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HOUSING WITH GAS-ESCAPE MEANS FOR SAFETY-LAMP ACCUMULATORS

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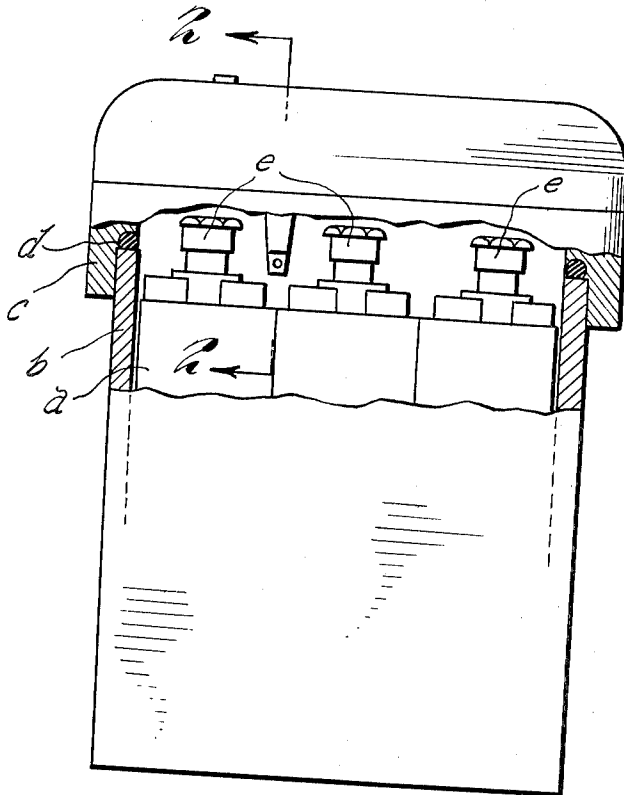


Fig. 1

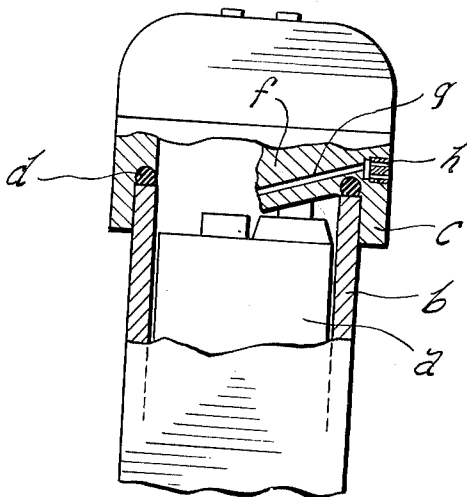


Fig. 2

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HOUSING WITH GAS-ESCAPE MEANS FOR SAFETY-LAMP ACCUMULATORS

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3 Claims. (Cl. 136—170)

It is usual with miner's safety-lamps found on the market at present to separate the upper part from the lower part (the actual accumulator housing) for charging the accumulator, so that the gases evolved in charging can dissipate through the battery valves. Towards the end of charging, a vigorous formation of gas occurs in which small amounts of acid or lye are frequently entrained, which, however, can and must be removed immediately in order to avoid lye or acid burns.

The conditions are quite otherwise when it is necessary to keep the upper part and a lower part together during charging, which is fundamental in charging systems employed in foreign countries. It is not possible with the usual accumulator batteries and valve constructions employed at present to prevent some amounts of lye or acid leaving through the valves towards the end of charging.

In accordance with the invention, this liquid is received in the battery housing which is made liquid-tight. A gas-escape opening located in the housing is supported by a peg, at such a distance from the cover, bottom and side walls, that lye or acid cannot flow out at any position of the housing. The housing is thus made liquid-tight for a certain amount of lye or acid on the one hand, and, on the other, allows the gases passing through the accumulator valves to dissipate into the atmosphere.

In the accompanying drawing, the invention is illustrated by way of example in an embodiment relating to a three-cell accumulator. In the drawing, Fig. 1 shows the housing from the outside with part of one wall broken away to show the interior; Fig. 2 is a view taken at right angles with respect to Fig. 1, partly in section on line 2—2 of said figure.

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The drawing shows a three-cell accumulator *a*, arranged in a lamp housing *b*, which is enclosed in liquid-tight fashion by a cover *c* and an interposed soft rubber ring *d*. When towards the end of charging of the accumulator, small amounts of lye or acid are thrown out of the gas-escape valves *e* as a result of vigorous gas development, the liquid remains inside the lamp housing *b*. The gases can, nevertheless, dissipate through a gas-escape opening *g* which passes through a peg *f*. In order to prevent the gas-escape opening from becoming soiled from the outside and to simplify its cleaning, a readily removable stopper *h* provided with 4 holes is inserted.

What I claim is:

1. In a housing for a safety lamp accumulator, comprising a housing body having a bottom, side walls and a cover thereon, means capable of sealing said cover liquid-tight on said body, valves for permitting the escape of gas from batteries contained in said housing, a peg-shaped support in said housing with additional means for gas-escape from said batteries, said support being arranged with the opening of the gas-escape located laterally at such a distance from the bottom, side walls, and cover of said body that liquid entrained from said accumulator valves during the charging operation of the accumulator is prevented from flowing out through the additional gas-escape opening.

2. A housing for a safety valve accumulator according to claim 1 wherein the openings for gas escape in said peg are obliquely passing therethrough with the outlet holes laterally discharging from the cover.

3. A housing for a safety-lamp accumulator according to claim 1, wherein removable stopper means having a plurality of holes is provided for covering said gas-escape openings of said peg on the outside of said housing.

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