



(12) Utility Model Patent



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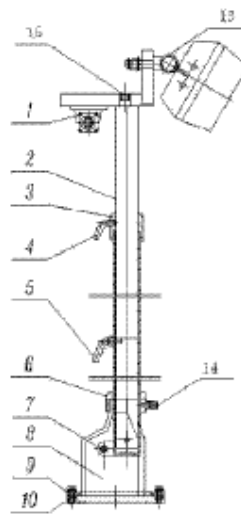
(54) Title of Utility Model

Novel Lighting Lamp Stand for Oil Drilling Rig Well Site

(57) Abstract of Disclosures

A novel lighting lamp stand for an oil drilling rig well site includes a lamp base, an upper half part of the lamp stand, a lower half part of the lamp stand, and a lamp head. The upper half part of the lamp stand is fitted on the lower half part of the lamp stand achieve to slide up and down and rotate. The lamp base is provided with a notch. A bottom portion of the lower half part of the lamp support is hingedly connected with the lamp base, and a hinging rotation direction thereof is aligned with the notch. A width of a portion, corresponding to the notch, of the bottom

portion of the lower half part of the lamp support is smaller than a width of the notch. The lamp head is arranged on the upper half part of the lamp support. Both the lighting height and lighting direction of the present utility model can be regulated and adjusted. When the present utility model is moved or transported, the lamp stand as a whole can be put down, thus there will be no problems of excessive height or collision during lamp support transportation. According to the present utility model, by means of the connection of a lamp cross bar, the installation distance of the lamp can be adjusted with the cross bar, which is suitable for various lamps of different lengths.



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1. A lighting lamp stand for an oil drilling rig well site, characterized in that the lighting lamp stand comprises a lamp base, an upper half part of the lamp stand, a lower half part of the lamp stand, and a lamp head, the upper half part of the lamp stand is fitted on the lower half part of the lamp stand achieve to slide up and down and rotate, the lamp base is provided with a notch, a bottom portion of the lower half part of the lamp support is hingedly connected with the lamp base, and a hinging rotation direction thereof is aligned with the notch, a width of a portion, corresponding to the notch, of the bottom portion of the lower half part of the lamp support is smaller than a width of the notch, and the lamp head is arranged on the upper half part of the lamp support.

2. The lighting lamp stand for an oil drilling rig well site according to claim 1, characterized in that the lighting lamp stand further comprises a lamp base bottom plate and a lamp base pressure plate, the lamp base pressure plate is fixed on the lamp base bottom plate, and the lamp base is rotatably arranged on the lamp base pressure plate.

3. The lighting lamp stand for an oil drilling rig well site according to claim 1 or 2, characterized in that the lighting lamp stand further comprises a pin shaft, and the bottom portion of the lower half part of the lamp stand is hingedly connected to the lamp base via the pin shaft.

4. The lighting lamp stand for an oil drilling rig well site according to claim 1 or 2, characterized in that the lighting lamp stand further comprises a fixing sleeve, and the lower half part of the lamp stand and the lamp base are fixed by the fixing sleeve.

5. The lighting lamp stand for an oil drilling rig well site according to claim 1 or 2, characterized in that the lighting lamp stand further comprises a bent handle top screw, a support top screw and a fixing screw, and a relative position between the lower half part of the lamp stand and the upper half part of the lamp stand is fixed by the bent handle top screw, the support top screw and the fixing screw.

6. The lighting lamp stand for an oil drilling rig well site according to claim 1 or 2, characterized in that the lamp head comprises a lamp fixing member and a lamp cross bar, the

lamp cross bar is arranged on the upper half part of the lighting lamp stand by the light fixing member, and a lamp is connected to the lamp cross bar.

Novel Lighting Lamp Stand for Oil Drilling Rig Well Site

Technical Field

[0001] The present utility model relates to the technical field of oil drilling equipment and devices, in particular to a novel lighting lamp stand for an oil drilling rig well site.

Background Art

[0002] The position and space for installing lighting lamps for existing oil drilling rigs are limited. The existing lighting lamp stands have the following deficiencies. 1. In the limited space, the lighting range cannot be adjusted, and the lighting angle cannot be adjusted, either. 2. The oil drilling rigs may be frequently moved after the well is finished. During the moving and transportation process, the existing lighting lamp stand may exceed the transportation height limit if it is not disassembled, and the transportation thereof may have safety issues. However, the processes of disassembly and assembly not only are troublesome, but also can easily lead to loss of accessories. 3. The height of the lighting lamp stands used for the existing drilling rig is fixed, the height thereof cannot be adjusted according to the lighting needs, and the lighting of various areas cannot be met.

Summary of the Utility Model

[0003] One object of the present utility model is to design a lighting lamp stand for an oil drilling rig well site to solve the deficiencies mentioned above.

[0004] To achieve the above object, the following technical solutions are employed by the present utility model.

[0005] A lighting lamp stand for an oil drilling rig well site includes a lamp base, an upper half part of the lamp stand, a lower half part of the lamp stand, and a lamp head. The upper half part of the lamp stand is fitted on the lower half part of the lamp stand achieve to slide up and down and rotate. The lamp base is provided with a notch. A bottom portion of the lower half part of the lamp support is hingedly connected with the lamp base, and a hinging rotation direction thereof is aligned with the notch. A width of a portion, corresponding to the notch, of the bottom portion of the lower half part of the lamp support is smaller than a width of the notch. The lamp head is arranged on the upper half part of the lamp support.

[0006] The lighting lamp stand further includes a lamp base bottom plate and a lamp base pressure plate, the lamp base pressure plate is fixed on the lamp base bottom plate, and the lamp base is rotatably arranged on the lamp base pressure plate.

[0007] The lighting lamp stand further includes a pin shaft, and the bottom portion of the lower half part of the lamp stand is hingedly connected to the lamp base via the pin shaft.

[0008] The lighting lamp stand further includes a fixing sleeve, and the lower half part of the lamp stand and the lamp base are fixed by the fixing sleeve.

[0009] The lighting lamp stand further includes a bent handle top screw, a support top screw and a fixing screw, and a relative position between the lower half part of the lamp stand and the upper half part of the lamp stand is fixed by the bent handle top screw, the support top screw and the fixing screw.

[0010] The lamp head includes a lamp fixing member and a lamp cross bar, the lamp cross bar is arranged on the upper half part of the lighting lamp stand by the light fixing member, and a lamp is connected to the lamp cross bar.

[0011] The beneficial effects of the present utility model is summarized as follows:

[0012] 1. Both the lighting height and lighting direction of the present utility model can be regulated and adjusted.

[0013] 2. When the present utility model is moved or transported, the lamp stand as a whole can be put down, thus there will be no problems of excessive height or collision during lamp support transportation.

[0014] 3. According to the present utility model, by means of the connection of a lamp cross bar, the installation distance of the lamp can be adjusted with the cross bar, which is suitable for various lamps of different lengths.

Brief Description of Drawings

[0015] Fig. 1 is a structural schematic diagram of the present utility model in a front view direction.

[0016] Fig. 2 is a structural schematic diagram of the present utility model in a left view direction.

[0017] Fig. 3 is a schematic cross-sectional structural diagram of A-A in Fig. 2.

[0018] In the above figures, 1. explosion-proof connector; 2. upper half part of the lamp stand; 3. lower half part of the lamp stand (pole); 4. bent handle top screw; 5. support top screw; 6. fixing sleeve (locking device); 7. pin shaft; 8. lamp base; 9. lamp base pressure plate; 10. lamp base bottom plate; 11. lamp fixing member; 12. lamp cross bar (suspension device); 13. lamp head; 14. fixing screw; 15. guard wire apron.

Description of the Embodiments

[0019] In order to make the technical problems, technical solutions and beneficial effects solved by the present utility model clear, the present utility model will be further described in detail below in conjunction with the accompanying drawings and embodiments. It should be understood that the specific embodiments described herein are only used to explain the present utility model, and are not intended to limit the present utility model.

[0020] As shown in Fig. 1, a lighting lamp stand for an oil drilling rig well site includes a lamp base, an upper half part of the lamp stand, a lower half part of the lamp stand, and a lamp head. The upper half part of the lamp stand is fitted on the lower half part of the lamp stand achieve to slide up and down and rotate. The lamp base is provided with a notch. A bottom portion of the lower half part of the lamp support is hingedly connected with the lamp base, and a hinging rotation direction thereof is aligned with the notch. A width of a portion, corresponding to the notch, of the bottom portion of the lower half part of the lamp support is smaller than a width of the notch. The lamp head is arranged on the upper half part of the lamp support.

[0021] In some preferred embodiments, the lighting lamp stand further includes a lamp base bottom plate and a lamp base pressure plate, the lamp base pressure plate is fixed on the lamp base bottom plate, and the lamp base is rotatably arranged on the lamp base pressure plate. The lighting lamp stand further includes a pin shaft, and the bottom portion of the lower half part of the lamp stand is hingedly connected to the lamp base via the pin shaft. The lighting lamp stand further includes a fixing sleeve, and the lower half part of the lamp stand and the lamp base are fixed by the fixing sleeve.

[0022] In some more preferred embodiments, the lighting lamp stand further includes a bent handle top screw, a support top screw and a fixing screw, and a relative position between the lower half part of the lamp stand and the upper half part of the lamp stand is fixed by the bent handle top screw, the support top screw and the fixing screw. The lamp head includes a lamp

fixing member and a lamp cross bar, the lamp cross bar is arranged on the upper half part of the lighting lamp stand by the light fixing member, and a lamp is connected to the lamp cross bar.

[0023] A lamp stand part 2 and a lamp stand part 3 are two fully independent parts. The lamp stand part 3 is composed of 2" steel pipe by welding. The lamp stand part 2 is composed of 1 1/4 " steel pipe by welding. In an installation process, the lamp stand part 2 is inserted into the lamp stand part 3. After a lamp is suspended and installed on the lamp cross bar 12, the lamp stand is erected and then fixedly installed on the lamp base by a locking shaft 7. After the lamp stand is lifted to a required height, a support top screw is used to support the upper half part of the lamp stand that has been lifted; next the upper half part of the lamp stand that has been lifted is further locked by the fixing screw and the bent handle top screw on the lamp stand, so as to prevent the light stand from sliding down. There is a fixing plate 10 under the lamp base, which can be welded on the top of a platform of a part that needs lighting. The light base can be rotated by 360 degrees. The lamp stand can be used to illuminate with different angles for a well site.

[0024] Both the lighting height and lighting direction of the lamp stand can be regulated and adjusted. When the lamp stand is moved or transported, the lamp stand as a whole can be put down, thus there will be no problems of excessive height or collision during lamp support transportation. By means of the connection of a lamp cross bar, the installation distance of the lamp can be adjusted with the cross bar, which is suitable for various lamps of different lengths.

[0025] The present utility model has been described in detail above with reference to specific preferred embodiments. However, a person skilled in the art should understand that the present utility model is not limited to the embodiments described above. All modifications, equivalent replacements, etc. made within the principles of the present utility model shall be included in the scope of protection of the present utility model.

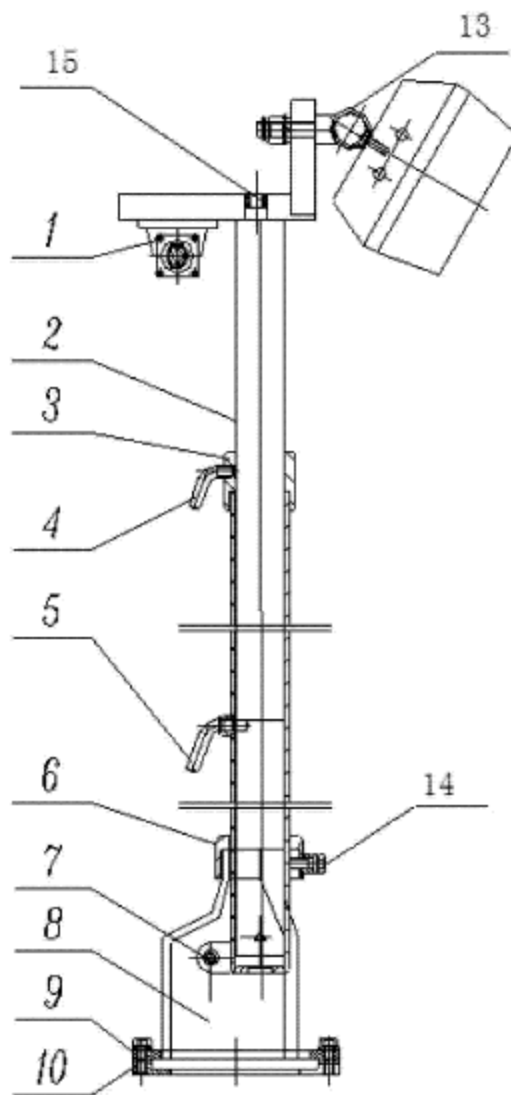


Fig. 1

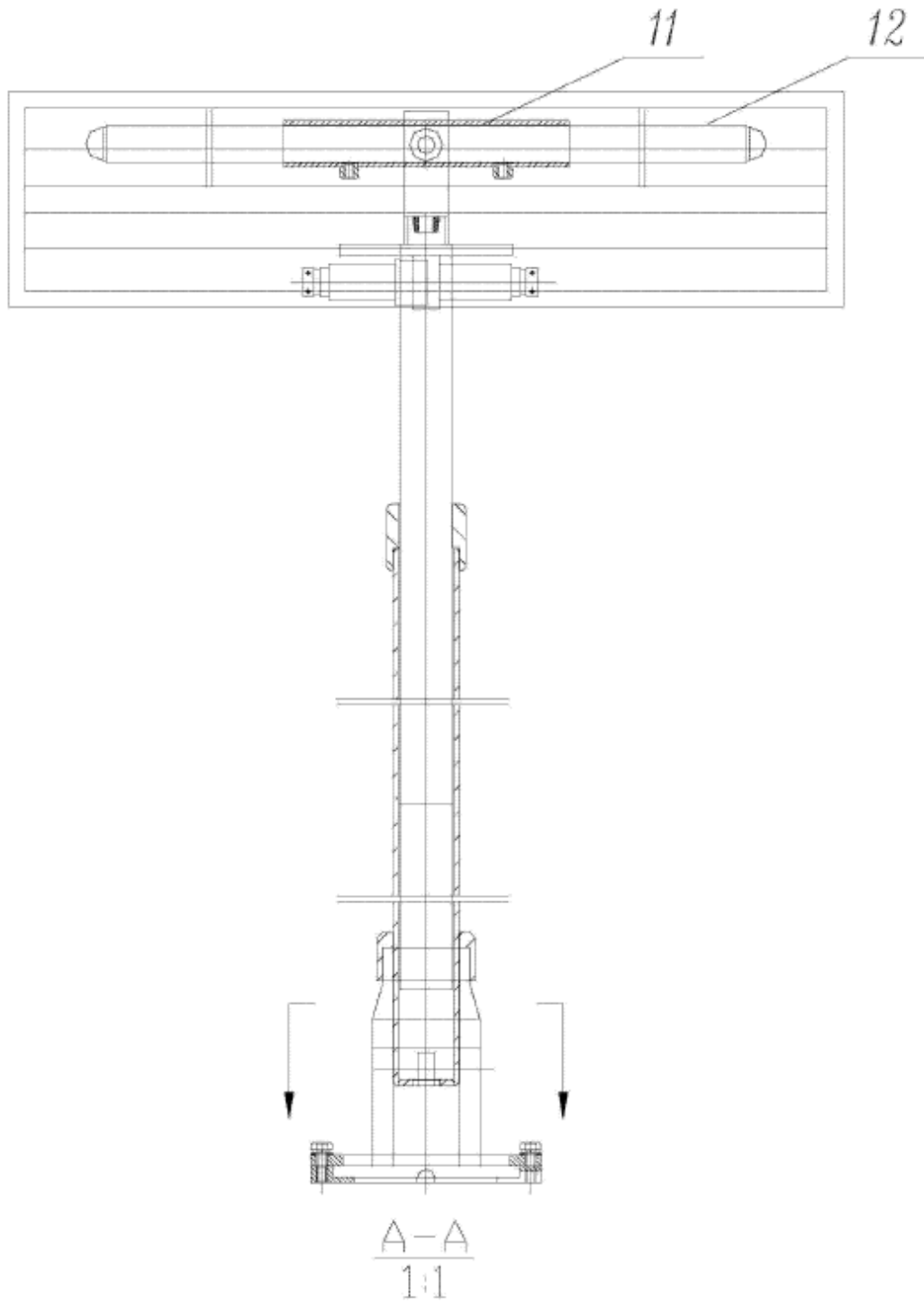
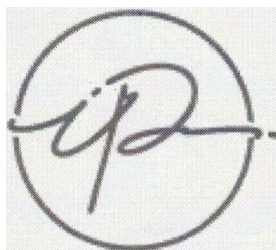


Fig. 2



Fig. 3

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March 28, 2023

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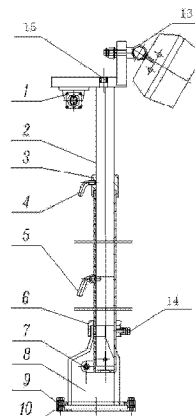
权利要求书1页 说明书2页 附图3页

(54) 实用新型名称

石油钻机井场新型照明灯架

(57) 摘要

一种石油钻机井场新型照明灯架,包括灯底座、灯架上半部、灯架下半部和灯头,所述灯架上半部通过套装在所述灯架下半部上实现上下滑动和旋转,所述灯底座上设有豁口,所述灯架下半部的底部与所述灯底座铰接连接并且铰接的旋转方向对准所述豁口,所述灯架下半部底部与所述豁口对应部分的宽度小于所述豁口的宽度,所述灯头设置在所述灯架上半部上。本实用新型照明高度及照明方向均可调整调节;本实用新型搬家运输时灯架整体可放倒,不会出现运输超高和碰撞灯具的问题;本实用新型灯具通过灯横杆的连接,在横杆上可调节灯安装间距,适用各种长短不同的灯具。



1. 一种石油钻机井场新型照明灯架,其特征在于,包括灯底座、灯架上半部、灯架下半部和灯头,所述灯架上半部通过套装在所述灯架下半部上实现上下滑动和旋转,所述灯底座上设有豁口,所述灯架下半部的底部与所述灯底座铰接连接并且铰接的旋转方向对准所述豁口,所述灯架下半部底部与所述豁口对应部分的宽度小于所述豁口的宽度,所述灯头设置在所述灯架上半部上。

2. 根据权利要求1所述的石油钻机井场新型照明灯架,其特征在于,还包括灯座底板和灯座压板,所述灯座压板固定在所述灯座底板上,所述灯底座可旋转的设置所述灯座压板上。

3. 根据权利要求1或2所述的石油钻机井场新型照明灯架,其特征在于,还包括销轴,所述灯架下半部的底部与所述灯底座之间通过所述销轴铰接连接。

4. 根据权利要求1或2所述的石油钻机井场新型照明灯架,其特征在于,还包括固定套,所述灯架下半部与所述灯底座之间由所述固定套固定。

5. 根据权利要求1或2所述的石油钻机井场新型照明灯架,其特征在于,还包括弯把顶丝、托头顶丝和固定螺丝,所述灯架下半部与所述灯架上半部之间的相对位置由所述弯把顶丝、所述托头顶丝和所述固定螺丝固定。

6. 根据权利要求1或2所述的石油钻机井场新型照明灯架,其特征在于,所述灯头包括灯固定件和灯横杆,所述灯横杆通过所述灯固定件设置在所述灯架上半部上,灯具连接在所述灯横杆上。

石油钻机井场新型照明灯架

技术领域

[0001] 本实用新型涉及石油钻井设备与装置技术领域，尤其是涉及一种石油钻机井场新型照明灯架。

背景技术

[0002] 现有的石油钻机安装照明灯具的位置、空间有限。而现有的灯架：1、在有限的空间中不可以进行照明范围的调节，调整不了照明的角度。2、石油钻机在完井后会经常搬家，在搬家运输过程中现有灯架不拆装会超出运输高度限制，运输也会出现不安全因素；但拆装时不仅麻烦，还容易造成配件丢失。3、现有钻机照明用灯架高度是一定的，不可以根据照明需要来调节高度，不能满足不同区域的照明。

实用新型内容

[0003] 本实用新型的目的在于设计一种石油钻机井场新型照明灯架，解决上述问题。

[0004] 为了实现上述目的，本实用新型采用的技术方案如下：

[0005] 一种石油钻机井场新型照明灯架，包括灯底座、灯架上半部、灯架下半部和灯头，所述灯架上半部通过套装在所述灯架下半部上实现上下滑动和旋转，所述灯底座上设有豁口，所述灯架下半部的底部与所述灯底座铰接连接并且铰接的旋转方向对准所述豁口，所述灯架下半部底部与所述豁口对应部分的宽度小于所述豁口的宽度，所述灯头设置在所述灯架上半部上。

[0006] 还包括灯座底板和灯座压板，所述灯座压板固定在所述灯座底板上，所述灯底座可旋转的设置所述灯座压板上。

[0007] 还包括销轴，所述灯架下半部的底部与所述灯底座之间通过所述销轴铰接连接。

[0008] 还包括固定套，所述灯架下半部与所述灯底座之间由所述固定套固定。

[0009] 还包括弯把顶丝、托头顶丝和固定螺丝，所述灯架下半部与所述灯架上半部之间的相对位置由所述弯把顶丝、所述托头顶丝和所述固定螺丝固定。

[0010] 所述灯头包括灯固定件和灯横杆，所述灯横杆通过所述灯固定件设置在所述灯架上半部上，灯具连接在所述灯横杆上。

[0011] 本实用新型的有益效果可以总结如下：

[0012] 1，本实用新型照明高度及照明方向均可调整调节；

[0013] 2，本实用新型搬家运输时灯架整体可放倒，不会出现运输超高和碰撞灯具的问题；

[0014] 3，本实用新型灯具通过灯横杆的连接，在横杆上可调节灯安装间距，适用各种长短不同的灯具。

附图说明

[0015] 图1为本实用新型主视方向的结构示意图。

[0016] 图 2 为本实用新型左视方向的结构示意图。

[0017] 图 3 为本图 2 中 A-A 向的剖视结构示意图。

[0018] 其中,1、防爆连接器;2、灯架上半部;3、灯架下半部(立杆);4、弯把顶丝;5、托头顶丝;6、固定套(锁紧装置);7、销轴;8、灯底座;9、灯座压板;10、灯座底板;11、灯固定件;12、灯横杆(悬挂装置);13、灯头;14、固定螺丝;15、护线胶圈。

具体实施方式

[0019] 为了使本实用新型所解决的技术问题、技术方案及有益效果更加清楚明白,以下结合附图及实施例,对本实用新型进行进一步详细说明。应当理解,此处所描述的具体实施例仅仅用以解释本实用新型,并不用于限定本实用新型。

[0020] 如图 1 所示的一种石油钻机井场新型照明灯架,包括灯底座、灯架上半部、灯架下半部和灯头,所述灯架上半部通过套装在所述灯架下半部上实现上下滑动和旋转,所述灯底座上设有豁口,所述灯架下半部的底部与所述灯底座铰接连接并且铰接的旋转方向对准所述豁口,所述灯架下半部底部与所述豁口对应部分的宽度小于所述豁口的宽度,所述灯头设置在所述灯架上半部上。

[0021] 在更加优选的实施例中,所述石油钻机井场新型照明灯架还包括灯座底板和灯座压板,所述灯座压板固定在所述灯座底板上,所述灯底座可旋转的设置所述灯座压板上。所述石油钻机井场新型照明灯架还包括销轴和固定套,所述灯架下半部的底部与所述灯底座之间通过所述销轴铰接连接,所述灯架下半部与所述灯底座之间由所述固定套固定。

[0022] 在更加优选的实施例中,所述石油钻机井场新型照明灯架还包括弯把顶丝、托头顶丝和固定螺丝,所述灯架下半部与所述灯架上半部之间的相对位置由所述弯把顶丝、所述托头顶丝和所述固定螺丝固定。所述灯头包括灯固定件和灯横杆,所述灯横杆通过所述灯固定件设置在所述灯架上半部上,灯具连接在所述灯横杆上。

[0023] 灯架 2 和灯架 3 是两个完全独立的部分,灯架 3 是由 2" 钢管焊接组成的,灯架 2 是由 1¹/₄" 钢管焊接成的,安装时灯架 2 插入灯架 3 中,将灯具悬挂安装在灯横杆 12 上后,将灯架竖起,通过锁轴 7 固定安装在灯座上。再将灯架提升到所需高度后,用托头顶丝托住被提升的灯架上部分,通过灯杆上的固定螺丝、弯把顶丝锁定灯架被提升的上部分,防止灯架的下滑。灯座下有固定板 10,可焊接在照明所需部位的台面上,灯底座可旋转 360。可供井场不同角度的照明。

[0024] 此灯架可进行照明高度及照明方向均可调整调节;搬家运输时灯架整体可放倒,不会出现运输超高和碰撞灯具的问题;灯具通过灯横杆的连接,在横杆上可调节灯安装间距,适用各种长短不同的灯具。

[0025] 以上通过具体的和优选的实施例详细的描述了本实用新型,但本领域技术人员应该明白,本实用新型并不局限于以上所述实施例,凡在本实用新型的精神和原则之内,所作的任何修改、等同替换等,均应包含在本实用新型的保护范围之内。

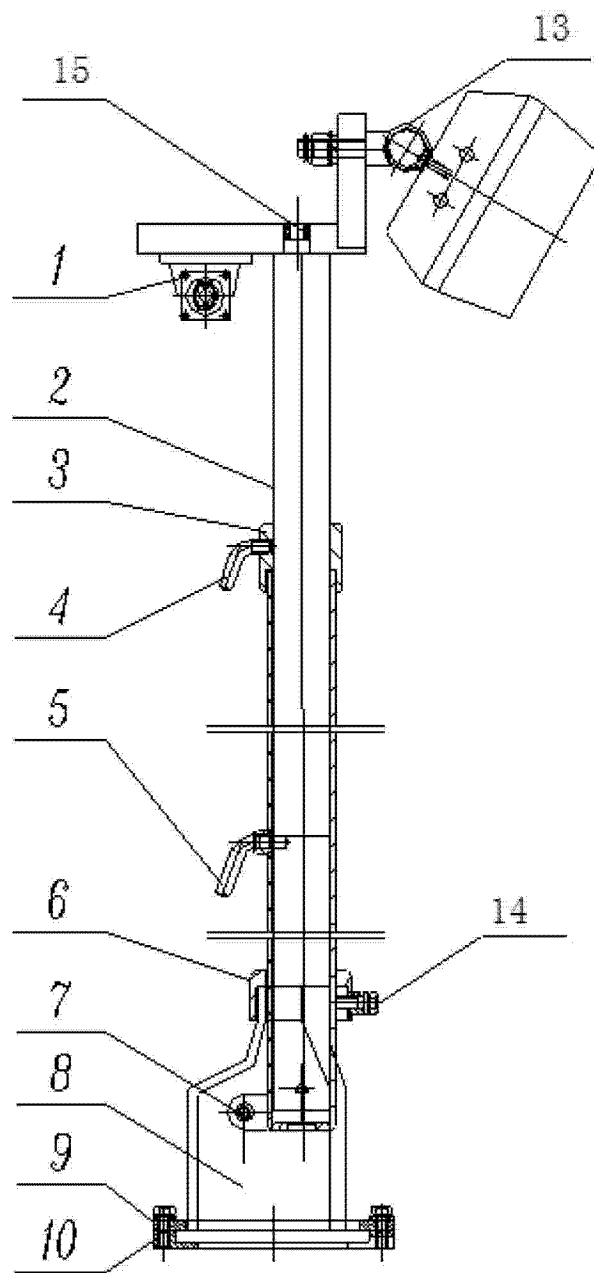


图 1

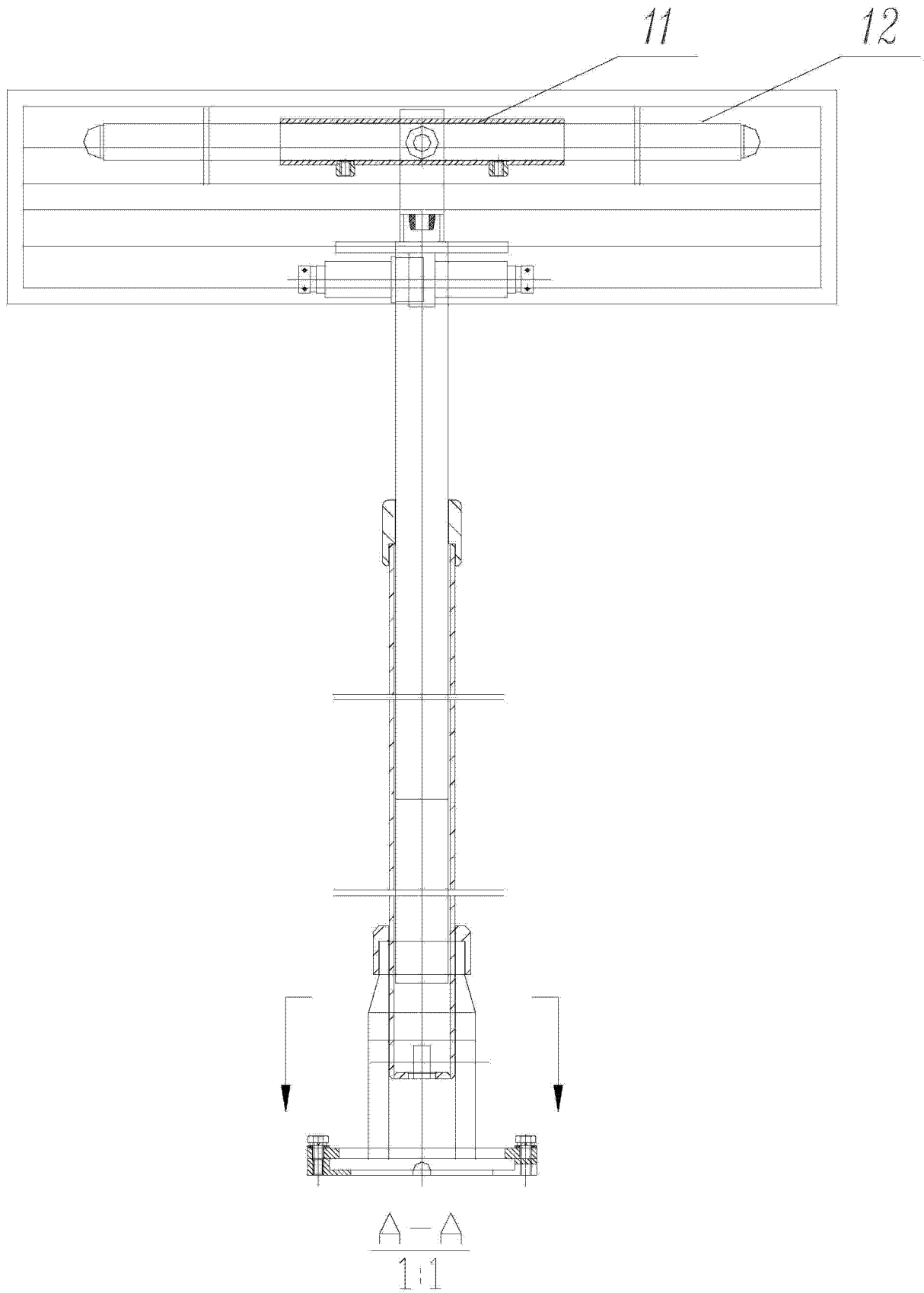


图 2

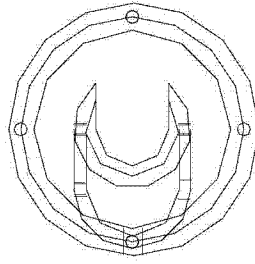


图 3