O. V. FORTNEY.

MINER'S LAMP.

APPLICATION FILED SEPT. 11, 1914.

1,132,324. Patented Mar. 16, 1915.

Fig. 1.

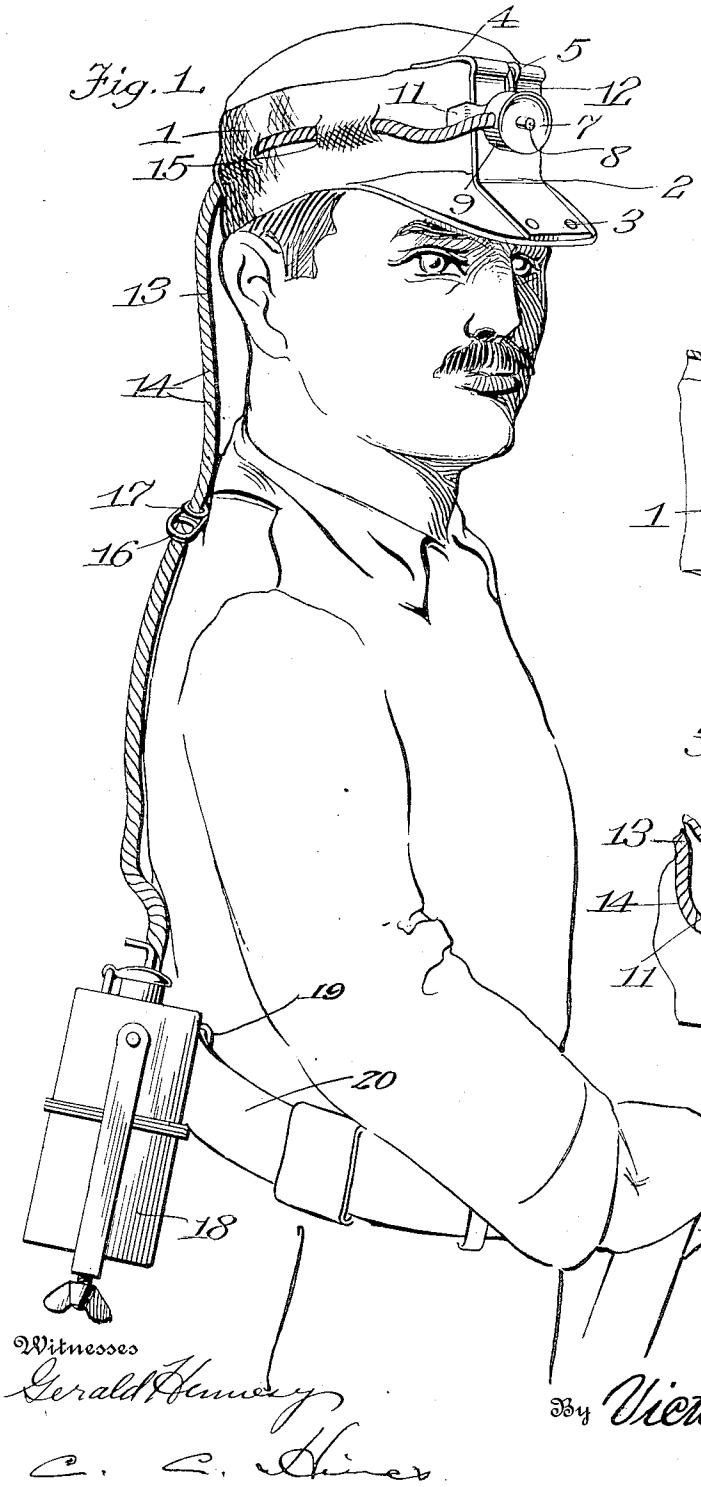


Fig. 2.

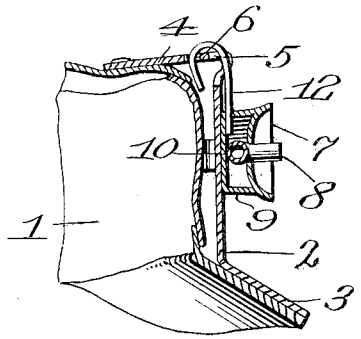
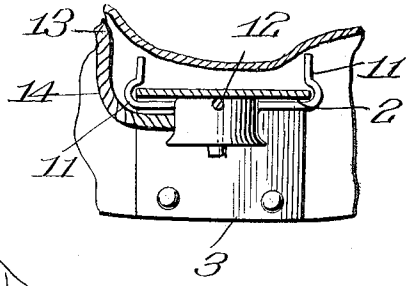


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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MINER'S LAMP.

1,132,324. Specification of Letters Patent. Patented Mar. 16, 1915.

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To all whom it may concern:

Be it known that I, OLAN V. FORTNEY, a citizen of the United States, residing at Kitzmiller, in the county of Garrett and State of Maryland, have invented new and useful Improvements in Miners' Lamps, of which the following is a specification.

This invention relates to miners' lamps of the acetylene gas type, and one of its objects is to provide a lamp which is light in weight, simple, reliable and efficient in construction, adapted to burn uniformly throughout a comparatively long period, and capable of being worn without trouble or discomfort by the miners.

A further object of the invention is to provide a miner's lamp which may be applied in place of the ordinary lamp to the lamp supporting bracket on the cap, and in which the generator is adapted to be supported from a belt passing around the waist of the wearer, the generator and burner being connected by a flexible hose or tube which is fastened to the cap and may be also fastened to the miner's shirt, thus adapting the equipment to be worn in a ready and convenient manner, without interfering with the operation of the lamp or the body movements of the wearer.

The invention consists of the features of construction, combination and arrangement of parts herein fully described and claimed, reference being had to the accompanying drawings in which:—

Figure 1 is a view showing the application of the invention. Figs. 2 and 3 are vertical and transverse sections through the lamp and lamp supporting bracket.

Referring to the drawings, 1 designates a miner's cap, to which is attached the usual lamp supporting bracket 2, having end portions 3 and 4 which are respectively attached to the vizor and crown of the cap, the upper end portion 4 being arranged at right angles to the bracket body, as shown. At the angle of fold or intersection of the bracket body and end portion 4 the bracket is provided with a slot 5, and in rear of said slot or end portion 3 is formed with a keeper opening 6. The lamp comprises a burner body 7, of suitable construction to receive the burner tip 8, and also any desired type of shade or reflector. This body has a rearwardly extending annular wall 9 slotted for the passage of a gas delivery tube 10, which tube projects forwardly through the front of the burner body and receives the tip 8. Projecting from the sides of the burner body are elbow shape spring clips 11 adapted to engage and interlock with the sides of the bracket body, and carried by the burner body is a supporting hook 12 which engages the slot 5 and has its extremity engaged with the keeper opening 6 to detachably support the burner body in position. By moving the burner body outwardly and upwardly it may be disconnected from the bracket in an obvious manner, and by a reverse movement the burner body may be connected with the bracket with equal convenience, thus providing a lamp body which may be readily cleansed and repaired. The gas is conducted to the delivery tube 10 through a flexible rubber tube hose 13, which may be reinforced by a wire winding 14. This tube is preferably extended through openings 15 in the cap between the body and lining thereof, so as to be supported at its upper end from the cap. Intermediate of its length the tube may be secured to the miner's shirt by means of a safety pin 16 having a guide loop 17 for passage of said tube.

The generator 18 is provided with a loop 19 through which a belt 20 may be extended and passed around the waist of the wearer, so that the generator may be supported in position, preferably over one of the hips, allowing it to be worn with ease and convenience and without undue agitation of the water or carbid from the body movements of the wearer. This generator is provided with a suitable gas discharge outlet with which the lower end of the tube 13 communicates, it being observed that the tube passes, intermediately of its length, through the guide loop of the pin 16, by which it is secured in position and prevented from dangling and catching into extraneous objects. As the tube is free to slide through the eye 17, it will be evident that the tube is free to adjust itself to the head and body motions of the wearer, thus relieving it from strain and allowing the miner to wear the device with ease and convenience.

From the foregoing description, taken in connection with the drawings, the construction and mode of use of my improved miner's lamp will be readily understood and it will be seen that the invention provides a lamp which is not only simple of construction but in which the burner body and generator are

respectively supported upon the cap and waist belt of the wearer and are connected by a uniformly flexible hose pipe or gas conducting tube, thus relieving the weight of the generator from the head of the wearer with its attendant disadvantages and inconveniences, and supporting the parts of the lamp mechanism so that they may be worn with ease and convenience and in such a way as not to interfere with the body movements of the wearer or to cause undue agitation of the water and carbid within the generator.

I claim:—

The combination with a cap provided with guide openings at one side thereof, of a supporting bracket upon the front of the cap, a lamp detachably engaging said bracket, a gas supplying device provided with means for supporting it from a garment about the waist of the wearer, a flexible tube leading from said device and connected with the lamp, said tube being threaded through said guide openings, and a fastening member provided with an eye slidably engaging the tube and forming a guide for the passage of the same, said fastening member being adapted for attachment at any point between the cap and waist garment to the shirt, coat or like garment of the wearer, whereby the tube is slidably mounted and held in position against displacement.

In testimony whereof I affix my signature in presence of two witnesses.

OLAN VICTOR FORTNEY.

Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."