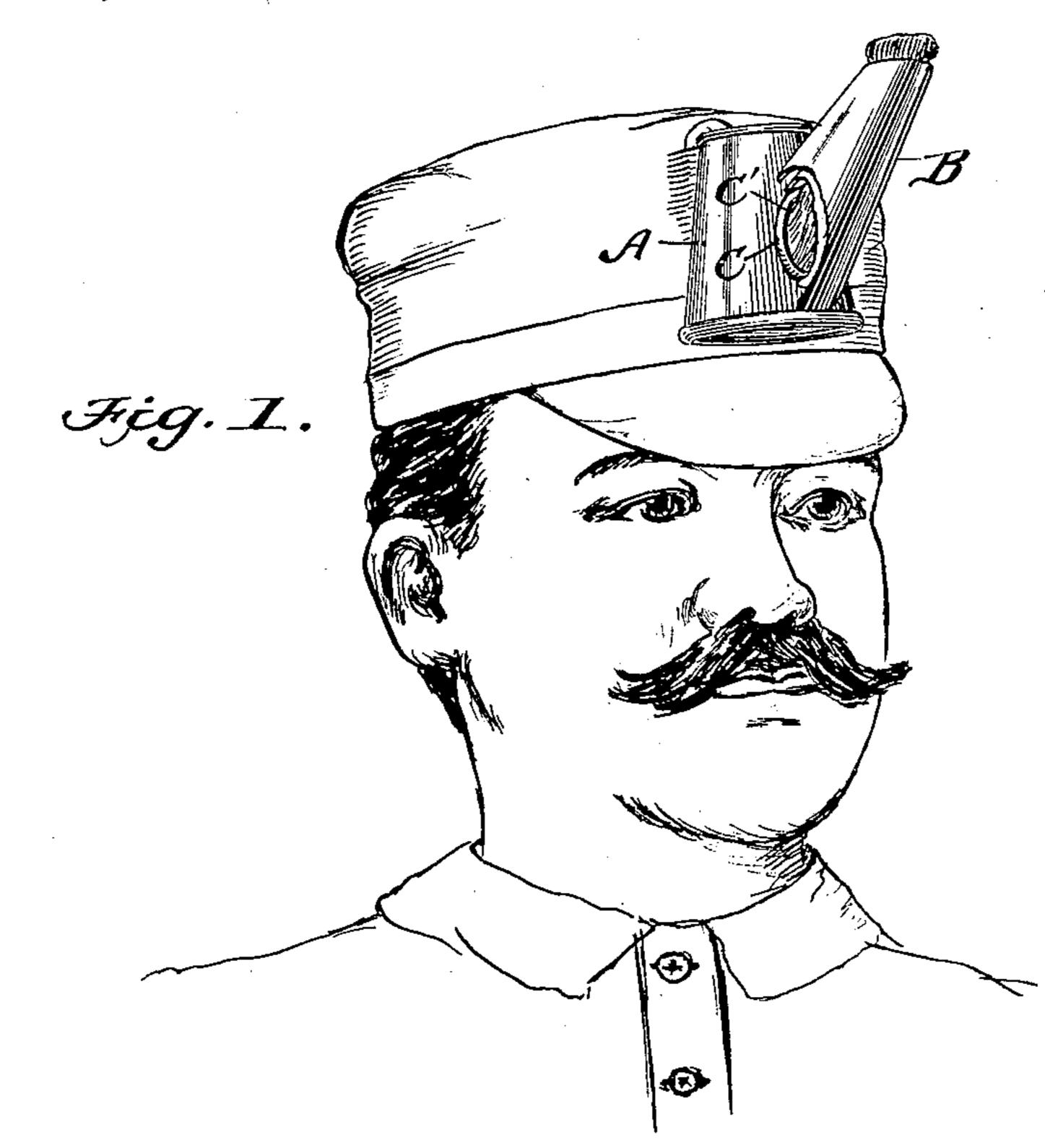
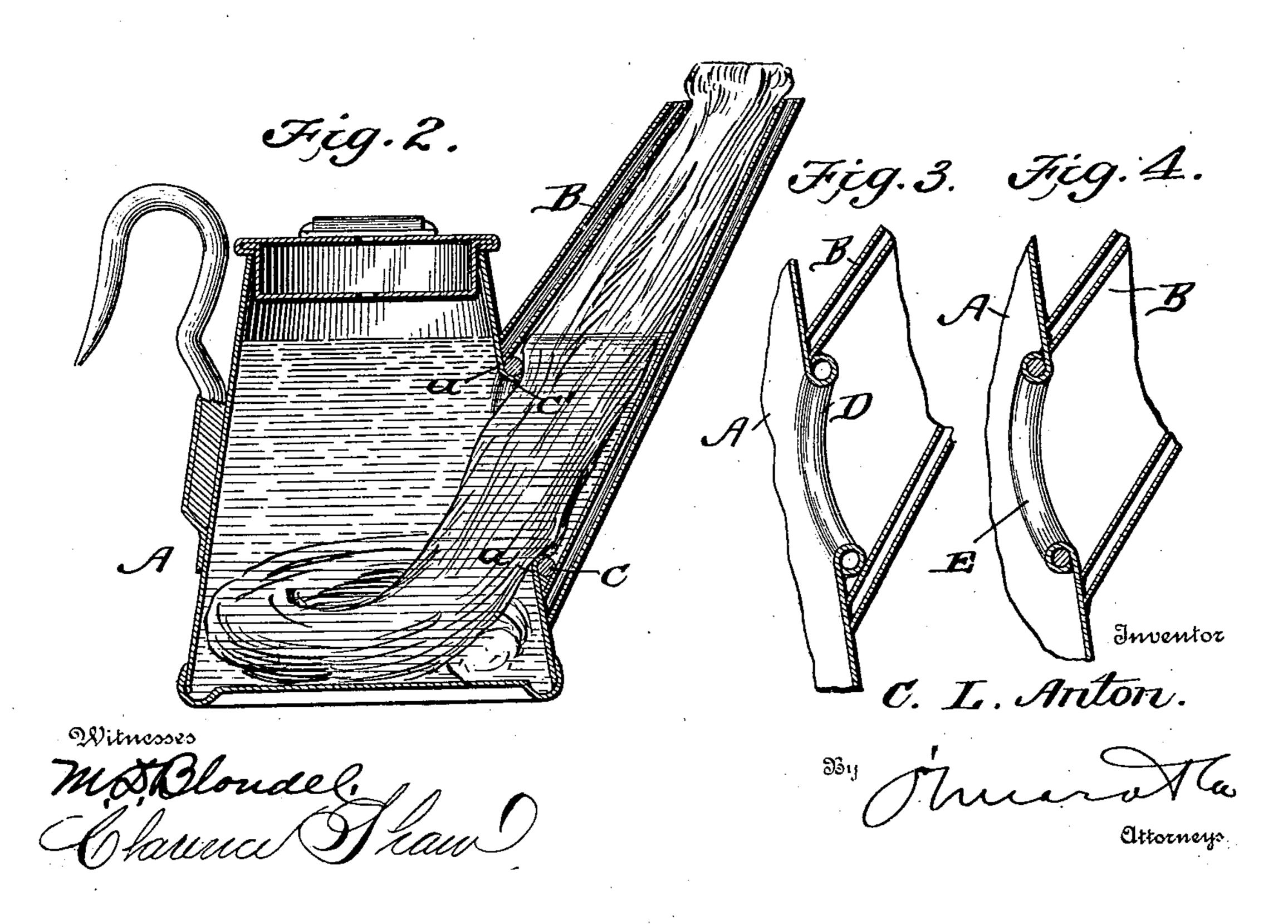
## C. L. ANTON. MINER'S LAMP.

(Application filed Mar. 23, 1901.)

(No Model.)





## United States Patent Office.

CHRISTOPHER L. ANTON, OF MONONGAHELA, PENNSYLVANIA.

## MINER'S LAMP.

SPECIFICATION forming part of Letters Patent No. 678,852, dated July 23, 1901.

Application filed March 23, 1901. Serial No. 52,553. (No model.)

To all whom it may concern:

Beit known that I, Christopher L. Anton, a citizen of the United States, residing at Monongahela, in the county of Washington and State of Pennsylvania, have invented a new and useful Miner's Lamp, of which the following is a specification.

My invention is an improvement in miners' lamps, and has for its object to provide a smooth rounding surface at the juncture of the lamp and wick-tube that will permit of the wick being easily and evenly pulled out when it is desired to increase the flame.

My improvement further consists in the novel arrangement and combination of parts, as will be fully disclosed in the following specification and pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a view of my improved lamp, showing the same in use. Fig. 2 is a longitudinal section of the same, taken through the wick-tube; and Figs. 3 and 4 shows lightly-different arrangements and connections of

25 the body and wick-tube. My invention is designed to overcome a great objectionable feature common in the construction of miners' lamps that are now upon the market—viz., a rough raw edge of 30 the opening formed in the body of the lamp at the entrance to the wick-tube that prevents the wick being freely pulled out when desired—and this I accomplish in the following manner: The body portion A of the lamp and 35 wick-tube B are made the same as the lamps now in use, only I provide the openings in the lamp of a smaller diameter than the base of the wick-tube, which leaves a flange a projecting around the entire opening, and to the 40 outside of this flange, within the tube B, I solder or otherwise fasten a ring C, made of wire or other suitable material. After the wire has been secured in position the ends of the flange are bent over and soldered, as at 45 C', after which the rough edges and projections of solder are carefully filed away, leaving a smooth round entrance to the tube from the lamp. It will thus be seen that I avoid

the rough edge at the intersection of the tube
and the lamp-body that is very objectionable
to the miner and often results in danger and
the loss of life, as the wick catching upon the
raw edge prevents it being pulled out without
extinguishing the flame, and should a miner
be caught alone in a shaft and his lamp-wick

burns down to the point of going out the danger will be readily apparent, as he would be unable to find his way in the shaft and possibly left for an unknown period to perish.

The wicks are usually pulled out by a small 60 "pick" carried by the miner for such purpose, and by providing a smooth surface at the juncture of the body and wick-tube the wick can be readily pulled out without disturbing the flame, and the trouble herein set 55 forth is avoided.

I may find it desirable to in some instances turn the edge completely over, forming a tubular ring, as shown at D in Fig. 3, or to turn the flange within the body of the lamp and 70 connect a ring thereto, as shown at E in Fig. 4; but I prefer the construction having a round flange, whereby a shoulder is formed within the wick-tube which prevents the wick slipping back into the lamp, as the wick slipping back into the lamp, as the wick 75 swells when saturated with oil, spreads itself within the tube, and strikes against the shoulder or flange and prevents any voluntary movement thereof, as will be readily understood.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a lamp of the character described, the combination of a body portion, having a wick-85 tube connected thereto, and a wire ring connected to the body of the lamp at the juncture of the tube and body, substantially as shown and described.

2. In a lamp of the character described, the 90 combination of a body portion having an opening formed therein, of a wick-tube connected to the body and surrounding the said opening the base of said wick-tube being of a larger diameter than the diameter of the 95 said opening, and a wire ring secured to the body portion adjacent the said opening, substantially as shown and described.

3. In a lamp of the character described, the combination of a body portion having a wicktube connected thereto, an opening formed in the body communicating with the said tube the body portion within said tube being turned over upon a ring that surrounds the said opening, substantially as shown and described.

CHRISTOPHER L. ANTON.

Witnesses:

GEO. T. LINN, CHARLES H. COULTER.