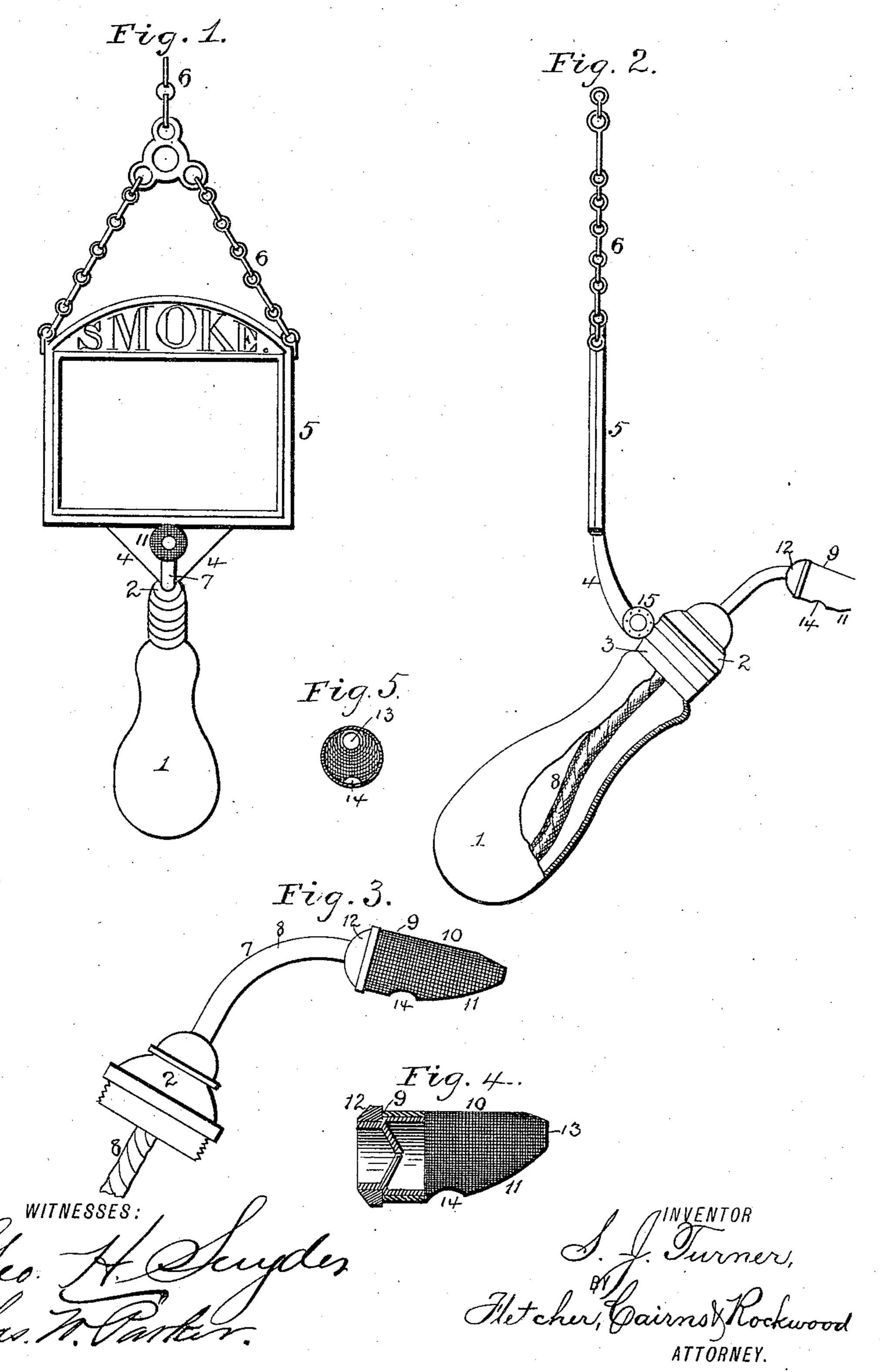
## S. J. TURNER. CIGAR LIGHTER.

No. 575,670.

Patented Jan. 19, 1897.



## United States Patent Office.

SAMUEL J. TURNER, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF THREE-FOURTHS TO HENRY J. GLASSER, CHARLES T. GLASSER, AND THOMAS P. JUMPER, OF SAME PLACE.

## CIGAR-LIGHTER.

SPECIFICATION forming part of Letters Patent No. 575,670, dated January 19, 1897.

Application filed December 17, 1895. Serial No. 572,474. (No model.)

To all whom it may concern:

Be it known that I, Samuel J. Turner, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Cigar-Lighters, of which the following is a specification.

My invention relates to cigar-lighters for use in retail cigar shops and stores in which a 10 flame is kept constantly burning and which may be used by a smoker to light his cigar by applying such flame directly to the cigar while in his mouth; and the objects of my invention are to devise means to utilize gasolene or similar oils to produce the flame and to provide means to prevent the flame from being blown out. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of the cigar-lighter. Fig. 2 is a side elevation of the same with a portion of the bulb broken away, showing the wick. Fig. 3 is a side elevation with the bulb removed. Fig. 4 is a detail showing a longitudinal central section of the burner and flame-protector. Fig. 5 is a detail showing a rear view of the flame-protector when removed from the burner.

Similar numerals refer to similar parts throughout the several views.

The body 1 of the cigar-lighter is a hollow bulb which is closed at the top by means of an appropriate screw-cap 2. The neck of the bulb is surrounded by a band 3, to which arms 4 35 are adjustably attached. These arms may be secured to a frame 5, adapted to receive advertising-cards, but which forms no part of the invention for which application is now made. A suitable chain 6 will then be pro-40 vided for suspending the whole from any point or object desired. Entering the top of the cap 2 is a tube 7, which incloses the wick 8. The inner end of this wick will be immersed in the oil which is placed in the bulb 1, while 45 the outer end of the wick extends to the outer end of the tube 7. Upon the outer end of the tube 7 is fitted a burner 9. A small opening 10 leads through the burner to the cavity of the tube at the end of the wick, through which 50 the gas escapes to form the flame. A flame-

protector 11, preferably formed of wire-netting, encircles the outer end of the burner and may be secured to the burner by having its inner or rear end bent at right angles, so as to be clamped against the burner by means 55 of a screw-nut 12. The flame-protector is provided with an opening 13 at its outer end, also with an auxiliary opening 14 on its under side near the forward end of the burner.

If a lighted match be held beneath the 60 burner near the opening 14, it will heat the burner 9 and thereby generate gas from the oil within the wick 8 at the outer end of the tube 7. The gas escaping through the opening 10 will be ignited from the match and the 65 flame will be projected from the flame-protector 11 through the outer opening 13. For the purpose of lighting his cigar the smoker will grasp the bulb with his hand and bring the flame to the end of his cigar. It will be 70 noticed that the burner with its flame-protector does not extend in a horizontal plane, but that its outer end projects slightly downward, as shown in Figs. 2 and 3. By this means the burner 9 is brought slightly over 75 the burning flame and is thereby heated so as to generate sufficient gas from the oil to keep the flame constantly burning. The angle at which the burner is set may be adjusted by means of a set-screw 15, Fig. 2, and the greater 80 dip that is given to the burner the greater will be the generation of gas and the larger the flame produced, and vice versa.

The flame of the cigar-lighter is liable to be blown out by sudden puffs of air and drafts, 85 and I therefore provide the flame-protector 11. The sides of the protector will protect the flame against drafts striking it in that direction, while if a draft of air strikes from the front on the opening 13 the flame for the 90 time being will be driven through the opening 14 without being extinguished. By the means described a practical, inexpensive, and most economical cigar-lighter is produced, the expense of operating which is much less 95 than where ordinary illuminating-gas is employed. Besides it can be used in villages or rural districts where there is no supply of illuminating-gas. Likewise the large expense of making and maintaining connection

tions with the gas-pipes for conducting illuminating-gas in cities involving plumbers' bills and rubber tubing in order to conduct the gas to the proper situation for the burner 5 is avoided.

What I claim as my invention, and desire

to secure by Letters Patent, is—

1. In a cigar-lighter, a bulb adapted to contain oil, a tube extending therefrom, and a 10 wick extending from the bulb through the tube, combined with a burner having a small central orifice, and into which the outer end of the wick extends, the burner being applied to the outer end of the tube and adapted to 15 have heat applied thereto for the purpose of generating gas; and means for suspending the lighter so that the burner will be slightly over the flame, substantially as shown.

2. In a cigar-lighter, a bulb adapted to con-20 tain oil, a tube extending therefrom, and a burner applied to the outer end of the curved end of the tube, combined with a wick which extends through the tube into the burner and a flame-protector applied to the burner, and 25 having an opening for the escape of the flame, the burner being tilted forward so that it is slightly over the flame, substantially as described.

3. In a cigar-lighter the combination of a 30 bulb adapted to contain oil, a burner provided with an opening adapted for the escape of gas, a wick adapted to conduct oil to the burner, a flame-protector provided with an opening adapted for the escape of the flame 35 at its forward end and an auxiliary opening on the under side of the protector near the outer end of the burner, substantially as herein set forth.

4. In a cigar-lighter the combination of a bulb, a burner with an opening therein, a 40 tube leading from the bulb to the burner, said tube inclosing a wick adapted to conduct oil from the bulb to the burner, a flame-protector provided with an opening adapted for the escape of the flame at its forward end, an aux- 45 iliary opening on the under side of the protector near the outer end of the burner, and means for suspending the whole, substantially as specified.

5. In a cigar-lighter the combination of a 50 bulb, a burner provided with an opening adapted for the escape of gas, a tube leading from the bulb to the burner, said tube inclosing a wick adapted to conduct oil to the burner, a flame-protector composed of wire- 55 gauze provided with an opening adapted for the escape of the flame from its outer end, an auxiliary opening on the under side of the protector near the outer end of the burner, and means for suspending the whole in such man- 60 ner that the burner is slightly over the flame of the lighter, substantially as herein shown and described.

6. In a cigar-lighter, the combination of a burner with an opening therein adapted for 65 the escape of gas, a flame-protector provided with an opening adapted for the escape of the flame at its forward end and an auxiliary opening on the under side of the protector near the outer end of the burner, and means 70 for suspending the whole, substantially as shown and described.

SAMUEL J. TURNER.

Witnesses:

CHAS. S. CAIRNS, C. A. Broeffle.