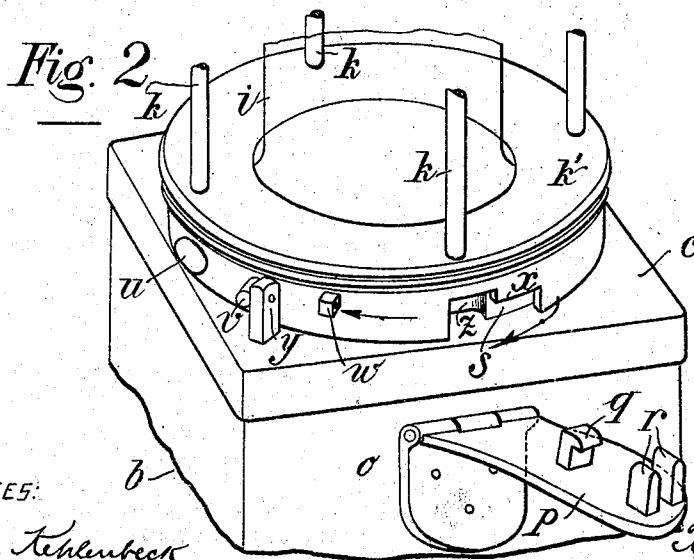
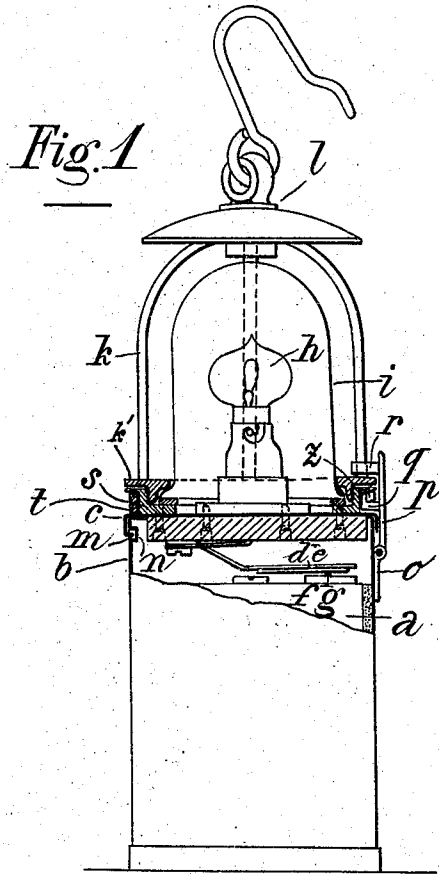


H. REMANÉ.
 MINER'S ELECTRIC LAMP.
 APPLICATION FILED MAY 22, 1908.

939,630.

Patented Nov. 9, 1909.



WITNESSES:

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MINER'S ELECTRIC LAMP.

939,630.

Specification of Letters Patent.

Patented Nov. 9, 1909.

Application filed May 22, 1908. Serial No. 434,254.

To all whom it may concern:

Be it known that I, HERMANN REMANÉ, a subject of the King of Prussia, residing at Berlin, Germany, have invented new and useful Improvements in Miners' Electric Lamps, of which the following is a specification.

This invention relates to an improved electric lamp for miners use, of the type having an accumulator combined with an incandescence lamp and the object being to provide an improved and more convenient construction particularly as regards the means for effectively locking the lamp and accumulator receptacle or casing.

In the accompanying drawing: Figure 1 is an elevation partly in section through such a lamp, and Fig. 2 is a perspective view of a part of same on a larger scale.

The electric cell or accumulator *a* is placed in a casing *b* on the cover *c* of which are downwardly extending contacts *d* and *e* which complete the circuit with the contacts *f* and *g* of the accumulator or source of electricity.

The upper side of the lid carries the incandescence lamp *h* and the usual lamp glass *i*, the glass being in turn surrounded by the usual protective cage *k* surmounted by the reflector and carrying hook *l*.

The cover fits into a recess *n* in the battery case, which if square may be on one side as shown, by means of a flange *m* either continuous or interrupted, and is held at one point, preferably opposite to the recess *n* by a locking device which consists of a catch *p* hinged to a portion *o* attached to the case *b* and provided with a hook *q* and two studs or a fork *r*. The upper side of the cover carries an internally threaded screw collar *s* into which a flange *k'* on the protective cage *k* of the lamp is screwed, and which is also adapted to hold down the base of the glass. On the outer side of the collar *s* a movable ring *t* is provided. This ring may with advantage be fitted with two handles *u* to enable it to be taken hold of easily. The ring is also provided with a stop *v* and a perforated projection *w*, and, at the point opposite the catch, with a stepped recess *x*. The screw collar is provided with a recess *z*, which comes into position opposite to, and receives the hook *q* of the catch *p* when the cover is on, and finally the upper side of the

cover carries a lug *y* which like the projection *w* on the ring is perforated.

If the lamp is to be locked, the cover carrying the lamp and other fittings, is placed on the case, its flange *m* having been inserted into the recess *n* in the casing. The hook of the catch *p* is then inserted into the ring which should be in such a position that the stop *v* on same abuts against the lug *y* on the cover. The hook is thus caused to pass through the recess *x* in the ring *t* and enter the recess *z* in the screw collar *s*. The ring *t* is then turned around so that it passes behind the head of the hook until its perforated projection *w* encounters the lug *y* and a seal can be attached by means of the perforations in these two. To keep the protective cage *k* also from being unscrewed, it is turned around until one of its wires comes into position so that the two limbs of the fork *r* of catch *p* can be placed over it, or else the flange of the cage may be provided with recesses and the like to engage with a nose on the catch *p*, so that when the lamp is sealed, it cannot be opened or taken to pieces in any way without damaging the seal.

What I claim is:

1. In a miner's electric lamp, and in combination, a casing for the source of current, a removable cover for same, a lamp carried by said cover, a rotatable ring on said cover, and means carried by said ring and casing respectively whereby the rotation of the ring will hold the cover to the casing.

2. In a miner's electric lamp, and in combination, a casing for the source of the current, a removable cover for same, a lamp carried by said cover, a rotatable ring on said cover having a recess, and a catch on said casing adapted to engage in the recess of said ring and to be held when the latter is rotated.

3. In a miner's electric lamp, and in combination, a casing for the source of the current, a removable cover for same, a lamp carried by said cover, a collar forming part of said cover and having a recess, a ring rotatable on said collar, and also having a recess, and a catch on said casing having a part adapted to engage in the recesses of said ring and collar and to be covered by the ring when rotated.

4. In a miner's electric lamp, and in combination, a casing for the source of the current and having a recess in same, a remov-

able cover for said casing, a flange on said cover to engage said recess, a lamp and a protective cage carried by said cover, a screwed flange carried by said cage, a screwed collar forming a part of said cover, and with which the screwed flange of the cage can engage, a ring having a recess and rotatable on said collar, a catch on said casing adapted to engage in the recess of said ring and to be held when the latter is rotated, and a fork on said catch to engage a part of the protective cage.

5. In a miner's electric lamp, and in combination, a casing for the source of the current and having a recess in same, a removable cover for said casing, a flange on said cover to engage said recess, a lamp, a lamp glass, and a protective cage carried by said cover, a screwed flange carried by said cage adapted to seat on the lamp glass, a screwed collar forming a part of said cover, and with which the screwed flange of the cage can engage, a ring having a recess and rotatable on said collar, a catch on said casing adapted to engage in the recess of said ring and to be held when the latter is rotated, and a fork on said catch to engage a part of the protective cage.

6. In a miner's electric lamp, and in combination, a casing for the source of the current, a lug on said casing, a removable cover

for same, a lamp carried by said cover, a rotatable ring on said cover having a recess, a projection carried by said ring, and a catch on said casing adapted to engage in the recess of said ring and to be held when the latter is rotated and brought into a position when the lug and projection respectively are abutting so that the two may be sealed together.

7. In a miner's electric lamp, and in combination, a casing for the source of the current, a removable cover for same, a lamp carried by said cover, a collar having a recess and forming part of said cover, a ring rotatable on said collar and having a stepped recess, a stop on said ring, a perforated projection also on said ring, a perforated lug on said cover against which the stop is adapted to abut and a catch on said casing adapted to engage the recesses in the collar and ring and to be held when the latter is rotated, the perforations of the lug and projection respectively being adapted to receive a seal.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HERMANN REMANÉ.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.