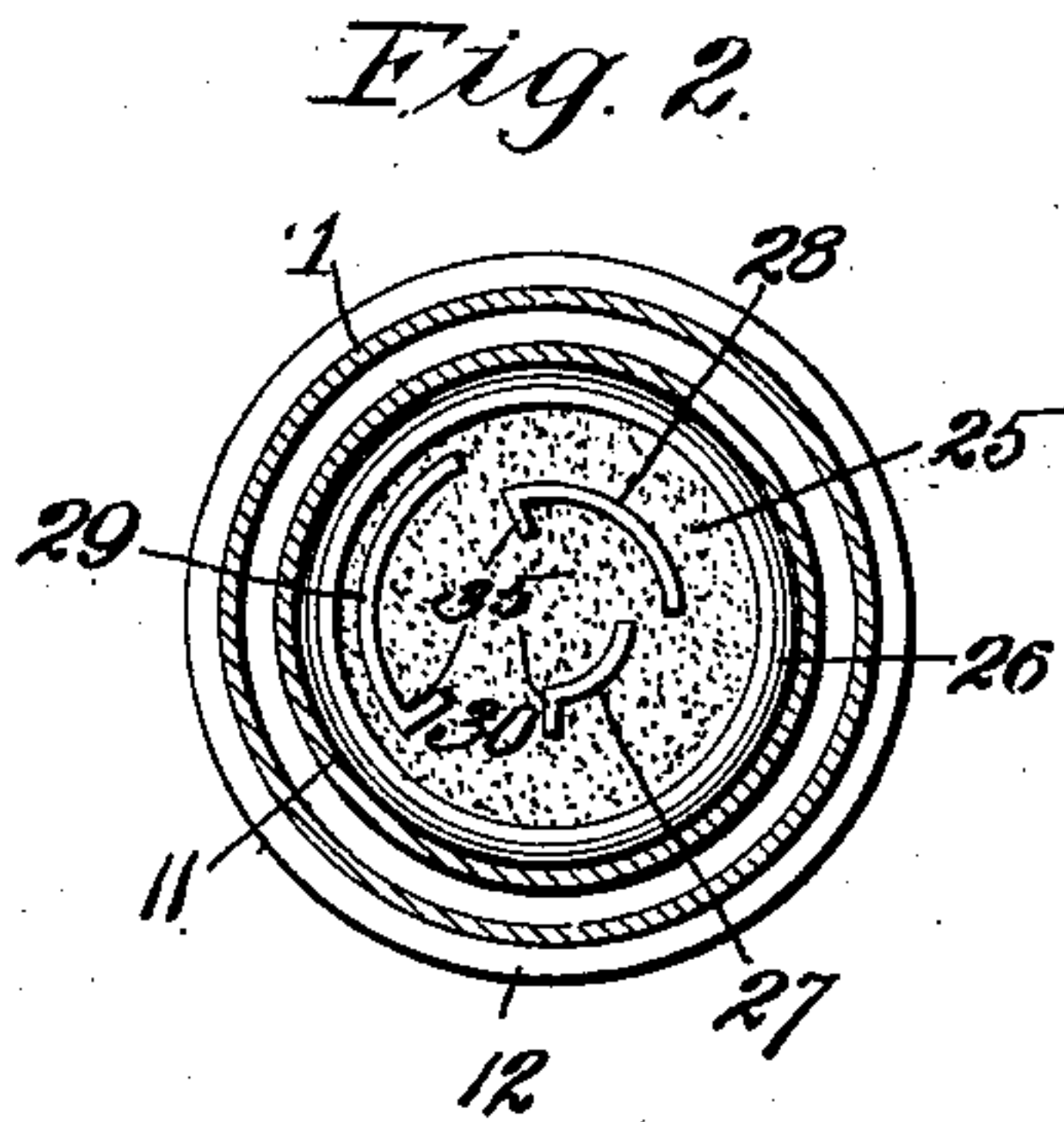
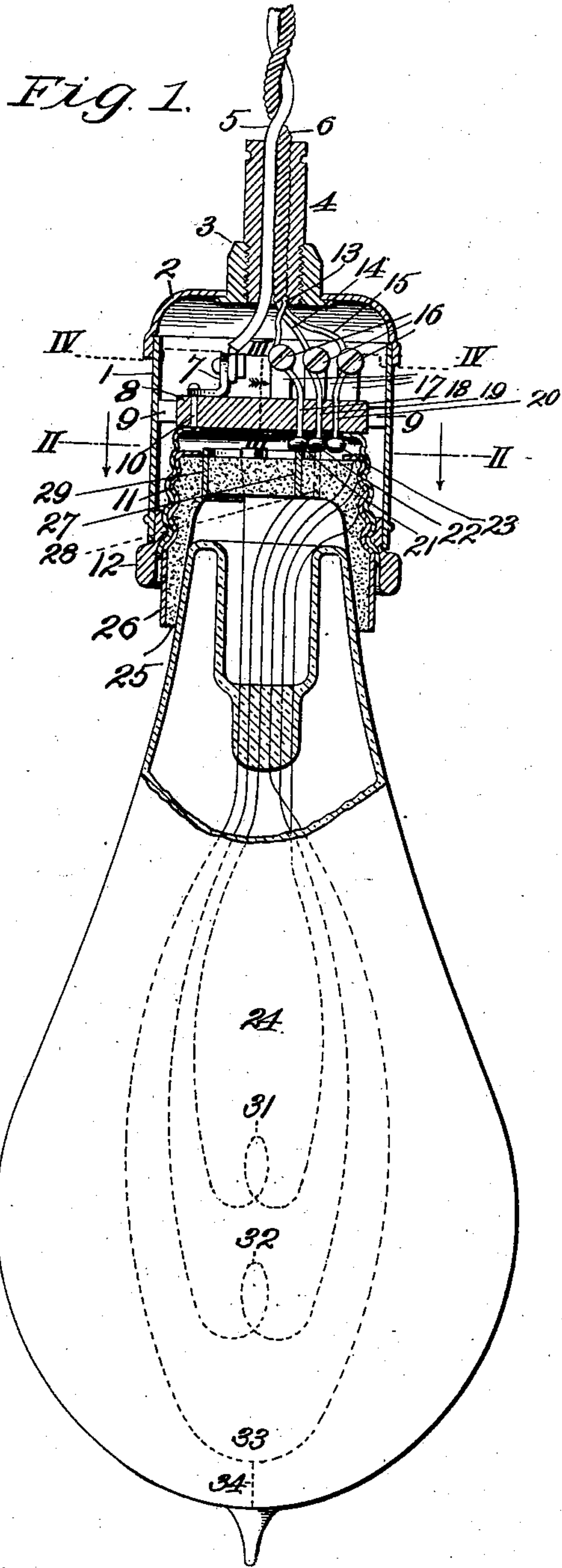


No. 708,159.

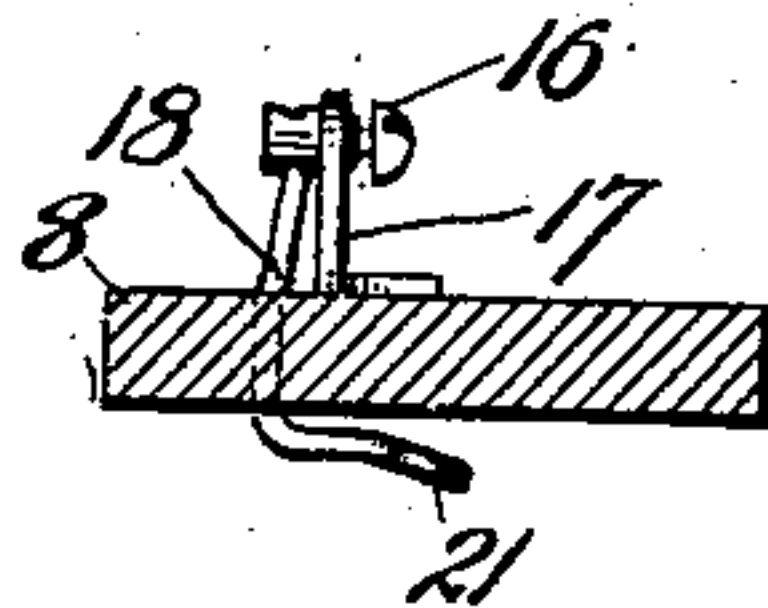
H. E. MEYERS.  
INCANDESCENT LAMP.  
(Application filed Aug. 19, 1901.)

Patented Sept. 2, 1902.

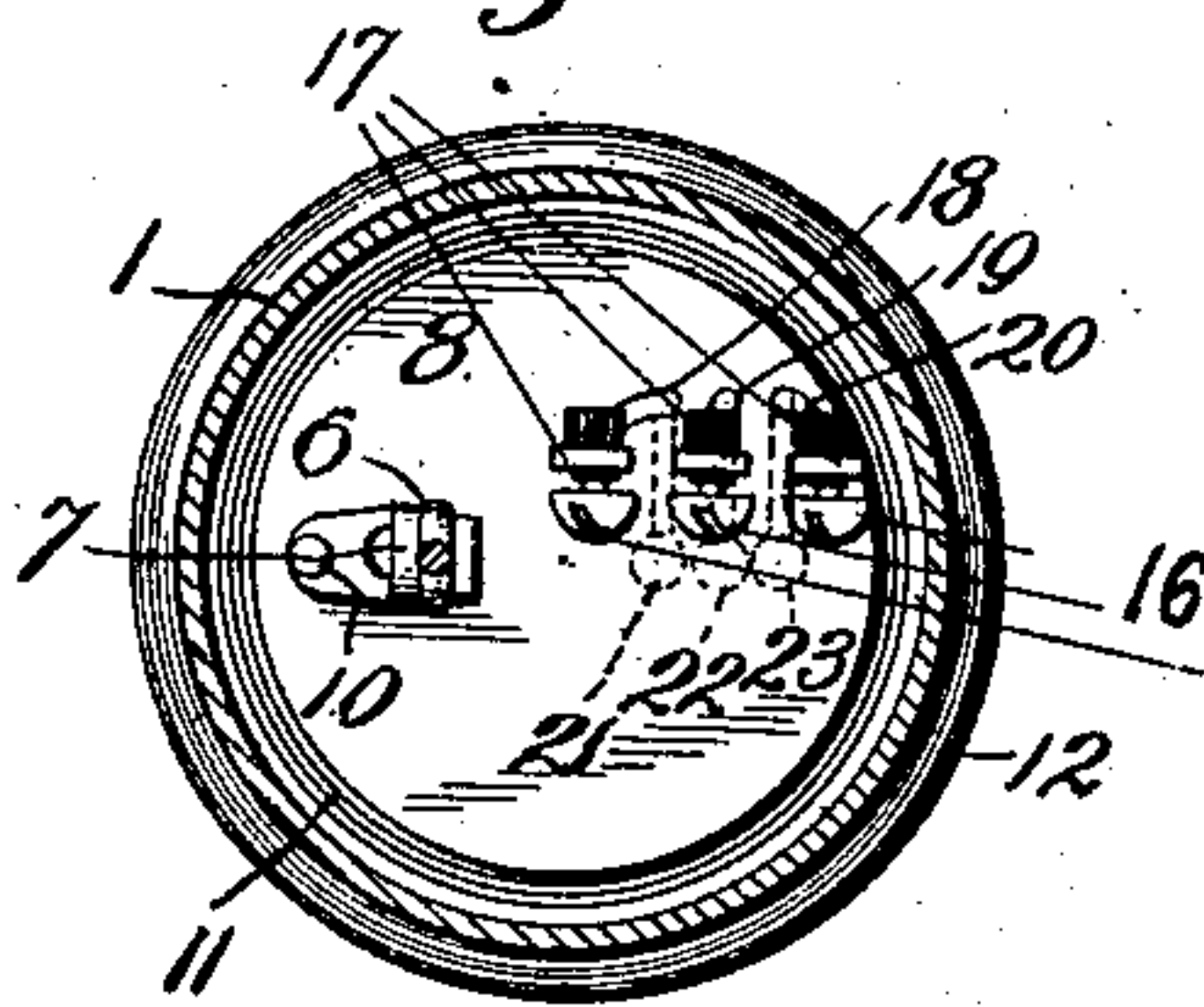
(No Model.)



*Fig. 3.*



*Fig. 4.*



Witnesses:

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H. C. Rodgers

Inventor:

Henry E. Meyers.

By Fischer & Thorpe  
attys.



# UNITED STATES PATENT OFFICE.

HENRY E. MEYERS, OF BUTTE, MONTANA.

## INCANDESCENT LAMP.

SPECIFICATION forming part of Letters Patent No. 708,159, dated September 2, 1902.

Application filed August 19, 1901. Serial No. 72,463. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY E. MEYERS, a citizen of the United States, residing at Butte, in the county of Silverbow and State of Montana, have invented certain new and useful Improvements in Incandescent Lamps, of which the following is a specification.

My invention relates to incandescent lamps, and more particularly to that class which may be caused to emit a light of variable candle-power, my object being to produce means whereby as the globe is turned in its socket lights of varying candle-power shall be successively produced in order that the lamp may be employed with equal facility in small rooms, in sick-rooms, where a soft and subdued light is desired, and in halls and hallways, where a bright light is desired.

A further object is to produce a lamp of this character which is of simple, strong, durable, and inexpensive construction.

With these objects in view the invention consists in certain novel and peculiar features of construction and combinations of parts, as hereinafter described and claimed; and in order that it may be fully understood reference is to be had to the accompanying drawings, in which—

Figure 1 is a vertical central section of an incandescent lamp embodying my invention. Fig. 2 is a horizontal section taken on the line II II of Fig. 1. Fig. 3 is a section taken on line III III of Fig. 1. Fig. 4 is a section taken on the line IV IV of Fig. 1.

In the said drawings, 1 designates the usual metallic casing, provided with a cap 2, carrying internally-threaded sleeve 3, to which screw-plug 4 is attached and through which extends the leading-in wires or conductors 5 and 6, conductor 5 being attached electrically to an angle-plate 7, mounted on the insulating-plate 8, secured rigidly in the casing to the arms or brackets 9. Angle-plate 7 is electrically connected through insulating-plate 8 by means of a pin 10 with a metallic threaded socket 11, secured in the casing by means of the interposed collar 12, of insulating material.

The conductor 6 is composed of branch wires 13, 14, and 15, insulated from each other and connected by binding-posts 16, supported by brackets 17 on insulating-plate 8

with conductors 18, 19, and 20, respectively, said conductors terminating below the insulating-plate in spring-contacts 21, 22, and 23, arranged at different distances from the center of the threaded socket 11 and radially thereof and in substantially the same horizontal plane.

24 designates the globe of the usual type, secured in the plaster-of-paris or other lining 25 of the threaded metallic plug 26 for engagement with the threaded socket 11, and embedded in and projecting above the upper portion of the plaster-of-paris lining are segmental contact-strips 27, 28, and 29, which are the same distance from the axis of rotation as contacts 21, 22, and 23, respectively, in order that once in each revolution contact 21 shall engage contact-strip 27, contact 22 shall engage contact-strip 28, and contact 23 shall engage contact-strip 29, these strips being arranged in arcs at different radial distances from the axis of the socket, so that only one contact-strip shall be engaged at a time, in order to extinguish the light entirely when the current is on a space, as at 30, is left between the contiguous ends of two of the contact-strips, wherein spring-contacts 21, 22, and 23 may lie without touching any of the strips. As in the manipulation of the lamp movement of the threaded plug in its socket is in a spiral direction, and therefore longitudinally of the socket, it is necessary that a yielding engagement shall subsist between the spring-contacts and contact-strips. To effect this object in a practical and cheap manner, I prefer that the contacts 21, 22, and 23 shall be of the spring type in order that they may follow plug 26 downward for a suitable distance as it is unscrewed and yield upward a corresponding distance as it is resecured in the socket, this arrangement providing a good electrical connection between the spring-contacts and contact-strips for at least a full revolution of the globe in order to produce lights of varying candle-power.

As shown, this lamp is provided with three filaments 31, 32, and 33, the latter being anchored, as at 34, to the globe to eliminate vibration as far as possible. The opposite ends of filament 31 are electrically connected to threaded plug 26 and contact-strip 27, the opposite ends of filament 32 are electrically



connected to threaded plug 26 and contact-strip 28, and the opposite ends of filament 33 are electrically connected to threaded plug 26 and contact-strip 29, which contact-strips  
 5 to secure them more firmly in position are provided with arms 35, embedded in the plaster-of-paris or other lining. The wires 13, 14, and 15 are connected, respectively, to sources of electric supply of capacity to pro-  
 10 duce, say, four-candle-power light in filament 31, sixteen-candle power in filament 32, and thirty-two-candle power in filament 33, so that when spring-contact 21 is engaged with contact-strip 27 it will be seen that the current  
 15 passes through wire 13, spring-contact 21, contact-strip 27, filament 31, and the metallic plug 26, metallic socket 11, pin 10, angle-plate 7, and conductor 5, and the source of supply. Should the operator now turn the lamp a suf-  
 20 ficient distance, the engagement would be broken between spring-contact 21 and contact-strip 27 and established between spring-contact 22 and contact-strip 28, the result being sixteen-candle power from filament 32.  
 25 Another turn of the lamp breaks the engagement between spring-contact 22 and contact-strip 28 and establishes electrical connection between spring-contact 23 and contact-strip 29, and as a result thirty-two-candle-power  
 30 light is produced in filament 33. A still further turn of the globe completes the revolution with spring-contacts 21, 22, and 23 in the space 30 unbridged by any contact-strip. When in this position, the lamp emits no light.  
 35 From the above description it will be apparent that I have produced an incandescent lamp applicable for use in many connections—such as sick-rooms, reading-rooms, halls, and hallways—it being obvious that its

chief field of usefulness will be in hospitals 40 and large public and private buildings of all kinds, and while I have illustrated and described the preferred embodiment of the invention it is to be understood that I reserve the right to make such changes in its detail 45 construction, form, proportion, and arrangement of the parts as shall not involve a departure from its spirit and scope.

Having thus described the invention, what I claim as new, and desire to secure by Letters 50 Patent, is—

An incandescent lamp, comprising a casing, a cap therefor, a sleeve in the cap, a screw-plug in the sleeve, an insulating-collar at the lower end of the casing, a threaded metallic 55 socket in the collar, an insulating-plate secured to said socket, a conductor extending through the plug and electrically connected through said plate to said metallic socket, a series of spring-contacts, below said plate, 60 electrical conductors connected thereto, a globe, a threaded plug, an insulating-lining for the plug and securing the globe in position, filaments in the globe electrically connected at one end to said plug, and segmental 65 contact-strips embedded in and projecting upward from said lining, and connected to the opposite ends of said filaments, each of which is adapted to engage, once in each revolution, one of said spring-contacts, substan- 70 tially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

HENRY E. MEYERS.

Witnesses:

HUGH HARRIS,  
 GUSTAV FRANKEL.