P. RENNERT.

MINER'S LAMP.

APPLICATION FILED JAN. 21, 1910.

987,744. Patented Mar. 28, 1911.

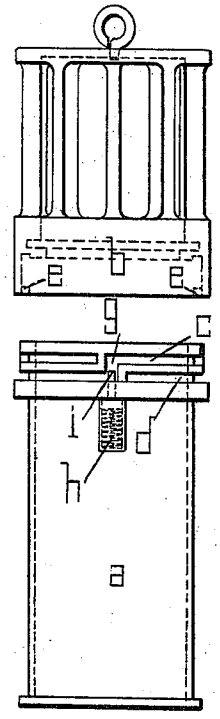

Fig. 1.

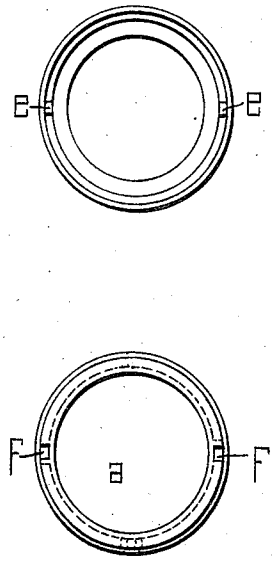

Fig. 2.

Witnesses:
M. N. Darg.
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UNITED STATES PATENT OFFICE.

PAUL RENNERT, OF HAGEN, GERMANY.

MINER'S LAMP.

987,744. Specification of Letters Patent. **Patented Mar. 28, 1911.**

Application filed January 21, 1910. Serial No. 539,291.

To all whom it may concern:

Be it known that I, PAUL RENNERT, a subject of the Emperor of Germany, and residing at Hagen, in Westphalia, Germany, have invented certain new and useful Improvements in Miners' Lamps, of which the following is a specification.

This invention relates to a double bayonet joint for miners' lamps with resiliently held locking pins which are released magnetically. Such closing devices are already well known. In these devices the locking pins arranged at the bottom portion, snap into the perforation in the other part. Unlike in the said devices, the resiliently held locking pins of the bottom lamp portion according to this invention, engage with the slots of the same bottom lamp portion, which connect an upper bayonet groove to a lower one, and thus prevent the bayonet projections of the upper lamp portion from coming out at the time that the projections enter into the bottom groove, owing to the upper portion being turned. This construction of the closing device affords great security against accidental and intentional opening of the lamp. The manipulation is also simpler, as the magnet need not become operative when the two lamp portions are being connected together, as the locking pins are forced back by the projections of the upper portion when the latter is turned. In former bayonet closing devices with magnetic spring lock, the magnet had to be operated also when the lamp was closed, in order to withdraw the locking pins.

A construction according to this invention is illustrated in the accompanying drawings in which:—

Figure 1 shows a side elevation of the two parts, and Fig. 2 plans of the ends of the parts to be connected.

The container of the lamp is provided at its upper strengthened edge with two superposed circular, but not closed grooves *c* and *d*. They are connected together at two opposite points by means of short vertical grooves *g*. From the upper groove *c* start upward inlet slots *f* for two projections *e* of the upper lamp portion *b*, used for producing the bayonet joint. The upper lamp portion *b* has a hollow or recess with a cylindrical wall which can engage over the upper edge of the lamp container. The projections *e* are arranged at the bottom and inside on the wall of the lamp portion *b*.

For connecting the two lamp portions, the projections *e* are brought by means of the slots *f* into the upper groove *c*, then the upper part *b* is turned to such an extent that the projections *e* register with the recesses *g*. Through the latter they are pressed into the bottom groove *d*, the locking pins *i* being at the same time pressed downward. Upon slight further rotation, the locking takes place, the pins *i* being forced upward again into the slots by the springs *h* and closing the connection between the two grooves *c* and *d*. The lamp can then be opened only by means of a magnet.

What I claim as my invention and desire to secure by Letters Patent is:—

A miner's lamp comprising an upper portion, a lower portion, a plurality of projections on said upper portion, annular flanges having vertical slots therethrough on said lower portion forming two superposed grooves adapted to receive said first mentioned projections, partitions between said annular flanges adjacent said vertical slots and locking means adapted to retain said projections in the lowest of said superposed slots when the portions of the lamp are assembled.

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

PAUL RENNERT. [L. S.]

Witnesses:
OTTO KÖNIG,
WILLY KLEIN.