

(No Model.)

W. M. BRISTOL.

FLAMBEAU.

No. 304,163.

Patented Aug. 26, 1884.

Fig. 1.

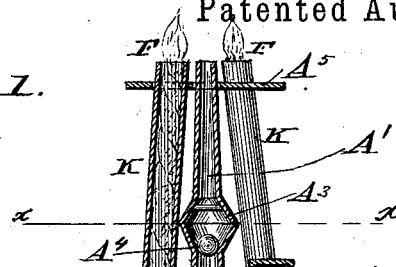


Fig. 2.

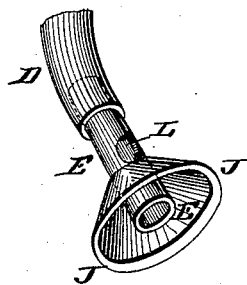
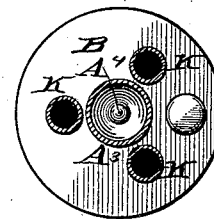


Fig. 3.



WITNESSES

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FLAMBEAU.

SPECIFICATION forming part of Letters Patent No. 304,163, dated August 26, 1884.

Application filed June 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. BRISTOL, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Flambeaux, of which the following is a specification.

My invention relates to improvements in flambeaux or flashing torches to be used in torchlight processions, for signaling, &c., and in which inflammable powders are used to produce the flash.

Heretofore flambeaux have been made with stationary inflexible and non-adjustable blow-pipes, which soon became clogged, thereby rendering the flambeau inoperative and useless.

The object of my improvements is to provide a flambeau which cannot become clogged, and which will work successfully and continuously as long as any powder remains therein. I accomplish this by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of the entire flambeau as it appears when ready for use. Fig. 2 is a detailed view, in perspective, of the weighted end of the blow-pipe; and Fig. 3 is a section on the line *x x* of Fig. 1.

Similar letters refer to similar parts throughout the views.

The cylindrical chamber A is intended to hold the inflammable powder, and is here represented (Ab) as partially filled.

The oil-can B B, with wick-tubes K K, screws onto the chamber A, as shown at I I. The bottom of the oil-can forms the cover of the chamber A, and tapers upward through the center of the oil-can, as shown at Aa. It is formed with a tubular extension, A', having an integral casing, A³, within which is supported a ball-valve, A⁴.

G represents the handle, which is tubular. An inflexible pipe, C C, extends from the mouth-piece H into the handle G, thence upward into the chamber A, and enters a flexible tube, D, as shown at C'. A short tube, E, (shown in detail in Fig. 2,) has a concave weight, J, attached near its lower end. Just above the weight is an opening, L, in the side of the tube, the diameter of which is about the same as the diameter of the tube. The short tube E is inserted in the end of the flexible tube D, as shown, thus making a

continuous and air-tight blow-pipe from the mouth-piece H to the powder Ab. The object of the weight J is to keep the end of this blow-pipe inserted in the powder, while its concave shape prevents it from sinking too deeply, and the opening L prevents it from becoming choked up as it settles into the powder.

By blowing into the mouth-piece H a portion of the powder Ab is stirred up, set in motion, and forced upward through the tube Aa, and is ignited as it passes through the flames of the wicks at F F. The valve A⁴ drops after the powder passes it, to prevent a reaction of the flash. As the powder is blown out, the flexible tube D (which may be of rubber) allows the weighted end of the blow-pipe E J to adjust itself to the amount of powder remaining in the chamber A. A guard-plate, A³, surrounds the wick-tubes and tube A³. This plate is perforated to receive the tubes to which it is soldered.

I claim—

1. In a flambeau, the combination, with a powder-receptacle having a discharge-opening, of a flexible blow-tube and a weight secured thereto, substantially as set forth.

2. In a flambeau, the combination, with a powder-receptacle having a discharge-opening, of a flexible blow-pipe and a weighted tube, E, having an opening, substantially as set forth.

3. In a flambeau, the combination, with the powder-receptacle, of a discharge-tube leading therefrom, a valve arranged within said discharge-tube, and a blow-pipe, substantially as set forth.

4. In a flambeau, the combination, with the wick-tubes and oil-reservoir, of a powder-receptacle, a weighted flexible tube, D, and the stationary tubes C C, substantially as set forth.

5. In a flambeau, a casing consisting of two separable sections, the lower section forming the powder-receptacle, while the upper section constitutes the oil-reservoir, and is provided integrally with a conical and tubular portion which forms the discharge-tube and cover for the powder-receptacle, substantially as set forth.

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