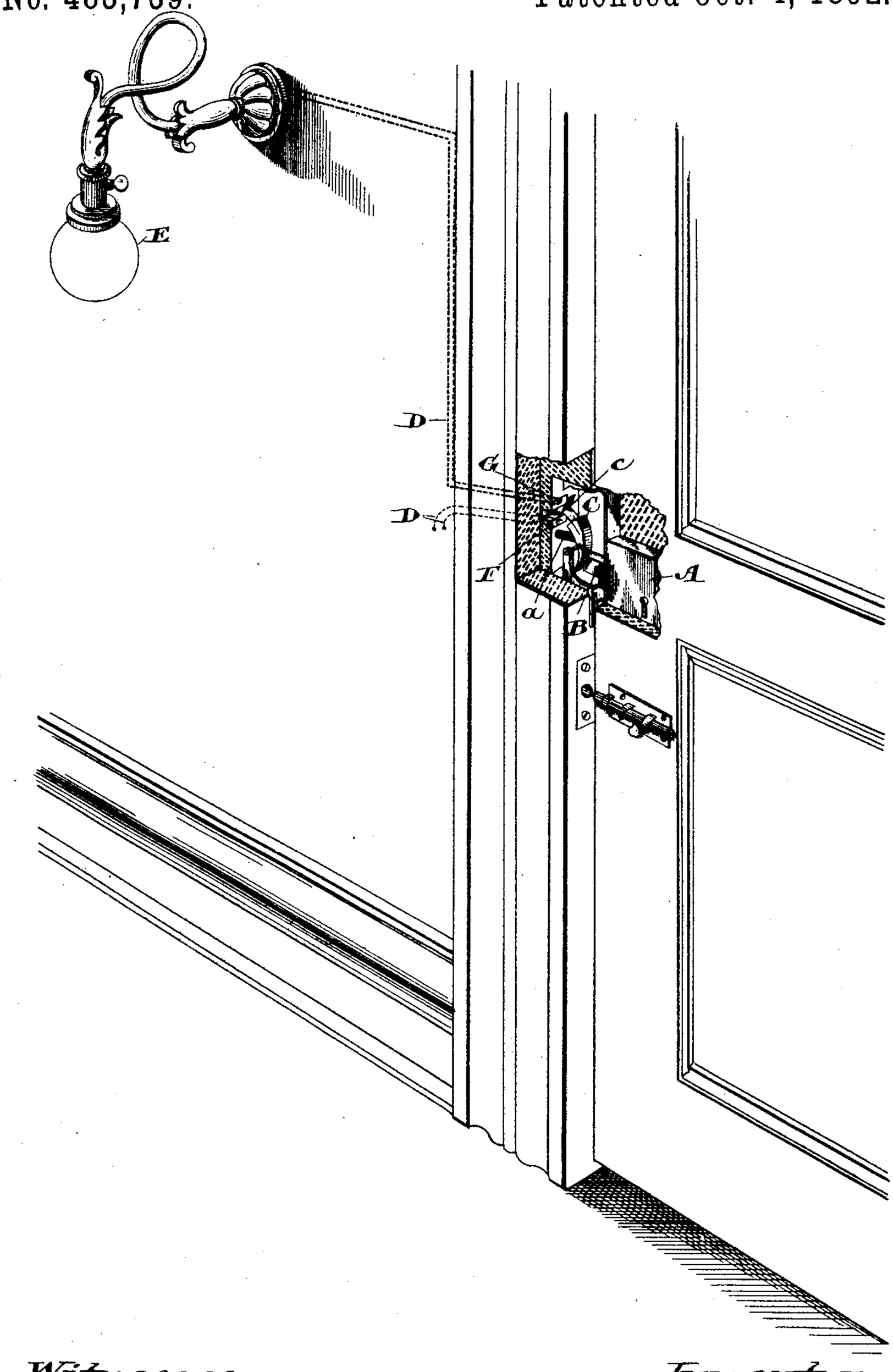
(No Model.)

C. GREEN.

DOOR LOCK SWITCH FOR ELECTRIC LIGHTS.

No. 483,739. Patented Oct. 4, 1892.



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UNITED STATES PATENT OFFICE.

CHARLES GREEN, OF TORONTO, CANADA.

DOOR-LOCK SWITCH FOR ELECTRIC LIGHTS.

SPECIFICATION forming part of Letters Patent No. 483,739, dated October 4, 1892.

Application filed April 8, 1892. Serial No. 428,328. (No model.)

To all whom it may concern:

Be it known that I, CHARLES GREEN, commercial traveler, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented a certain new and useful Door-Lock Switch for Electric Lights, of which the following is a specification.

The object of the invention is to design a switch for electric lights to be actuated by the shooting of the bolt of a lock so as to break the current and extinguish the light when the door is locked; and it consists, essentially, of preferably locating within the keeper opposite the lock of the door a switch which is actuated by a bolt when it is shot into the keeper, so as to extinguish the light, when the door is locked, by breaking the circuit passing through the wires which lead through the divided plates at the inner end of the keeper to the electric light, the said switch forming when the door is unlocked a means of connection between the divided plates in order to complete the circuit to the light, as hereinafter more particularly explained.

The drawing represents a perspective view of a portion of a door and wall of a room, showing an electric fixture and wires leading thereto from the keeper, portions of the door-frame, lock, and keeper being broken away to show the operation of my combined switch and lock.

A is the lock; B, the bolt; C, the switch, and D are the wires leading from the main-circuit wires to the incandescent electric light E.

F and G are contact-plates located at the inner end of the keeper. The wires D lead first to the plate F, which is separated from the plate G by a space, and the wires D continue from the plate G to the incandescent light E.

The upper part *c* of the switch C is wedged or V-shaped in form, so as to readily fit into the space between the contact-plates F and G. The upper part of the lever of the pivoted switch C is weighted or, if preferable, held normally against the contact-plates F and G by a spiral spring *a*. The major portion of the switch is preferably made of insulating material, and when the door is locked, as shown in the drawing, the switch is tilted on its pivot so as to hold the wedged or V-shaped portion from the contact-plates F and G. When the door is unlocked, the metal wedged portion *c* of the switch C is held against both of the contact-plates F and G, fitting into the space between them. In this position it will be seen that the wedged or V-shaped portion of the switch C completes the circuit over the wires D to the incandescent electric light E when the door is unlocked. It will of course be understood, however, that although this circuit is complete from the main circuit, yet there is a main switch for the main circuit, so that during the day no electric current passes over the wires to the electric light E. Consequently no light will be emitted therefrom. When, however, the current is turned on over the main circuit, it will flow over the branch wires D; but if the door of the room should be locked it will of course be understood that no light will be thrown out in the room.

My invention is generally applicable, but is more particularly adapted for hotels and offices in which the occupant of the room or office when leaving it locks the door, thereby extinguishing the light. In hotels particularly it will be found invaluable. When the occupant of the room is in the room, instead of locking the door he of course can have a supplemental bolt, which is suggested in the drawing, and thereby bolt the door from the inside when he wishes to have the light turned on. When, however, the occupant leaves the room, it frequently happens that he leaves the switch at the lamp turned on, and it remains so for hours at a time, and a great waste of current is thereby caused and considerable expense is consequently incurred, as this is done very frequently; but by providing a switch in connection with the lock it will be seen upon the occupant leaving in the evening the light will be extinguished immediately upon his locking the door, so no waste of current and consequent expense to the host of the hotel will be incurred. When the occupant, however, returns and unlocks the door, he will find the room lighted and will not have to grope about in the dark in order to locate the position of the fixture.

I wish it to be understood that the ordinary lamp-switch would also be provided, so that

the occupant upon retiring could by turning it extinguish the light. As, however, it would be necessary that this switch should be turned on in order to have my door-lock switch work, it will be readily understood that it might be made the duty of the caretaker or chambermaid to turn on this switch every day when doing up the office or room, it being understood that the current would always be turned off at the main switch, so that there would be no current flowing to each lamp, and consequently no waste of electricity in the daytime.

Although I show only one form of switch, it will of course be understood that I do not wish to limit myself to the exact form of switch or its exact location in reference to the keeper.

From this description it will be seen that the proprietor of a hotel or building will be able to save a considerable sum in his electric-lighting bill when a meter is employed. It will also be seen that a very simple and efficient convenience is provided for the guest of a hotel or lessee of an office in a building, as the case may be.

What I claim as my invention is—

1. In a door-lock switch for electric lights, a switching-piece pivoted in the keeper and having one end located between the conducting-wires and held normally out of contact therewith and the other end adapted to be operated by the bolt of the lock to close the circuit, substantially as described.

2. The combination, with the bolt B, of the lock A and the switch C, having the wedged or V-shaped portion *c* and provided with the spring *a* and designed to come in contact with the plates F and G, so as to complete or break the circuit through the wires D, as and for the purpose specified.

CHARLES GREEN.

Witnesses:
BLANCHE BOYD,
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