

PATENT SPECIFICATION



Application Date: Oct. 3, 1925. No. 24,635/25.

249,418

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PROVISIONAL SPECIFICATION.

Improvements in Spirit Lighters suitable for Igniting Cigars and the like.

I, HENRY CAEN, Engineer, British subject, 88, Avenue Chambers, Southampton Row, London, W.C., do hereby declare the nature of this invention to be as follows:—

This invention relates to improvements in spirit lighters or torches of the type in which an inflammable spirit is set alight by means of a spark.

It is customary to fill these lighters with spirit by pouring it in. In my invention I provide a two part lighter with a valve so that it can be filled by first inserting one part of the lighter in the spirit and then operating the two parts as a suction pump.

Dated the 1st day of October, 1925.

HENRY CAEN.

COMPLETE SPECIFICATION.

Improvements in Spirit Lighters suitable for Igniting Cigars and the like.

I, HENRY CAEN, Engineer, British subject, 88, Avenue Chambers, Southampton Row, London, W.C. 1, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to improvements in pyrophoric spirit lighters for igniting cigars and the like of the type in which an inflammable spirit is set alight by means of a spark.

It is customary to fill these lighters with spirit by pouring it in. According to this invention the spirit container is provided with or comprises a suction pump so that the spirit may be introduced into the lighter by inserting it in the spirit, and by operating the lighter as a suction pump.

To enable the invention to be fully understood I will describe it by reference to the accompanying drawings in which:—

Figure 1 is an exterior view of one form of a lighter constructed according to my invention.

Figure 2 is a part sectional view of the

pump mechanism of the lighter shown in Figure 1.

Figure 3 is a sectional view of the pump mechanism of a modified form of lighter constructed according to this invention.

Figure 4 is a plan view of the lighter shown in Figure 1.

According to Figure 1 the lighter consists of an outer casing *a*, a ceric or sparking medium *b*, contained in the hollow pillar *c*; a spring *d* arranged to keep the cerium in contact with the sparking wheel *e*; a screw *g* partly contained in the pillar *c* and adapted to compress the spring *d*, and a wick *k*.

According to Figure 2, *s* is a plunger rod provided with the piston *s*¹, working in a chamber *r* and provided with the port *s*², and the loose cover or washer *s*³. A ball *t* rests on the seating *t*¹ which is provided with the inlet *t*² and is fitted with the closing cap *t*³ shown in Figure 1, and the spirit, which is drawn into the chamber by the withdrawal of the pump plunger rod *s*, passes through the port *s*⁴ on the second stroke of the plunger rod and thence to the chamber *q*,

[Price 1/-]

Price 25p

which may contain absorbent material.

Although I have described this particular form of pump mechanism in connection with the inlet valve I do not limit
 5 my invention to it. I may also employ any known form of pump mechanism in conjunction with this valve. In practice I may sometimes omit the ball t and by
 10 making the inlet t^2 sufficiently small to act as a friction valve, I may constrain a part of the spirit which is drawn in on the upstroke of the piston to pass to the absorbent material on the return stroke of the piston by reason of the frictional
 15 resistance offered to the outflow of the spirit by the narrow aperture of the inlet.

Figure 3 shows a modified form of lighter in which the casing comprises telescoping parts, q and r , q acting as a plunger or piston, and r contain-

ing the ball t and the seating t^1 , the seating being provided with the inlet t^2 .

Having now particularly described and ascertained the nature of my said invention and in what manner the same is
 25 to be performed, I declare that what I claim is:—

1. A pyrophoric spirit lighter for igniting cigars and the like characterised in that the spirit container is provided
 30 with or comprises a suction pump for filling purposes.

2. Spirit lighters as claimed in Claim 1 substantially as described in reference
 35 to Figures 1 and 2.

3. Spirit lighters as claimed in Claim 1 substantially as described with reference to Figure 3.

Dated the 30th day of November, 1925.

HENRY CAEN. 40

[This Drawing is a reproduction of the Original on a reduced scale.]

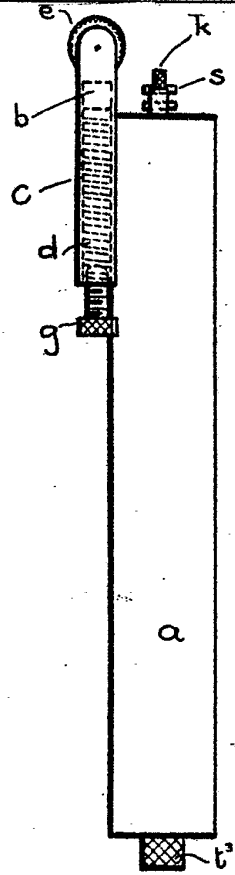


FIG. 1.

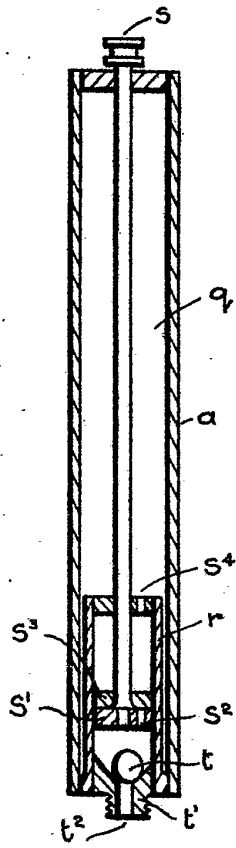


FIG. 2.

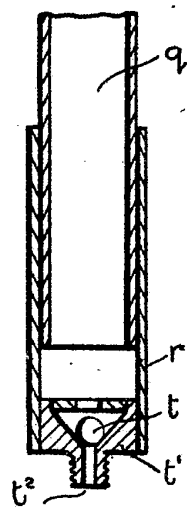


FIG. 3.

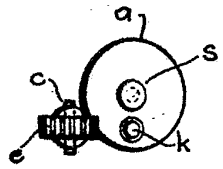


FIG. 4.