Oct. 29, 1929. A. L. OGDEN 1,733,748

CIGAR AND CIGARETTE LIGHTER

Filed Jan. 18, 1928

Fig. 1.

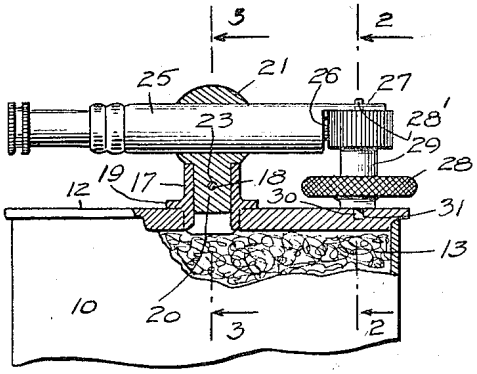


Fig. 2.

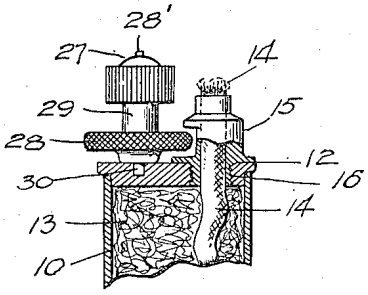


Fig. 3.

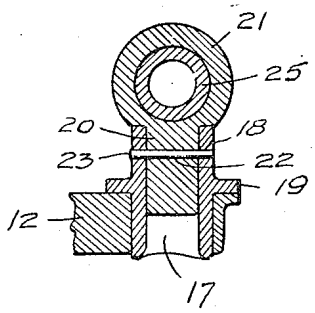
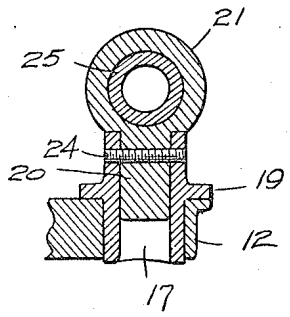


Fig. 4.



Arnold L. Ogden
INVENTOR
BY
his ATTORNEY

Patented Oct. 29, 1929

1,733,748

UNITED STATES PATENT OFFICE

ARNOLD L. OGDEN, OF NEW YORK, N. Y., ASSIGNOR TO ALFRED DUNHILL OF LONDON, INC., OF NEW YORK, N. Y., A CORPORATION OF DELAWARE

CIGAR AND CIGARETTE LIGHTER

Application filed January 18, 1928. Serial No. 247,548.

This invention relates to improvements in pocket cigar and cigarette lighters of the type utilizing a pyrophoric material as a means of creating the spark to ignite the wick.

This invention is a further development of my improved lighter forming the subject matter of the copending application No. 233,338 filed Nov. 15, 1927.

An object of this invention is to provide means for readily effecting the removal of certain parts of a lighter of this character whereby replacement of the parts may be made without in any way damaging the instrument or making it necessary to return the same to the factory for slight repairs.

A further object of the invention is to provide a wick tube which is removably engaged in the casing of the lighter so as to facilitate the operation of inserting a wick in the tube.

I accomplish these objects by means of the device hereinafter described and claimed, and illustratively exemplified in the accompanying drawing, in which Figure 1 is a side elevational view of a lighter with parts shown in section to clearly illustrate the invention; Figure 2 is a transverse sectional view taken on lines 2—2 of Figure 1; Figure 3 is also a transverse sectional view taken on lines 3—3 of Figure 1; and Figure 4 is a detail sectional view of a modified construction of the parts illustrated in Figure 3.

In the manufacture and use of lighters of the type set forth in my copending application No. 233,338, wherein the spark wheel and thumb wheel are separate members, I have found that in order to facilitate removal of the used spark wheel and replacement by a new one, the holder of the thumb and spark wheels must be removably supported in the head of the lighter casing. Briefly, I have accomplished the problem by constructing the spark wheel holder and its supporting post in two pieces which are detachably connected together as hereinafter more fully described.

It has been found equally important that after the wick of the lighter has burned away and is no longer of use, that provision be made to readily replace the burned wick by a new one. Ordinarily, this operation has been a tedious one, because the wick holder is permanently fixed in the head of the lighter casing and a new wick must be threaded through the small orifice in the holder and then projected as far as possible into the absorbent in the casing. The soft inherent nature of the wick of course makes such a task very laborious and some times practically impossible to perform. I have overcome the need for this unpleasant experience by simply providing the wick tube with a threaded portion which screws into a threaded opening in the head of the lighter casing. Arranged in this manner it is a simple matter to unscrew the tube and remove it from the casing. The old burnt wick may then be removed and replaced by a new wick and the tube screwed back in place.

Referring now to the drawings, 10 denotes the body or fuel reservoir closed at opposite ends by a bottom wall 11 and head or top wall 12. Disposed within the reservoir 10 is the usual filler of fuel absorbent material 13 for holding the highly inflammable fuel used in lighters of this character. Projecting into the absorbent 13 is the inner end of a wick 14 which extends above the head 12 and is held in position by a wick tube 15 which is threaded at its end and screws into a threaded opening 16 in head 12 as illustrated clearly in Figure 2, the position of the opening 16 being at one corner of the head 12 at the front thereof.

Disposed intermediate the top wall 12 and adjacent the side opposite that adjacent to the wick tube 15, is an upstanding tubular supporting post 17 having a transverse opening 18 at its upper end, the lower end being rigidly secured to the head 12 and provided with a flange 19 to rest on the head. Inserted in the post 17 at its upper end is a shank 20 of a ball shaped holder 21, the shank 20 being provided with a transverse opening 22 to register with the openings 18 and to accommodate a pin 23 therethrough, as illustrated particularly in Figure 3. It is intended that the pin 23 be removable so that the holder 21 may be removed at will, as already explained. In Figure 4, the shank 20 and post 17 accommodate a screw 24 in

place of the pin 23. The ball holder 21 is further provided with a bore to accommodate a tube 25 in which a piece of pyrophoric material 26 is yieldably arranged. The tube 25 is disposed in a direction parallel with the sides of the reservoir 10 and the front end is cut away so that only a narrow strip at the uppermost point of the periphery projects forward to form a bearing 27 for the upper end of the abrasive wheel, etc.

A spark wheel, comprising a corrugated or knurled thumb wheel 28 provided with an integral shank 29 projecting axially of its uppermost face and an integral bearing 30 projecting axially of the under face. The bearing 30 is mounted in an opening 31 in the top wall 12 adjacent the corner at the front thereof opposite to that occupied by the wick tube 15, while the end of the shank 29 is provided with a bearing 28′ which is mounted in an opening in the overhanging bearing 27 of the wick tube 15. The details of construction of the spark wheel and its mounting are identical with those described and illustrated in my said copending application No. 233,338, and it is therefore unnecessary it is thought, to go further into detail here.

In view of the improved construction of the wick tube and detachable holder for the pyrophoric material, it is possible to replace the wick and abrasive wheel without turning the lighter in to the factory for service.

Having now described my invention and the manner in which the same operates, what I claim and desire to secure by Letters Patent is:

1. A pocket lighter, comprising a fuel reservoir and a wick being fed therefrom, a socket in the reservoir, a holder for pyrophoric substance detachably supported in the socket, and detachable means comprising a screw adjustable in threaded openings in the said socket and holder projecting through the socket and holder to secure the same together.

2. A pocket lighter, comprising a reservoir, and a wick being fed therefrom, a wick holder for the wick screwed into the reservoir comprising a tubular member having an exterior flange disposed about its mid portion to seat on the top of the reservoir, the inner end of the socket being upset to engage the under surface of the said reservoir top, a socket projecting from the reservoir, a holder comprising a shank insertable in said socket, a tubular piece projecting through the holder and carrying the pyrophoric substance, and a spark wheel mounted between the reservoir and the end of the tubular piece and in contact with the pyrophoric substance to generate sparks to ignite the said wick.

3. A pocket lighter, as claimed in claim 1, in which the means comprises a screw adjustable in threaded openings in the said socket and holder, substantially as described.

4. A pocket lighter, comprising a fuel reservoir and a wick being fed therefrom, a socket in the reservoir, a holder for pyrophoric substance detachably supported in the socket, detachable means projecting through the socket and holder to secure the same together, and a sparking wheel comprising a thumb piece and separate abrasive wheel mounted between the holder and the top of the reservoir.

In testimony whereof I affix my signature.

ARNOLD L. OGDEN.