

PATENT SPECIFICATION

175,857

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PROVISIONAL SPECIFICATION.

Improvement in Petrol or Spirit-lighters for Lighting Cigars and other Objects.

I, JAKOB MANZ, Mechanician, of 41, Howland Street, W. 1, in the County of London, a citizen of the Swiss Confederation, do hereby declare the nature of this invention to be as follows:—

This invention relates to that class of cigar lighters which mainly consist of a portable or stationary container for petrol, methylated spirit or other suitable volatile liquid, and a torch or a striking pin adapted to be dipped into the said receptacle, so as to take up some inflammable liquid, which after the withdrawal of the torch is ignited by means of sparks produced by friction between the end of the said torch and a strip of hard flint or other pyrophoric material mounted on the said container.

My improvement has for its object, to prevent the evaporation and waste of spirit which may take place after the torch has been withdrawn from the container.

For this purpose I provide the opening of the container with a hinged flap or other closing device, which allows the torch to be introduced into and withdrawn from the receptacle and which closes the opening automatically by spring action, as soon as the torch is withdrawn.

Such a flap may be mounted on the outside or in the interior of the container, but preferably on the outside. The

[Price 1/-]

device may consist, for instance, of a base-plate fixed to the top of the container in proximity to its opening and provided at its front edge (adjacent to the opening) with a hinge pin, a flap which normally covers the said opening and is hinged at its rear edge to the said pin, and a helical wire-spring coiled on the said pin in a recess formed in the centre of the hinge, one end of the said spring forming an arm resting on the base-plate and the other end forming an arm resting on the flap.

The edge of the flap which is opposite to the hinge is bent up, so that it may be conveniently turned up by means of the torch for opening the container, the striking pin of the torch being for this purpose inserted underneath the flap so as to overcome the pressure of the spring.

If the closing device is situated in the interior of a container filled with absorbent material, such as felt, a cavity is formed in the upper part of the container for allowing the motion of the flap. The closing device may consist of a base-plate fixed to the inside of the container in an upright position, an approximately semi-circular flap hinged to the upper edge of the base-plate, so as to normally occupy a horizontal position covering the inside of the opening and a helical wire-spring coiled on the hinge pin and tending to keep the flap in its closing position.

The cavity or space left in the upper part of the container may be formed by a sheet metal casing of approximately semi-cylindrical shape, which is open at the top of the insertion of the torch, and has at the bottom a circular opening or a short flange for attaching a perforated

sheet-metal tube adapted to receive and guide the torch.

Dated this 4th day of January, 1921 10

J. WETTER,
Chartered Patent Agent,
For the Applicant.

COMPLETE SPECIFICATION.

Improvement in Petrol or Spirit-lighters for Lighting Cigars and other Objects.

I, JAKOB MANZ, Mechanician, of 23, 15
Bride Lane, Ludgate Circus, in the City
of London, late of 41, Howland Street,
London, W. 1, a citizen of the Swiss Con-
federation, do hereby declare the nature
of this invention and in what manner the
same is to be performed, to be particu-
larly described and ascertained in and by
the following statement:—

This invention relates to that class of
cigar lighters which mainly consist of a
portable or stationary container for petrol,
methylated spirit or other suitable volatile
liquid, and a torch or a striking pin
adapted to be dipped into the said recep-
tacle, so as to take up some inflammable
liquid, which after the withdrawal of the
torch is lighted by means of sparks pro-
duced by friction between the end of the
said torch and a strip of hard flint or
other pyrophoric material mounted on the
said container.

My improvement has for its object, to
prevent the evaporation and waste of
spirit which may take place after the
torch has been withdrawn from the
container.

For this purpose I provide the opening
of the container with a hinged flap or
other closing device, which allows the
torch to be introduced into and withdrawn
from the receptacle and which closes the
opening automatically by spring action,
as soon as the torch is withdrawn.

Such a flap may be mounted on the out-
side or in the interior of the container.
The accompanying drawings illustrate
the application of my invention to a cigar
lighter according to my Patent No.
139,020, but my invention is applicable
also to other spirit or petrol-lighters of
the class specified above.

In these drawings

Fig. 1 is a vertical section of a con-
tainer provided with a closing flap in the
interior of the same,

Fig. 2 is a vertical section at right
angles to Fig. 1,

Fig. 3 is a horizontal section along line
A—B of Fig. 1 looking downward,

Fig. 4 is a horizontal section of Fig. 1
looking upward, 65

Fig. 5 is a section through the upper
end of a container provided with an
external flap, showing the flap open.

Fig. 6 is a similar section showing the
flap closed. 70

As shown by Figs. 1 and 2 the closing
device comprises a base plate *b* fixed to
the side of the container *a* near the top
of the same in proximity to its opening
and provided at its upper edge with a
hinge pin *b*¹; an approximately semi-
circular flap *c* which normally covers the
said opening and is hinged at its rear
edge to the said pin, and a helical wire-
spring *d* coiled on the said pin in a recess
formed in the centre of the hinge, one
end of the said spring forming an arm
resting on the base-plate and the other
end forming an arm resting on the flap.

If the closing device is situated in the
interior of a container, as mentioned
above, filled with absorbent material, such
as felt, a cavity is formed in the upper
part of the container for allowing the
motion of the flap. 85

The cavity or the space left in the
upper part of the container may be formed
by a sheet metal casing *e* of approxi-
mately semi-cylindrical shape, which is
open at the top for the insertion of the
torch, and has at the bottom a circular
opening or a short flange for attaching a
perforated sheet-metal tube *f* adapted to
receive and guide the torch. 90

If the container is provided with an
external flap *g*, as indicated by Figs. 5
and 6, the flap is hinged to the lower end
of a base-plate *h* fixed to the container
and provided with a hinge-pin *h*¹ on
which is coiled a wire spring *i* which has
a projecting arm tending to keep the flap
in its closing position indicated by Fig. 6.

The free end of the flap is bent upward
slightly, as shown, in order that the flap

may be turned up by means of the torch for opening the container, the end of the torch being for its purpose inserted underneath the flap, so as to overcome the pressure of the spring.

5
10 Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

15 1. In a petrol or spirit-lighter of the class described, the combination of the petrol-container and the torch with a device for automatically closing the container by spring-action, when the torch

is withdrawn from the same, substantially as described.

2. A device according to Claim 1, comprising a spring-operated flap hinged to the interior of the container and adapted to close the opening of the container automatically, when the torch is withdrawn, substantially as described or substantially as shown.

Dated this 4th day of October, 1921.

J. MANZ,

By J. Wetter,
Chartered Patent Agent,
Fulwood House, Holborn, London,
W.C.

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

FIG. 1.

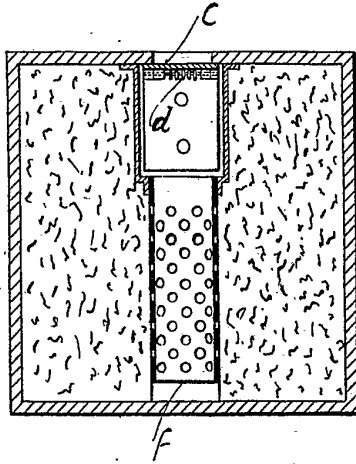


FIG. 2.

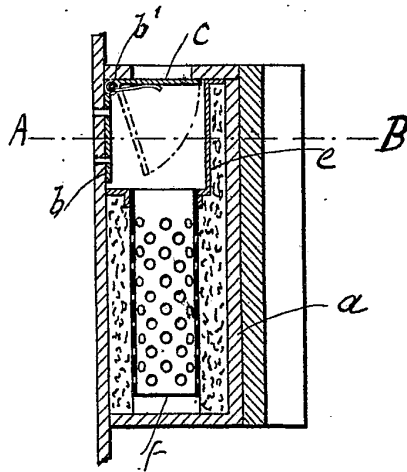


FIG. 3.

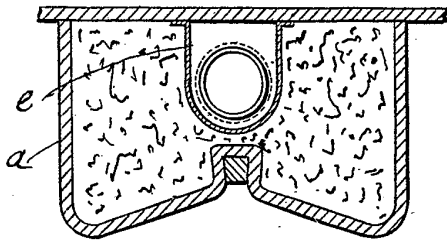


FIG. 5.

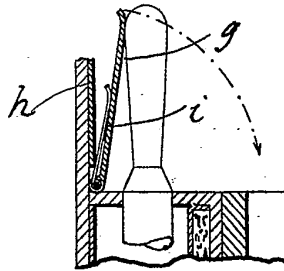


FIG. 4.

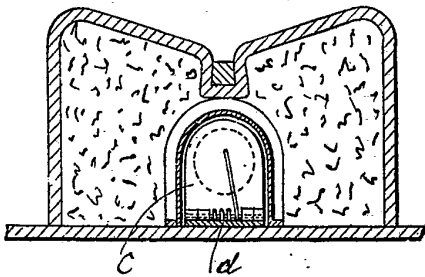


FIG. 6.

