

UNITED STATES PATENT OFFICE.

PETER PEZZUTO, OF CURWENSVILLE, PENNSYLVANIA.

MINER'S LAMP.

1,048,870.

Specification of Letters Patent.

Patented Dec. 31, 1912.

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To all whom it may concern:

Be it known that I, PETER PEZZUTO, a citizen of the United States, residing at Curwensville, in the county of Clearfield and State of Pennsylvania, have invented certain new and useful Improvements in Miners' Lamps, of which the following is a specification, reference being had to the accompanying drawings.

This invention comprehends certain new and useful improvements in lamps or lanterns designed for use particularly by miners, and the invention has for its primary object a simple and efficient device of this character, the parts of which are so constructed and arranged that the lantern may be easily lighted without the necessity of having matches or other independent lighting devices at hand, whereby the miner may be at all times sure of lighting his lamp under conditions and in emergencies in which a failure to secure a light might prove fatal or at least exceedingly dangerous. And the invention also aims to generally improve devices of this class and to render them more useful and commercially desirable.

With these and other objects in view as will more fully appear as the description proceeds, the invention consists in certain constructions, arrangements and combinations of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawing, in which,

Figure 1 is a side elevation of a lamp embodying the improvements of my invention. Fig. 2 is a detail sectional view on the line 2-2, of Fig. 1, and, Fig. 3 is a detail perspective view.

Corresponding and like parts are referred to in the following description and designated in the accompanying drawing by like reference characters.

Referring to the drawing, A designates the casing of the lamp embodying a carbid chamber 1 and a water chamber 2, the same being of any desired construction or type within the purview of this invention, except, as hereinafter noted. The top of the water chamber is provided with a vent 3 accommodating the valve rod 4, whereby the passage of the water from the water cham-

ber 2 to the carbid chamber 1 may be controlled.

5 designates a burner for the acetylene gas generated in the lamp, said burner being provided with any suitable form of tip.

In carrying out my invention, I rivet or otherwise secure to the front of the water chamber 2 immediately above the burner 5, a plate 6 which is formed or provided with upper and lower vertically alined apertured ears or lugs 7, between which an apertured lug 8 is adapted to fit, said lug 8 being formed on one end of a laterally swinging bracket 9, the pivotal connection between the lug 8 of the bracket and the lugs 7 of the plate 6 being in the form of a pin or pintle rod 10, as clearly illustrated in the drawing. The bracket 9 is formed at its free end with a preferably forked arm 11 in which a stem 12 is mounted to turn, said stem being provided on one end with a finger piece or handle 13 and being formed with an intermediate many sided portion 14 on which a friction wheel 15 is mounted, said friction wheel being received between the ends of the fork. The bracket 9 is also formed with a lower arm 16 having a tubular extremity 17 in which the spark producing element 18 is mounted, shoulders being provided on said element and the extremity 17 to prevent the complete displacement of said element in one direction. The extremity 17 of the arm 10 is exteriorly threaded, as shown, and a screw cap 19 screws over the lower end of said extremity, an expansion spring 20 being received in said cap and bearing against the spark producing element 18, whereby said element will be forced upwardly or outwardly into frictional engagement with the friction disk or wheel 15. Consequently, when the wheel 15 is turned by the finger piece 13, sparks will be produced, said sparks, owing to the position of the parts in their operative relation to the burner 5, being directed downwardly and forwardly toward and over the tip of the burner so as to ignite the gas. By providing the finger piece 13, it is evident that the wheel 15 may be easily turned without danger of scratching or otherwise injuring the fingers of the operator.

In order to prevent moisture collecting on the top of the water reservoir 2 from dripping down over and upon the burner 5 which would have a tendency to extinguish

the flame, it will be noted that I have provided the water reservoir 2 with a rearwardly sloping top 21 which is formed around the upper forward edge thereof with a flared and obliquely disposed flange 22 which will cause all of the moisture to flow rearwardly from the top and prevent it from dropping down upon the burner.

Any suitable forms of handles may be employed, such as are customary with lamps of this character, whereby the device may be properly carried from place to place or supported in any required position.

By pivotally connecting the bracket 9 to the water reservoir 2 so that the bracket may swing laterally to one side or the other, it is obvious that the bracket with its spark igniting devices may be turned to one side when not required for use and be entirely out of the way of the flame.

While the accompanying drawing illustrates what I believe to be the preferred embodiment of my invention, it is to be understood that the invention is not limited thereto, but that various changes may be made in the construction, arrangement and proportions of the parts without departing from the scope of the invention, as defined in the appended claims.

What I claim is:—

1. A lamp embodying a casing provided with a burner, a laterally swinging bracket carried by the casing above the burner and provided with upper and lower arms, a

spark producing element carried by one of said arms and a friction wheel carried by the other arm and engaging said element, for the purpose specified.

2. A lamp embodying a casing provided with a burner, a bracket carried by the casing above the burner, the bracket being formed with upper and lower arms, a friction wheel journaled in the upper arm, the lower arm being formed with a tubular extremity, a spark producing element mounted in said extremity and adapted to engage the periphery of said wheel, a detachable cap secured to said extremity, and an expansion spring mounted in said cap and bearing against the spark producing element, whereby to hold it in contact with said wheel.

3. A lamp embodying a casing provided with a burner and provided above the burner with upper and lower vertically aligned apertured lugs, a bracket formed with an apertured lug fitting between the first named lugs, a pintle rod passing through all of said lugs, the bracket being thereby mounted to swing laterally above the burner, and spark producing devices carried by said bracket.

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

PETER PEZZUTO.

Witnesses:

D. S. MOORE,

MENDER BRUNETTI.