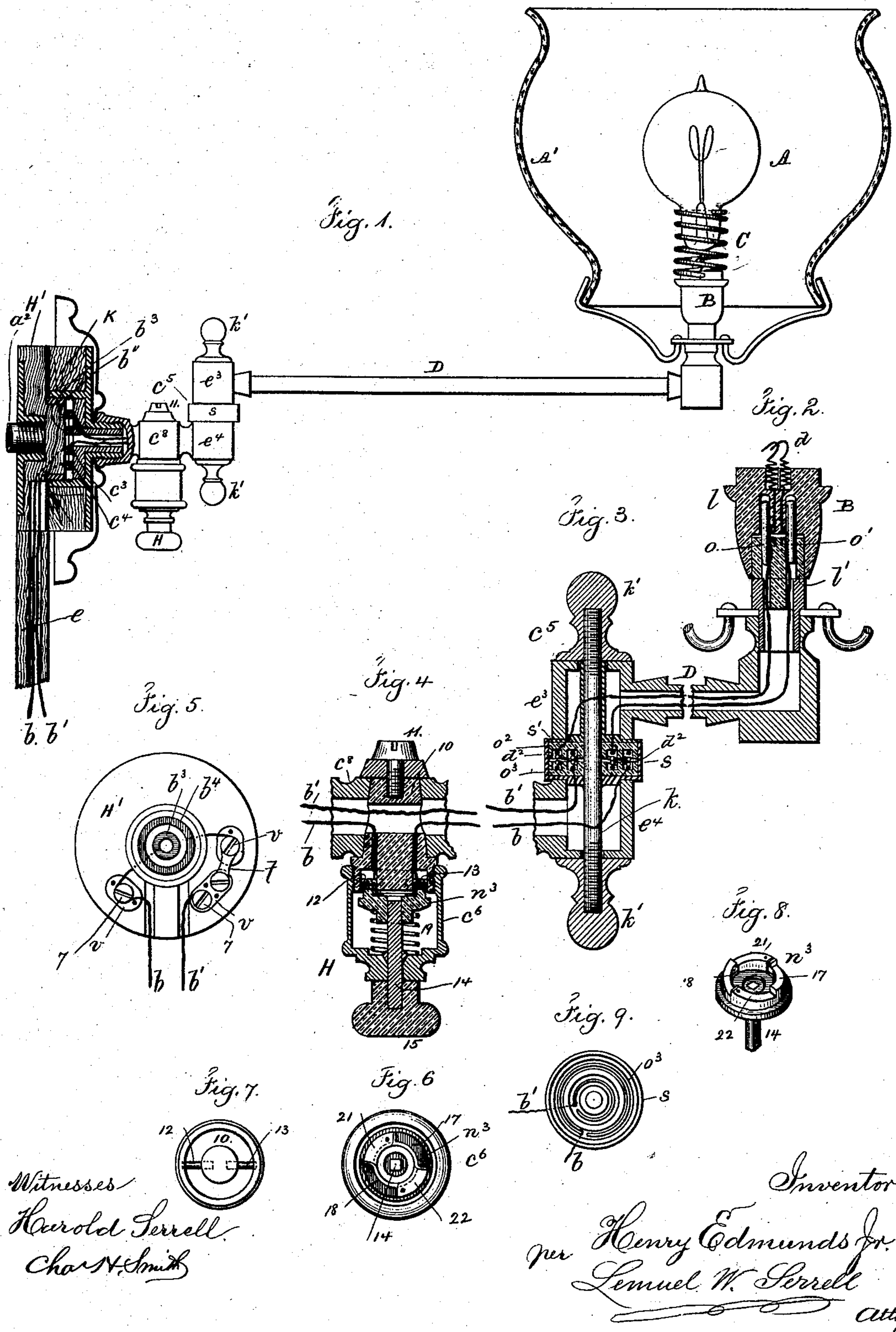


(No Model.)

H. EDMUNDS, Jr.
BRACKET FOR ELECTRIC LAMPS.

No. 291,171.

Patented Jan. 1, 1884.



UNITED STATES PATENT OFFICE.

HENRY EDMUNDS, JR., OF NEW YORK, N. Y., ASSIGNOR TO THOMAS J. MONTGOMERY, OF BOSTON, MASSACHUSETTS.

BRACKET FOR ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 291,171, dated January 1, 1884.

Application filed April 5, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY EDMUNDS, JR., of the city and State of New York, have invented an Improvement in Brackets for Electric Lamps, of which the following is a specification.

The object of this invention is to exclude the conductors from sight and to allow the arms of the brackets to be revolved or turned more or less without injury to the conductors and without breaking the metallic circuits.

In the drawings, Figure 1 is an elevation of the bracket and electric lamp, with the wall-plate in section. Fig. 2 is a section of the lamp-base. Fig. 3 is a section of the joint at the base of the bracket-arm. Fig. 4 is a section of the switch. Fig. 5 is a face view of the wall-plate. Fig. 6 is a plan of the switch-ratchet. Fig. 7 is an inverted plan of the ratchet contact-pins. Fig. 8 is a perspective view of the switch-ratchet, and Fig. 9 is a plan of the joint contacts.

The electric lamp A is of any desired character, and at A', I have shown a shade. The bracket may be provided with two or more joints in the arms. I have shown one joint at C⁵ between the arm D and the stationary portion of the fixture; and I have described hereinafter the construction of such joint, and remark that each joint on the arms of the bracket will be made in the same manner.

At a², I have represented the end of an ordinary gas fixture. Upon this the wall-plate H' is fastened. Said wall-plate, however, may be screwed to the wall when there is not any gas-pipe. The conductors b b' pass along the grooved slips e to the wall-plate H', where they are fastened to binding-plates v and screws 7, and at t there is a circuit-fuse or safety-switch that melts and breaks the circuit when there is too much current in the line or branch circuit. The wires b b' pass from the plates v to the rings b³ b⁴, respectively. These are fastened concentrically to the hub of the wall-plate H', and upon this hub the secondary wall plate or base K is screwed. The parts through which the wires pass are made of insulating material, and within the recessed back of K there are insulated rings c³ c⁴, secured similarly to the rings b³ b⁴, so that when the base K is screwed upon the hub of the

wall-plate the bracket will be in position for use. The conductors b b' pass off from the respective rings c³ and c⁴, through the switch H and joint c⁵, to the base of the burner, and to the filament in the incandescent lamp.

The base B of the burner is of insulating material. The upper part, l, slips over the lower part, l', and these two parts are connected by the pins o o', passing into holes above and below the point of junction. The conductors from the spring-hooks d for the lamp pass through separate holes in the part l, and their ends are brought out and passed into the holes for the respective pins o o', and the naked ends of the covered conductors b b' are passed into the holes for the respective pins before these metal pins are driven in; hence the conductors and pins are permanently connected, and the base-piece l' is to be attached at the end of the arm D; but the part l can be lifted on or off the pins o o', and when in place the metallic contact will be completed in the circuit by the pins o o'.

The joint at c⁵ in the fixture is made with the two hollow parts c³ and c⁴ of the fixture, through which passes a pivot-bolt, k, with nuts k' at the respective ends to apply the necessary pressure and friction. Between the two parts c³ and c⁴ there is the cup-piece s and the cap s' to the same, the bolt k passing centrally through these, and within the cup there are two disks of insulating material, o² and o³, which are grooved concentrically, and the ends of the covered wire conductors b and b' are scraped bare, passed through holes at the bottoms of the respective concentric grooves, and bent into a circle, or nearly so in order that they may lie in the bottoms of such grooves, as seen in Figs. 3 and 9, and into the respective grooves there are placed short helical springs d², preferably of flat sheet metal, each one having about two convolutions, so as to press upon the respective conductors as they lie in the bottoms of the respective grooves and form metallic contacts between the same. This construction allows for the arm of the bracket being turned entirely or partially around, and for the respective positive and negative conductors remaining perfectly connected.

My switch is intended to take the place of

the plug of a gas-cock. I have shown the portion c^s as the barrel of said cock, into which the plug 10 of insulating material is inserted and secured by the screw and washer 5 11. There is a hole through the plug for one of the circuit-wires, b' , and the other circuit-wire, b , is separated and passed through the plug to the contact-pins 12 13, that extend across an annular recess in the lower end of 10 said plug. Outside the plug the case c^b is screwed, and within it there is a stem, 14, with a head, 15, outside the case by which the stem can be revolved. The inner end of the stem is squared and passes through the ratchet-switch n^3 , which is made of vulcanite or other 15 insulating material. There are four teeth to this ratchet-switch. The two teeth 17 18 are of the vulcanite, and the other two teeth 21, 22, are covered with a metal plate that is cup-shaped in the middle and extends across from 20 one tooth to the other, as seen in Figs. 6 and 8, and there is a spring, 19, by which the ratchet-switch is pressed toward the contact-pins 12 13. When the vulcanite teeth are 25 in contact with the pin, then the current is interrupted; but when the teeth that are of metal are in contact with the pins 12 13, the

current passes from one pin to the other and the circuit is completed to the lamp. The spring allows the ratchet-switch to yield as 30 the spindle is turned, and the springing of the ratchet-switch forward as the teeth clear the pins indicates the completion of a movement for turning the current on or off.

I claim as my invention—

1. The wall-plate H' and the circuit-con- 35 nections thereon, in combination with the contact-rings $b^1 b^1$, the secondary wall-plate K and its conductors, and the fixture for an electric lamp screwed upon the hub of the wall- 40 plate, substantially as set forth.

2. In combination with the bracket-arm for an electric lamp, the joint-pivot, the concentric-grooved plates of insulating material, the naked ends of the conductors in such 45 grooves, and spring-contacts in the grooves between the respective conductors, substantially as set forth.

Signed by me this 29th day of March, A. D. 1883.

HENRY EDMUNDS, JR.

Witnesses:

GEO. S. PINCKNEY,
WILLIAM G. MOTT.