No. 835,308.

PATENTED NOV. 6, 1906.

## W. MINERY.

## ATTACHING MEANS FOR MINERS' LAMPS. APPLICATION FILED MAY 26, 1906.

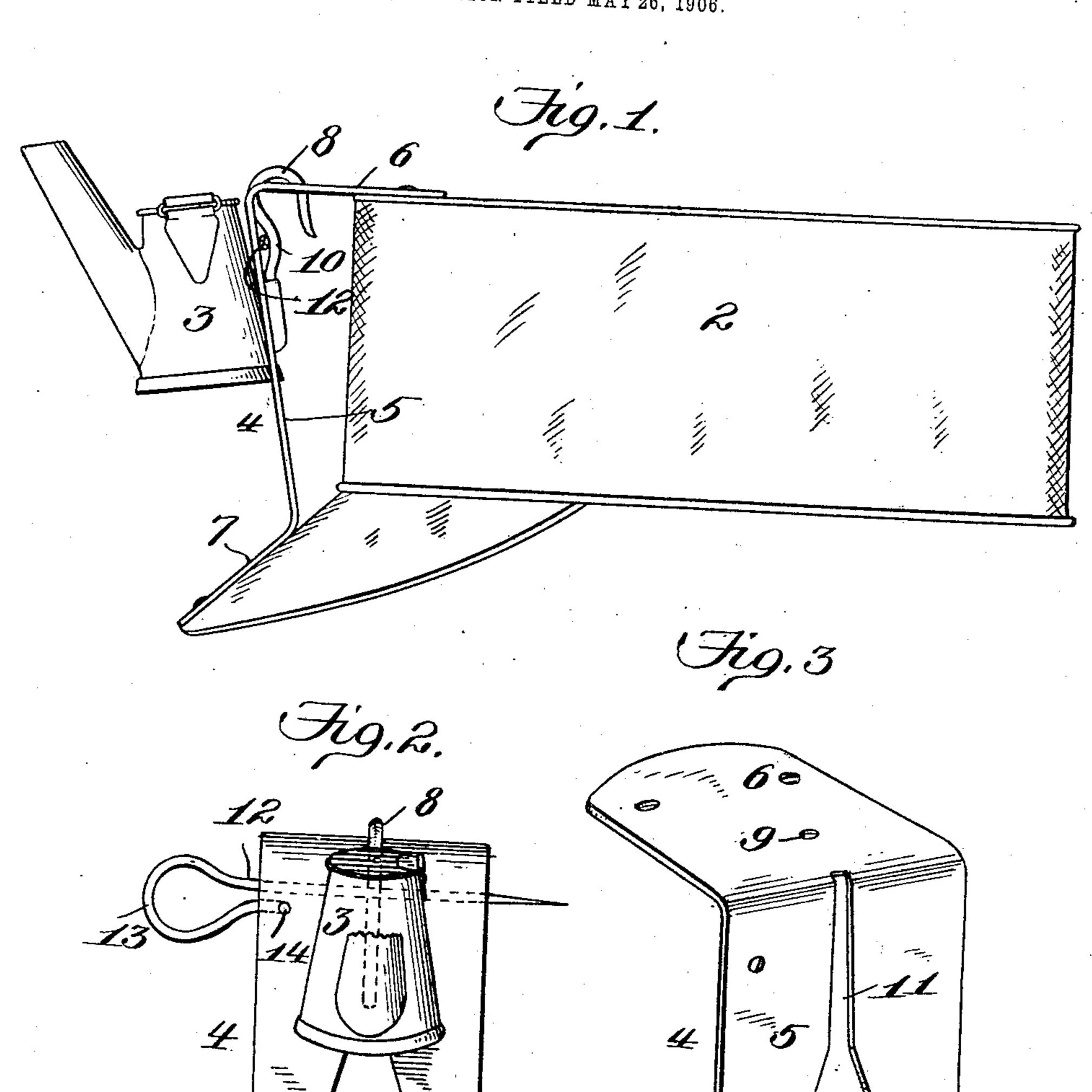


Fig. 4.

Witnesses,

6.2 Kesler

Dunis Sumbl;

14 William Minery

James 4. N.

titles

## UNITED STATES PATENT OFFICE.

WILLIAM MINERY, OF SCAMMON, KANSAS.

## ATTACHING MEANS FOR MINERS' LAMPS.

No. 835,308.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed May 26, 1906. Serial No. 318,885.

To all whom it may concern:

Be it known that I, WILLIAM MINERY, a citizen of the United States, residing at Scammon, in the county of Cherokee and State of Kansas, have invented new and useful Improvements in Attaching Means for Miners' Lamps, of which the following is a specification.

This invention relates to an attaching means for miners' lamps, the object of the invention being to provide an effective device of this character which is simple in construction and which will prevent swinging movement of the lamp. Miners' lamps are usually suspended by a hook, and ordinarily these lamps are free to swing in all directions. This causes wear on hooks, so that the same rapidly break through. I prevent swinging or vibratory motion of the lamp, and thereby prolong the life of the hook. The means for attaching the lamp in place can be readily applied and as easily removed.

A further object of the invention is the provision of means whereby friction between the base of the lamp and its carrier is avoided, so that wear upon such portion of the lamp is prevented.

In the drawings accompanying and forming a part of this specification I show one form of embodiment of the invention which enable those skilled in the art to practice said invention I will set forth in detail in the following description, while the novelty of the invention will be included in the claims succeeding said description.

Referring to the drawings, Figure 1 is a side elevation of a miner's lamp attaching means involving my invention. Fig. 2 is a front elevation of the same. Fig. 3 is a per-40 spective view of a lamp-carrier. Fig. 4 is a like view of a fastening-pin.

Like reference characters refer to like parts throughout the several views.

It is customary for miners to connect their lamps with their headwear, the latter ordinarily consisting of caps.

In the drawings I have shown a miner's cap, the same being denoted in a general way by 2. The lamp associated with said cap is designated in a general way by 3, and it with the cap are of the ordinary construction, so that a detailed description of the same is not necessary. The lamp is not in the present case directly supported by the cap, but is shown as mounted upon a carrier, as 4. The carrier 4 may be made from sheet-metal, and it is com-

posed of a body 5 and upper and lower flanges 6 and 7, said flanges 6 and 7 being connected with the top of the crown and vizor of the cap in some suitable way, as by rivets. The up- 60 per flange 6 is horizontally disposed to overlie the top of the crown, while the lower flange 7 is at an inclination to conform substantially to that of the visor. The body 5 extends at an upward and outward inclination, so that 65 the lamp, which is generally located near the upper part of said body portion, will be held away from the crown of the cap. The carrier 4 is stiff, yet somewhat flexible, its stiffness being sufficient to prevent collapse of the 70 cap and naturally to uphold the peak thereof, while it is sufficiently resilient to cause no discomfort to the wearer of the cap.

The lamp has a hook, as 8, adapted to be passed through a perforation 9 in the top or 75 upper flange 6 when it is desired to hang the lamp from the carrier 4. The shank of said hook has an inwardly-extending bend, as 10, to coöperate with the locking or fastening device, as will hereinafter appear. In the 80 body 5 I form a vertical slot 11, the side walls of which near the lower portion thereof diverge downward, whereby the slot toward its lower portion is made of progressively-increasing width, so as to receive and accommo- 85 date the lower portion of the lamp 3. The shank of the hook 8 extends rearward through the slot 11, so as to bring the bend 10 in position for the passage between the bend and the lamp of a locking or fastening 90 device, such as that designated by 12. This locking or fastening device 12 consists of an elongated pin having a pointed end, whereby, in addition to serving as a locking or fastening device, it also acts as a picker and stick. 95 One end of the pin 12 is provided with an open loop or crook 13, the free end of which is laterally offset, as at 14, to present a catch to extend through a perforation in the body portion 5. The pin 12 is usually made of 100 wire, whereby I can secure a certain amount of resiliency in the loop 13 to hold automatically the offset or catch 14 in its operative position.

When the lamp is fastened in place, the 105 bill of the hook 8 will extend through the perforation 9, the shank of the hook extending through the upper narrow portion of the slot 11, while said hook between such points is sustained by the carrier at the junction of the 110 body 5 and flange 6. With the lamp in this position the lower portion thereof will be op-

posite the wide portion of the slot 11 and the shank of the pin 12 will be between the bend 10 and the inner face of the body portion 5, by reason of which latter relation the lamp 5 will be prevented from swinging with respect to its carrier. At the same time the offset 14 will be in its coöperative perforation. To dismount the lamp, the pin is turned by engaging the loop 13, which constitutes a conro venient actuating-head for this purpose, to carry the offset or catch 14 out of its cooperating perforation, at which time the pin can be withdrawn from place. The lamp is then swung forward and lifted to carry the 15 hook 8 out of the perforation 9. To put the lamp in place, the described operation is reversed, and during such procedure the offset 14 will be sprung by the resiliency of the loop 13 into its coöperating perforation.

below its point of suspension there is no possibility of the same swinging, so that abnormal wear on the hook is prevented. The dismounting or mounting of the lamp are operations that can be rapidly secured. The lamp

when in operative position is securely held against unusual wear.

The pin 12, in addition to serving as a fastening device for the lamp, also acts as a picker for the wick thereof, the pointed end of said pin being employed for this purpose. Said pointed end may be thrust into the wall of a mine in order to employ the loop 13 as a support for the hook 8, said pin in this case serving as what is known as a "stick."

What I claim is—

1. The combination of a carrier, a lamp

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having a hook to be supported by said carrier and a pin removably associated with the carrier, for preventing swinging motion of the 40 lamp with respect to said carrier, said pin having a catch to engage the carrier to prevent the pin from being accidentally separated from the carrier.

2. The combination of a carrier comprising a body portion provided with a flange at its upper end, said flange having a perforation and the body portion having a slot, a lamp having a hook to be passed through said perforation, the shank of the hook having a bent portion extending through said slot and a pin fitted against the inner surface of said body portion and extending through the space between said bend and carrier, one end of the pin being sharpened and the other 55 end thereof being provided with a catch to engage the carrier to prevent accidental sepa-

ration of the pin from said carrier.

3. The combination of a carrier, a lamp having a hook to be supported by the car- 60 rier, the shank of the hook having a bend and the carrier having a slot through which the bent portion of the hook passes, a pin extending through the space between said bend and the carrier and having an open loop at one 65 end provided with an offset, the carrier having a perforation to receive said offset.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit-

nesses.

WILLIAM MINERY.

Witnesses:

JOHN W. MORTON,

JES F. WOLFE.