



(12)

**EUROPEAN PATENT APPLICATION**

(43) Date of publication:  
**29.05.2002 Bulletin 2002/22**

(51) Int Cl.<sup>7</sup>: **A61H 3/04**

(21) Application number: **01308969.3**

(22) Date of filing: **22.10.2001**

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE TR**  
Designated Extension States:  
**AL LT LV MK RO SI**

(72) Inventors:

- **Duff, Mark**  
**Ipswich, Suffolk IP3 3RU (GB)**
- **Flounders, Michael**  
**Ipswich, Suffolk IP3 3RU (GB)**

(30) Priority: **02.11.2000 GB 0026792**

(74) Representative: **Nash, Keith Wilfrid et al**  
**KEITH W. NASH & Co.,**  
**90-92 Regent Street**  
**Cambridge CB2 1DP (GB)**

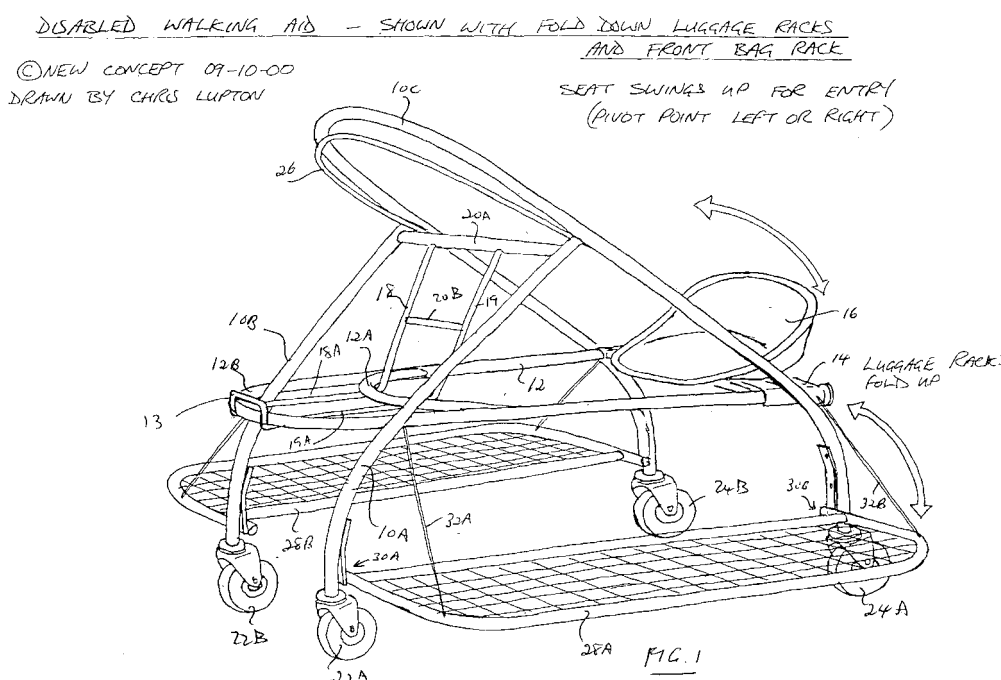
(71) Applicants:

- **Duff, Mark**  
**Ipswich, Suffolk IP3 3RU (GB)**
- **Flounders, Michael**  
**Ipswich, Suffolk IP3 3RU (GB)**

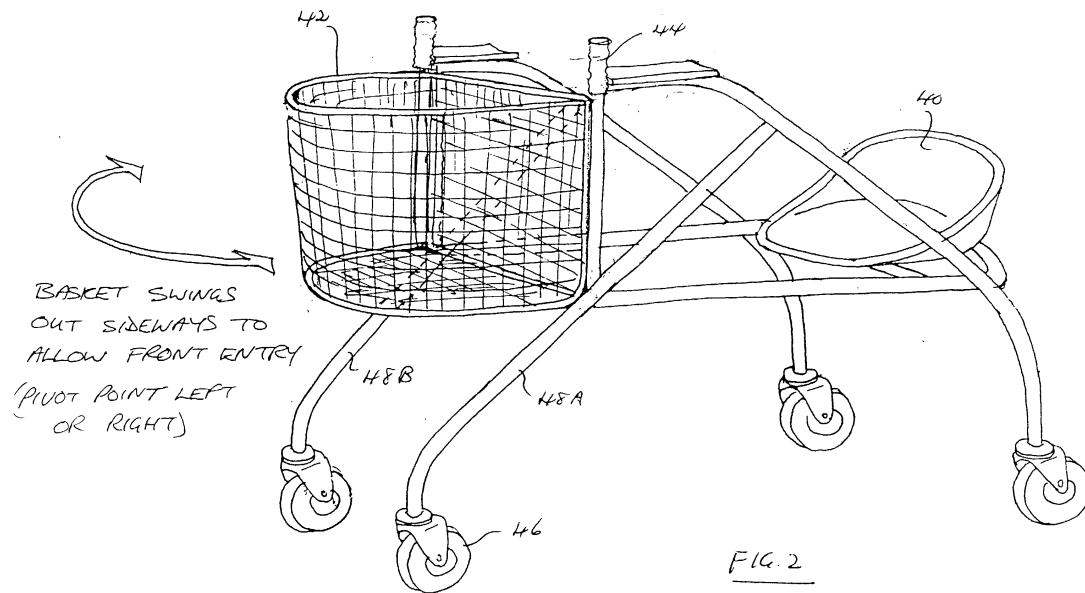
(54) **Walking aid for the disabled**

(57) A walking aid having side frame parts (10A, 10B, 10C) bridged by a crosspiece (12A, 12B), a seat (16) and a load-carrying platform (28A, 28B) on at least one side of the frame. A wheel or castor may be provided below the or each platform for engaging the ground when the or each platform is lowered. The or each platform is movable between a vertical (stowed) position

and a lowered load carrying (operative) position. Typically the or each platform is hinged to a side frame part. A walking aid is also described in which access is via a hinging front crosspiece, typically integrated with a basket (42), or via a hinging seat (40). A hinging front crosspiece or hinging seat may be provided in the aid having the load carrying platform.



DISABLED WALKING AID - SHOWN WITH PIVOTING BASKET FOR FRONT ENTRY,  
©NEW CONCEPT 09-10-00  
DRAWN BY CHRIS LUPTON



## Description

### Field of the Invention

**[0001]** This invention relates to a walking aid, especially for disable persons.

### The Invention

**[0002]** According to the present invention, there is provided a walking aid comprising a wheeled walking frame having side frame parts bridged by at least one crosspiece, a rear seat carried by the frame and, on at least one side of the frame, a load-carrying platform.

**[0003]** Preferably, load-carrying platforms are provided on both sides of the frame, in order to achieve better lateral balance.

**[0004]** A bag carrying framework may be provided at the front of the frame.

**[0005]** The invention provides a wheeled walking frame which assists disabled persons in movement around airport terminals, railway and bus stations, and ferries, amongst many other uses, more especially enabling heavy loads such as suitcases or other heavy luggage and other items to be stowed on the load-carrying platform or platforms, and/or on the bag carrying framework provided.

**[0006]** Preferably, the walking aid has front and rear wheels at least some of which may be turnable to assist in steering the frame when in use and at least one rear wheel may have braking means automatically operated when the user is seated in the rear seat.

**[0007]** Further braking means, typically operable on one or more front wheels, may be provided, operable by cables or rods from lever means carried by the frame.

**[0008]** The frame preferably has handle means at or towards its front end, for use by the user when walking. The handle means may form part of or be carried by a front crosspiece, or may take the form of individual handles respectively carried by the side frame parts.

**[0009]** The or each load-carrying platform is preferably movable into and out of its operative position. For this purpose the or each platform may be hinged to a side frame part, whereby to be movable between a generally horizontal operative position and a generally vertical inoperative position in which it stands against or close to the side frame part on which it is mounted.

**[0010]** Alternatively, however, the or each platform may be detachable from the side frame part on which it is mounted, either for generally vertical storage on supporting bracket means or the like against or adjacent the side frame part, or for total removal and storage elsewhere when the user is using the walking aid for a purpose for which the load-carrying platform or platforms are not required.

**[0011]** The invention therefore also lies in a load carrying plate adapted to be removable secured to a walking aid which comprises a wheeled walking frame hav-

ing side frame parts bridged by at least one crosspiece with a rear seat carried by the frame, wherein the plate includes means for attaching it to a side frame part of the walking aid.

**[0012]** The or each platform preferably extends in use along the major part of the length of the walking aid and, in the case of a hinged platform, preferably has front and rear hinged connections to the side frame part on which it is mounted.

**[0013]** In the latter case, the hinge connections may comprise cord means extending between the frame and another peripheral region of the platform, together with a pivotal connection between the adjacent side frame part and another pivotal region of the platform. Suitable latching means may be provided for fixing the platform in its generally vertical stowage position.

**[0014]** A wheel or castor may be located on each platform to extend therebelow when the platform is in its lowered load-carrying position, to engage the ground as well as the wheels/castors of the frame, and assist in supporting the weight of luggage carried by the platform and to improve the overall stability of the frame.

**[0015]** Access for the user into the frame may be enabled at either the front or the rear of the frame. In the latter case access can be made possible by swinging the rear seat out of the way. The seat may swing generally upwardly or laterally to afford rear access. In the former case, some or all of a crosspiece, if present, may swing out of the way to enable access to the frame and seat from the front. Such a crosspiece may convey or be integrated with a front basket or bag for holding relatively small items such as items of shopping, and/or may carry the handle means for use by the user when walking.

### Description of Embodiment

**[0016]** The invention will be further described with reference to the accompanying drawings, in which: -

Fig 1 shows one embodiment of a walking aid in accordance with the invention; and

Fig 2 shows a modification.

**[0017]** Referring to Fig 1, the illustrated walking aid for a disabled person comprises a frame having vertical side frame parts 10A, 10B integrated by a curved crosspiece 10C and also interconnected by a horizontal frame part 12 which includes curved front crosspieces 12A, 12B and a rear crosspiece 14 which carries a seat 16. A further frame part 18, 19 including crosspieces 20A and 20B also interconnects the side frame parts 10A, 10B towards the front. The crosspiece 10C or the crosspiece 20A may constitute or carry handle means for the user.

**[0018]** The crosspiece 14 carrying the seat 16 is pivotally attached to one side frame part 10A or 10B, and latches to the other side frame part 10B or 10A, enabling

the crosspiece, and with it the seat, to swing upwardly out of the way to enable the user to enter the frame from the rear, subsequently lowering the crosspiece to permit use of the seat.

[0019] The frame has turnable front wheels 22A, 22B and turnable rear wheels 24A, 24B. The term "wheels" is intended to include castors or rollers or the like. The latter may be equipped with a braking means automatically applied when the user is seated and released when the user stands up to walk, supported by the frame, steering by use of the handle means such as the front crosspiece 10C or the front crosspiece 20.

[0020] The handle means, for example the crosspiece 10C, may comprise a brake lever 26, more especially for the front wheels 22a, 22B.

[0021] In accordance with the invention, the frame is equipped on both sides with a load-carrying wire-mesh platform 28A or 28B, extending substantially the full front-to-back length of the frame. Each platform is pivoted at 30A and 30B to the front and back of the adjacent side frame part 10A, just above the wheels, and the outer peripheral region of the platform is supported by strong cords 32A, 32B extending from the frame, thus maintaining an operative horizontal orientation of the platform suitable to enable it to carry suitcases or other relatively heavy loads such as luggage. The term "cords" is to be understood as including equivalent supporting means such as wires or chains.

[0022] When not required for use the platforms can be pivoted upwardly and latched to the frame, in generally vertical orientation against or adjacent the respective side frame parts.

[0023] Alternatively, the platforms 18A, 28B may mount detachably to the frame.

[0024] Fig 2 shows a modification of the frame permitting it to be accessed from the front. In this drawing, the load-carrying platforms are for convenience omitted.

[0025] In this modification, the rear seat 40 is hingedly mounted on the frame and a front crosspiece is constituted by and integrated with a basket 42, which can swing out of the way, preferably laterally, to enable the user to enter the frame from the front. Upstanding handle means 44 for steering the frame on its turnable wheels 46 are integrated with the side frame parts 48A, 48B.

[0026] Although not shown a castor may be located below each of the platforms 28A, 28B to engage the ground in the same way as the other castors 22A, 22B and 24A, 24B, to reduce the loading on the hinge or other connections 30A, 30B and thereby increase the load carrying capability of the platforms, and improve the stability of the frame.

[0027] The curved front crosspieces 12A, 12B, the upright members 18, 19, crosspiece 20B, front upstand 13 and horizontal extensions 18A and 18B together form a bag carrying rack at the front of the frame.

[0028] In the modification of Fig 2, the frame is of modified construction compared to that of Fig 1, but in other

respects the features described with reference to Fig 1 can also be employed in the modification of Fig 2.

## 5 Claims

1. A walking aid comprising a wheeled walking frame having side frame parts (10A, 10B) bridged by at least one crosspiece (12A, 12B), and a seat (16) carried by the frame, **characterised by** a load-carrying platform (28A, 28B) on at least one and preferably both of the sides of the frame.
2. A walking aid according to claim 1, **characterised in that** the or each load-carrying platform is movable into and out of its operative position.
3. A walking aid according to claim 2, wherein the or each platform is hinged to a side frame part, whereby to be movable between a generally horizontal operative position and a generally vertical inoperative position in which it stands against or close to the side frame part on which it is mounted.
4. A walking aid according to claim 2, wherein the or each platform is detachable from the side frame part on which it is mounted, either for generally vertical storage on supporting bracket means or the like against or adjacent the side frame part, or for total removal and storage elsewhere when the user is using the walking aid for a purpose for which the load-carrying platform or platforms are not required.
5. A walking aid according to any of claims 1 to 4, wherein a wheel or castor is located on each platform to extend therebelow when the platform is in its lowered load-carrying position, to engage the ground as well as the wheels/castors of the frame, and assist in supporting the weight of luggage carried by the platform and to improve the overall stability of the frame.
6. A walking aid according to any of claims 1 to 5, **characterised in that** access for the user is enabled at either the front or the rear of the frame, **characterised that**, in the latter case access is made possible by swinging the rear seat out of the way, and in the former case, some or all of a crosspiece is swingable out of the way.
7. A load carrying plate adapted to be removably secured to a walking aid according to any of claims 1 to 6, **characterised in that** the plate includes means for attaching it to a side frame part of the walking aid.
8. A walking aid comprising a wheeled walking frame having side frame parts (48A, 48B) bridged at the

rear by a fixed seat (40) and at the front by a hinged crosspiece carrying, integrated with, or constituted by a hinged basket (42), which is swingable to the side to enable a user to enter the frame from the front.

5

9. A walking aid comprising a wheeled walking frame having side frame parts (48A, 48B) bridged at the front by a fixed crosspiece comprising or carrying a basket (42) and at the rear by a hinged seat (40) which is hingeable up or to the side to enable a user to enter the frame from the rear.

10

10. A walking aid according to claim 8 or 9, **characterised in that** a load-carrying platform is provided on at least one and preferably both of the sides of the frame.

15

20

25

30

35

40

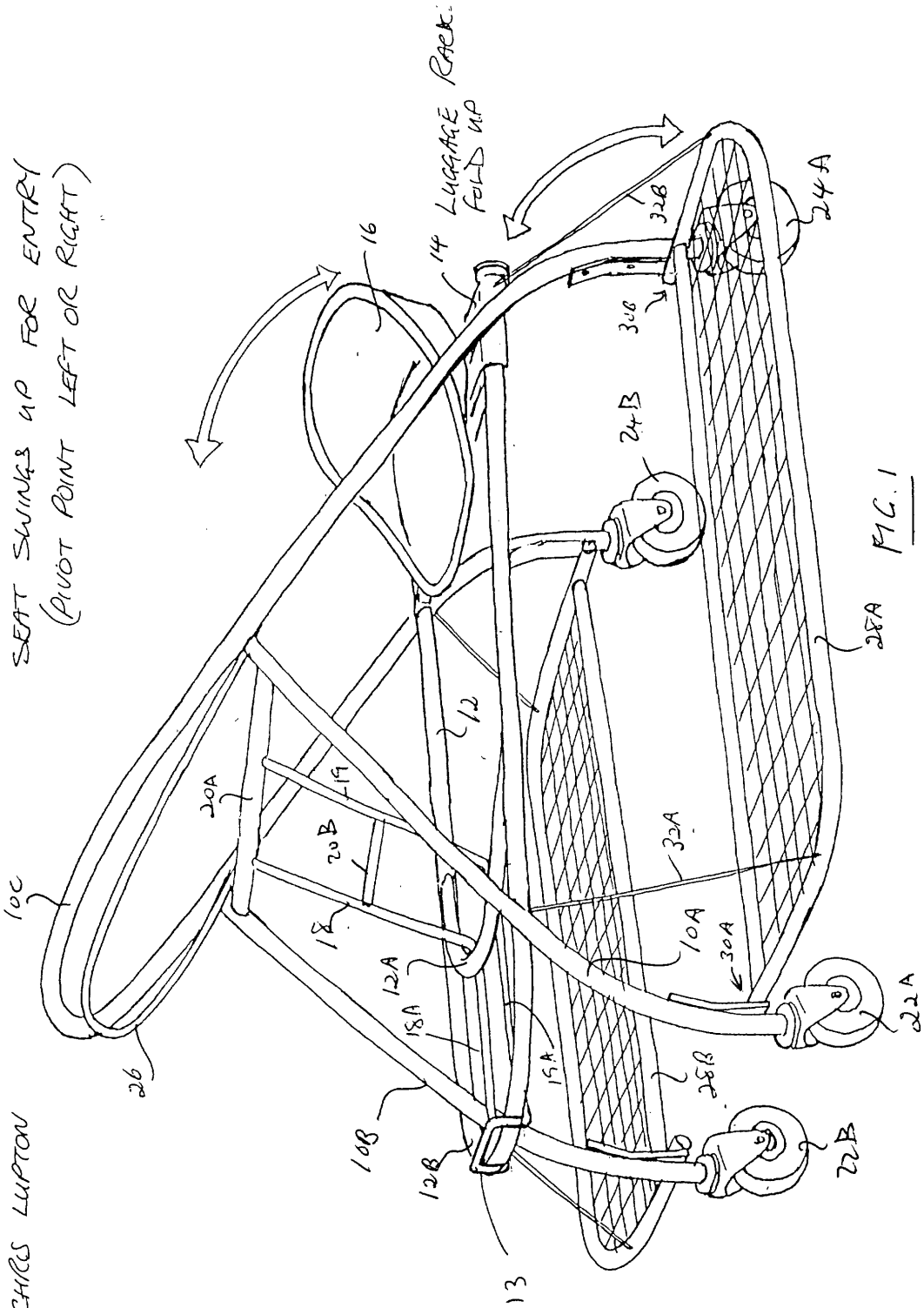
45

50

55

DISABLED WALKING AID - SHOWN WITH FOLD DOWN LUGGAGE RACKS  
AND FRONT BAG RACK

©NEW CONCEPT 09-10-00  
DRAWN BY CHRIS LUPTON



DISABLED WALKING AID - SHOWN WITH PIVOTING BASKET FOR FRONT ENTRY,  
 © NEW CONCEPT 09-10-00  
 DRAWN BY CHRIS LUPTON

