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(54) **TRAY**

TABLETT

PLATEAU

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EP 1 660 752 B1

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Description

[0001] This invention concerns a tray according to the preamble of claim 1, particularly but necessarily for holding tools, which tray can be attached to different kinds of ladders.

[0002] Such a tray is known from US-A-4,706,918.

[0003] Three kinds of ladders are in common use. The pole ladder comprises a pair of stiles with a plurality of rungs secured therebetween, and in portable form is in use leant against a wall or the like. The builder's stepladder (and a variant thereof known as a painter's stepladder, which should be deemed herein to be included within the term "builder's stepladder") comprises two frames joined together at the top with a hinge, one of the frames having a plurality of steps and the two frames being arranged to be opened to mutually inclined positions so that the ladder is self-supporting in use. The platform stepladder is similar to the builder's stepladder but has a platform extending between the frames in use and, extending above the hinge, a safety rail for a user standing on the platform.

[0004] It is well known that a tray may be attached to a ladder to provide a handy support for tools, workpieces, fasteners, paint etc. However, many jobs require the use of two or all three of the different kinds of ladder in common use, and previous trays are not readily transferable from one kind of ladder to another.

[0005] It is an object of the present invention to enable a tray to be attached to any one of the three common kinds of ladder.

[0006] Thus according to the invention there is provided a tray for attachment to different kinds of ladder with the features of claim 1, which tray comprises first attachment means configured to fit over the top of a builder's stepladder, second attachment means configured to fit over the safety rail of a platform stepladder and third attachment means configured to fit over a rung of a pole ladder.

[0007] In the invention the first attachment means, the second attachment means and the third attachment means are all comprised in one downwardly facing recess.

[0008] The tray preferably includes a plurality of compartments for tools or the like.

[0009] Other aspects of the invention will be apparent from the following description, which is made by way of example only with reference to the accompanying schematic drawings in which -

Figure 1 is a plan view of a tray which does not form part of the invention;

Figure 2 is a front view corresponding to *Figure 1*;

Figure 3 is an end view corresponding to *Figure 1*;

Figures 4, 5 and 6 are respectively a plan view, a side elevation and a front elevation of a second tray which does not form part of the invention; and

Figure 7 is a cross-section of an embodiment of the

invention, being a modification of the tray of *Figures 4 to 6* and enlarged relative thereto.

[0010] Referring first to *Figures 1 to 3*, the tray shown therein does not form part of the invention; it is formed from synthetic plastics material and comprises a body indicated at **10** and an upstanding handle **12** whereby the tray may be carried. As can be seen in *Figure 1*, the body **10** is formed with a plurality of compartments for holding tools, fasteners, workpieces etc. The underside **14** of the body **10** is generally flat so that the tray may be securely put down on a floor or work surface. The front face **16**, rear face **18** and both side faces **20** of the body **10** are all inclined and an extension **22** extends forward of the front face **16**.

[0011] Within the body **10** is formed a first downwardly facing recess **24** (shown in broken lines in *Figure 3*) having opposed walls **26** which are mutually inclined. Those skilled in building and allied trades will know that a builder's stepladder has two frames, one carrying steps, which are joined by a hinge at the top and in use are mutually inclined. Thus the recess **24** is configured to fit over the top of a builder's stepladder in use with the walls **26** engaging the mutually inclined frames of the ladder, and so provides attachment means for attaching the tray to a builder's stepladder.

[0012] Extending from the underside **14** of the forward extension **22** is a second recess **28** having a base **30** and opposed walls **32**. The walls **32** are mutually parallel, inclined and spaced apart. Those skilled in building and allied trades will know that a platform stepladder has a safety rail (not shown) comprising two side members connected at the top by a cross member. Thus the recess **28** is configured to fit over the safety rail of a platform stepladder, the base **30** sitting on the cross member thereof, and so provides attachment means for attaching the tray to a platform stepladder.

[0013] Moulded into or otherwise secured to the front face **16** of the body **10** are two downwardly facing hooks **34**, one each side of the extension **22**. Those skilled in building and allied trades will know that a pole ladder comprises two stiles with a plurality of rungs secured therebetween, and in use is leant against a wall or the like. The hooks **34** are arranged to fit over a rung of such a ladder, the inclined front face **16** of the body **10** then bearing on the inclined stiles of the ladder. Thus the hooks **34** and the inclined front face **16** provide attachment means for attaching the tray to a rung of a pole ladder.

[0014] The recess **28** may have closed ends. Or, in place of the hooks **34**, the recess **28** may be configured to fit over a rung of a pole ladder. Also the tray may be a roller tray for painters and decorators.

[0015] Another form of tray which does not form part of the invention is shown in *Figures 4 to 6*. This tray has an upstanding handle **40** cut away at **42** to receive a user's hand when the tray is carried and turned down at **44** to fit over the rung of a pole ladder or the rail of a

platform stepladder. When this tray is so fitted, two spaced apart recesses **46** receive the side members of the platform stepladder or the stiles of the pole ladder, as the case may be. Not detailed in *Figures 4 to 6*, this tray also has a recess in its underside whereby it may be located on the top of a builder's stepladder, like the embodiment of *Figures 1 to 3*.

[0016] An embodiment of the invention is shown in *Figure 7*. This embodiment is a modification of the tray shown in *Figures 4 to 6*. As with the tray of *Figures 4 to 6*, the tray of *Figure 7* has two spaced apart recesses **50** to receive the side members of a platform stepladder or the stiles of a pole ladder. But instead of the handle **52** being formed to engage the rung of a pole ladder or the rail of a platform stepladder, the downwardly facing recess **54** is formed for this purpose. The recess **54** (which can be seen in *Figure 7* to have a stepped form in cross-section) combines all the functions of the recess **24**, the recess **28** and the hooks **34** of the tray shown in *Figures 1 to 3*, thus simplifying manufacture of the tray as a whole whilst also offering a variety of abutments for ladders of various dimensions.

[0017] From the foregoing description it will be understood that by means of the invention a tray for tools or the like may be quickly and conveniently attached to any one of a builder's stepladder, a platform stepladder and a pole ladder and may also be easily carried (with its contents) from one such ladder to another. This is of considerable advantage in jobs requiring the use of more than one kind of ladder. And, of course, a user does not need to purchase different kinds of trays for the different ladders, nor multiple tools etc.

[0018] A tray according to the invention may be modified in various ways without departing from the scope of the claims. For instance it may be provided with slots to receive a neck or shoulder strap, for increased utility. Other modifications will be apparent to those skilled in the building and allied trades.

Claims

1. A tray for attaching to different kinds of ladder, comprising a base and a peripheral wall extending upwardly from and around the base, wherein the base defines a downwardly-facing recess (**54**) having a top and two generally inclined sides, the sides being stepped such that in use the downwardly-facing recess fits alternatively over the safety rail of a platform stepladder, the rung of a pole ladder and the top of a builder's stepladder,
characterised in that the wall defines two forwardly-facing recesses (**46**) each having a back wall, an inner side wall and an outer side wall that defines an end wall of the downwardly-facing recess, the forwardly-facing recesses when in use on a pole ladder receiving the stiles of the pole ladder and when in use on a platform stepladder receiving the uprights

of the safety rail.

Patentansprüche

1. Eine Ablageschale zur Befestigung an verschiedenen Arten von Leitern, die über einen Boden und über eine vom Boden nach oben strebende und den Boden umfassende Umwandung verfügt, wobei der Boden eine nach unten offene Ausbuchtung (**54**) mit einem oberen Abschluss und zwei insgesamt geneigten Seiten aufweist; die Seiten sind stufenförmig, sodass bei der Verwendung die nach unten offene Ausbuchtung über die Sicherheitsbrücke einer Plattform-Stufenleiter, die Sprosse einer Sprossenleiter und das obere Ende einer Stufenleiter passt; die Umwandlung weist zwei nach vorn offene Ausbuchtungen (**46**) auf, die jeweils über eine Rückwand, eine innere Seitenwand und eine äußere Seitenwand verfügen, die gleichzeitig eine Rückwand der nach unten offenen Ausbuchtung darstellt; in die nach vorn offenen Ausbuchtungen fügen sich bei Verwendung mit einer Sprossenleiter die Holme der Sprossenleiter und bei Einsatz mit einer Plattform-Stufenleiter die Querstreben der Sicherheitsbrücke.

Revendications

1. Une tablette qui peut se fixer à différentes sortes d'échelles, comprenant une base et une paroi périphérique s'étendant vers le haut à partir de et autour de la base, où la base forme un renforcement pointant vers le bas (**54**) ayant une partie supérieure et deux côtés généralement inclinés, les côtés ayant une forme d'escalier de telle sorte que lors de l'utilisation le renforcement pointant vers le bas s'adapte à la fois sur un garde-corps d'un escabeau de plate-forme, sur un barreau d'une échelle pliante et sur la partie supérieure d'un escabeau de construction. La caractéristique principale de cette invention étant que la paroi forme deux renforcements pointant vers l'avant (**46**) chacun d'entre eux ayant une paroi arrière, une paroi tournée vers l'intérieur et une paroi tournée vers l'extérieur qui forment une paroi d'extrémité du renforcement pointant vers le bas. Lors de l'utilisation sur une échelle pliante, les renforcements pointant vers l'avant reçoivent les montants de l'échelle pliante et en cas d'utilisation sur un escabeau de plate-forme, les renforcements reçoivent les montants du garde-corps.

Fig 1

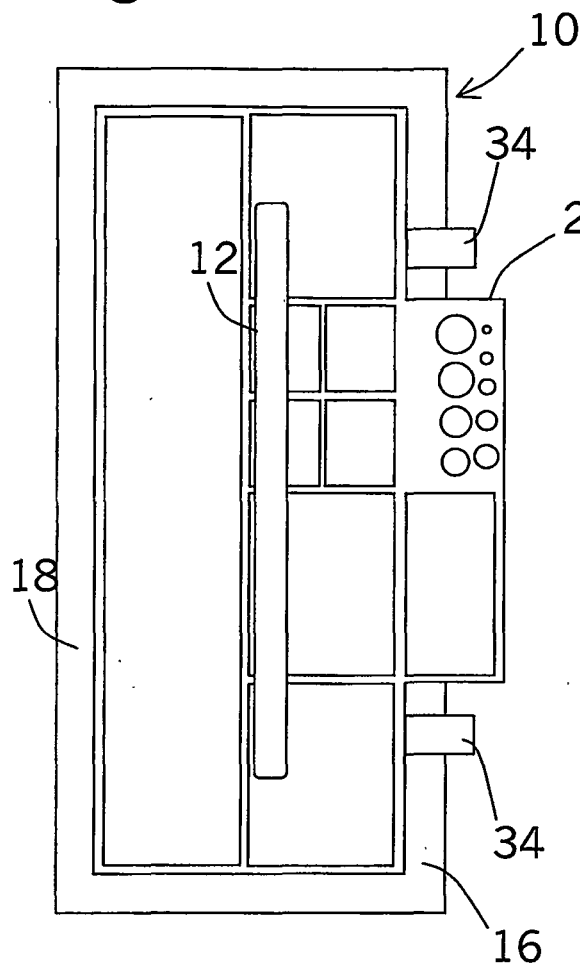


Fig 2

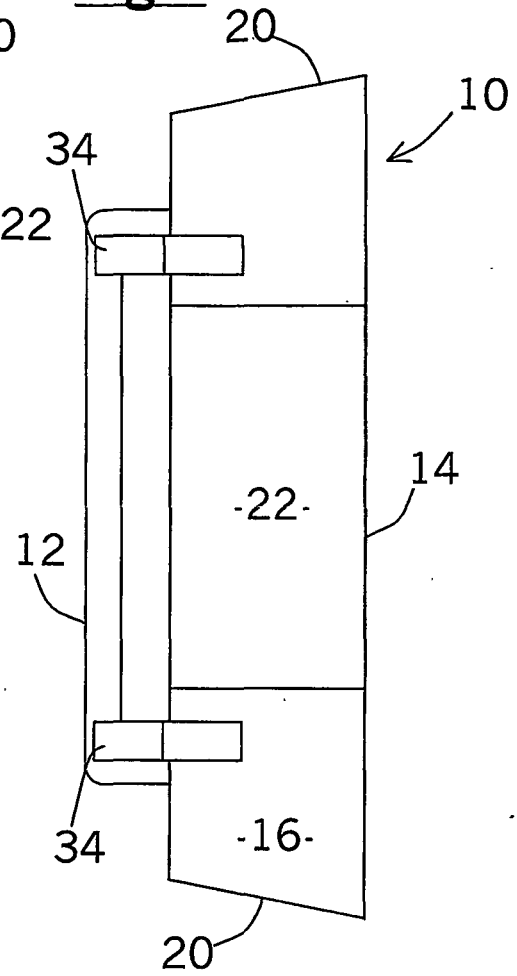


Fig 3

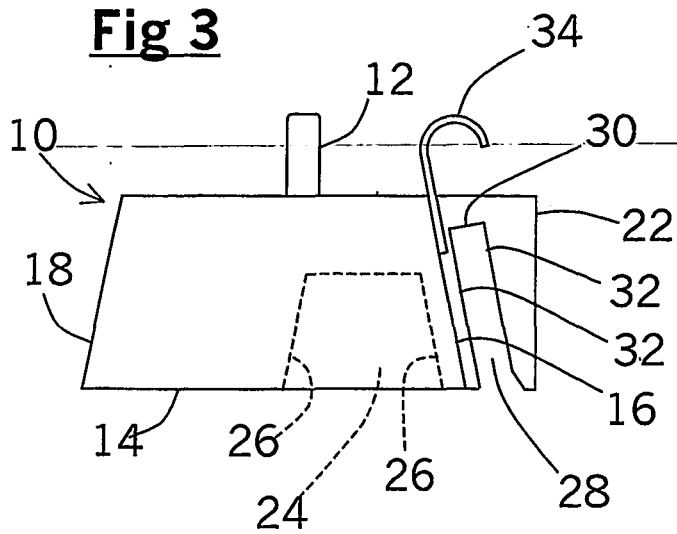


Fig 4

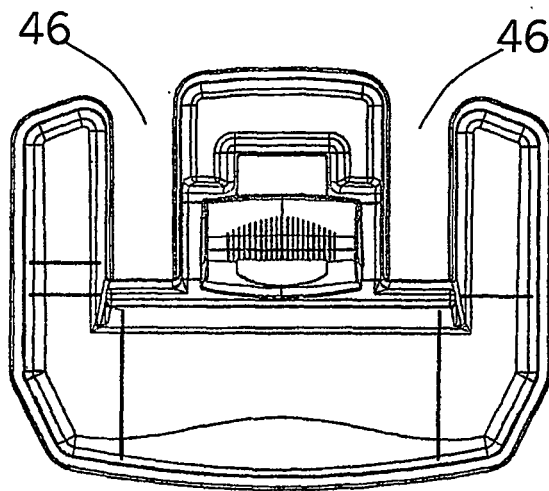


Fig 5

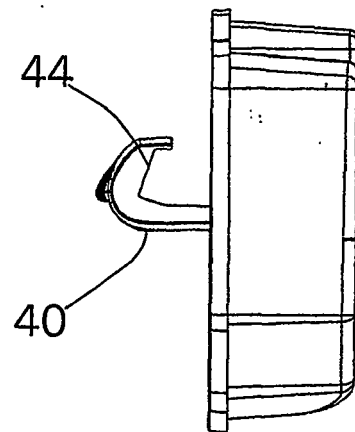


Fig 6

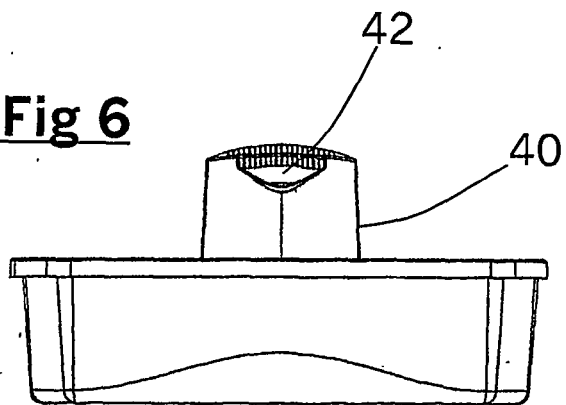
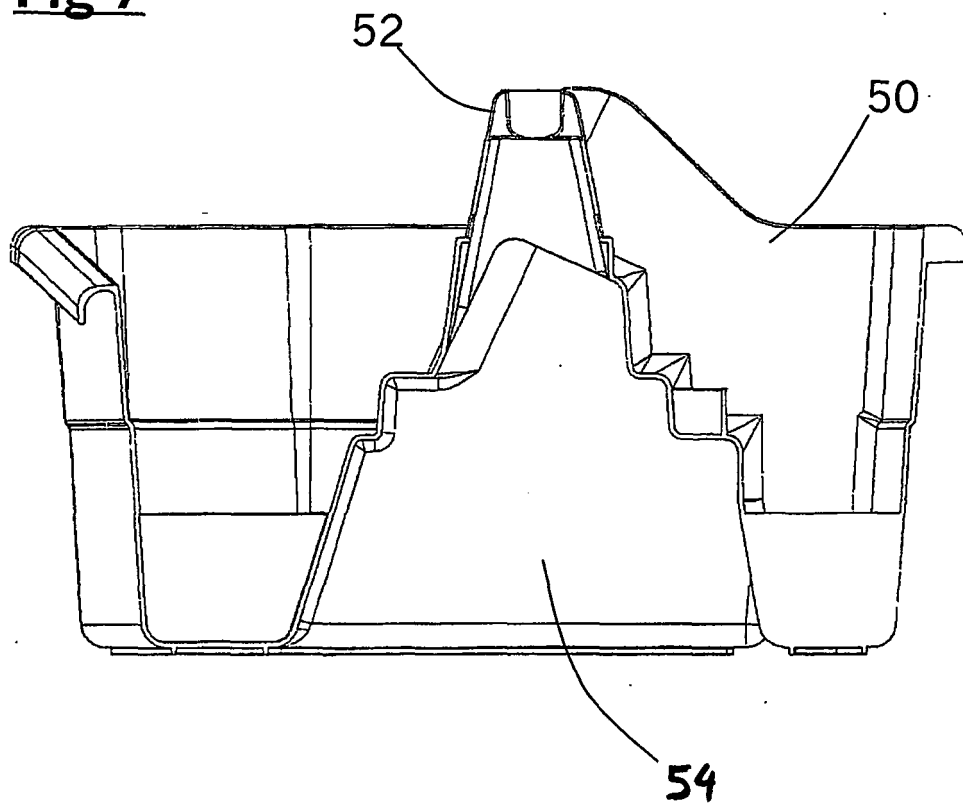


Fig 7



REFERENCES CITED IN THE DESCRIPTION

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