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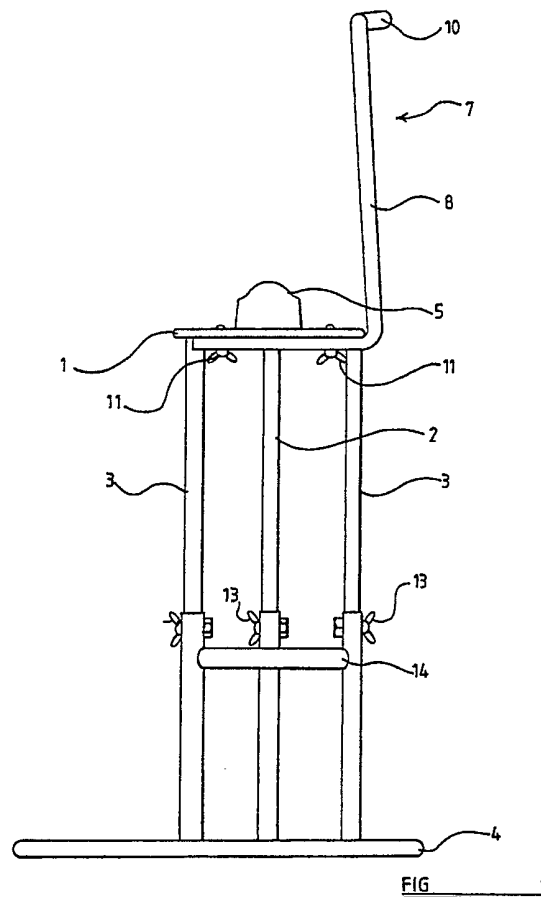
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GB 2031720 A GB 1422671 A US 3595339 A

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UK CL (Edition K) A3B B8B3 , E1S SLA1 SLG SLM
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(54) Elevation apparatus.

(57) An elevation apparatus having a base (4), three legs (2, 3) mountable on the base (4) and a platform (1) mountable on the legs (2, 3) for supporting a foot (not shown). The base (4) comprises strengthening webbing (15, fig 3) and the outer limits of the base (4) may be defined by five limiting points (16, 17, 18, 19, 20, fig. 3), one (16, fig 3) at the back and one (17, fig. 3) at the front of the outer foot side of the base and one (18, fig 3) at the back, one (19, fig. 3) at the side and one (20, fig 3) at the front of the inner foot side of the base (4). A limiting point on the outer foot side of the base (4) is further away from the platform (1) than a limiting point on the inner foot side of the base (4). The legs (2, 3) are mountable on the base (4) adjacent a limiting point at the back (18, fig 3) or front (20, fig 3) of the inner foot side of the base (4). A stabilizer bar (7) is also provided on the platform (1) at a position, in use, adjacent the inside of a foot. The elevation apparatus may be easily assembled and disassembled for easy transport.



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At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The print reflects an assignment of the application under the provisions of Section 30 of the Patents Act 1977.

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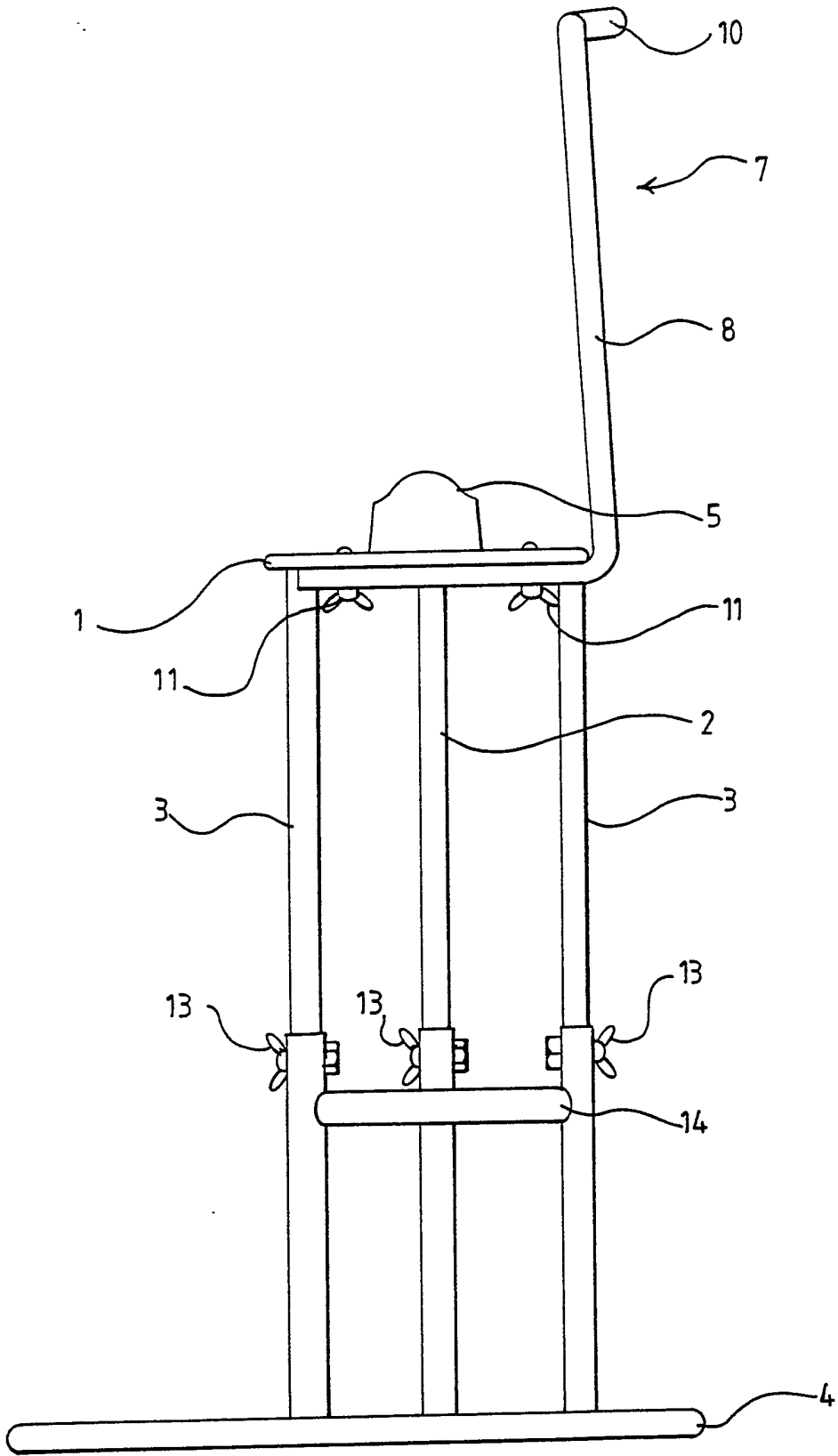
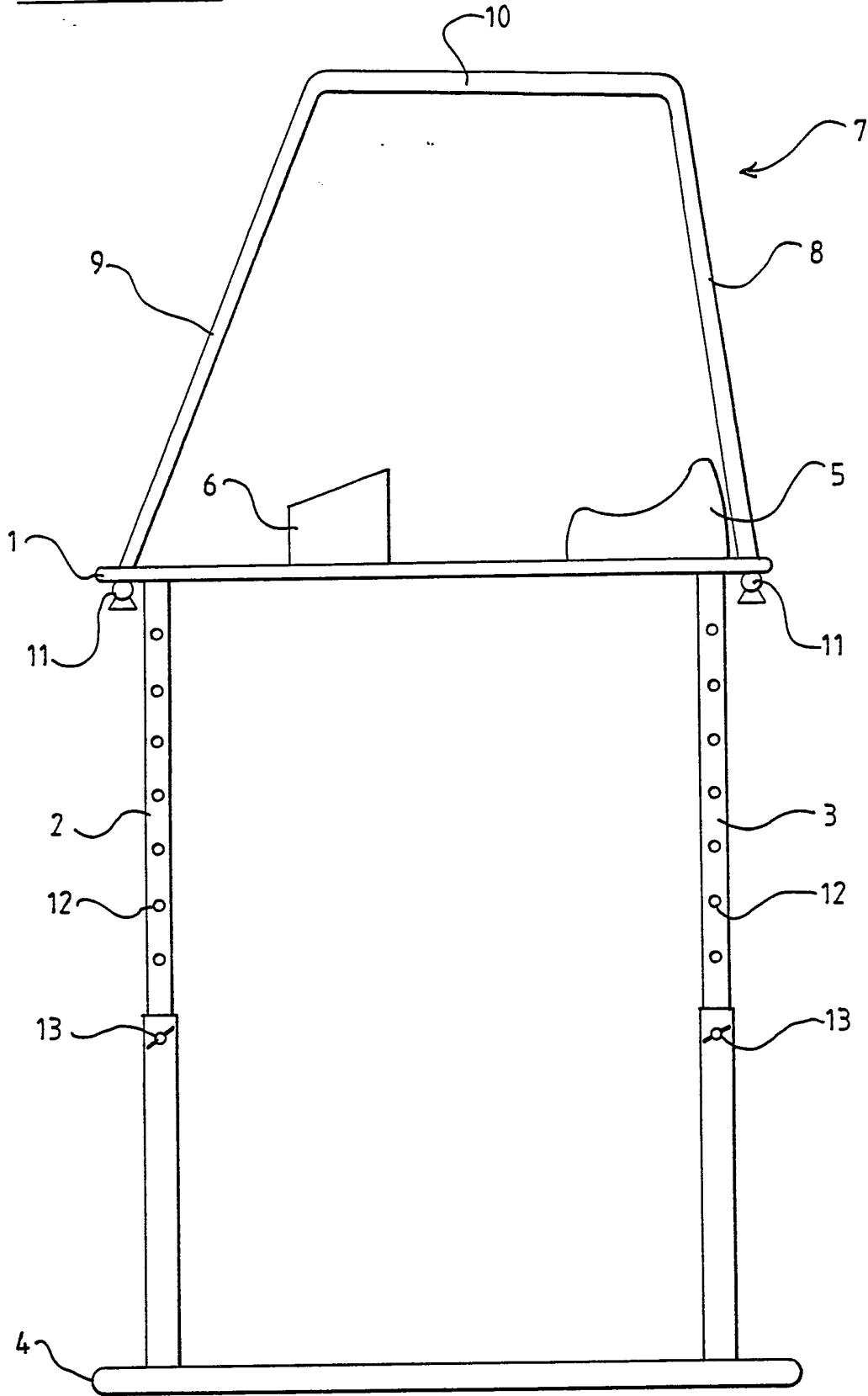


FIG 1

FIG 2



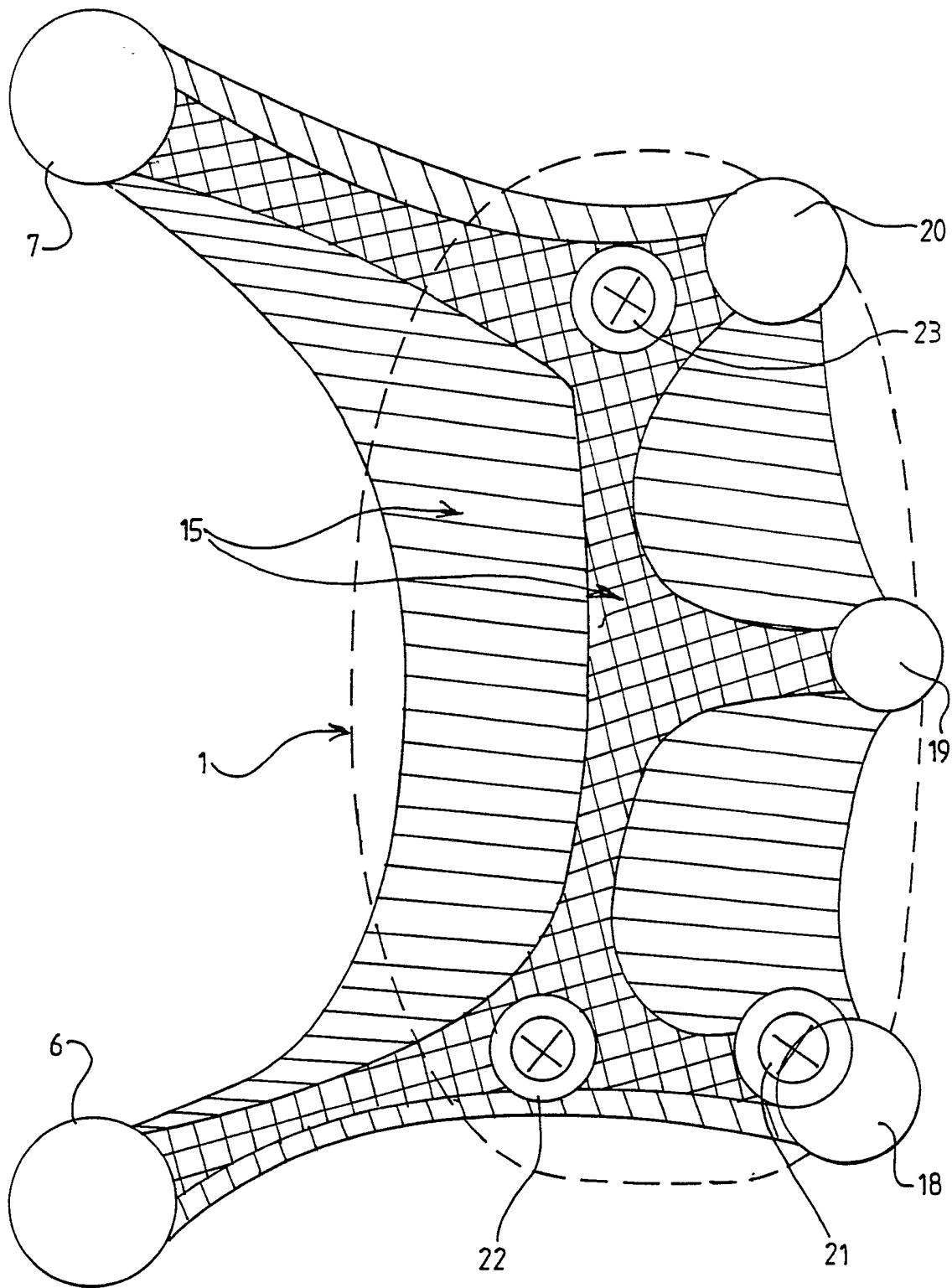


FIG 3

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The present invention relates to an elevation apparatus and, in particular, to an elevation apparatus for working in high places, for example, at the top levels of a room.

The building industry, for example, DIY and professional builders, decorators, plasterers, painters, ceiling installers and electricians, have previously relied on ladders, steps and/or trestles, or other such apparatus presently available on the market, for working in high places, for example, at the top levels of a room. This usually requires the presence of an extra person to hold the ladder, steps or trestle and such methods are not only inefficient, time consuming and inconvenient, but also restrict the mobility of the user.

The aim of the present invention is to provide a more convenient means for reaching the top levels of a room or for working at heights, which allows for both increased mobility and high stability and which, therefore, enables the user to work more efficiently without having to use the above-mentioned apparatus or to rely on the help of an extra person. Other advantages of the present invention include increased comfort for the user when working (less stress to various parts of the body) and the fact that the elevation apparatus of the present invention has been designed to be easily assembled and disassembled and, thus, easily transported.

According to the present invention, there is provided an elevation apparatus which comprises a base, at least one leg mountable on the base and a platform, mountable on the at least one leg, for supporting a foot,

wherein, the base extends further on one side of the platform than on the other.

Preferably, the base of the elevation apparatus extends further on the outer foot side than on the inner foot side of the platform. This provides the elevation apparatus with increased stability.

Preferably, the outer limits of the outer foot side of the base are defined by two points, one at the back and one at the front of the outer foot side of the base and the outer limits of the inner foot side of the base are defined by three points, one at the back, one at the side and one at the front of the inner foot side of the base.

Preferably, the base comprises strengthening webbing.

Preferably, the at least one leg is extendably adjustable to different heights. This may enable the user to work at heights of up to, for example, 3 metres.

Preferably, a strap is provided on the platform for, in use, restraining a foot and preferably the platform further comprises a heel guard for positioning a foot on the platform. These provide added comfort to the user and, again, increased stability.

Preferably, the elevation apparatus further comprises a stabilizer bar mountable on the platform at a position, in use, adjacent the inside of a foot. The stabilizer bar may be curved around the position in which a foot is, in use, placed. This is an added safety precaution to prevent the user from damaging ankle, hip and/or knee joints. In addition, the stabilizer bar may

act as a handle to aid the user in mounting and dismounting the elevation apparatus and gives the user an added sense of stability.

In order to illustrate the features and advantages of the present invention, the present invention will be further described, by way of example only, and with reference to the accompanying drawings in which:

FIGURE 1 shows a rear view of an elevation apparatus according to the present invention;

FIGURE 2 shows a view of the elevation apparatus of Figure 1 from the outer foot side; and

FIGURE 3 shows a plan view of a base of an elevation apparatus according to the present invention.

Referring to Figures 1 and 2, an elevation apparatus, according to the present invention, comprises a platform 1 for supporting a foot (not shown), three telescopic legs 2,3 and a base 4.

The platform 1 is approximately 34.9 cm long. A foot (not shown) is positioned on the platform 1 by means of a heel guard 5 and is restrained on the platform 1 by means of a Velcro (Trade Mark) strap 6, or any other suitable restraining strap.

A stabilizer bar 7 is detachably mounted on the platform 1 at a position, in use, adjacent the inside of a foot (not shown). The stabilizer bar 7 comprises two sloping struts 8,9 inclined at an angle to the vertical and joined by a horizontal bar 10. The front strut 9 is inclined at a larger angle to the vertical than the rear

strut 8, as shown in Figure 2. The horizontal bar 10 is approximately 20.3 cm long. The stabilizer bar is approximately 41.9 cm in height and the horizontal bar 10 is curved around the position in which a foot (not shown) is positioned on the platform 1. The stabilizer bar 7 is positioned on the platform 1. The stabilizer bar 7 is mounted on the platform 1 by means of four screws or fixings 11 so that the stabilizer bar 7 may be easily assembled and disassembled from the platform 1. The stabilizer bar is an added safety precaution to prevent the user from damaging ankle, hip and/or knee joints and also acts as a handle to aid the user in mounting and dismounting the elevation apparatus, while, at the same time, giving the user an added sense of stability.

The platform 1 is supported by the three telescopic legs 2,3. The telescopic legs 2,3 are extendably adjustable to different heights by means of holes 12, which are positioned at intervals along the telescopic legs 2,3 and screws 13, which fit into the holes 12 to hold the telescopic legs 2,3 at a selected level. The telescopic legs are adjustable from a height of approximately 30.5 cm to 91.4 cm. In addition, the use of removable screws 13 enables the elevation apparatus to be easily assembled and disassembled.

The telescopic legs 2,3 are mounted on the base 4, two telescopic legs 3 being positioned at the rear of the base 4 (below the heel guard 5) and the other telescopic leg 2 being positioned at the front of the base 4. The two telescopic legs 3 at the rear of the base 4 are positioned approximately 12.7 cm apart, and form the ends of a base of an isosceles triangle, of which the telescopic leg 2 forms the apex. The two telescopic legs 3 positioned at the rear of the base 4 are bridged by a strengthening bar 14, for added stability.

The base 4 is shown in more detail in Figure 3. The base 4 comprises strengthening webbing 15, as shown by the shaded portions in Figure 3.

The outer limits of the base 4 are defined by five limiting points 16,17,18,19,20, which are in the form of circular discs and lie flat against the ground (not shown). The limiting points 16,17,18,19,20 are positioned with one 16 at the back and one 17 at the front of the outer foot side of the base 4, and one 18 at the back, one 19 at the side and one 20 at the front of the inner foot side of the base 4. The limiting points 16 and 17 at the back and the front of the outer foot side of the base 4 are further to the side and to the front or back respectively of the foot than the limiting points 18,19,20 at the back, side and front of the inner foot side of the base 4. Thus, the base 4 extends further on the outer foot side of the platform 1 than on the inner foot side of the platform 1, as shown in Figure 1, and by the dotted line in Figure 3, and this arrangement provides the elevated apparatus of the present invention with high stability.

Three apertures 21,22,23 are positioned in the base 4 in the form of an isosceles triangle and correspond in size to the telescopic legs 2,3 which slot into the apertures 21,22,23. The rear telescopic legs 3 slot into the apertures 21 and 22 positioned at the rear of the base 4, thus forming the ends of the base of the isosceles triangle and the front telescopic leg 2 slots into the aperture 23 at the front of the base 4, thus forming the apex of the isosceles triangle. The isosceles triangle formed by the apertures 21,22,23 in the webbing 15 is positioned nearer to the furthest extent of the inner foot side of the base 4 than to the furthest extent of the outer foot side of the base 4, as shown in Figure 3.

The webbing 15 extends to the limiting points 16,17,18,19,20 of the base 4 and not beyond. The strengthening webbing 15 is slightly raised from the limiting points 16,17,18,19,20 of the base 4 towards the outer edge of the apertures 21,22,23 for extra strength.

Also seen in Figure 3 is an outline (shown by the dotted line) of the position of the platform 1 of Figures 1 and 2 above the base 4.

The base 4, the telescopic legs 2,3, the platform 1 and the stabilizer bar 7 are reversibly connected to each other so that the elevation apparatus may be collapsed for easy and light transport.

CLAIMS:

1. Elevation apparatus which comprises a base, at least one leg mountable on the base and a platform, mountable on the at least one leg, for supporting a foot, wherein the base extends further on one side of the platform than on the other.

2. Elevation apparatus according to Claim 1, wherein the base extends further on the outer foot side than on the inner foot side of the platform.

3. Elevation apparatus according to Claim 1 or 2, wherein the base comprises strengthening webbing.

4. Elevation apparatus according to Claim 3, wherein the webbing extends to the outer limits of the base.

5. Elevation apparatus according to Claim 4, wherein the outer limits of the base are defined by at least three limiting points.

6. Elevation apparatus according to Claim 5, wherein at least two of the limiting points are on the outer foot side of the base and at least one of the limiting points is on the inner foot side of the base.

7. Elevation apparatus according to Claim 6, wherein the outer limits of the outer foot side of the base are defined by two points, one at the back and one at the front of the outer foot side of the base and wherein the outer limits of the inner foot side of the base are defined by three points, one at the back, one at the side and one at the front of the inner foot side of the base.

8. Elevation apparatus according to Claim 6 or 7, wherein a limiting point on the outer foot side of the base

is further away from the platform than a limiting point on the inner foot side of the base.

9. Elevation apparatus according to Claim 7 or 8, wherein the at least one leg is mountable on the base adjacent a limiting point at the back or front of the inner foot side of the base.

10. Elevation apparatus according to Claim 9, wherein the webbing is raised from a limiting point of the base towards the base of the at least one leg.

11. Elevation apparatus according to any one of the preceding Claims, wherein the at least one leg is extendably adjustable to different heights.

12. Elevation apparatus according to any one of the preceding Claims, wherein the at least one leg is receivable in an aperture in the base.

13. Elevation apparatus according to any one of Claims 1 to 11, wherein the at least one leg is welded to the base.

14. Elevation apparatus according to any one of the preceding Claims which comprises three legs.

15. Elevation apparatus according to Claim 14, wherein two legs are mountable at the rear of the base and one leg is mountable at the front of the base.

16. Elevation apparatus according to Claim 15, wherein the three legs are arrangable in the form of an isosceles triangle, the two rear legs forming the ends of the base

and the front leg forming the apex of the isosceles triangle.

17. Elevation apparatus according to any one of the preceding Claims, wherein a strap is provided on the platform for, in use, restraining a foot.

18. Elevation apparatus according to any one of the preceding Claims, wherein the platform further comprises a heel guard for positioning a foot on the platform.

19. Elevation apparatus according to any one of the preceding Claims, further comprising a stabilizer bar mountable on the platform at a position, in use, adjacent the inside of a foot.

20. Elevation apparatus according to Claim 19, wherein the stabilizer bar is curved around the position in which a foot is, in use, to be placed.

21. Elevation apparatus according to any one of the preceding Claims, wherein the base, the at least one leg, the platform and, optionally, the stabilizer bar are reversibly connectable to each other.

22. Elevation apparatus substantially as hereinbefore described with reference to and as shown in the accompanying drawings.

23. Any novel feature or combination of features described herein.

Relevant Technical fields

- (i) UK Cl (Edition K) A3B (B8B3); E1S (SLA1, SLM, SLN, SLG, SLX)
- (ii) Int Cl (Edition 5) A43B; A47C; E04G; E06C

Search Examiner

S J CHURCH

Databases (see over)

- (i) UK Patent Office
- (ii)

Date of Search

10 NOVEMBER 1992

Documents considered relevant following a search in respect of claims 1-22

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
X	GB 2031720 A (MILLER) See Figures 3 and 4	1 and 2
X	GB 1422671 (CRAMER IND) See Figures 1 and 2	1 and 2
A	US 3595339 (BALLARD) See whole of document	1



Categories of documents

X: Document indicating lack of novelty or of inventive step.

Y: Document indicating lack of inventive step if combined with one or more other documents of the same category.

A: Document indicating technological background and/or state of the art.

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