

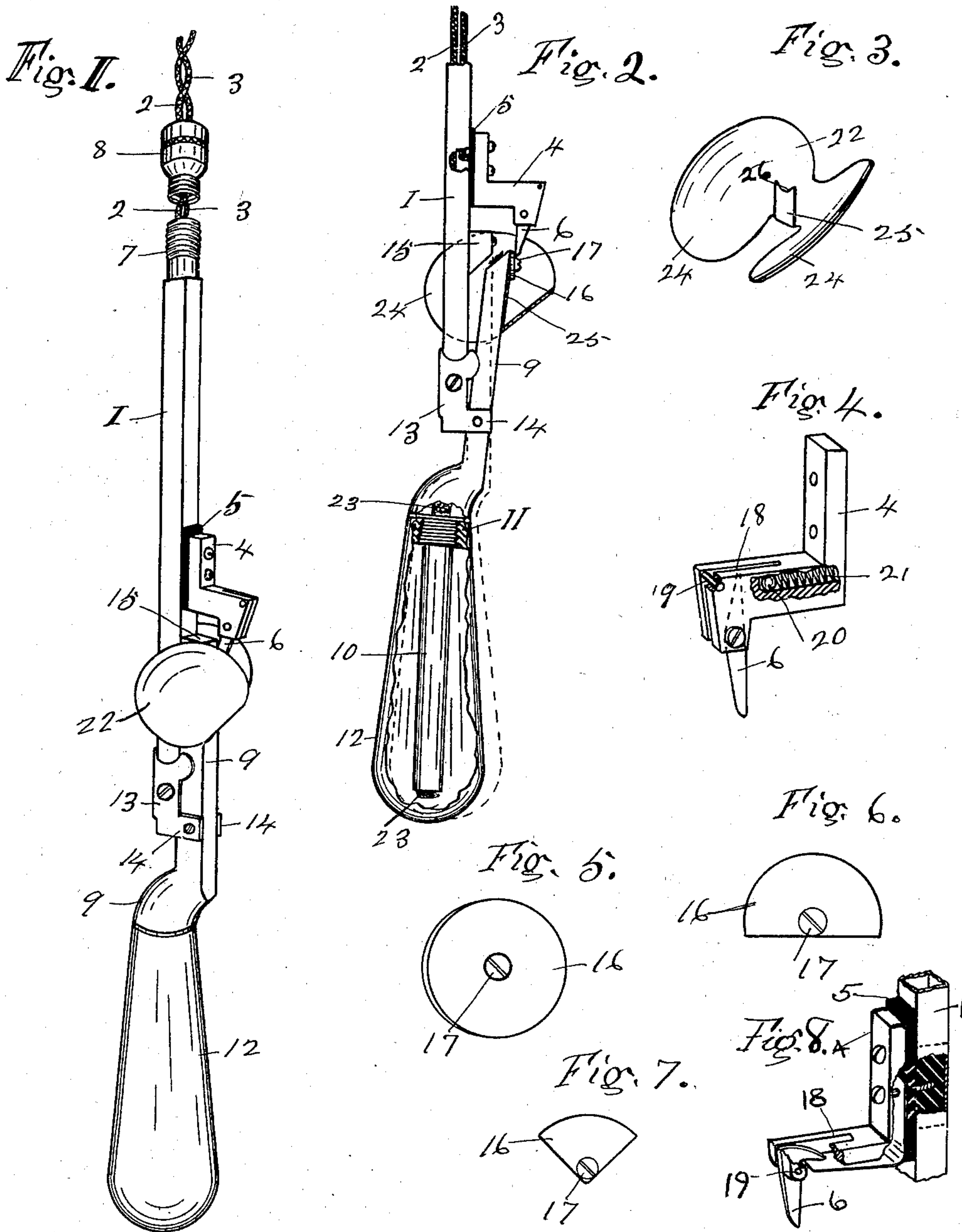
No. 702,437.

Patented June 17, 1902.

W. F. KESSLER.
ELECTRIC CIGAR LIGHTER.

(Application filed Oct. 27, 1900.)

(No Model.)



WITNESSES:

William F. Kessler INVENTOR

Cecilia Kears.
Augusta Viberg.

BY Chapin & Denny
ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM F. KESSLER, OF AUBURN, INDIANA.

ELECTRIC CIGAR-LIGHTER.

SPECIFICATION forming part of Letters Patent No. 702,437, dated June 17, 1902.

Application filed October 27, 1900. Serial No. 34,587. (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 Dekalb, in the State of Indiana, have invented certain new and useful Improvements in Electric Cigar-Lighters; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to 10 which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in 15 electric cigar-lighters.

The object of my present invention is to provide an electric cigar-lighter of simple and economical construction for retail cigar-stores or smoking-rooms having the following novel 20 features: First, an improved adjustable and removable striking-plate for the frictional contact of the sparking-lever in throwing the ignition-spark; second, a detachable wind shield or protector adapted to guard the flame 25 against side drafts when the wick is ignited; third, a burner-tube having an offset therein adapted to secure a perfect vertical alinement of the oil-receptacle and also to secure the prompt return of the burner-tube to its normal 30 position in contact with the extinguishing-cap by gravity, and, fourth, a downward extension of the wick-tube into the oil-receptacle to secure the wick against evaporation or disarrangement while the oil-receptacle is being 35 replenished.

Similar reference-numerals indicate like parts in the several views of the accompanying drawings, in which—

Figure 1 is a perspective of my improvement, showing the relative arrangement of the operative parts in their normal position broken away in part. Fig. 2 is a side view of the lower portion of the lighter, with the wind-shield and the oil-receptacle broken 45 away in part, showing the wick-tube extension, and showing the sparking-lever in contact with my improved striking-plate, and also showing the manner of securing the wind-shield in position. Fig. 3 is a perspective detail of my improved wind-shield, showing the means for securing it in position. Fig. 4 is an enlarged detail of the sparking-lever bracket

broken away in part to show the means for securing the sparking-lever in its normal position out of contact with the other electrode. 55 Figs. 5, 6, and 7 are enlarged details of modified forms of the improved detachable striking-plate I employ. Fig. 8 is another enlarged detail of the sparking-lever bracket broken away in part to show the form of the 60 sparking-lever and also showing the manner of securing the bracket in position on the supporting-tube and the manner of insulating the same therefrom.

The metal tube 1 of common form and construction contains the adjacent end of the insulated wires 2 and 3. The inner extremity of the said wire 2 is rigidly secured in the said tube and electrically connected therewith, while the inner extremity of the said 70 wire 3 passes out through a lateral opening in said tube and is electrically connected with the bracket 4, which is insulated from the said tube 1 by means of a proper insulating-strip 5, and in the other end of which is 75 pivotally mounted the pendent sparking-lever 6, which forms one terminal of the lighter. This metal tube 1 is surmounted by a common form of flexible arm 7, consisting of a coiled spring, through which pass the said 80 insulated-wire conductors 2 and 3. This coil-spring forms the usual flexible connection between my improved lighter and its support and is provided at its upper end with the internally-threaded nut 8. 85

The wick-tube 9 has its lower end curved, as shown, to bring the oil-receptacle in vertical alinement with the tube 1. To the lower end of the said wick-tube is rigidly secured in any proper manner the tubular extension 90 10, having upon its upper end a screw-threaded enlargement 11, adapted to receive and rigidly secure by a screw-threaded connection the oil-receptacle 12, as shown in Fig. 2.

The wick-tube 9 is pivotally connected to 95 the lower end of the tube 1 by means of the hanger-bracket 13, which embraces three sides of said tube 1, to which it is rigidly secured, and is provided with the oppositely-arranged lateral ears 14, from which the wick-tube 9 is pivotally suspended. To the front 100 face of the said tube 1 is rigidly secured, by a proper holding-screw, the hollow extinguishing-cap 15, in coöperative relation with the

upper end of the said wick-tube 9, the adjacent faces of each being correspondingly beveled, as shown in Fig. 2. To the outer face of the upper extremity of the said tube 9 is rigidly secured my improved striking-plate 16, in coöperative relation with the lower end of the said sparking-lever 6. This plate 16 may be of any proper form, preferably circular, as in Fig. 5, or in the form of some portion of a circle, as shown in Figs. 6 and 7, and is secured in position by means of a proper holding-screw 17. By loosening the said screw 17 the said plate 16 can be readily adjusted to compensate for the erosive action of the said sparking-lever and when worn out can readily be replaced. The upper end of the said pivoted sparking-lever 6 is arranged in the open slot 18 of the said bracket 4 and is limited in its movement in one direction by the fixed pin 19 and in the other direction by the loosely-mounted spring-pressed pin 20, which is held in position by the spiral spring 21, Fig. 4.

The wind-shield 22, by which the flame of the wick 23 is inclosed and protected, is constructed and arranged as follows: Two oppositely - arranged integral concavo - convex wings or plates 24 of sheet metal, connected as shown, are provided with an intermediate integral tongue 25, having a notch 26 at its free end adapted to receive the holding-screw 17, when the said tongue is placed in position by slipping its free end beneath the said plate 16 when the screw 17 is properly loosened, after which it is rigidly secured in position by again tightening the said screw 17, as shown in Fig. 2. When thus placed in position, the flame of the lighter is fully shielded upon two opposite sides by the said wings 24 against any lateral draft and is shielded rearwardly by the adjacent portion of the tube 1.

The operation of my improvement thus described is obvious, and, briefly stated, is as follows: When the wick-tube and oil-receptacle are in their normal position, as shown by the dotted outlines in Fig. 2, which position they automatically assume by gravity when permitted to do so, the outer end of the wick 23 will be inclosed by the said extinguishing-cap 15 and the circuit of the lighter will be open, as the two terminals 6 and 16 are out of contact. When it is desired to ignite the said wick for use, the operator seizes the receptacle 12, which thus serves as a handle, and draws the lighter toward him or toward the right in Figs. 1 and 2, at the same time holding or maintaining the wick-tube in a substantially vertical position. This movement throws the upper end of the wick-tube 9 outward, thereby closing the electric circuit of the lighter by the contact of the said terminals 6 and 16, and as this movement is continued toward the operator the wiping-contact of the said sparking-lever with the outer face of the striking-plate 16 an ignition-spark is thrown, producing a

flame at the upper end of the said wick. In throwing the spark the lower end of the pivoted sparking-lever will be forced outward against the tension of the said spring 21, which thus insures the prompt return of the said lever to its normal position. When the operator has lighted his cigar, he releases his hold and permits the wick-tube to resume by gravity its above-described normal position. Obviously the said shield 22 will effectually guard the flame against such extinguishing-drafts as are incident to use. Another advantage of the shield is that it conceals from view those portions of the lighter which are more or less blackened by smoke from use.

It is evident that by the use of my improved striking-plate the outer face of the wick-tube is fully protected from the usual erosive wear of the sparking-lever that the said plate or disk can readily be adjusted, so as to bring its entire outer face successively in the path of the sparking-lever, and that when worn out it can readily be replaced at a merely nominal expense.

It is obvious that when the oil-receptacle is detached from the wick-tube to be filled the lower end of the wick 23 is inclosed and protected against evaporation and interference from bystanders by means of the tubular extension 10.

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

1. In an electric cigar-lighter, a tubular supporting-standard provided upon its front face with an insulated bracket for the sparking-lever, and with a fixed snuffing-cap; a vertically-arranged wick-tube pivotally suspended from said standard, having its upper end in coöperative relation with said snuffing-cap, and provided upon its lower end with a detachable tubular extension; an oil-receptacle removably mounted on the lower end of the wick-tube; a striking-plate fixed on the upper end of the wick-tube to prevent mutilation thereof by the sparking-lever; a pivoted sparking-lever in coöperative relation with the said striking-plate; and a wind-shield having a central notched tongue by which it is detachably mounted on said wick-tube as described.

2. The combination in an electric cigar-lighter of a tubular standard, having a fixed snuffing-cap and a pendent pivoted sparking-lever; a vertical wick-tube pivotally suspended from the said standard, having an offset at its lower portion for the purpose specified; and provided with a detachable pendent tubular extension; a striking-plate on the upper end of said wick-tube to prevent mutilation of said tube in coöperative relation with the said sparking-lever; and a wind-shield detachably mounted on the said wick-tube as shown by means of a centrally-arranged tongue or lug.

3. In an electric cigar-lighter, the combination of a tubular standard, having a fixed snuffing-cap and a pendent pivoted sparking-lever; a vertical wick-tube pivotally suspended

ed from the said standard, having an offset
at its lower portion for the purpose specified,
and provided with a detachable pendent tu-
bular extension; and a striking-plate on the
5 upper end of said wick-tube to prevent muti-
lation of said tube, in coöperative relation
with the said sparking-lever.

Signed by me at Fort Wayne, Allen county,
State of Indiana, this 18th day of October,
A. D. 1900.

WILLIAM F. KESSLER.

Witnesses:

ADELAIDE KEARNS,
AUGUSTA VIBERG.