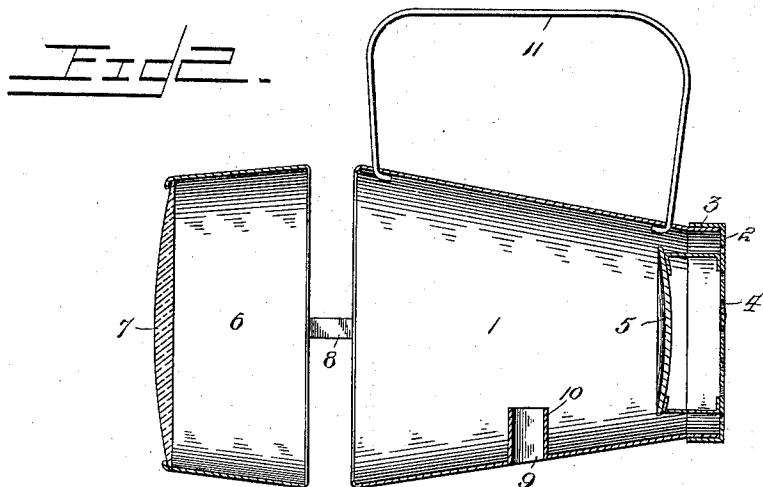
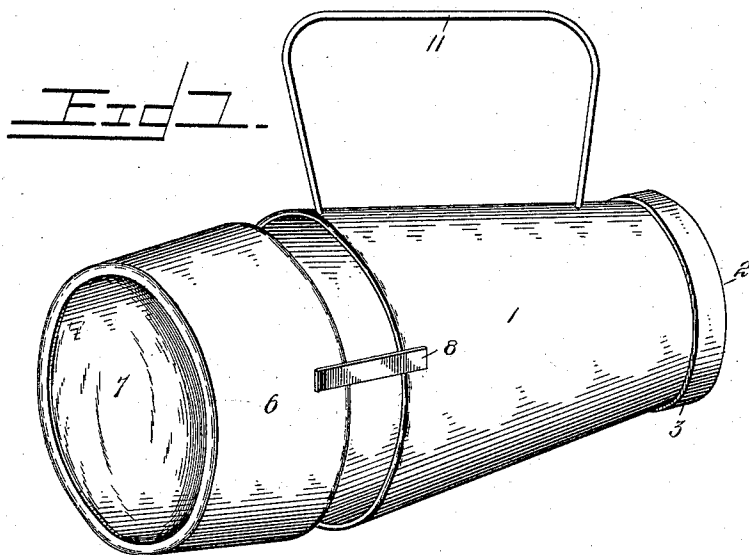


(No Model.)

H. DELZELL.
MINER'S LANTERN.

No. 567,889.

Patented Sept. 15, 1896.



Witnesses
H. J. Lavan.
R. M. Smith

Inventor
Hattie Delzell.

By her Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

HATTIE DELZELL, OF JACKSON, CALIFORNIA.

MINER'S LANTERN.

SPECIFICATION forming part of Letters Patent No. 567,889, dated September 15, 1896.

Application filed May 6, 1896. Serial No. 590,458. (No model.)

To all whom it may concern:

Be it known that I, HATTIE DELZELL, a citizen of the United States, residing at Jackson, in the county of Amador and State of California, have invented a new and useful Miner's Lantern, of which the following is a specification.

This invention relates to miners' lanterns; and the object in view is to provide a light, simple, cheap, and efficient lantern which will remain lighted in the strongest currents of air and in the strong drafts encountered in deep mines. The lantern is so constructed that the light is thrown directly ahead, and the body of the lamp is of such form that the air-currents striking against the same will be deflected, so that they cannot enter the open space through which the quiescent air enters to supply the flame.

To this end the invention consists in an improved miner's lamp embodying certain novel features of construction and arrangement of parts, as hereinafter particularly described, illustrated in the drawings and finally pointed out in the claim hereto appended.

In the accompanying drawings, Figure 1 is a perspective view of a lamp constructed in accordance with the present invention. Fig. 2 is a vertical longitudinal section through the same.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

Referring to the accompanying drawings, 1 designates the main body of the lamp, which is of conico-cylindrical form or has the shape of a tapering cylinder, being arranged with the large end toward the front of the lantern and having its contracted rear end closed by means of a cap 2, removably fitted thereon. This cap is provided with an annular flange 3, adapted to fit snugly around the rear end of the body 1 for holding the same thereon, and has a number of perforations 4 for admitting air at the rear end of the lantern. Within the main body of the lantern and near the rear end thereof is arranged a reflector 5, which is preferably secured to the cap 3, as shown, so as to be removable therewith for giving access to the

interior of the lantern for the purpose of cleaning the same.

At the front of the lantern is a tapering or conico-cylindrical rim 6, in the front end of which is fitted a glass or lens 7. The rear edge of this rim corresponds in diameter to the front end of the main body 1, and the said rim is secured to the main body by means of straps or webs 8, soldered or otherwise united thereto. By means of these straps or webs any desired space may be left between the edges of the body 1 and rim 6 which will provide for the ingress and egress of air. The body 1 is provided at its under side with an opening 9, of a size just sufficient to admit a candle or wick-tube of any desired size. This opening may be provided upon the inside of the body 1 with a surrounding flange 10, forming a holder for supporting and steadying the candle or wick-tube. The lantern described may be constructed of bright tin or any desired sheet metal, and the body of the lamp is provided at the top with a bail-shaped handle 11, by which it may be carried.

By making the main body of the lantern 1 and the lens case or rim 6 of conico-cylindrical form, and by disposing these parts reversely, so that their outer surfaces slope away from the intervening space between their adjacent edges, the currents and drafts of air incident to deep shafts are prevented from entering the interior of the lantern and affecting the flame of the candle or wick, as the said surfaces have a strong tendency to deflect or repel such currents or drafts and cause them to pass by and across such space without entering therein. By making the cap 3, with the attached reflector, removable, access is readily had to the interior of the lantern for cleaning the same.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new is—

A lantern comprising a conico-cylindrical body, in combination with a rim or case arranged at one end thereof and connected thereto but spaced therefrom so as to leave an intervening space between the adjacent

edges of said parts, said rim being also of
conico-cylindrical form and having its larger
end arranged opposite the larger end of the
body of the lantern so that the outer surfaces
5 of said parts slope in reverse directions and
a glass fitted in said rim and closing the same
at its smaller end, substantially as described.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

HATTIE DELZELL.

Witnesses:

ALFRED GOLDNER,
R. BROWN.