Sept. 7, 1954 J. T. SIMONS 2,688,427

CAP-LAMP BATTERY AND CARRIER THEREFOR

Filed Jan. 30, 1952

Fig. 1

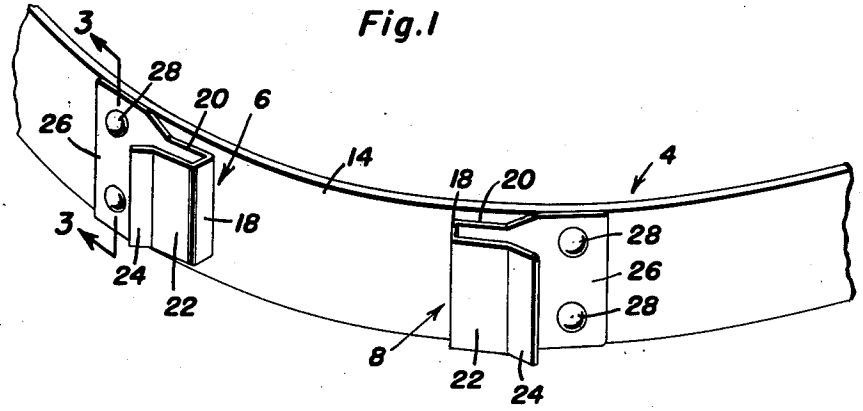


Fig. 2

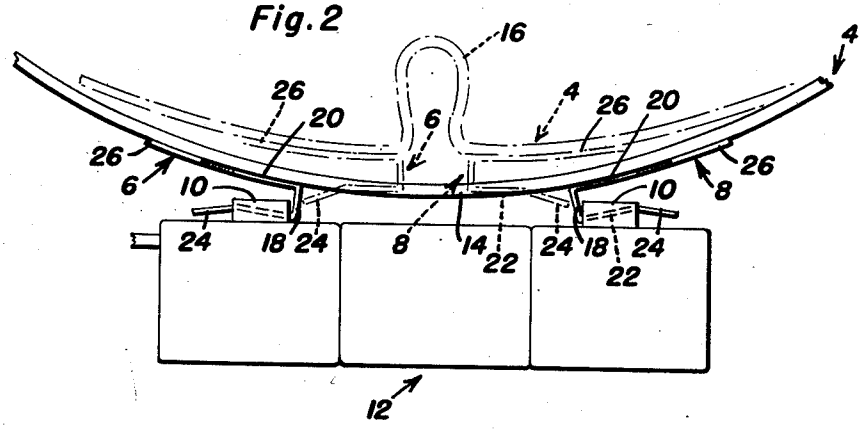
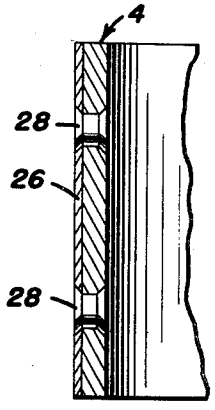


Fig. 3



Jess T. Simons
INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson
Attorneys

Patented Sept. 7, 1954

2,688,427

UNITED STATES PATENT OFFICE

2,688,427

CAP-LAMP BATTERY AND CARRIER THEREFOR

Jess T. Simons, Eldorado, Ill.

Application January 30, 1952, Serial No. 268,977

1 Claim. (Cl. 224—5)

1

The present invention relates to an improved cap-lamp battery of a type customarily employed by miners and has more particular reference to ways and means whereby said battery is effectively supported on and carried by a waist encircling belt.

It is a matter of common knowledge that miners and others who use cap-lamps have had to carry the complemental battery on a belt, usually the wearer's waist encircling belt. It is now customary practice to provide the waist belt with an auxiliary short-length strap, this being attached at one end to the waist belt, passing through loop means on the battery case and being buckled at its opposite end to said waist belt. Manifestly, this mode of supporting a battery on a waist belt involves an expenditure of too much time, it is contended, for attaching and detaching the battery. Then, too, the auxiliary carrier strap, being of leather, stretches and permits the battery to sag and shift, much to the annoyance of the miner. The obvious objective in the matter herein presented is to structurally, functionally and otherwise improve upon known body supported battery carriers by providing one which overcomes presently recognized objections and which has to do with a simple and practical structural arrangement in which both manufacturers and miners will find their respective requirements and needs fully met and conveniently at hand.

In carrying out the improved principles of the present invention, the waist belt is provided with a pair of duplicate hook-equipped clips. These are secured to the waist belt at longitudinally spaced points with the bill portions of the hooks facing in directions away from each other where they are conveniently located for quick attachable and releasable association with the battery loops by merely buckling or bending that portion of the belt which spans the space between respective clips.

Another and important object of the invention is to provide clips having unique features of construction which make it possible to attach and detach the battery case without necessitating removal of the waist belt from the body of the wearer.

What is more important the thus improved waist belt provides the wearer with a safety feature in that if the wearer becomes fouled in a close place, a twist of the waist belt by bodily movement, which can be learned, will cause one of the clips to become disengaged, thereby causing quick release of the battery when the miner's

2

hands are not available to cope with the emergency.

Other advantages which will be best appreciated by those acquainted with the problems at hand will doubtless become apparent when rated in relation to the drawings, the following detailed description and concluding claim.

In the accompanying sheet of drawings wherein like numerals are employed to designate like parts throughout the views:

Figure 1 is a perspective view with the waist belt fragmentarily shown and with the novel miner's battery attaching and supporting clips applied thereto.

Figure 2 is a top plan view showing the manner in which the battery is attached and, in phantom lines the manner in which the clips are attached or detached, as the case may be.

Figure 3 is an enlarged cross-section taken on the vertical line 3—3 of Figure 1, looking in the direction of the arrows.

In the drawings the numeral 4 denotes an ordinary or common waist encircling belt such as is worn by miners and others. Usually, the belt is a common flexible leather waist encircling member with fastening means (not shown). In accordance with the present invention duplicate companion clips are used and these are denoted by the numerals 6 and 8 respectively. The clips are fastened at longitudinally spaced points on the belt where they are accessible for attachable and detachable association with longitudinally spaced keeper loops or equivalent members 10—10 on cap-lamp or miner's battery 12. That portion of the belt which spans the space between the clips 6 and 8 is conveniently denoted by the numeral 14 and it is pinched or otherwise flexed into a substantially U-shaped bend 16 as shown in dotted lines in Figure 2 for attaching and detaching the keeper clips 6 and 8. Each clip is the same in construction and it is preferably formed from resilient brass or equivalent bendable sheet material. Each clip embodies a U-shaped portion characterized by a bight portion 18 joining spaced parallel complemental limb portions 20 and 22. The free end of the limb portions 22 has a laterally flaring or obliquely bent terminal 24 which may be conveniently referred to as the bill of the hook. The other limb portion 20 has an extension which is slightly widened and is substantially flat and constitutes an attaching ear 26. This is secured by rivets or other suitable fastenings 28—28 to the belt. It will be noticed that the attaching ear projects beyond the terminal edge of the bill portion 24.

It will be obvious that with a belt having these unique keeper clips 6 and 8, the clips may be applied and removed by bending or looping the portion 14 of the belt into the approximate U-shaped form shown at 16 in Figure 2. This shortens the distance between the clips and obviously releases them from the keeper loops 10—10 on the battery case 12. The clips are, of course, reattached in a likewise manner of procedure.

A consideration of the preceding explanation in conjunction with the illustrative drawings will suffice, it is believed, to comprehend the various aspects of the invention herein revealed.

Having described the invention, what is claimed as new is:

A miner's cap-lamp battery carrier comprising, in combination, a body encircling belt, the latter being bendably flexible, and a pair of complemental duplicate keeper-hooks individually secured to a face of said belt at points spaced longitudinally from each other, said keeper-hooks having broad bill portions sized and shaped to releasably engage a pair of spaced parallel keeper-loops fixed to one side of a battery, said bill portions facing in directions away from each other, each keeper-hook comprising a U-shaped portion including spaced parallel limbs joined by a bight portion, one limb having a laterally deflected relatively wide bill portion, and the other limb having a wider belt attaching ear, the latter projecting to a position which is beyond the terminal tip of said bill portion and being secured to said belt and the space between said keeper-hooks being precisely predetermined and serving to permit that portion of the belt which spans said space to be flexed and looped into U-shaped form for purposes of moving the keeper-hooks toward and from each other.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,625,920	Thurman	Apr. 26, 1927
1,713,413	Yenerall	May 14, 1929
1,809,696	Heilweil	June 9, 1931
1,879,469	Piovarchy	Sept. 27, 1932
2,190,601	La Van	Feb. 13, 1940
2,595,893	Seid	May 6, 1952