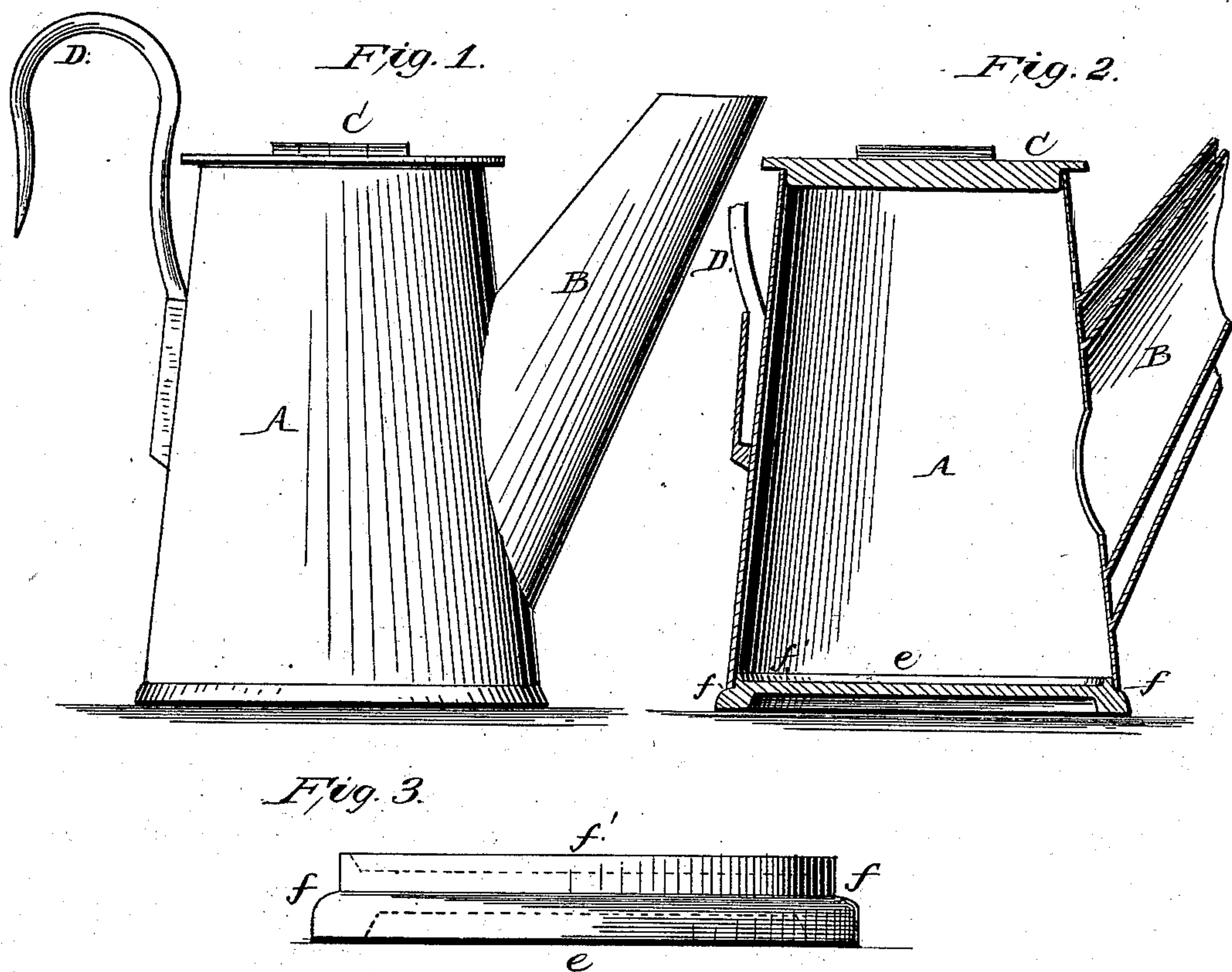


J. FLEMING.  
Miner's Lamp.

No. 219,352.

Patented Sept. 9, 1879.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN FLEMING, OF PITTSBURG, PENNSYLVANIA.

## IMPROVEMENT IN MINERS' LAMPS.

Specification forming part of Letters Patent No. **219,352**, dated September 9, 1879; application filed July 24, 1879.

*To all whom it may concern:*

Be it known that I, JOHN FLEMING, of Pittsburg, in the county of Allegheny, State of Pennsylvania, have invented a new and useful Improvement in Miners' Lamps; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improvement in miners' lamps; and consists in providing the body of the lamp with a bottom of hard metal in contradistinction to tin.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction.

In the accompanying drawings, which form part of my specification, Figure 1 is a side elevation of an ordinary miners' lamp provided with my improvement. Fig. 2 is a section of the lamp, showing the position of the bottom in the lamp. Fig. 3 is an edge view of the bottom.

In the drawings, A represents the body of the lamp; B, the wick-tube; C, the lid, and D the hook or handle, all of which are of the ordinary construction and material.

*e* is the bottom, which is made of any of the hard metals, such as cast-iron, wrought-iron, brass, or malleable iron. The bottom *e* is pro-

vided with a flange, *f*, which supports the lower edges of the body of the lamp, and a flange, *f'*, supporting the lower inner wall of the lamp. The bottom is secured to the body by the soldering process.

In order to raise and lower the wick in the tube, miners always strike the edge of the lamp-bottom against some hard substance, which soon damages the ordinary tin-bottom lamps, and they become leaky and useless; but a lamp provided with my improved bottom will stand any amount of striking, the flange *f* protecting the body from coming in contact with any hard substance, while the flange *f'* supports the inner wall.

A lamp constructed with the improved bottom, as herein described, will be of great utility, very lasting, and very desirable.

Having thus described my improvement, what I claim is—

A miner's lamp provided with a hard-metal bottom, said bottom having a flange, *f*, supporting the lower edge of the body of the lamp, and the flange *f'* bearing against the inner wall of the body, substantially as described.

JOHN FLEMING.

Witnesses:

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