(No Model.)

J. DUNLAP & E. RIEDEL.

CAMPAIGN TORCH.

No. 305,377. Patented Sept. 16, 1884.

Fig. 1.

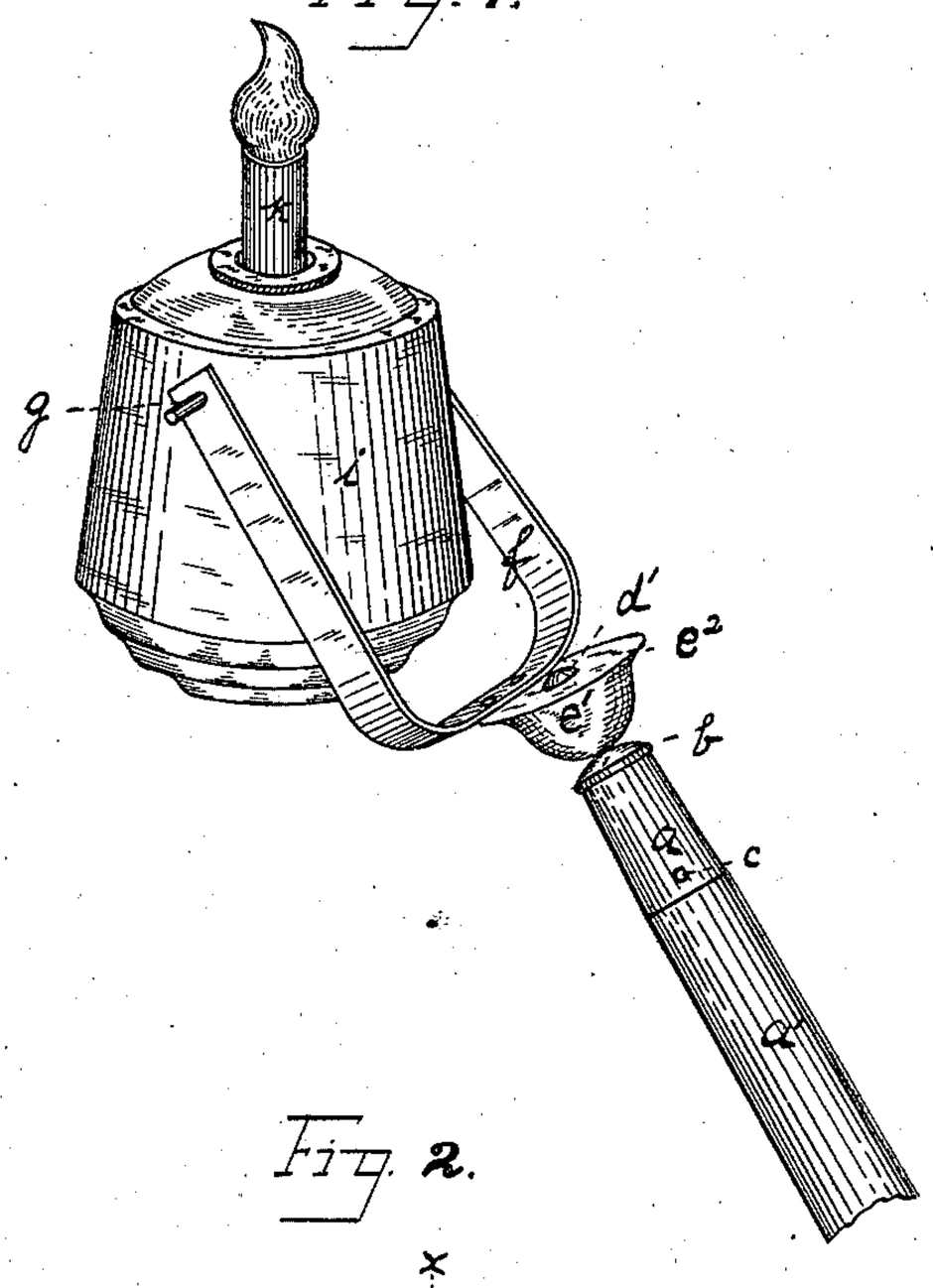


Fig. 2.

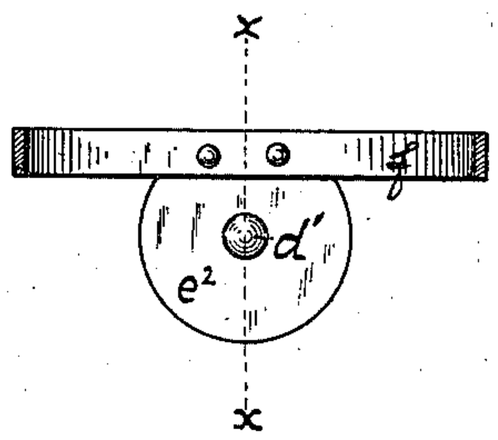
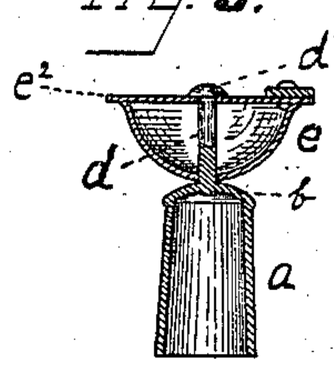


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN DUNLAP AND EWALT RIEDEL, OF PITTSBURG, PENNSYLVANIA; SAID RIEDEL ASSIGNOR TO SAID DUNLAP.

CAMPAIGN-TORCH.

SPECIFICATION forming part of Letters Patent No. 305,377, dated September 16, 1884.

Application filed June 20, 1884. (No model.)

To all whom it may concern:

Be it known that we, JOHN DUNLAP and EWALT RIEDEL, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Campaign-Torches; and we do hereby declare the following to be a full, clear, and exact description thereof.

Our invention relates to an improvement in torches; and it consists in the arrangement and construction of devices for securing the frame of the lamp to the stock, as hereinafter more fully appears.

We will now describe our invention so that others skilled in the art to which it appertains may employ the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of our improved torch. Fig. 2 is a plan view of the swivel; and Fig. 3 is a vertical sectional view on the line *x x*, Fig. 2.

Like letters of reference indicate like parts wherever they occur.

In the drawings, *a* represents the ferrule or socket, which is designed to fit over the end of the torch pole or stock *a'* and to be securely attached thereto. For this purpose it is preferably made in the form of a hollow metallic cap having one end closed by the outwardly-convex piece *b*. The other and open end of the socket fits over the end of the torch-pole, and may be secured thereto by a rivet, *c*. Secured to the socket *a* by a bolt, *d*, having a head, *d'*, is a convex swivel-piece, *e*, composed of the cup *e'* and flat disk e^2, fitting over the mouth of the cup, the bolt *d* passing loosely through the center of the disk e^2 and cup *e'* to the top of the socket *a*. The bolt is connected with the socket by being made integral therewith, as shown in the drawings, or by inserting the end through the top of the socket and upsetting or otherwise fastening it therein.

If desired, the disk e^2 may fit over the cup *e'* without being secured thereto, excepting by the head of the bolt *d*. By these devices a swivel is formed which revolves easily on its axis—the bolt *d*.

Bolted or otherwise secured to the disk *e*, at a point near the periphery of the disk and away from its center, is the bracket or frame *f*, through the ends of the arms of which pass the pintles *g g*, which are secured to the body *i* of the lamp, and are flattened at their outer ends to prevent them from escaping from the frame, so that the lamp is pivotally supported within the two arms *f f*, the pintles *g g* forming the axis upon which the lamp may be vertically rotated. Thus constructed, in whatever position the staff of the torch may be held, the frame *f* will automatically adjust itself so that the burner *k* will be upright. Thus, if the staff be inclined, as shown in Fig. 1, the weight of the body of the torch, acting upon the outer rim of the disk e^2, will cause the cup *e'* to turn on its axis—the bolt *d*—until the axis *g g* of the vessel reaches a position at right angles to the plane of the inclination of the staff, thus allowing the body of the lamp to swing on its axis into an upright position.

We are aware that this effect has been produced more or less perfectly by other devices than that which we have described, and we do not desire to claim, broadly, pivoting the torch eccentrically upon its staff. The advantages of our improved torch are, however, that the top of the ferrule *a*, being convex and bearing upon the convex surface of the bottom of the swivel, materially aids in the easy adjustment of the lamp, and prevents friction between the parts.

If desired, the cap *b* of the socket *a* may be made plane instead of convex, as shown in the drawings; but I prefer the dome shape, as it affords a more perfect bearing-surface for the convex swivel-piece *e*.

The bolt *d*, also passing through the disk e^2 and bottom of the cup *e'*, affords a secure attachment without increase of friction.

If desired, the arms *f f* may be inclined, so that the pivots *g g* are situate in the same vertical plane with the staff *a'*. Owing to the disk e^2, the torch may be held in an inverted position, when the heat from the burner, striking against the disk e^2, is deflected therefrom and prevented from injuring the end of the staff.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a torch, the socket *a*, in combination with the inverted-dome-shaped swivel *e* and frame *f*, substantially as and for the purposes specified.

2. In a torch, the socket *a*, in combination with the inverted-dome-shaped swivel-piece *e* and frame *f*, mounted upon said swivel-piece, substantially as herein described, said swivel-piece being secured to said socket by means of a bolt, *d*, which passes loosely through the base and top plate of the swivel-piece, and is fixed to said socket, as and for the purposes set forth.

In testimony whereof we have hereunto set our hands this 17th day of June, A. D. 1884.

JOHN DUNLAP.
EWALT RIEDEL.

Witnesses:
W. B. CORWIN,
THOMAS W. BAKEWELL.