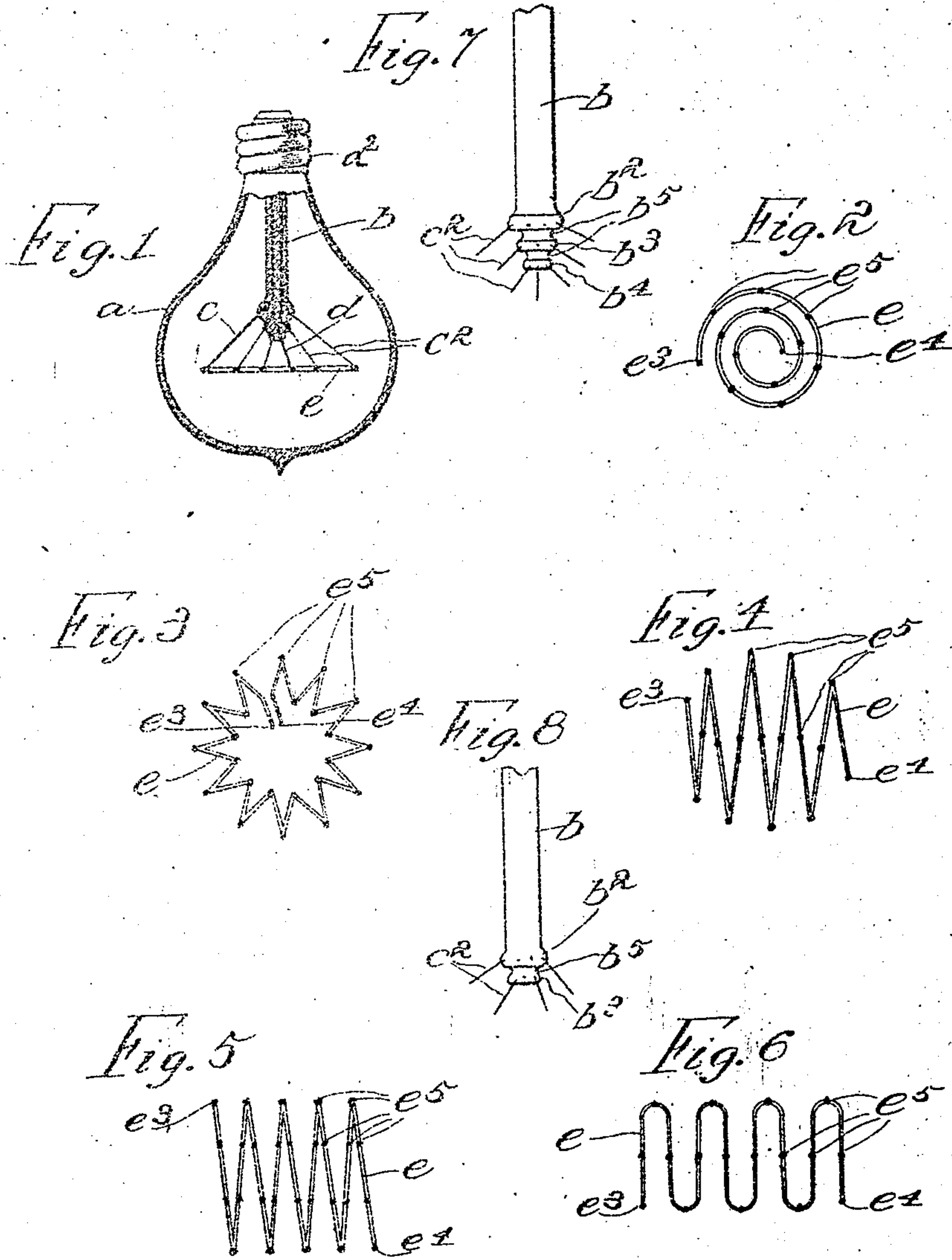


A. F. F. STODD.
 INCANDESCENT ELECTRIC LAMP.
 APPLICATION FILED JUNE 23, 1909.

962,795.

Patented June 28, 1910.



WITNESSES:

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INCANDESCENT ELECTRIC LAMP.

Specification of Letters Patent. Patented June 28, 1910.

962,795.

Application filed June 23, 1909. Serial No. 503,777.

To all whom it may concern:

Be it known that I, ALEXANDER F. F. STODD, a citizen of the United States, and residing at Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Incandescent Electric Lamps, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to electric lamps, and particularly to what are known as bulb lamps; and the object thereof is to provide a lamp of this class most of the light of which is thrown downwardly whereby the lamp is particularly adapted for use as a table lamp, desk lamp and for reading and other purposes; a further object being to provide an electric lamp the incandescing filament of which is supported in a horizontal plane and may be of various forms; and with these and other objects in view the invention consists in a lamp of the class specified constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which;—

Figure 1 is a sectional side view of an incandescent electric lamp made according to my invention, Fig. 2 a bottom plan view of the filament and showing the points where said filament is connected with its supports, Figs. 3, 4, 5 and 6 views similar to Fig. 1 but showing modifications, Fig. 7 a side view of a bulb stem which I employ and through which the circuit wires are passed and from which the incandescing filament is supported, and Fig. 8 a view similar to Fig. 7 but showing a modification.

In the practice of my invention, I provide a bulb a having a neck a^2 of the usual general form and construction, but which in my improvement is provided with a stem b of glass or similar material which extends downwardly into the bulb a and through which the circuit wires c and d are passed.

In the construction shown in Fig. 1, the lower end of the stem b is provided with separate annular enlargements or head members b^2 , b^3 and b^4 , and said head members

decrease in size downwardly; and in the forms of construction shown in Fig. 7, the head members are separated by neck members b^5 , and in the construction shown in Fig. 8 only two head members b^2 and b^3 are shown separated by a neck b^5 , but it will be understood that my invention is not limited to the exact number of these members at the lower end of the stem b .

In the construction shown in Fig. 1, I provide a filament e which is spiral in form as shown in Fig. 2 and lies in a horizontal plane; and I secure to the filament e at spaced points thereon connectors c^2 of any preferred and suitable material such as is used in ordinary incandescent electric lamps, and these connectors c^2 are also secured in the head members on the lower end of the stem b as plainly shown, the outer or longer connectors being secured in the upper head member and the shorter or inner connectors being connected to the lower head member; and the circuit wires c and d may serve as two of the connectors c^2 , the circuit wire c being connected to the point e^3 and the circuit wire d to the point e^4 as shown in Fig. 2. By this construction, it will be seen, that current may flow into the filament e through the circuit wire c and through the filament and out through the circuit wire d , and as usual the filament e will become incandescent and emit light, and as will be understood from the shape of the filament the greater part of this light will be directed downwardly and very little of it laterally.

In Fig. 2 I have shown at e^5 the points of connections between the filament and the connectors, and I do not wish to be limited to any particular form of connection between the connectors and the filament, and this connection may be that of a soldered joint, or hook or loop, or any other preferred form.

In Fig. 3 I have shown a filament arranged in the shape of a star the points of which may be of any number and length and as in Fig. 2 I have shown at E^5 the points of connection between the filament and the connectors.

In Figs. 4, 5 and 6 I have shown other modified forms of horizontal filaments, and it will be readily understood that filaments made according to these forms may be supported in the bulb a in identically the same manner as the filament in Fig. 1.

All of the forms of filaments shown are adapted to be connected in series between the circuit wires *c* and *d*, but it will be understood that if desired the parts of the filament may be connected in parallel between these two circuit wires, and this and other changes in and modifications of the forms of construction shown and described may be made, within the scope of the appended claim, without departing from the spirit of my invention or sacrificing its advantages.

The distinctive feature of this invention lies in the fact that the filament is supported in a horizontal plane at right angles to the longitudinal axis of the lamp, and in the method of supporting the filament by means of the radially directed connectors or supports *c*² which are secured to the lower end of the stem *b*.

Having fully described my invention, what

I claim as new and desire to secure by Letters Patent, is:—

An incandescent electric bulb lamp, the neck of which is provided with a stem which extends into the bulb and is provided with a plurality of annular enlargements through which feed and return circuit wires are passed, and which are also provided with radially and downwardly directed supports, and an incandescent filament suspended from said supports and lying in a horizontal plane below said stem.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 21st day of June 1909.

ALEXANDER F. F. STODD.

Witnesses:

H. R. CANFIELD,
C. E. MULREANY.