

(No Model.)

W. F. KESSLER.
ELECTRIC CIGAR LIGHTER.

No. 598,489.

Patented Feb. 1, 1898.

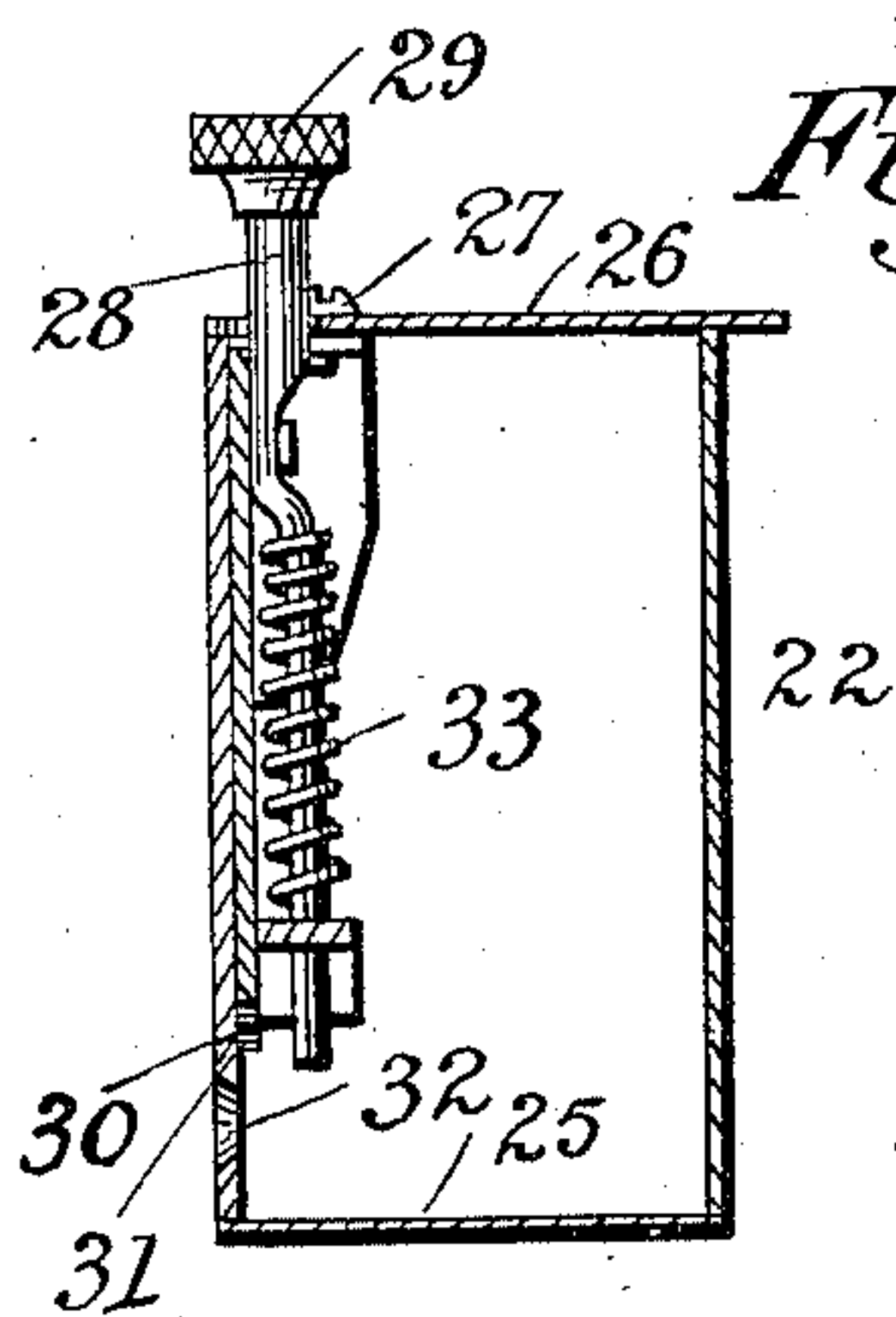
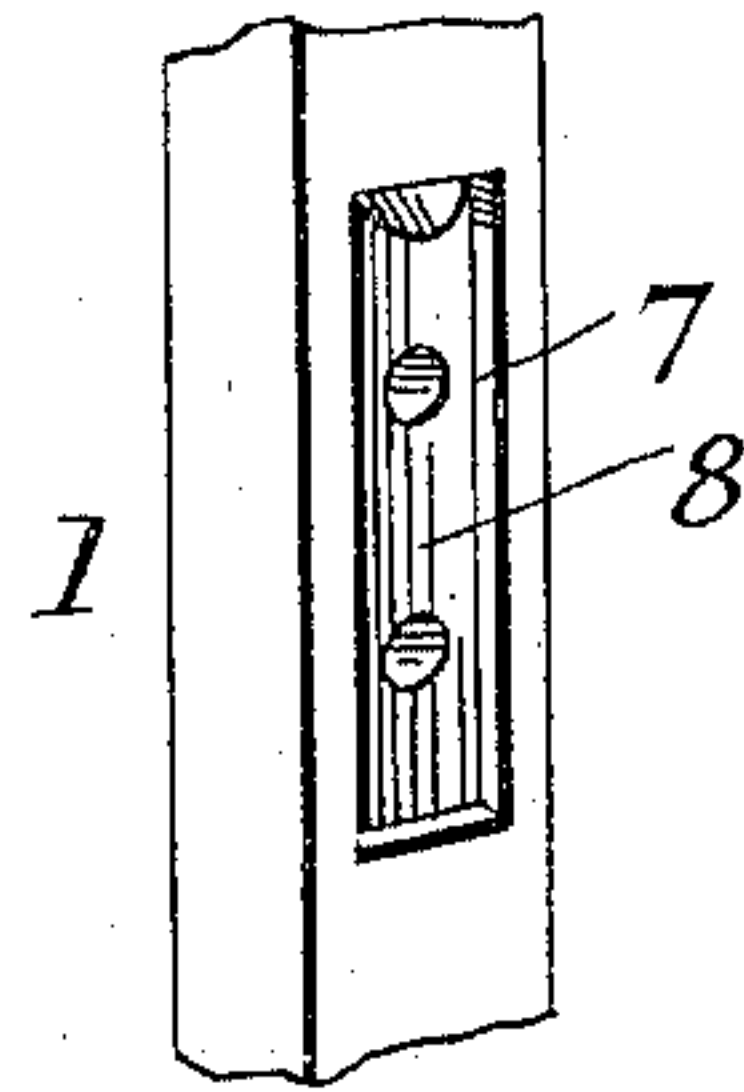
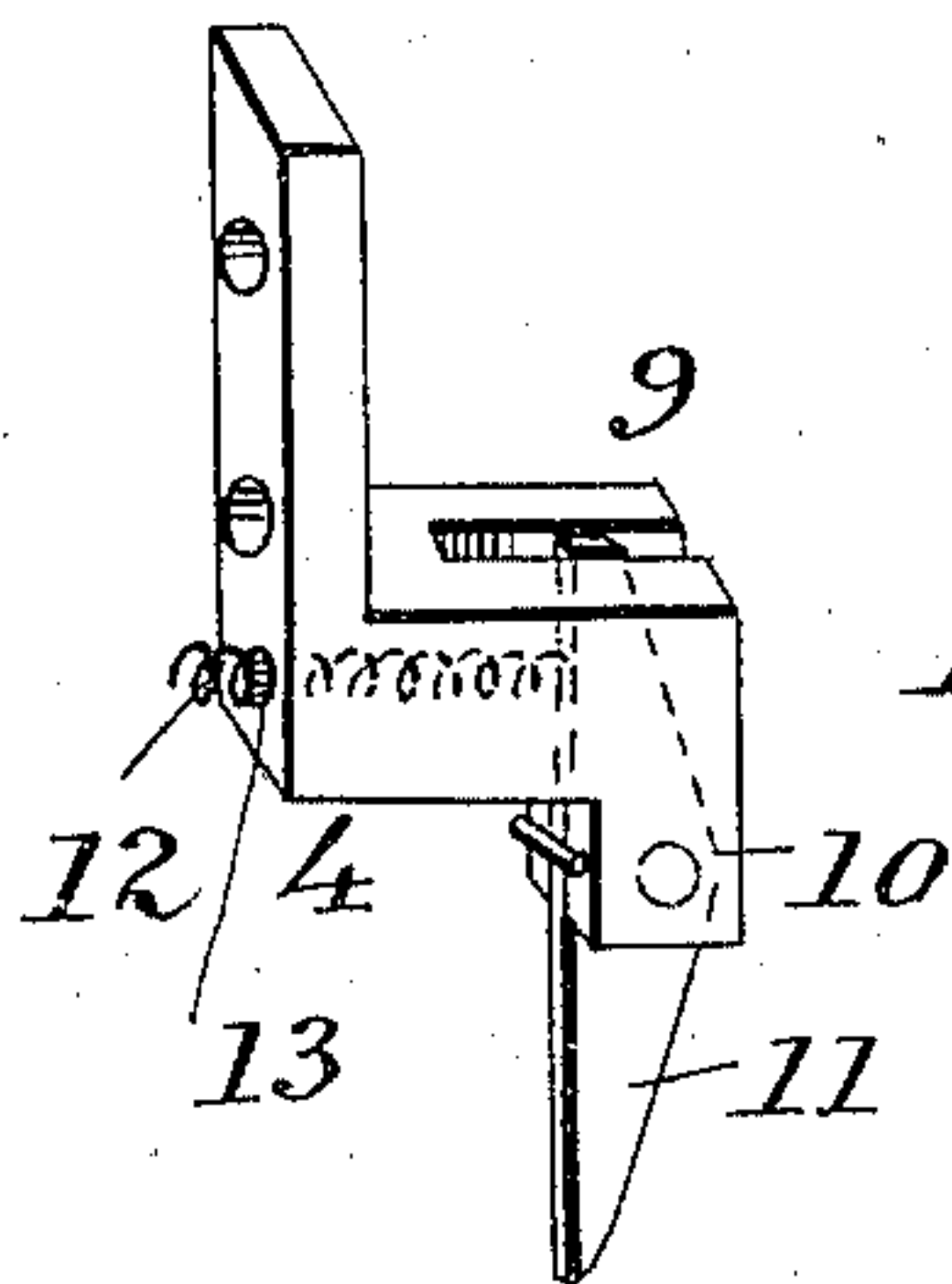
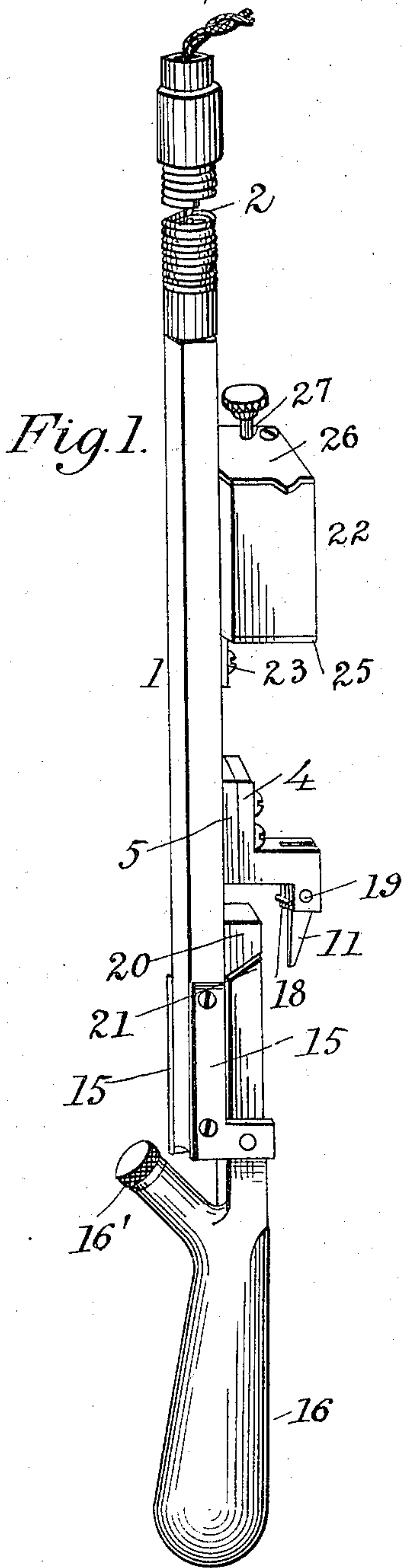
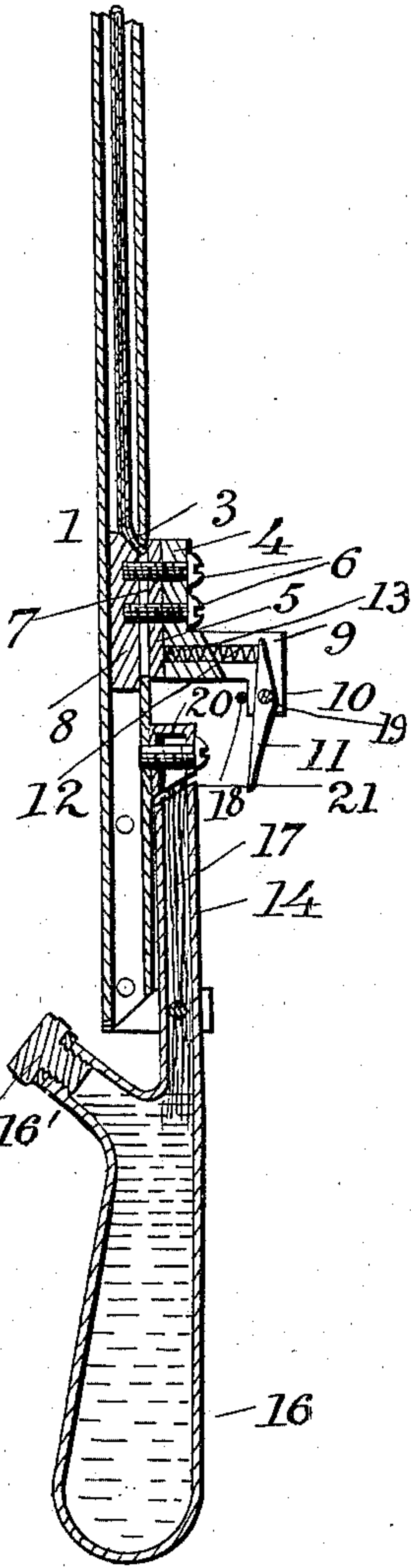


Fig. 2.



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UNITED STATES PATENT OFFICE.

WILLIAM F. KESSLER, OF AUBURN, INDIANA.

ELECTRIC CIGAR-LIGHTER.

SPECIFICATION forming part of Letters Patent No. 598,489, dated February 1, 1898.

Application filed July 22, 1897. Serial No. 645,597. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. KESSLER, a citizen of the United States, residing at Auburn, in the county of De Kalb and State of Indiana, have invented certain new and useful Improvements in Electric Cigar-Lighters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain improvements in electric cigar-lighters for retail cigar-stores, club and smoking rooms, and more particularly to that class of cigar-lighters as illustrated in United States Letters Patent No. 562,395, dated June 23, 1896; and the object is to increase the efficiency and durability of the same without increasing the cost of manufacture.

To this end the invention consists in certain details of construction, as well as in the combination and arrangement of the several parts of the device, as will be hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawings the same reference-numerals indicate the same parts of the invention.

Figure 1 is a perspective view of my improved electric cigar-lighter. Fig. 2 is a longitudinal section of the lower end of the same. Fig. 3 is an enlarged detail perspective view of the insulated angle-bracket. Fig. 4 is a detail of a section of the lighter with the angle-bracket removed therefrom, and Fig. 5 is a detail section of the cigar-cutter.

1 represents a rectangular metal tube which forms one terminal of an electric circuit comprising the conductor 2, which includes a suitable open-circuit battery and a solenoid or sparking coil (not shown) and the return-conductor 3, the end of which is in electrical connection with the angle-bracket 4, adjustably secured to the front face of the tube 1 and insulated therefrom by the non-conducting plate 5. This bracket is longitudinally adjustable on said tube by means of the set-screws 6 6, which pass through said bracket, the non-conducting plate 5, and through a slot 7 in the contiguous wall of the tube 1, so as to engage the non-conducting block 8, located

within said tube and which forms an adjustable anchorage for the screws. By this construction it will be seen that provision is made for a limited longitudinal adjustment of the angle-bracket without interfering with its insulation from said tube. The outer end of the horizontal arm 9 of this insulated bracket is slotted, and it terminates in a depending bifurcated toe 10, in which is fulcrumed the sparking-lever 11, the upper end of which is in operative contact with a spiral spring 12, seated in a pocket 13 in said arm, so as to normally press the upper end of said lever outwardly and its lower end inwardly and into the path of the uppermost point of the beveled end of the wick-tube 14, which is fulcrumed in the projecting parallel ears of the plates 15 15, fixed to the opposite sides of the lower end of the tube 1.

The lower end of the wick-tube terminates in an integral fluid-reservoir 16, which also forms a convenient hand-grip by which the device is manipulated to produce the light and which is also formed with a removable screw-cap 16 for replenishing said reservoir with a suitable inflammable liquid.

17 represents a non-combustible wick by which the fluid in the reservoir is conducted by capillary attraction to the ignition-point at the upper end of said tube.

A transverse spring 18 is secured under the head of the screw 19, on which the sparking-lever is fulcrumed, and its free end extends horizontally across the path of said lever below the fulcrum-point to limit its play in that direction and to counteract the tendency of the spring 12, which would otherwise press the lower end of said lever into contact with the extinguishing-cap 20, fixed to the face of the tube 1 immediately above the ignition end of the lamp-tube, and thus short-circuit the battery.

The entire device may be made of brass or similar material and suitably plated or otherwise finished, with the exception of the sparking-lever and the tip 21, forming the uppermost end of the wick-tube, which parts form the extremities of the electric circuit, and they are preferably formed of iron or steel, for the well-known reason that when the circuit is broken or interrupted at this point the arc formed consumes a portion of the carbon

in the iron or steel forming the terminals, the combustion of which amplifies the spark and insures the ignition of the fluid with which the wick is charged.

5 22 represents a vertical rectangular case removably secured by the screws 23 23 to the tube 1 about midway the angle-bracket 4 and the flexible sleeve 24 on the upper end of said tube. This case is formed with a closed
10 bottom 25 and a horizontally-pivoted cover 26, provided with a guide-orifice 27, through which extends a vertical rod 28, terminating in a push-button 29. 30 represents a cutting-blade fixed to the inner end of said rod, its
15 lower end being provided with a V-shaped notch 31, formed with knife-edges which are adapted to sever the pointed end of a cigar when inserted in the countersunk guide-orifice 32, so as to be projected into the path of
20 the cutter-blade. A spiral spring 33 encompasses said rod 28 to retract it after it has been pressed down by the thumb-button.

The operation will be readily understood when it is seen that the lower end of the spark-
25 ing-lever 11 normally projects into the path of the tip 21 on the wick-tube. If now the hand-grip be operated to press the upper end of the wick-tube outwardly, it carries the lower end of the sparking-lever with it, closing the cir-
30 cuit at the same time, and when the wick-tube has traveled far enough to release the lever and the instant that the separation takes place between the tip 21 and the lever 11 the spark is formed, which is projected across the
35 projecting end of the charged wick to ignite the charge and produce the flame. When the lever is released, the spring 12 restores it to its normal position, where it rests against the free end of the transverse limit-spring 18 and
40 in the path of the tip 21, which must pass it on its return movement and press it out of its path and against the tension of the spring 18. When this has been accomplished, the spring 18 then carries the lever backward un-
45 til an equilibrium is established between both of the springs, and the lever again projects into the path of the forward movement of the

wick-tube, as in the first instance, igniting the lighter.

Although I have specifically described the 50 construction and relative arrangement of the several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of my invention 55 without departing from the spirit thereof.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A cigar-lighter of the class described, 60 comprising an electric circuit, a supporting-tube, a wick-tube pivoted to said supporting-tube and forming one terminal of said circuit, in combination with an insulated bracket se-
65 cured to said supporting-tube and longitudinally adjustable with reference to said wick-tube, a spring-actuated sparking-lever fulcrumed in said bracket and projecting into the path of said wick-tube and forming the opposite terminal of said circuit, and a re- 70
actionary spring such as 18, extending across the path of said sparking-lever to take up its rebound, substantially as and for the purpose set forth.

2. A cigar-lighter of the class described, 75 comprising the tube 1 provided with the longitudinal slot 7, the non-conducting plate 5 and the corresponding block 8, the bracket 4 secured to said block and longitudinally ad-
80 justable with reference to said tube by means of the screws 6 6 and the spring-actuated lever 11 fulcrumed in said bracket, in combination with the wick-tube 14 pivoted to said tube 1, and an electric circuit, the poles of which terminate in the lever 11 and wick-tube 85
14, substantially as and for the purpose set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

WILLIAM F. KESSLER.

Witnesses:

GEORGE W. MAXWELL,
CHARLES M. BROWN.