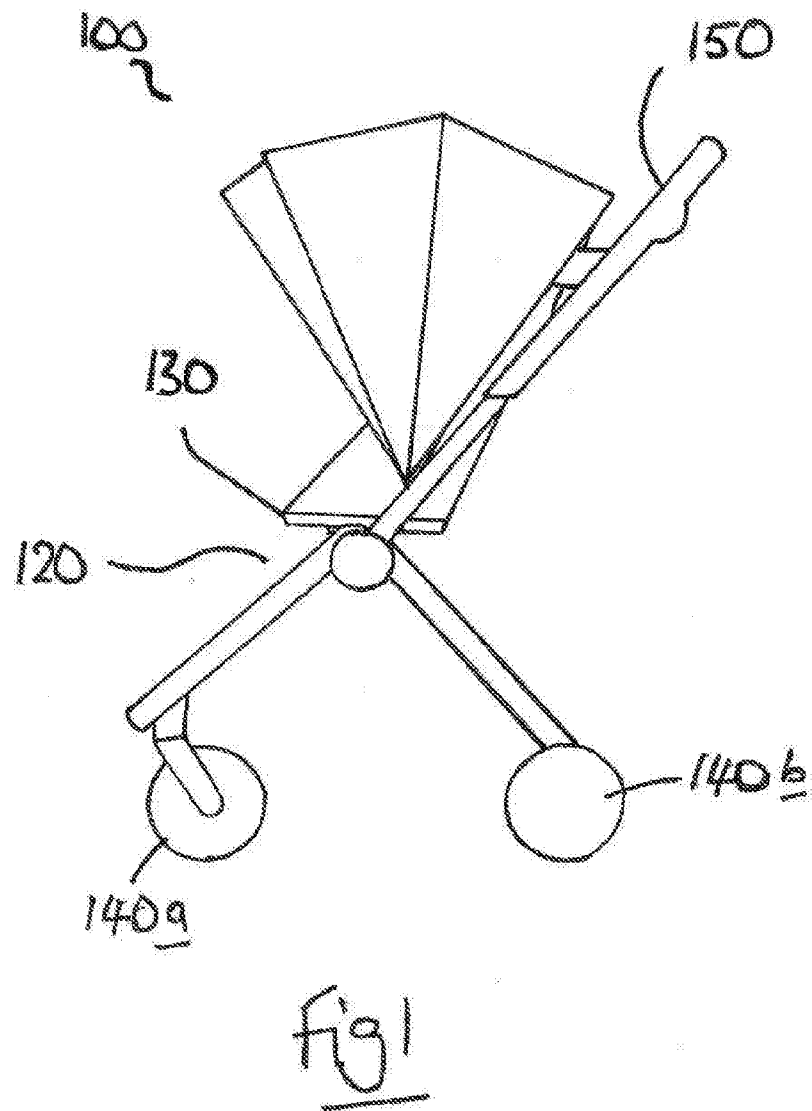
6. An infant stroller according to Claim 4 or 5, wherein the lower portion and/or the upper portion of the support comprises a sheet material.
7. An infant stroller according to Claim 6, wherein the material is a fabric.
8. A stroller according to any of Claims 4-7, wherein the upper portion releasably attaches to the upper mounting part of the chassis in at least two spaced-apart locations on the chassis.
9. A stroller according to any of Claims 4-8, wherein at least the second portion of the support is attachable to the chassis by engagement of a first attachment member mounted on the upper portion of the support, and a second attachment member on the upper mounting part of the chassis.
10. A foldable infant stroller comprising a chassis including a handle portion, a plurality of wheels and a support for an infant, wherein the chassis comprises first and second leg portions connected for relative pivotal movement between a folded configuration and an unfolded configuration, and wherein the stroller also includes a mounting part coupled to at least one of the first and second leg portions for pivoting movement in either of two directions with respect to the leg portions.

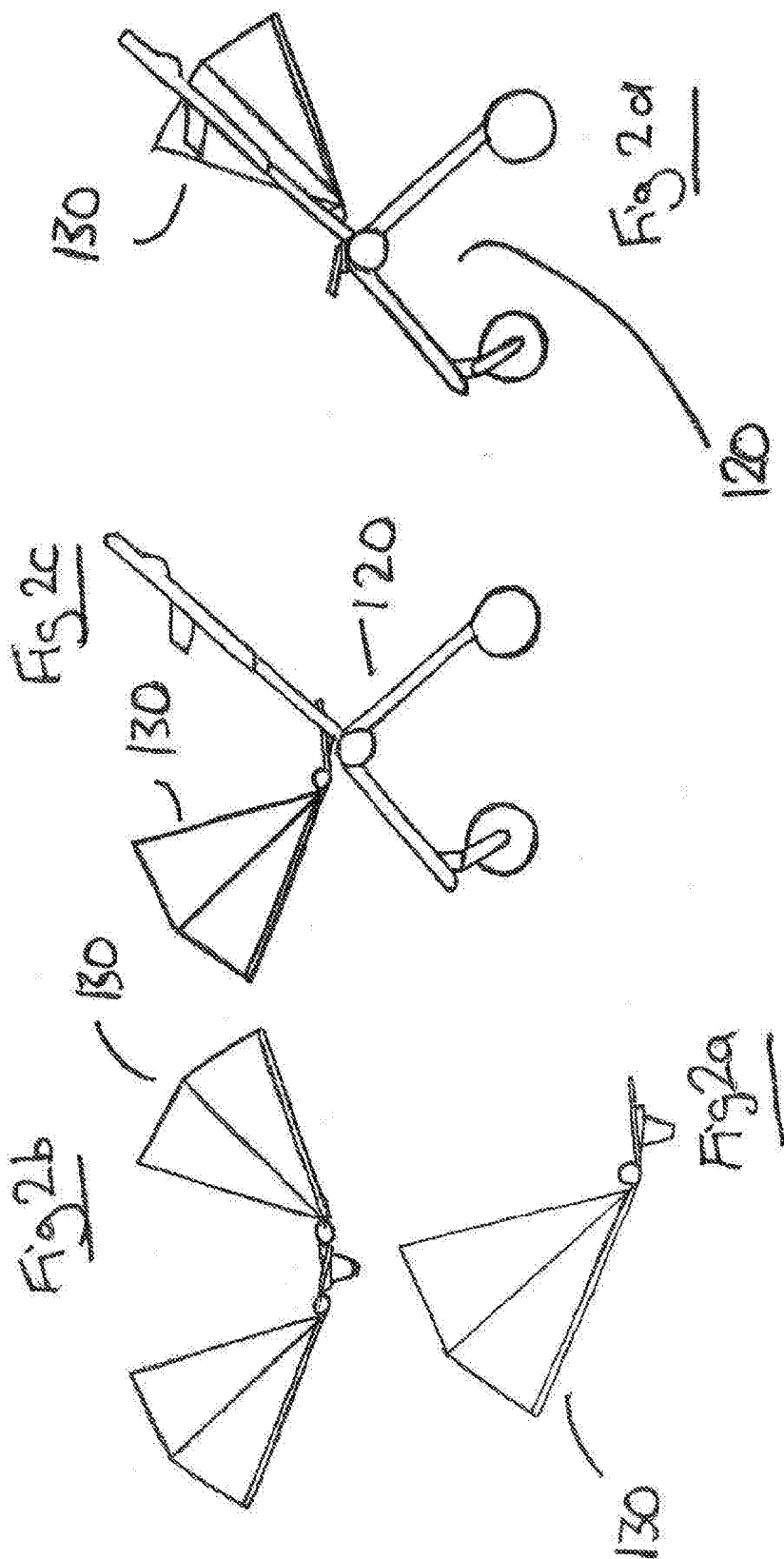
11. A stroller according to Claim 10, wherein the mounting part is coupled to at least one of the first and second leg portions by a floating hinge so that the mounting part can rotate in two directions with respect to the leg portions.
12. A stroller according to Claim 10 or 11, wherein the mounting part coupled to the first and second leg portions is arranged to accommodate a mounting of the infant support.
13. A stroller according to any of Claims 10-12, wherein the mounting part comprises a lower mounting part on a chassis which has an upper mounting part.
14. A stroller according to any of Claims 10-13, wherein the mounting part is coupled to the leg portions by a hinge pin that engages a first slot in the first leg portion and a second slot in the second leg portion so that the slots constrain movement of the mounting part as the pin slides in the slots.
15. A stroller according to any of Claims 10-14, wherein the mounting part includes a mounting portion for receiving a portion of the seat, so as to mount the seat on the chassis.
16. A stroller according to any of Claims 10-15, wherein one or both of the first and second leg portions comprises a pair of spaced apart legs joined by a strut.

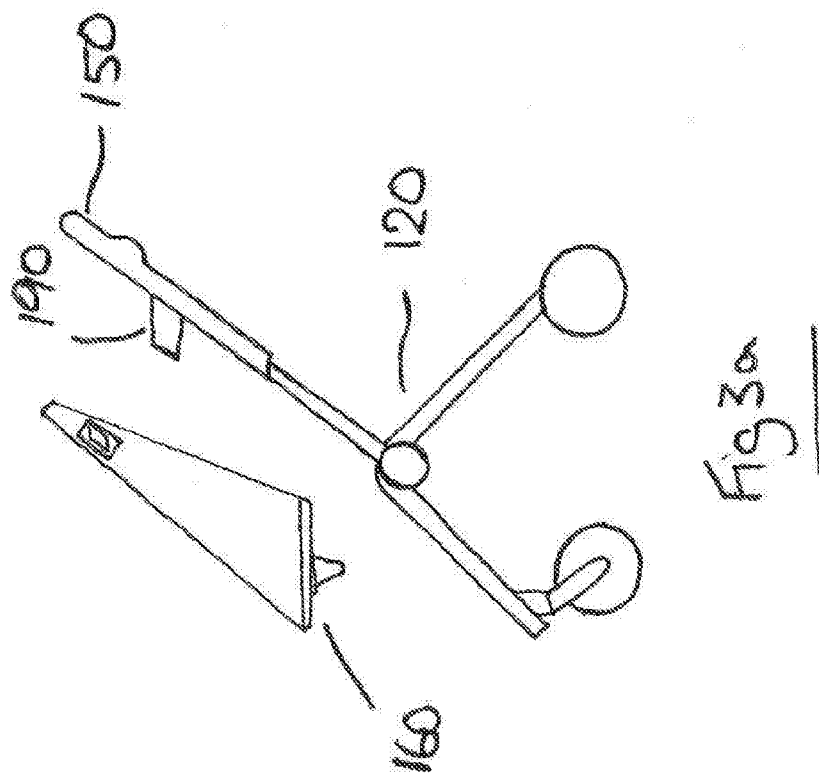
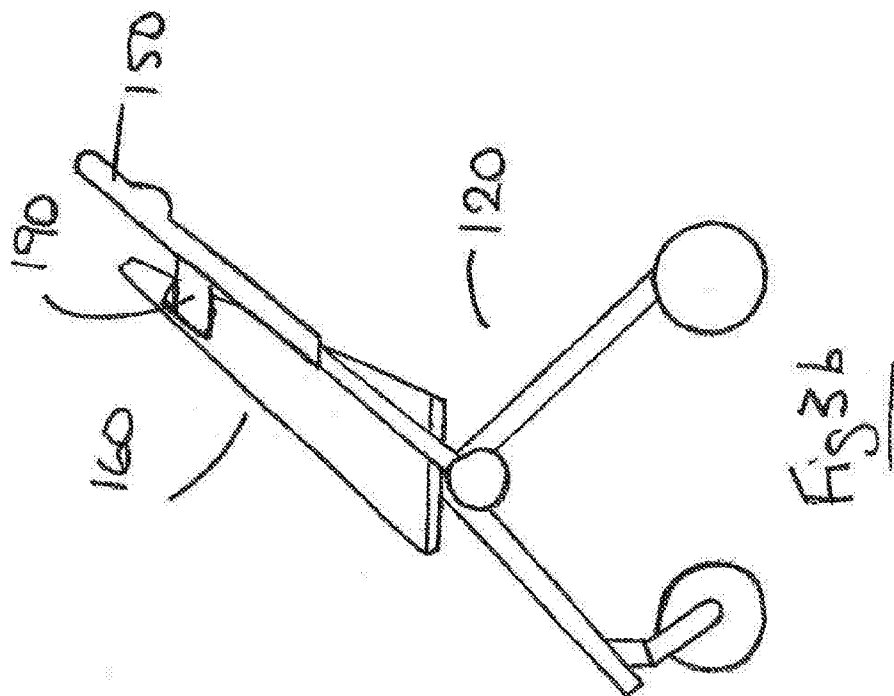
17. A stroller according to Claim 11, wherein the hinge comprises a retaining arm arranged to engage one, or more preferably both, of the struts to limit the range of pivoting movement of the leg portions.
- 5
18. A stroller according to any of Claims 10-17, wherein the stroller includes a handle portion.
19. A stroller according to Claim 18, wherein the handle
10 portion is foldable with respect to the leg portions in two directions.
20. A stroller according to Claim 18 or 19, wherein the
15 handle portion is arranged to engage at least one of the leg portions during an unfolding operation, so as to cause the relative pivoting of the leg portions away from one another.
21. An infant stroller comprising a chassis, an infant seat
20 and a plurality of wheels, wherein at least one of the wheels is connected to the chassis by a wheel mounting member having a plurality of mounting portions for mounting the wheel, so that the wheel is mountable on the chassis in a plurality of positions.
- 25
22. A stroller according to Claim 21, wherein the wheel mounting member has a plurality of mounting portions for mounting a brake member, so that the brake member can be positioned optimally with respect to the wheel.
- 30
23. A method of mounting a seat on a chassis of an infant stroller, the method comprising releasably mounting a

lower portion of the seat on a lower mounting part and releasably attaching an upper portion of the seat to an upper mounting part.

- 5 24. A method of changing an infant stroller between a folded configuration and an unfolded configuration, wherein the stroller has a chassis comprising first and second leg portions connected for relative pivotal movement between the folded configuration and the
- 10 unfolded configuration, and wherein the stroller also includes a mounting part coupled to the first and/or second leg portions for pivoting movement in either of two directions with respect to the leg portions.
- 15 25. A method of mounting a wheel on an infant stroller, the method comprising connecting the wheel to a chassis of the stroller by a wheel mounting member having a plurality of mounting portions for mounting the wheel, so that the wheel is mountable on the chassis in a
- 20 plurality of positions.







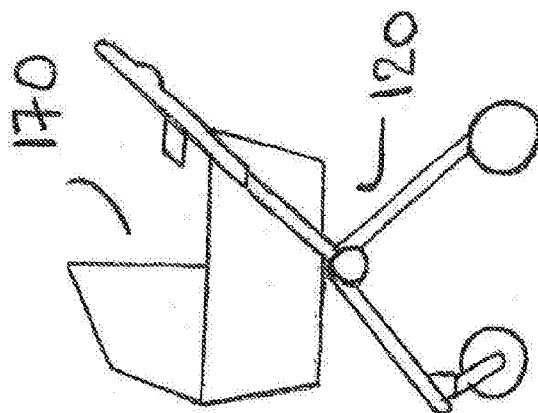


Fig 4b

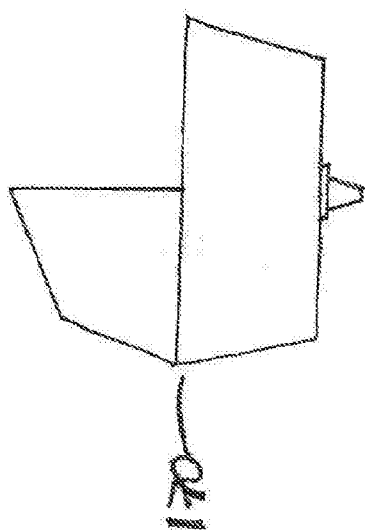


Fig 4a

