No. 628,653. Patented July 11, 1899.

W. A. DUNLAP.

MINER'S LAMP.

(Application filed June 26, 1897. Renewed June 8, 1899.)

(No Model.)

FIG. 1.

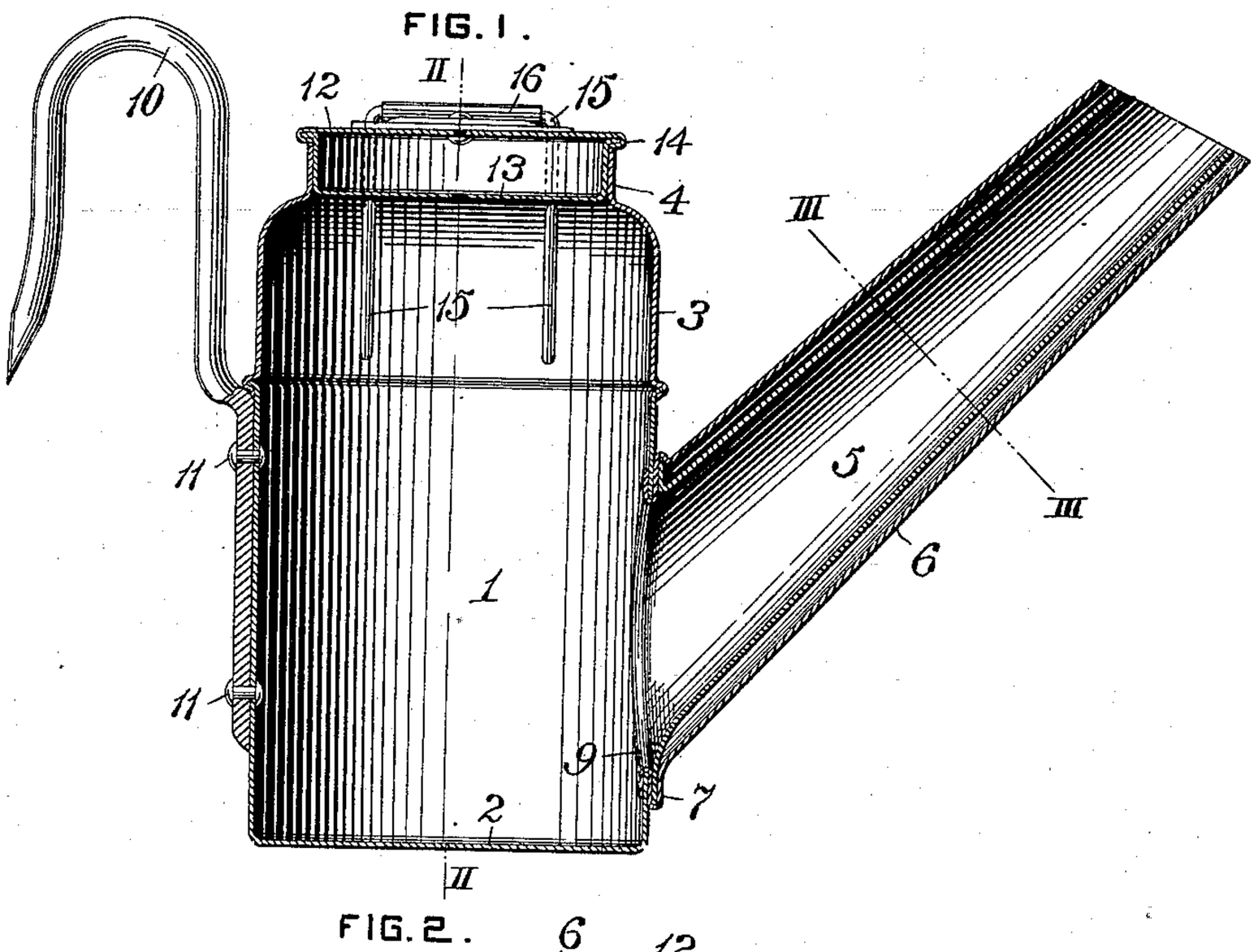


FIG. 2.

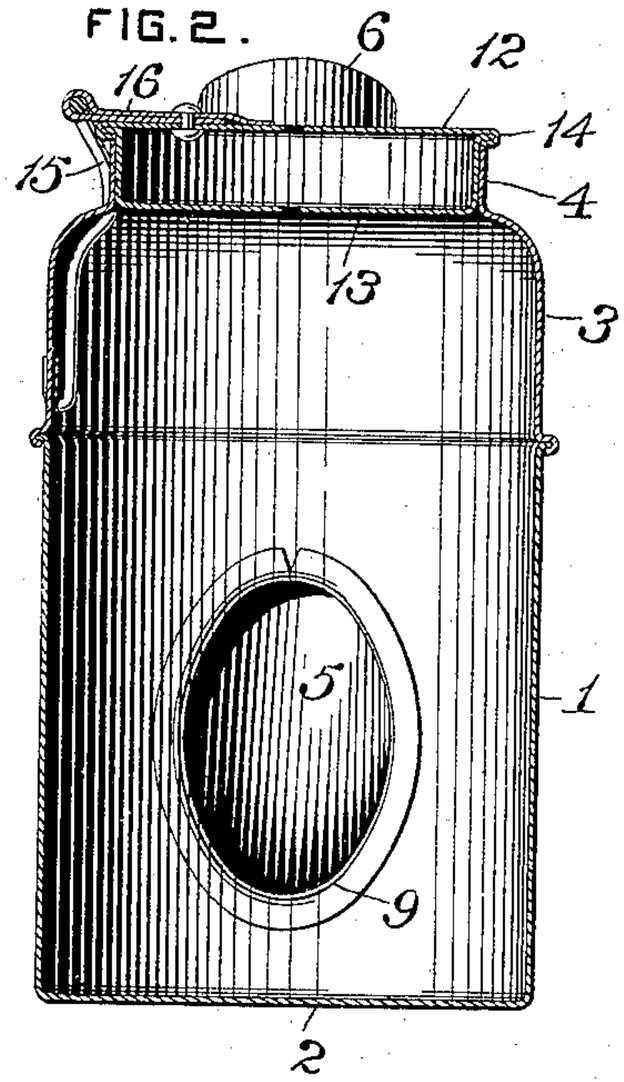


FIG. 3.

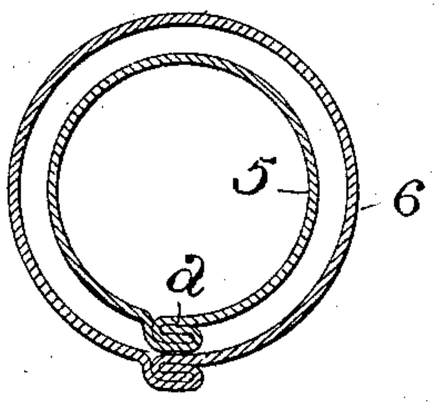
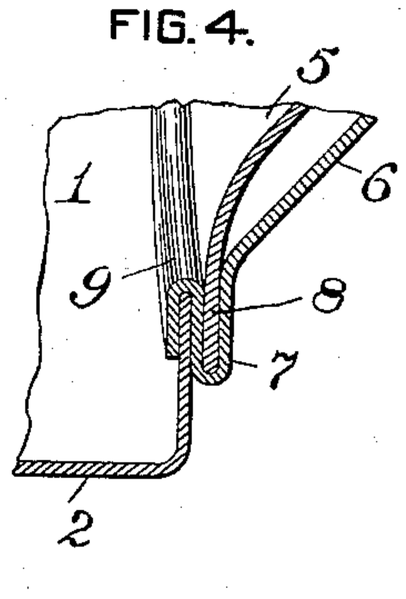


FIG. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM A. DUNLAP, OF PITTSBURG, PENNSYLVANIA.

MINER'S LAMP.

SPECIFICATION forming part of Letters Patent No. 628,653, dated July 11, 1899.

Application filed June 26, 1897. Renewed June 8, 1899. Serial No. 719,836. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. DUNLAP, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Miners' Lamps, of which improvements the following is a specification.

The invention described herein relates to certain improvements in miners' lamps, and has for its object a construction of lamp in which the several parts are secured together by bends or folds of the metal or by rivets, thereby insuring the integrity of the lamp, even when subjected to considerable heat.

The invention is hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a sectional elevation of my improved lamp. Fig. 2 is a similar view, the plane of section being indicated by the line II II, Fig. 1. Fig. 3 is a sectional detail of the spout, the plane of section being indicated by the line III III, Fig. 1; and Fig. 4 is a sectional detail view illustrating the manner of securing the spouts to the body of the can.

In the practice of my invention the body 1, including the bottom 2, is formed by stamping or spinning from a single sheet of metal. The upper edge of the body 1 is flanged outwardly to interlock with a groove formed on the lower edge of the breast 3, which, together with the collar 4, is stamped or spun from a single piece of metal. Prior to seaming the breast to the body an opening is formed in the side of the latter for the attachment of the wick-spouts. The inner spout 5 is formed from a sheet of metal suitably shaped and bent to tubular form and its meeting edges seamed together in the usual or any suitable manner, as shown in Fig. 3. The outer spout 6 is formed in a similar manner. At its lower end the outer spout 6 is formed with an outwardly-projecting flange, which is bent back on itself, forming a fold 7 around the flange 8, formed by the lower end of the inner spout 5. The inner portion of the fold 7 is folded back on itself around the edge of the opening formed in the body of the lamp. The folds 7 and 9 are tightly closed against the flange 8 of the inner spout, the wall of the body of the lamp thereby firmly securing the spouts to the lamp and fixing them in proper relation to each other. The suspending-hook 10 is secured to the body by means of rivets 11, as shown in Fig. 1.

The stopper for the lamp is formed by a circular disk 12 and a cup-shaped plate 13 of a size adapted to fit tightly in the neck 4 of the lamp, and the disk and cup are so seamed together as to form a flange 14, adapted to rest on the upper end of the neck. In order to connect the cup or cover to the lamp, a U-shaped piece of wire is passed down through suitable openings through the shoulder on the breast 3 and through similar holes farther down in the breast and then bent up against the metal, so as to secure the U-shaped piece in place. Around the loop of this U-shaped wire 15 is bent a piece of metal 16, whose ends are then riveted to the disk 12. After the spout and suspending-hook have been secured to the body 1 and the cap or cover pivotally attached to the breast 3 the body and breast are placed in proper relation to each other and their adjacent edges seamed together.

It will be observed that all the parts composing the lamp are firmly secured together, making a strong rigid structure, and will retain their position in relation to each other without the aid of solder. It is preferred, in order to protect the vessel against oxidation and to insure perfectly tight joints where the rivets 11 and wire 15 pass through the body, to dip the completed lamp in molten tin, so as to form a thin air-tight coating or covering over all the joints and also to present a bright polished appearance.

It will be readily understood by those skilled in the art that the inner spout may be omitted; but such omission will not require any changes in the bends or folds in the flange on the outer spout.

I claim herein as my invention—

1. A miner's lamp having in combination a seamless body portion, a seamless breast and

neck portion seamed to the body portion, substantially as set forth.

2. A miner's lamp having in combination a body portion and a double wick-spout, the inner spout being seamed to the outer spout and the latter seamed to the body portion, substantially as set forth.

In testimony whereof I have hereunto set my hand.

WILLIAM A. DUNLAP.

Witnesses:
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