

(No Model.)

M. W. DEWEY.
ELECTRIC HEATING APPARATUS.

No. 566,564.

Patented Aug. 25, 1896.

Fig. 1.

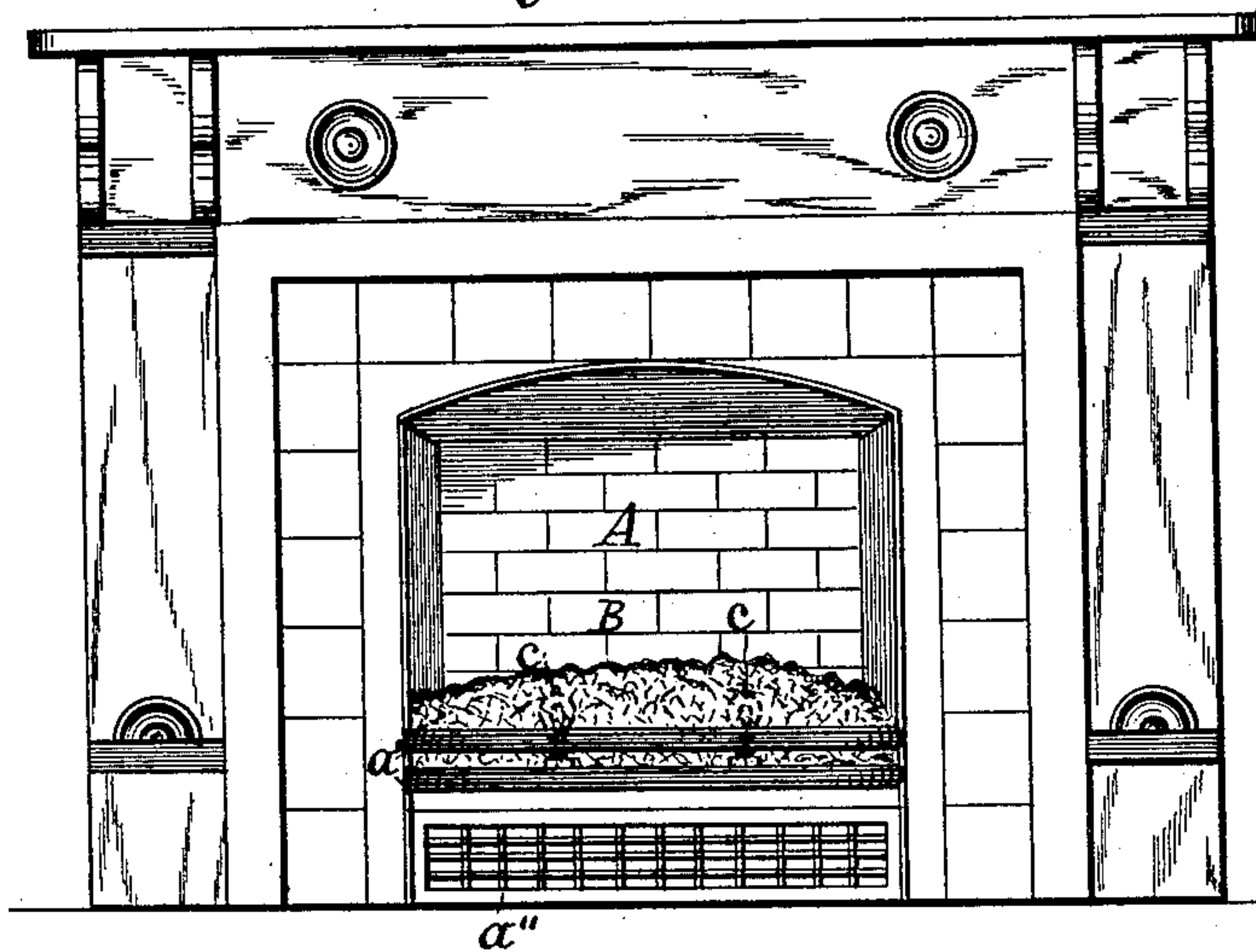


Fig. 2.

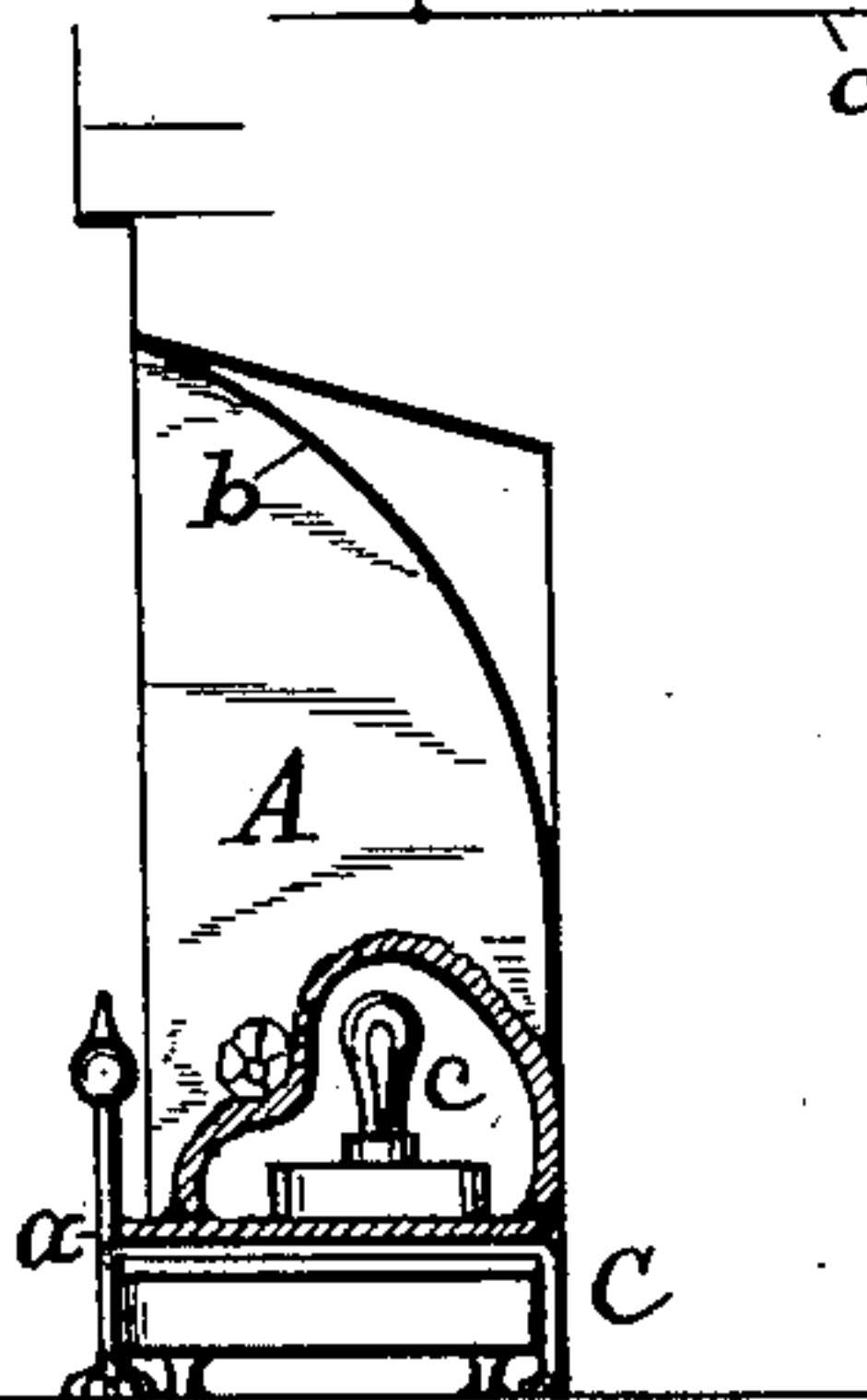
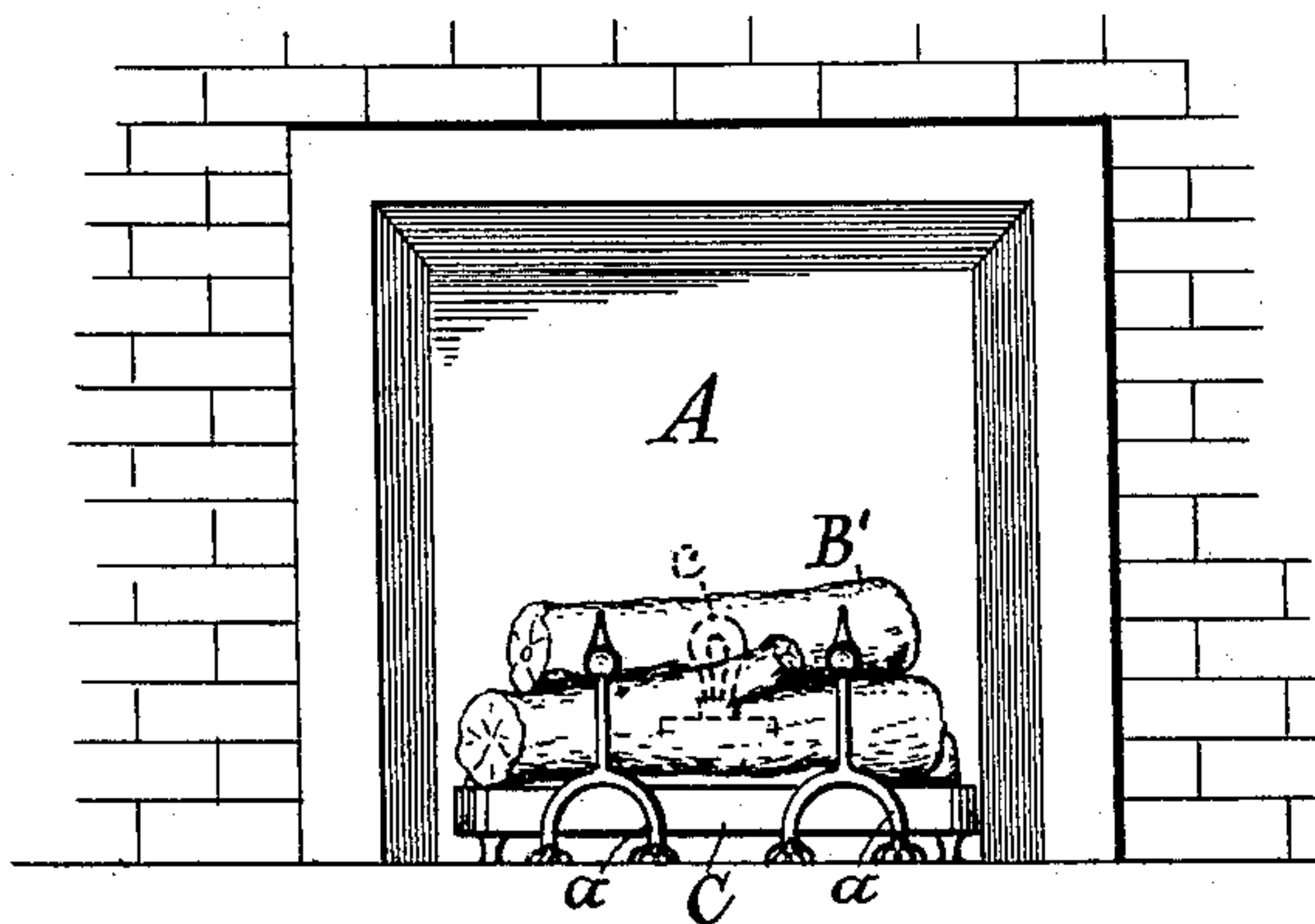
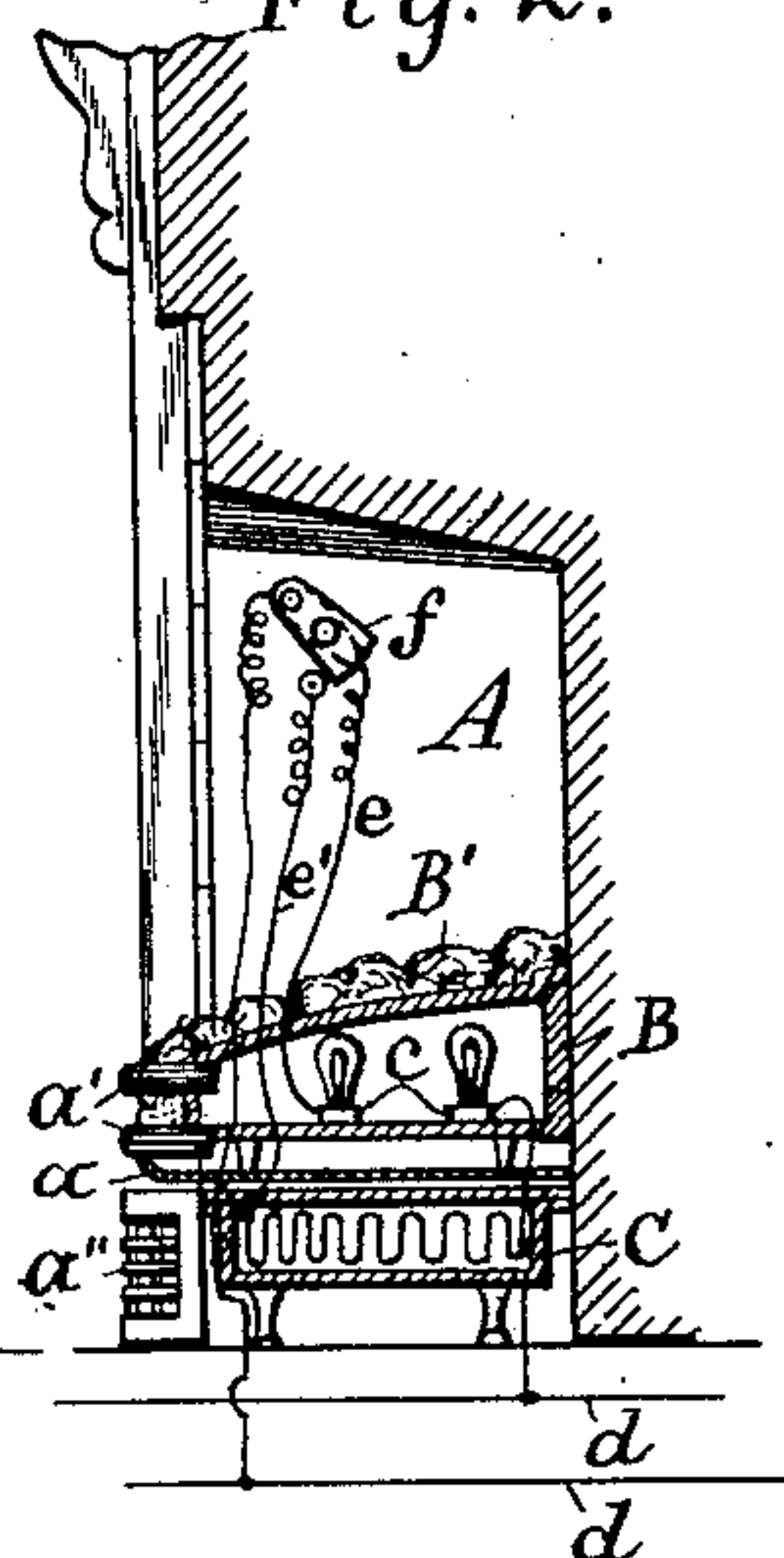


Fig. 3.

Fig. 4.

WITNESSES:

C. L. Bendixon.
J. J. Laass.

INVENTOR,

Mark W. Dewey.
By Quell, Laass & Quell,
his ATTORNEYS.

UNITED STATES PATENT OFFICE.

MARK W. DEWEY, OF SYRACUSE, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE DEWEY ELECTRIC HEATING COMPANY, OF SAME PLACE.

ELECTRIC HEATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 566,564, dated August 25, 1896.

Application filed July 24, 1891. Serial No. 400,586. (No model.)

To all whom it may concern:

Be it known that I, MARK W. DEWEY, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Electric Heating Apparatus, (Case No. 94,) of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to electric heating apparatus for rooms; and the object is to provide an electric heating apparatus that may be placed in an ordinary fireplace and not only radiate heat but light, and, further, to construct said heater or its cover so that it will resemble, imitate, or give an appearance of fuel, especially when light is radiated by the heater.

To this end my invention consists in the combination of transparent or semitransparent imitation fuel, an electric conductor for illuminating the same, and an electric heating conductor for generating heat; and my invention consists in certain other combinations of parts hereinafter described, and specifically set forth in the claims.

Referring to the drawings accompanying this specification, Figure 1 represents a front view of a fireplace containing my invention.

Fig. 2 is a cross-section of the same. Fig. 3 is a front view of a fireplace, showing a covering for the incandescent conductor, constructed to resemble wood; and Fig. 4 is a cross-section of Fig. 3.

In the drawings, A represents the fireplace or recess in a wall to resemble an ordinary open fireplace where coal or wood is burned. Such fireplaces usually have a mantel above them, as shown in Fig. 1.

a represents the grate or andirons, and a' the bars in front to hold the fuel, and a'' is the ash-guard in front below the said bars. Upon or somewhat above the grate or andirons I support an inclosure or box B. The bottom and back, and ends in some cases, may be made of any material, as metal or wood, and is preferably made to fit the walls of the fireplace. The cover B' for this box, which preferably includes the top and front,

and in some cases the ends, is made or constructed of a transparent or semitransparent material, as glass or mica. This cover is preferably removable from the box and is formed or fashioned or colored, or both, to resemble or imitate, as near as may be, ordinary fuel, as coal or wood, in a state of combustion when light is radiated through it, and may also be made to resemble the same materials when not in such state when light is not radiated through it. I preferably form this cover of glass and give it the general shape that coal or wood would be placed in for a good fire, make the interior surface smooth and the exterior surface rough to give the appearance of fuel. The glass may contain more or less red color, or this may be dispensed with if another red-colored glass is used with it. When coal is to be imitated, the tips of the projections may be colored black and deep red, between which as it approaches the hollows becomes almost white. I do not limit myself to the coloring, as any suitable color or colors may be employed to give glass or other transparent material the appearance of a fuel when ignited, the process of making which may be accomplished by those skilled in the art of fancy glass-working. I preferably support within and upon the bottom of the box B an incandescent electric conductor or conductors in the shape of one or more incandescent lamps c. The bulbs of these lamps may be colored or not. If the box B and its cover B' are made to form an air-tight inclosure, from which the air may be removed, the conductors contained therein may be raised to incandescence without the bulbs.

In Fig. 4, b indicates a curved reflector that may be used with my heater to direct the light into the room. The illuminating-heater described may be used alone, but as it will not produce much heat and is only intended to give light, and simply the appearance of a fire on a grate, I provide with it, when heat is also required, any well-known form of electric heater C, but preferably one the same as or similar to that shown and described in my Patent No. 448,879, dated March 24, 1891, and comprising a heat-developing electric con-

ductor covered or embedded in a pulverulent
 refractory material and an opaque or metallic
 casing inclosing the same. This latter heater
 is supported upon the bottom of the fireplace
 5 upon short legs to allow an air-space between
 the heater and the said bottom of the fireplace.
 An air-space is also preferably allowed be-
 tween the two heaters or above the heater
 having the metallic casing, to provide a large
 10 radiating-surface. The said heaters may be
 connected with the supply-circuit in any
 manner, but preferably as shown in Fig. 2,
 where d d indicate the supply-conductors, e
 15 the lamp-heater circuit, and e' the circuit of
 the heater covered with refractory material.
 These heaters are adapted to be connected in
 parallel with the supply-conductors by means
 of a switch-lever f . The said lever has its
 20 fulcrum connected with one supply-conduc-
 tor and its free end moved in contact with the
 terminal of the lamp-circuit e , so that only
 the lamp-heater is supplied with current.
 When, however, the lever is moved to the left,
 it also makes contact with the terminal of the
 25 other heater and places both in circuit, and
 by moving the lever still farther to the left
 the lamp-heater is cut out of circuit, while the
 other remains in, and when moved farther to
 the left or to the extreme right both heaters
 30 are cut out of circuit. This arrangement en-
 ables one to connect either or both of the
 heaters in circuit, as desired.

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

1. The combination, of transparent or semi-transparent imitation fuel, an electric device for illuminating the same, and an electric conductor for generating heat.
- 40 2. The combination, of imitation fuel adapt-

ed to transmit rays of light, electrical means
 for directing rays of light thereon, and an elec-
 trical heating device.

3. The combination, of transparent or semi-transparent imitation fuel, an electric con- 45
 ductor hid thereby and adapted to illuminate
 the same, and an electric device for generat-
 ing heat.

4. The combination, of a transparent pile
 of imitation fuel, a chamber below the same 50
 and an electric illuminating device arranged
 therein, and an electric heater situated below
 said chamber.

5. The combination, of a translucent pile of
 imitation fuel, a chamber below the same, an 55
 electric illuminating device arranged therein,
 an electric heater, and an intermediate heat-
 ing-chamber.

6. The combination of one or more incan-
 descent electric conductors, a transparent or 60
 semitransparent cover or casing therefor con-
 structed to resemble fuel, and a heat-devel-
 oping electric conductor inclosed by a metal-
 lic casing supported below the incandescent
 electric conductors, as set forth. 65

7. The combination of one or more incan-
 descent electric conductors, a transparent or
 semitransparent cover or casing therefor con-
 structed to resemble fuel, a heat-developing
 electric conductor inclosed by a metallic cas- 70
 ing supported below the incandescent electric
 conductors, and an air-space above and below
 the metallic casing, as and for the purpose
 described.

In testimony whereof I have hereunto 75
 signed my name this 1st day of June, 1891.

MARK W. DEWEY. [L. S.]

Witnesses:

C. L. BENDIXON,
 H. M. SEAMANS.