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(54) **A lamp with a strap, specifically a work lamp**

Eine Lampe mit einem Riemen, insbesondere eine Arbeitslampe

Une lampe avec lanière, en particulier une lampe de travail

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Description

[0001] The invention relates to a work lamp comprising a lamp housing and a light source and a strap secured to the lamp for temporary attachment of the lamp, said strap having a number of coupling means distributed along the strap. The term "work lamp" does not restrict the invention to be used in connection with crafts; rather it is to be understood as any lamp for temporary use.

[0002] German published patent application No. 31 16317 discloses a lamp for emergency signalling or the like, which lamp may be suspended by means of a strap attached to the lamp, said strap having a number of slots whereby the strap can be secured on a nail, and moreover, at its end, the strap is provided with a coupling means that can be hooked around the strap itself.

[0003] Document GB 2 356 448 also shows such a work lamp.

[0004] The invention concerns a work lamp which, during use, distinguishes itself over the prior art lamp in that it is desirable that the lamp can be secured quickly in such a manner that it can be caused to illuminate a working or other area in a stable manner in any given direction. This is not possible by the prior art technique.

[0005] The object of the invention is to provide a work lamp that can be secured onto largely all building elements and pointing in any direction, whereby any working area can be illuminated by the lamp.

[0006] This object is accomplished in that the lamp has at least one coupling means for cooperating with the coupling means along the strap. Since now the strap engages in two locations on the lamp, it is possible to arrange it with various orientations, it being possible to wind the strap around a building part, eg pipes or beams, and subsequently to secure it in two locations on the lamp, whereby it can be fixated in many different positions.

[0007] For instance, the strap could be integral with the lamp housing, but preferably the strap is secured in a replaceable manner on the lamp, thereby enabling that a new strap can mounted in case the old one should break.

[0008] According to one embodiment the strap can be secured adjustably. Irrespective of its attachment, the strap is preferably arranged on the back of the lamp housing.

[0009] The number of options available for arrangement is considerably increased by the strap being elastic. The strap may comprise elastic and relatively inelastic areas, but preferably the strip is configured as a rubber strap. The number of options available for attachment is further increased by the strap being configured with a surface that provides a high degree of frictional resistance.

[0010] According to a preferred embodiment the strap is configured with open holes, eg quadrangular holes with a pair of opposed internal edges that are essentially in parallel with the strap. Thereby improved fixation is accomplished, and when the strap is elastic the advantage is accomplished that the hole is deformed uniformly thereby facilitating arrangement of the strap on a coupling means on the lamp which is preferably configured as a hook for being received in a hole along the strap. The hook can be configured such that it may cooperate with the strap in different directions for the strap. In accordance with one embodiment it may be a double hook, whereby the strap can be reliably secured in two opposed directions.

[0011] Alternatively or as a supplement the strap may be provided with protruding studs for receiving one or more holes in the lamp for temporary interconnection thereof to each other.

[0012] It is not crucial to the invention where on the lamp the coupling means is arranged, but in a preferred embodiment a coupling means is arranged on the front of the lamp housing, whereby the lamp can very easily be fixated on vertical or horizontal building parts. The coupling means on the lamp may also be provided on a bracket which is turnably secured onto the lamp housing, where the bracket may be configured as a handle or a base. Turning of the handle or the base provides further options for arrangement of the lamp in many stable positions.

[0013] For use in connection with relatively large lamps, a preferred embodiment provides the option of arranging several straps simultaneously on the lamp, in such a manner that each strap is secured in two locations on the lamp. Preferably the coupling means are arranged on the lamp housing in proximity of a connection for an electric wire, said lamp thereby exhibiting the best possible directional stability, meaning that its orientation is preserved even in case a given pull is exerted on the wire.

[0014] The invention will be explained in further detail in the description of an embodiment with reference to the drawing, wherein:

Figures 1-8 shows different options available for suspension of the embodiment;

[0015] The examples of the many options available with the lamp according to the invention are far from exhaustive.

[0016] Reference is now made to Figure 1 which shows a lamp comprising a lamp housing 1 and comprising a lamp glass, behind which a reflector 2 is located and one or more light sources 3. On the lamp glass, ie the front of the lamp, a hook 4 is provided which is configured to be received in one of the holes shown by 5 in a strap 6 which is preferably made of rubber. The strap is secured onto the rear of the lamp housing as is shown by 7 in Figure 2. Figure 2 shows the lamp suspended around eg a horizontal pipe 8, said strap also being secured to the front of the lamp housing as is shown in Figure 1. Figure 2 shows the lamp suspended vertically below the pipe 8; however, if it desired that the lamp is to shed light eg diagonally upwards, one may wind the strap one more time around the pipe 8, and depending

on which hole is used for providing attachment around the hook 4, one may tighten the lamp to shed light diagonally upwards.

[0017] Figure 2 also shows a handle 9 which is turnably secured to the lamp housing 1 around a journaling, preferably a frictional journaling or a journaling for incremental fixation of the handle in different positions. By a preferred embodiment an electric wire 10 is taken out coaxially with the axis of swinging of the journaling.

[0018] In Figure 3 the handle 9 is turned upwards, and the strap 6 is attached to the top face of the handle, a hook being provided on the handle identical with the one shown by 4 in Figure 1 (see Figure 4), whereby, during transport of the lamp, the wound wire can be secured by means of the strap 6 as shown in Figure 3. Here, it may also be convenient, albeit not necessary, for the strap 6 to be elastic.

[0019] Figure 4 shows how the handle 9 is preferably provided with a hook 14 for cooperating with the strap, whereby the strap can be secured against pulls in mutually opposite directions. Figure 4 also shows how the rear of the lamp can be configured with power outlets 13 that may advantageously be arranged like the wire 10, meaning that the orientation of the lamp is not significantly influenced when the electric cables are pulled.

[0020] Figures 5 and 6 show a further use of the lamp according to the invention where the strap 6 is arranged around a horizontal building part 11. Here the great advantage is shown of providing a hook like the one shown by 4 in Figure 1 on the handle 9, since, by turning of the handle - either incrementally or continuously with friction - it is possible to arrange the lamp in almost any direction around the building part 11. In case of a very heavy lamp it is also an option that the lamp has more than one strap 6, eg two straps that may be arranged in succession in figures 5 and 6. By the embodiments shown in figures 5 and 6 the straps may conveniently exhibit a certain frictional resistance around the building part, and the securing force could be adapted to precisely the requisite degree by adequate tightening of the elastic strap.

[0021] The term 'work lamp' does not restrict the invention to be advantageous only in connection with the exercise of crafts; rather, the lamp is also suitable for being used as temporary illumination for other purposes. For instance, the example shown in Figure 6 will be extremely suitable for mounting of a number of lamps underneath a canopy where the tube 11 can be a part of the canopy and where the canopy may shelter eg a pavement café or a green stall.

[0022] By the embodiment shown in Figure 1 the strap 6 is tightened relatively much, whereby the lamp housing 1 is caused to abut on an elongate building part 12. It will be understood that the lamp could be arranged as shown in Figure 1, irrespective of the orientation of the building part 12; albeit, of course, it also depends on the lamp's own weight.

[0023] Figures 7 and 8 show further examples of how the lamp may be secured, wherein, on the one hand, one uses the function mentioned in the context of Figure 1 to advantage, but also the circumstance that the handle 9 can be used as a further aid in reliably fixating the lamp in many different positions. It will be understood that, instead of the turnable handle 9, it is also an option to use a turnable base, since a base would contribute to the options of attachment in the same way as some of the above-described examples.

Claims

1. A work lamp for temporary attachment of the lamp to building elements in a working area comprising a front side with a light source and a reflector and comprising a rear side, **characterized in that** the lamp comprises an elastic strap (6) which is secured onto the rear side of the lamp, said trap comprises a plurality of holes coupling means (5) that are distributed along the strap for releasably cooperating with a complementary hook (4) on the lamp so that the strap in use can be secured adjustably on the lamp, depending on which hole is used.

2. A work lamp according to claim 1, **characterised in that** the strap is replaceably attached to the lamp.

3. A work lamp according to claim 2, **characterised in that** the strap is adjustably secured in its longitudinal direction.

4. A work lamp according to claims 1-3, **characterised in that** the surface of the strap has a high degree of frictional resistance.

5. A work lamp according to 1-4, **characterised in that** the hook is configured for being receivable in and able to secure the strap at in several orientations of the strap.

6. work lamp according to claim 5, **characterised in that** said hook is arranged on the front of the lamp housing.

7. A work lamp according to claims 1-6, **characterised in that** a hook is arranged on a bracket which is turnably secured to the lamp housing.

8. A work lamp according to claim 7 **characterised in that** the bracket is configured as a handle.

9. A work lamp according to claim 7, **characterised in that** the bracket is configured as a base.

10. A work lamp according to claims 1-9, **characterised in that** the lamp housing can cooperate with several straps at the same time.

11. A work lamp according to claims 1-10 and wherein the lamp housing comprises a coupling for an electric wire, **characterised in that** the hook on the lamp housing is arranged in proximity of the connection for the wire.

Patentansprüche

1. Arbeitslampe für das vorübergehende Anbringen der Lampe an Bauelementen in einem Arbeitsbereich, umfassend eine Vorderseite mit einer Lichtquelle und einem Reflektor und umfassend eine Rückseite, **dadurch gekennzeichnet, dass** die Lampe einen elastischen Riemen (6) umfasst, der auf der Rückseite der Lampe befestigt ist, wobei der Riemen mehrere Löcher (5) umfasst, die entlang des Riemens verteilt sind, zum lösbaren Zusammenarbeiten mit einem komplementären Haken (4) an der Lampe, so dass der Riemen bei Verwendung in Abhängigkeit davon, welches Loch verwendet wird, justierbar an der Lampe angebracht werden kann.

2. Arbeitslampe nach Anspruch 1, **dadurch gekennzeichnet, dass** der Riemen austauschbar an der Lampe befestigt ist.

3. Arbeitslampe nach Anspruch 2, **dadurch gekennzeichnet, dass** der Riemen in seiner Längsrichtung justierbar gesichert ist.

4. Arbeitslampe nach Anspruch 1-3, **dadurch gekennzeichnet, dass** die Oberfläche des Riemens einen hohen Grad an Reibungswiderstand aufweist.

5. Arbeitslampe nach Anspruch 1-4, **dadurch gekennzeichnet, dass** der Haken konfiguriert ist, dass er aufgenommen werden kann in und befestigt werden kann an dem Riemen in mehreren Orientierungen des Riemens.

6. Arbeitslampe nach Anspruch 5, **dadurch gekennzeichnet, dass** der Haken an der Front des Lampengehäuses angeordnet ist.

7. Arbeitslampe nach Ansprüchen 1-6, **dadurch gekennzeichnet, dass** der Haken an einer Halterung angeordnet ist, die drehbar an dem Lampengehäuse gesichert ist.

8. Arbeitslampe nach Anspruch 7, **dadurch gekennzeichnet, dass** die Halterung als ein Griff konfiguriert ist.

9. Arbeitslampe nach Anspruch 7, **dadurch gekennzeichnet, dass** die Halterung als eine Basis konfiguriert ist.

10. Arbeitslampe nach Ansprüchen 1-9, **dadurch gekennzeichnet, dass** das Lampengehäuse gleichzeitig mit mehreren Riemen zusammenarbeiten kann.

11. Arbeitslampe nach Ansprüchen 1-10 und wobei das Lampengehäuse eine Kupplung für einen elektrischen Draht umfasst, **dadurch gekennzeichnet, dass** der Haken an dem Lampengehäuse in der Nähe des Anschlusses für den Draht angeordnet ist.

Revendications

1. Lampe de travail destinée à être attachée temporairement à des éléments de construction dans une zone de travail comprenant un côté avant muni d'une source de lumière et d'un réflecteur et comprenant un côté arrière, **caractérisée en ce que** la lampe comprend une bande élastique (6) qui est fixée au côté arrière de la lampe et ladite bande comprend une pluralité de trous (5) qui sont distribués le long de la bande pour interagir de manière amovible avec un crochet complémentaire (4) sur la lampe de sorte que la bande, en cours d'utilisation, peut être fixée de manière ajustable sur la lampe en fonction du trou qui est utilisé.

2. Lampe de travail selon la revendication 1, **caractérisée en ce que** la bande est attachée de manière amovible à la lampe.

3. Lampe de travail selon la revendication 2, **caractérisée en ce que** la bande est fixée de manière ajustable dans son sens longitudinal.

4. Lampe de travail selon les revendications 1 à 3, **caractérisée en ce que** la surface de la bande présente un haut niveau de résistance au frottement.

5. Lampe de travail selon les revendications 1 à 4, **caractérisée en ce que** le crochet est configuré pour pouvoir se loger dans la bande et pour bloquer celle-ci dans plusieurs orientations de la bande.

6. Lampe de travail selon la revendication 5, **caractérisée en ce que** ledit crochet est disposé à l'avant du boîtier de la lampe.

7. Lampe de travail selon les revendications 1 à 6, **caractérisée en ce qu'**un crochet est disposé sur un support qui est fixé de manière rotative au boîtier de la lampe.

8. Lampe de travail selon la revendication 7, **caractérisée en ce que** le support est configuré sous la forme d'une poignée.

9. Lampe de travail selon la revendication 7, **caractérisée en ce que** le support est configuré sous la forme d'une base.

10. Lampe de travail selon les revendications 1 à 9, **caractérisée en ce que** le boîtier de la lampe peut interagir avec plusieurs bandes en même temps.

11. Lampe de travail selon les revendications 1 à 10 et selon laquelle le boîtier de lampe comprend un raccordement pour un fil électrique, **caractérisée en ce que** le crochet sur le boîtier de la lampe est disposé à proximité du raccordement pour le fil.

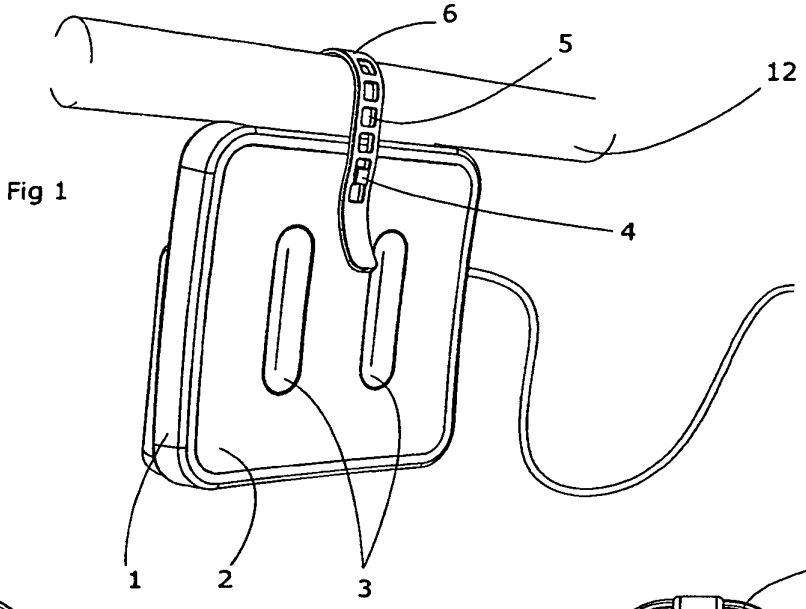


Fig 1

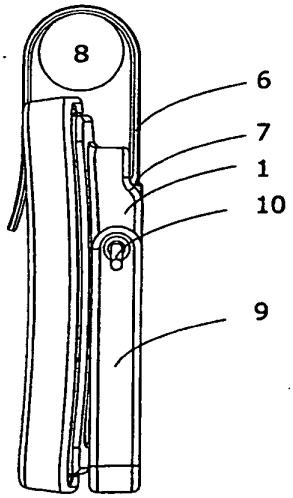


Fig 2

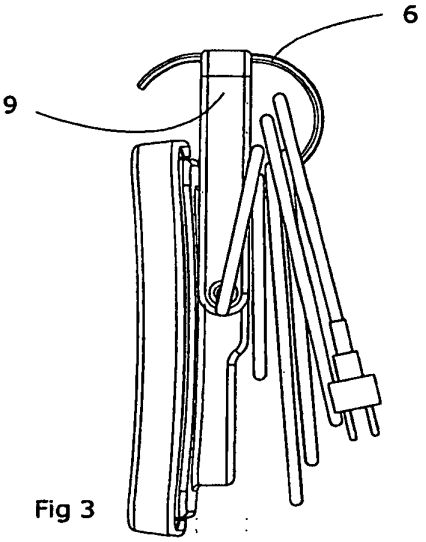


Fig 3

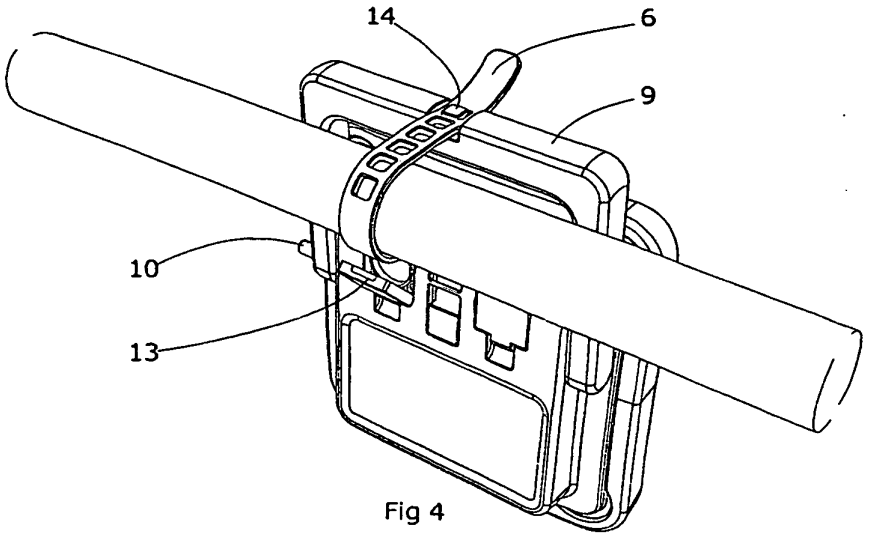


Fig 4

Fig 8

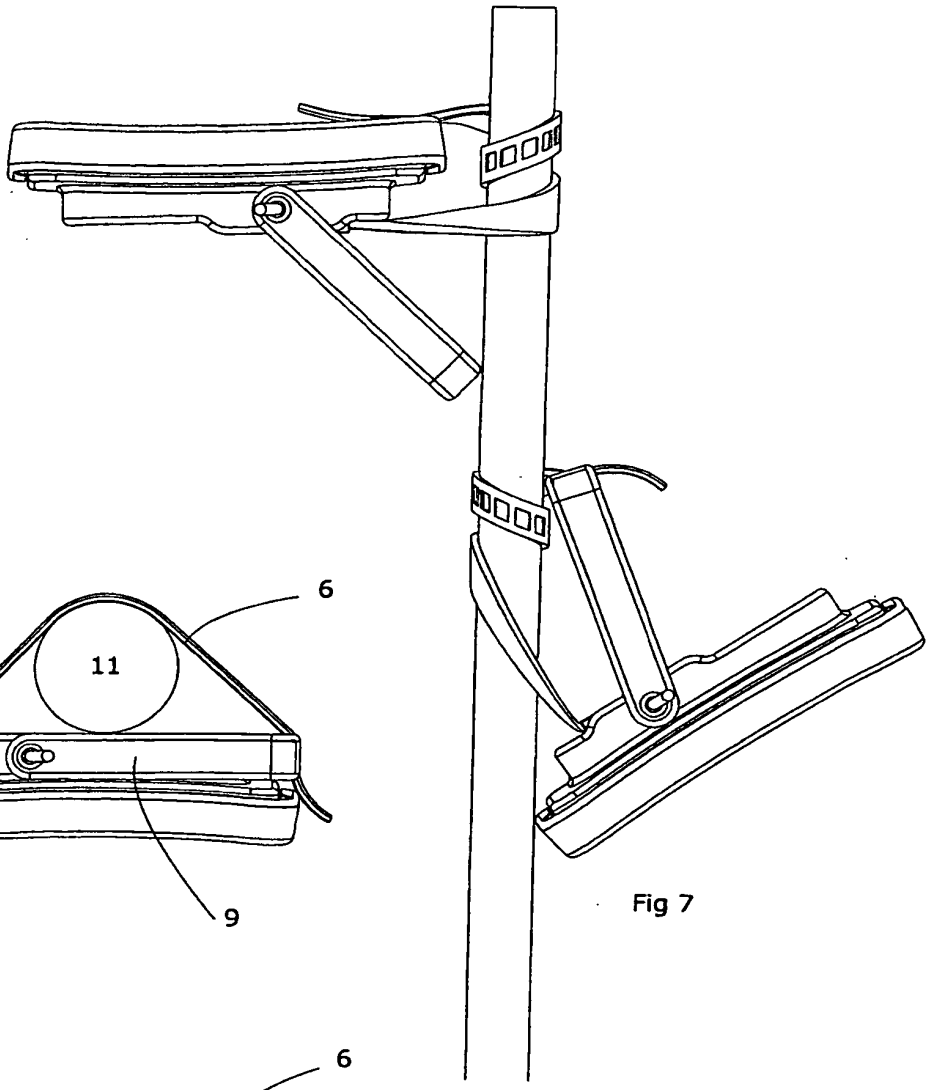


Fig 5

Fig 7

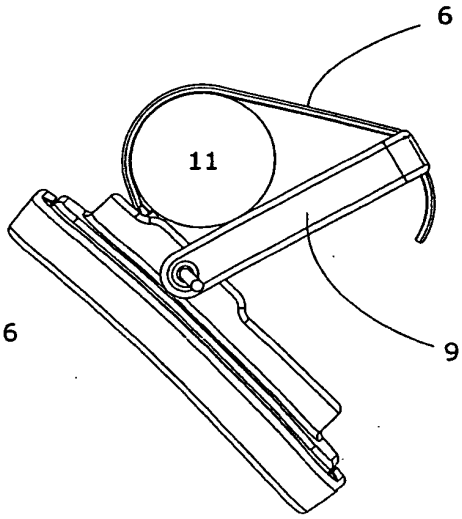


Fig 6

REFERENCES CITED IN THE DESCRIPTION

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