

W. Servant,
Perussion Match.

No. 113,937.

Patented Apr. 18, 1891.

Fig. 1.

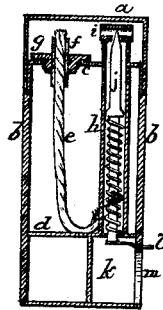


Fig. 2.

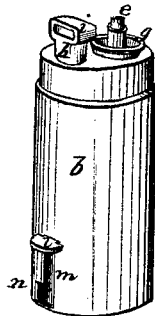
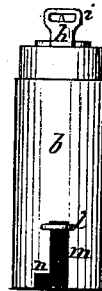


Fig. 3.



Witnesses,

Lydney C. Smith,
H. A. Daniels

Inventor,

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By J. C. Robbins
his attorney

UNITED STATES PATENT OFFICE.

WILLIAM SERVANT, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO
HIMSELF AND JOSIAH A. WHITMAN, OF SAME PLACE.

IMPROVEMENT IN PERCUSSION-MATCHES.

Specification forming part of Letters Patent No. **113,937**, dated April 18, 1871.

To all whom it may concern:

Be it known that I, WILLIAM SERVANT, of Providence, in the county of Providence and State of Rhode Island, have invented a new and Improved Percussion-Match or Pocket-Lamp; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, which forms a portion of this specification, of which—

Figure 1 is a longitudinal section, Fig. 2 a perspective view, and Fig. 3 a side elevation, of said invention.

The accompanying drawing represents a suitable and convenient size and shape for my improved percussion-match or pocket-lamp, and any suitable material may be employed in the manufacture of the casing and the internal portions of said invention.

The cover *a* should be so made as to fit closely upon the body *b* of the casing of said percussion-match or pocket-lamp, and I usually give an oval shape to said casing, for the purpose of enabling it to be conveniently carried in the pocket.

The space between the transverse partition *d* and the top *c* of the casing *b* forms the oil-chamber, for the reception of any suitable burning-fluid for the match-wick *e*.

The wick *e* passes out through the tube *f* in the screw-cap *g*, which is screwed into and closes the aperture in the top *c* of the casing *b*.

The match-wick *e* is lighted by the explosion of a percussion-wafer placed within the hollow head *i* of the tube *h*, which tube descends through the head *c* of oil-chamber and rests upon the transverse partition *d*, which forms the bottom of said chamber.

A percussion-rod, *j*, is placed within the tube *h*, as shown in Fig. 1.

The lower half portion, or thereabout, of the said percussion-rod is of smaller diameter than the upper portion thereof, and is embraced by a spiral spring, *p*, which rests upon the partition *d*, which spring must be of sufficient stiffness to throw the said rod upward from its lowest position with sufficient force to explode, with its pointed upper end, a percus-

sion-wafer placed within the hollow head *i* of the tube *h*.

The lower end of the percussion-rod *j* passes down through an aperture in the transverse partition *d* into the compartment *k*, and is there connected to the handle *l*, which passes outwardly through the vertical slit *m* in the side casing, *b*, as shown in Fig. 1.

A fluid-tight joint is formed at the point where the tube *h* passes through the top *c* of the casing *b*, and also at the point where the said tube rests upon the transverse partition *d*.

Having been thus constructed, my said percussion-match or pocket-lamp is ready for sale, and the following is the method of using said invention: The oil-chamber must be supplied with the proper quality of burning-oil or kerosene, and the user must supply himself with percussion-wafers of such a size and shape that they can be successively inserted within the opening in the head *i* of the tube *h*. When the user desires to light the match-wick he removes the cover *a* from the casing *b*, and draws down the percussion-rod *j* to the bottom of the compartment *k*, and turns its handle *l* under the shoulder *n* at the base of one side of the slit-opening *m* to said compartment. Then he places a percussion-wafer within the horizontal opening in the head *i* of the tube *h*, and turns the handle *l* of the percussion-rod *j* from its holding-notch *n*, at which moment the recoil of the actuating-spring *p* on the said rod *j* throws up the rod with a sufficient degree of force to explode the aforesaid wafer, and the flame therefrom will invariably light the match-wick *e*, provided the oil-chamber be supplied with the requisite quantity and quality of burning-fluid.

The upper end of the percussion-rod *j* is brought to a sharp point, for the purpose of diminishing the loudness of the report produced by the explosion of the percussion-wafer.

I claim as my invention—

1. My improved percussion-match or pocket-lamp, produced by the combination of the match-wick *e*, the spring-actuated percussion-rod *j*, and the hollow-headed tube *h* with each other and with the respective compartments

within the pocket-casing *a b*, substantially as and for the purpose herein set forth.

2. The sharpened actuating end of the percussion-rod *j*, as an improvement upon a blunt-headed percussion rod or hammer, for the purpose herein set forth.

In testimony that the foregoing is a full

and clear specification of my improved percussion-match or pocket-lamp I do hereby subscribe my name this 1st day of March, 1871.
WM. SERVANT.

Witnesses:

O. C. QUIRK,

J. CUSHMAN.