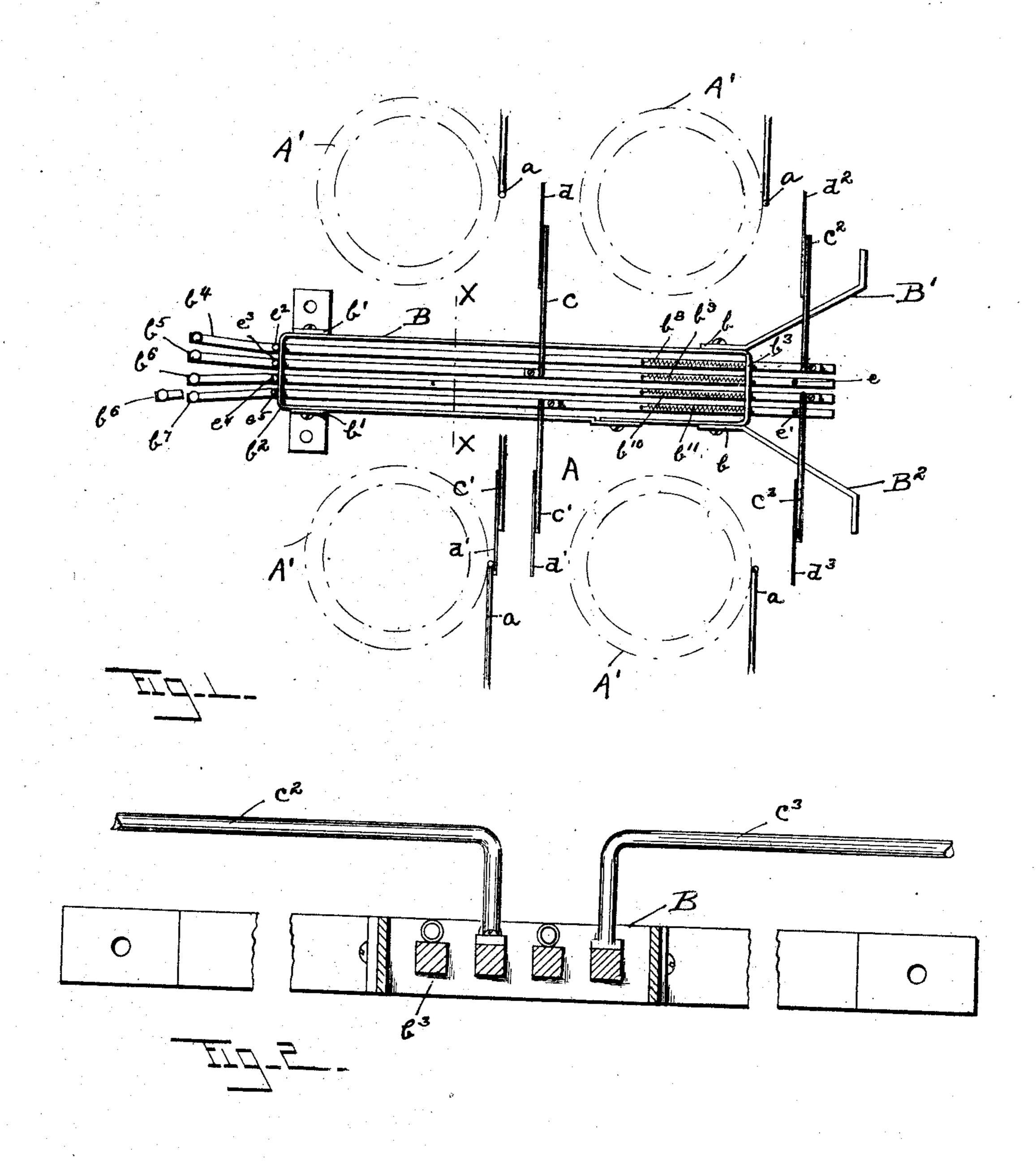
## D. A. BARLOW. ELECTRIC GAS LIGHTING MACHINE. APPLICATION FILED FEB. 21, 1907.



Witness

Charles Kleiner W. a. Legar David a. Barlow-Gengel Robinson - Live Attorner

## UNITED STATES PATENT OFFICE.

DAVID A. BARLOW, OF ORANGE, CONNECTICUT.

## ELECTRIC GAS-LIGHTING MACHINE.

No. 885,134.

Specification of Letters Patent.

Patented April 21, 1908.

Application filed February 21, 1907. Serial No. 358,660.

To all whom it may concern:

Be it known that I, David A. Barlow, a citizen of the United States, and a resident of the town of Orange, in the county of New 5 Haven, State of Connecticut, have invented a new and useful Improvement in Electric Gas-Lighting Machines, of which the following is a specification, taken in connection with the drawings, which form a part thereof, 10 and in which similar letters of reference represent like parts.

In the drawings Figure 1 is a plan view of my invention. Fig. 2, a sectional view of the same, on the lines X X, of Fig. 1.

The object of my invention is the construction of a device for lighting the gas issuing from the burners of gas stoves by an electrical spark as hereinafter more fully described.

In the drawings A represents a gas range or stove, having a series of gas plates A'. Contact points a, are affixed to the gas plates A', and connected with the positive post of a

battery, in well known manner.

25 Secured to the inner frame of the stove A, is a frame B, provided with extension arms B' and B<sup>2</sup>, as shown in Fig. 1. Said frame B, is insulated at the points b and b', and provided with perforations  $b^2$  and  $b^3$ . Hori-30 zontally extending rods  $b^4$ ,  $b^5$ ,  $b^6$  and  $b^7$ , are adapted to fit in said frame B, and to slide therein and be pulled forward by the operator against the tension of springs  $b^8$ ,  $b^9$ ,  $b^{10}$ and  $b^{11}$ , for purposes more fully described 35 hereafter, and when released by the operator the tension of the spring causes them to be returned to their normal position in well known manner. On the upper surface of said rods  $b^4$ ,  $b^5$ ,  $b^6$  and  $b^7$ , are secured laterally 40 extending arms  $c, c', c^2$  and  $c^3$ , having contact points d, d',  $d^2$  and  $d^3$ , said contact points being adapted to come in contact in their forward movement with the contact points a, on the gas plates A', as shown in Fig. 1.

Upright lugs e and e', are secured to the upper surface of said rods  $b^5$  and  $b^7$ , and as said rods are pulled forward bear against the outer side of the rear edge of frame B, and act as stops in the outward movement of 50 said rods, while laterally extending arms  $c^2$ and  $c^3$ , when said rods  $b^4$  and  $b^6$  are pulled forward bear against the outer edge of said frame B, and act as stops for said rods, while a series of upright lugs  $e^2$ ,  $e^3$ ,  $e^4$  and  $e^5$ , are se-55 cured to the upper surface of said rods  $b^4$ ,  $b^5$ ,  $b^{c}$  and  $b^{7}$ , so that when said rods are released [

against the tension of springs  $b^8$ ,  $b^9$ ,  $b^{10}$  and  $b^{11}$ , said lugs will bear against the outer edge of said frame B, and prevent said rods from sliding backwards through said perforations 60  $b^2$ , farther than is desired when released by the operator, as shown in Fig. 1. Said horizontal rods  $b^4$ ,  $b^5$ ,  $b^6$  and  $b^7$ , are connected in well known manner, with a spark coil and in turn with the negative pole of the battery or 65 batteries.

In operation the gas cock on a range connecting with the gas burner which it is desired to light is turned on, in well knowh manner, and the rod having the laterally ex- 70 tending arm over said burner is drawn forward by the operator until the contact point thereof comes in contact with the contact point on said gas plate, thus sparking the same and igniting the gas.

Having now described my invention, what I claim and desire to secure by Letters Pat-

ent, is—

1. In a device of the class described, a stove provided with a series of openings in 80 the top thereof, contact points adjacent to the openings, a supporting frame, a base plate provided with upwardly extending ears, said ears secured to the frame and said base plate adapted to be secured to the stove 85 top, having openings in the ends thereof, independently reciprocating rods having their bearings in said openings, arms secured to certain of said rods outside of the supporting frame, said arms acting as stops to limit the 90 movement of the rods to which they are attached, contact points carried by the arms, and arms secured to the remaining reciprocating rods at a distance from their ends, said arms also carrying contact points, the 95 operative ends of the reciprocating rods adjoining each other, alternating rods operating contact points on opposite sides of the frame.

2. In a device of the class described, a 100 stove provided with a series of openings in the top thereof, contact points adjacent to the openings, a supporting frame, having openings in the ends thereof, independently reciprocating rods having their bearing in 105 said openings, arms secured to certain of said rods outside of the supporting frame, said arms acting as stops to limit the movement of the rods to which they are attached, contact points carried by the arms, arms se- 110 cured to the remaining reciprocating rods at a distance from their ends, said arms also

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carrying contact points, the operative ends | hand at New Haven, in the county of New of the reciprocating rods adjoining each | Haven and State of Connecticut, this 8th day other, alternating rods operating contact points on opposite sides of the frame and 5 springs for automatically returning the rods to their normal position when operated.
In witness whereof I have hereunto set my

of February, 1907.

DAVID A. BARLOW.

Witnesses:

M. A. SEGAR, GEORGE W. ROBINSON.