

Jan. 3, 1956

S. MICKELBERG

2,729,086

LIGHTER

Filed Sept. 16, 1953

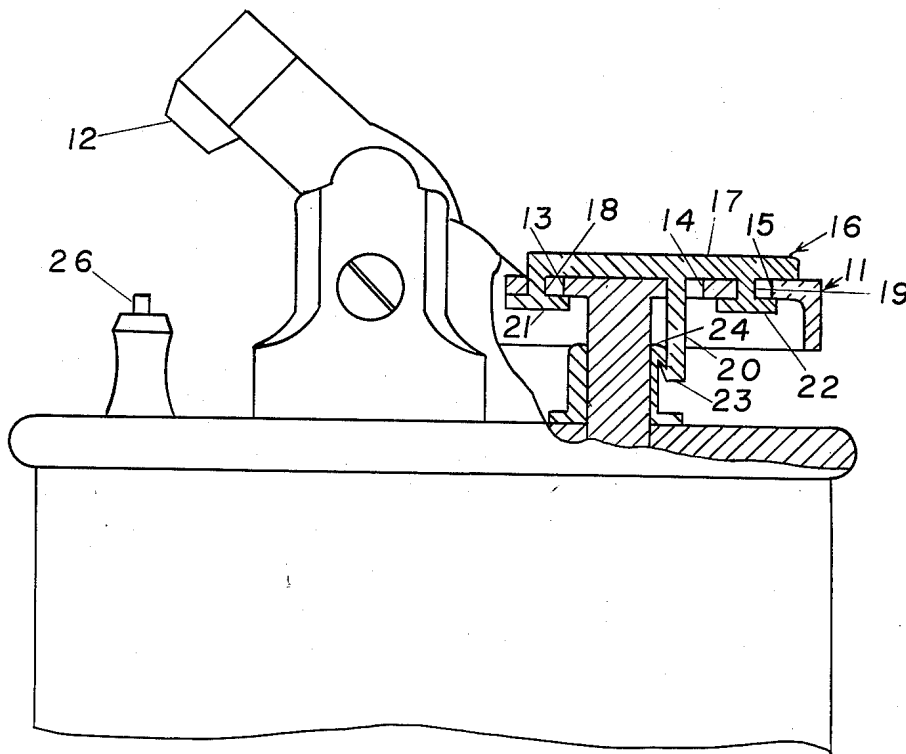
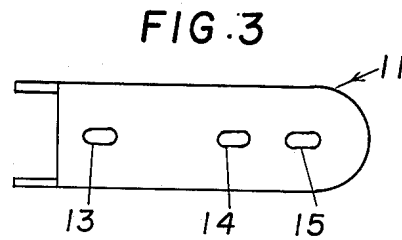
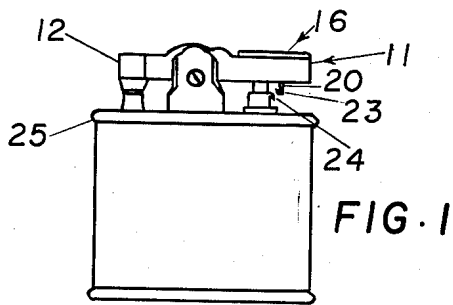


FIG. 2

SAMUEL MICKELBERG
INVENTOR.

BY *Harry Sargam*
ATTORNEY

1

2,729,086

LIGHTER

Samuel Mickelberg, Philadelphia, Pa.

Application September 16, 1953, Serial No. 380,517

3 Claims. (Cl. 67-7.1)

This invention relates to lighters in general and to devices for lighting cigarettes, cigars, pipes and the like in particular.

This invention improves the pyrophoric or spark actuated one motion action type of lighter wherein a unitary pressure producing movement transmitted thru a pressure bar removes the snuffer cap from an upright wick and actuates the spark producing mechanism and release of the pressure replaces the snuffer cap extinguishing the flame.

It is an object of this invention to produce a device which can be incorporated into the structure of a one motion action type lighter which will enable the flame to be maintained after the external pressure necessary to actuate the lighter is removed.

It is a further object of this invention to produce said device wherein the thumb or finger of the operator need not be removed from the pressure bar to lock and unlock the snuffer cap of the lighter at its position off of the wick of the lighter.

A further object of this invention is to produce said device wherein the pressure used to produce the flame can be used to position the pressure bar for locking in operative position.

Additional objects of this invention are to produce a device which can be easily manipulated, is of simple design and is inexpensive to manufacture.

Other objects and advantages of the invention will become apparent as the description of the same proceeds and the invention will be best understood from a consideration of the following detailed description taken with the accompanying drawings with the understanding that minor changes or alterations may be made in the structure so long as such changes or alterations form no material departure from the salient features of the invention as expressed in the appended claims.

Figure 1 is a front elevational view of a one action type lighter having a lock embodying my invention mounted thereon in disengaged position.

Figure 2 is an enlarged fragmentary front elevational view of the lighter with the lock in engaged position with a partial longitudinal vertical sectional view thru the lock and its associated operative parts.

Figure 3 is a plan view of the pressure bar.

In the preferred embodiment of my invention the numeral 11 represents the pressure bar which will at the same time transmit the force to remove snuffer cap 12 and actuate the spark producing mechanism (not shown). Pressure bar 11 is longitudinally apertured at 13, 14 and 15. Lock bolt 16 consists of lock bar 17 disposed above and in sliding contact relation with pressure bar 11 and beneath, integral with and extending perpendicularly from bar 17 guides 18 and 19 and catch bar 20 projecting through apertures 13, 15 and 14 respectively. Apertures 13, 15 and 14 are oval shaped so as to snugly receive guides 18 and 19 and catch bar 20, respectively, laterally, but allow their longitudinal displacement therein. The bottoms 21 and 22 of guides 18 and 19, respec-

2

tively, are enlarged so as to prevent the upward displacement of lock bolt 16.

Catch bar 20 terminates at its lower end with upward-pointing hook 23. Downward-pointing hook 24 is fastened to lighter frame 25 so as to mesh with hook 23 of catch bar 20 when lock bolt 16 is in its forwardmost position and pressure bar 11 is in its downward or operative position as shown in Figure 2.

To operate the lighter, pressure bar 11 is pressed down, removing snuffer cap 12 and igniting wick 26. If it is desired to keep the flame burning without the necessity of maintaining the pressure on pressure bar 11, the same digit of the hand that is applying the pressure can push lock bolt 16 forward meshing hooks 23 and 24 preventing pressure bar 11 from returning to its inoperative position and snuffer cap 12 from returning to its position over wick 26 as shown in Figure 1.

Reference is made to my application also entitled Lighter, Serial No. 370,178, filed July 24, 1953, which covers an invention having objects similar to those in this application.

I claim:

1. In a spark actuated lighter of the type wherein a unitary pressure producing movement removes a snuffer cap from an upright wick on the lighter frame and produces the spark and release of the pressure replaces the snuffer cap extinguishing the flame, a pressure bar for transmitting said movement to the snuffer cap and spark producing mechanism, a substantially elongated lock bar above and in sliding contact with said lever, means for holding and guiding said bar in longitudinal sliding displacement along said pressure bar, a catch bar attached to and extending from said lock bar terminating in an upward pointing hook and a downward pointing hook attached to the lighter frame adjacent said upward pointing hook whereby when said pressure bar is pressed and the lock bar pushed to bring said hooks in meshed relation the pressure bar is prevented from returning to its inoperative position preventing replacement of the snuffer cap when the external pressure is removed.

2. In a spark actuated lighter wherein constant pressure is necessary to maintain the flame means for the maintenance of said pressure after the externally applied pressure is removed comprising a pressure bar which yieldingly resists displacement along a line for transmitting said pressure, a substantially elongate lock bar in fixed relation with said pressure bar along said line and fixed relation with said pressure bar along another line, means for holding said lock bar in said relations with said pressure bar, a catch bar attached to and extending from said lock bar and terminating in an upward pointing hook and locking means for engaging and releasably holding said catch bar when said pressure bar is in operative position and said lock bar is moved along said line of adjustable relation with said pressure bar bringing said hook in engagement with said locking means and preventing said pressure bar from returning to its inoperative position after the external pressure is removed.

3. In a pyrophoric lighter of the type wherein the constant maintenance of operative pressure on a pressure bar yieldingly resisting displacement and pivotally attached to the lighter frame is necessary to maintain the flame, means for the maintenance of said pressure after the externally applied pressure is removed comprising a substantially elongated pressure bar for transmitting said pressure provided with a plurality of longitudinally disposed elongated openings, the larger dimension of said openings longitudinally aligned along said pressure bar, a substantially elongated lock bar above and in sliding contact with said pressure bar, a plurality of guide bars attached to and extending from the bottom of said lock bar through said openings, the bottom of one of said

2,720,086

3

guide bars terminating in an upward pointing hook, the bottoms of the other guide bars enlarged so as to prevent passage through said openings and a downward pointing hook attached to the lighter frame adjacent said upward pointing hook whereby when said pressure bar is pressed and the lock bar pushed to bring said hooks in meshed relation the pressure bar is prevented from returning to its inoperative position preventing replacement of the snuffer cap when the external pressure is removed.

5

4

References Cited in the file of this patent

UNITED STATES PATENTS

2,019,434 Reilly ----- Oct. 29, 1935

FOREIGN PATENTS

54,418 Austria ----- July 25, 1912
305,233 Great Britain ----- Aug. 29, 1929