(No Model.)

W. A. BLODGETT.

CIGAR LIGHTER.

No. 545,871. Patented Sept. 10, 1895.

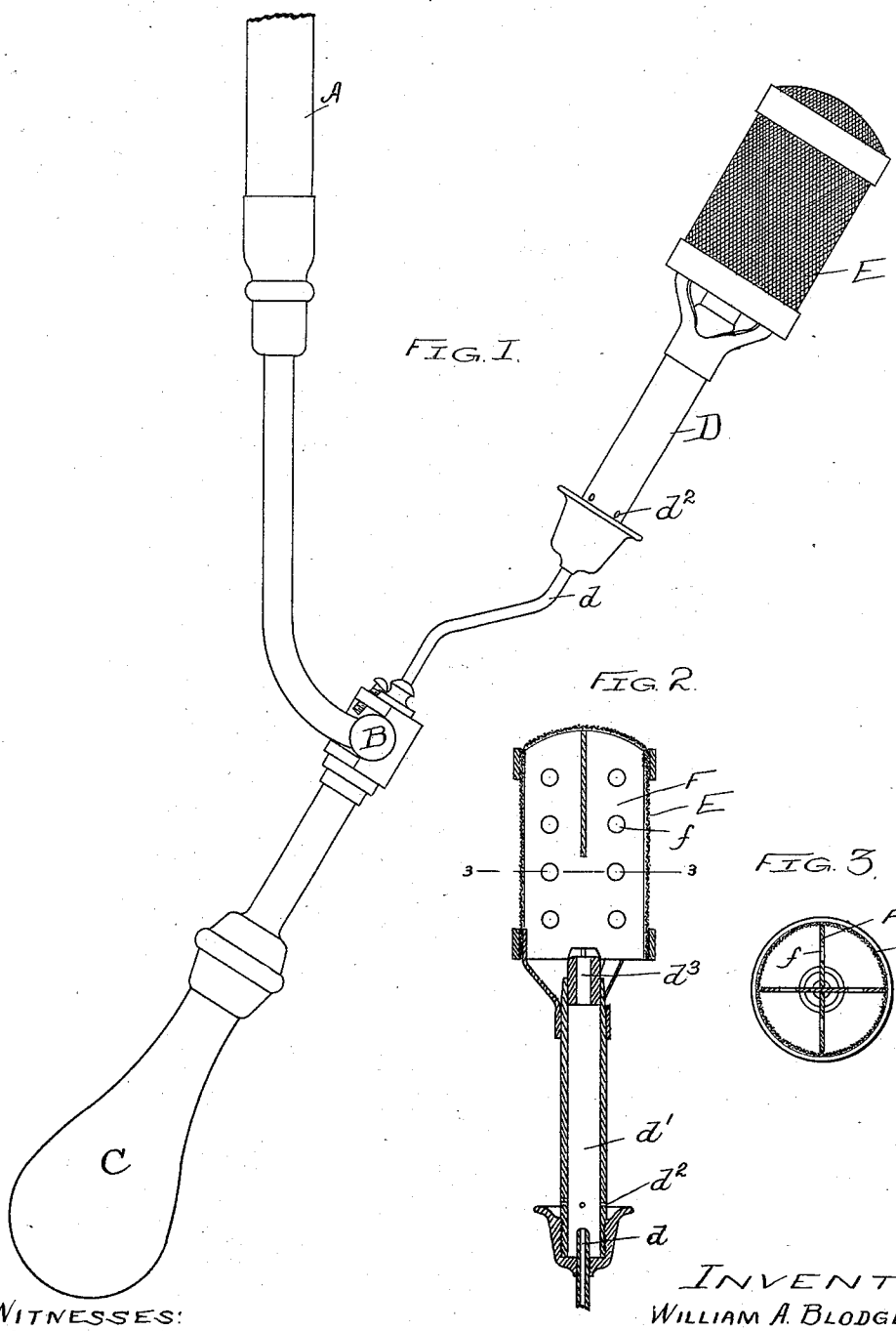

FIG. 1.

FIG. 2.

FIG. 3.

WITNESSES:
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CIGAR-LIGHTER.

SPECIFICATION forming part of Letters Patent No. 545,871, dated September 10, 1895.

Application filed April 1, 1895. Serial No. 543,957. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. BLODGETT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Cigar-Lighters, of which the following is a specification.

This invention relates to improvements in cigar-lighters.

The object of the invention is a device so contrived that by its use the cigar will not be lighted in any except the right way—at the tip evenly; also that the flame is guarded so that it will not set fire to what may come in contact accidentally with the burner; and also so that the flame is sheltered against being blown out by the wind or air-currents, the whole constituting a simple, cheap, and effective device for the purpose designed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side view of my improved lighter. Fig. 2 is a longitudinal vertical section of the burner, and Fig. 3 is a cross-section of the same on the line 3 3 of Fig. 2.

In said drawings, A is the usual flexible gas-tube by which the lighter is suspended from the point of supply, B the jointed connection to the swinging burner, and C the ordinary handle. These parts do not differ from similar parts in common cigar-lighters which have been so extensively in use. Instead of the common burner I apply the burner D, which is of the Bunsen type, designed to burn a mixture of air and gas.

By reference to Fig. 2 it will be seen that the gas-pipe d delivers the gas into the tubular chamber d', which is furnished with air-inlets d^2. In this chamber the air and gas are mingled together, and the mixture passes up and out at the burner-opening d^3, which is shown in the drawings as being made with a lava tip.

Supported from the tubular chamber d' by suitable arms or means is a flame-chamber E, made of wire-gauze, so that the flame is surrounded by the wire-gauze. This gauze may also be extended across the bottom, if that is desired; but I prefer to leave the bottom open. The burner, as will be understood, is of the sort which produces great heat rather than light, and gives a perfect combustion. Within this chamber is a quartering-partition F, of metal, which serves the double purpose of distributing the flame to all parts of the chamber and of affording a body of metal to receive and retain the heat. The walls of this partition are preferably made perforated with the perforations f to afford communication of the flame from quarter to quarter. When the gas is lighted, the interior of the chamber E becomes very hot and sometimes the wire-gauze itself becomes red; but the combustion being of mingled air and gas there is or should be no smoking and no material deposit of soot. There being no openly-exposed flame, the danger of fire is exceedingly slight, if not absolutely done away with. To light a cigar the tip of the cigar should be placed directly in contact with the gauze, and the suction of the smoker will then draw the heat of the internal flame directly to this point and ignite the tobacco directly at those parts and at those parts only where the tobacco comes in contact with the gauze. The result will be that the cigar is lighted evenly exactly at the end without burning the wrapper or binder more at one side than at the other; and, moreover, the difficulty experienced in the use of the ordinary flame-lighter, due to the drawing of the flame itself for a considerable distance into the body of the cigar, thus cooking the tobacco and destroying the flavor and aroma of the cigar, is entirely overcome by my device. When a cigar is properly lighted evenly and exactly at the end, and without any penetration of the flame to the interior, the flavor and aroma of the tobacco are much better preserved, as every smoker will discover by experience; and this is precisely the result accomplished by my improved cigar-lighter.

Some of the advantages of my invention may be obtained even if the gauze does not entirely surround the flame. Thus a part only of the shield or covering need be made of the gauze; or a simple plate or disk of gauze, either with or without other material surrounding the flame, will obviously answer the purpose and afford a means for lighting the cigar evenly, as above indicated; but I prefer, of course, the construction shown in the drawings, in which the gauze entirely sur-

rounds the flame, as the gauze then serves a triple purpose—to light the cigar, to shield the flame from air-currents, and also as a protection from fire.

Although I prefer to use a gas-burner and a flame of gas, and prefer that the gas-burner should be of the Bunsen type, it is not absolutely necessary to my invention, as some of the results of my invention may be obtained by combining the gauze lighting device with any well-known form of burner, burning any of the ordinary burning oils, fluids, or vapors; and I do not desire to be limited in these respects.

By the expression "gauze" or "wire-gauze" used in the specification I mean a perforated incombustible structure or sheet comprising a number of fine interstices. It is not necessary that this sheet or surface shall be actually made of wire-gauze or wire-cloth; but that is the best and cheapest material for the purpose that I now know.

I claim—

1. The combination with the burner of a cigar-lighter of a gauze surface arranged adjacent to the exterior of the flame and close enough thereto so that when the end of a cigar is placed against the gauze and the suction applied, the heat will be drawn thereby to the gauze and the cigar thus lighted evenly and exactly at the end, substantially as specified.

2. In a cigar lighter, the combination of the Bunsen burner attached to a flexible tube, and a gauze surface arranged adjacent to the exterior of the flame and close enough thereto so that when the end of the cigar is placed against the gauze and the suction applied the heat will be drawn thereby through the gauze and the cigar lighted evenly and exactly at the end, substantially as specified.

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