

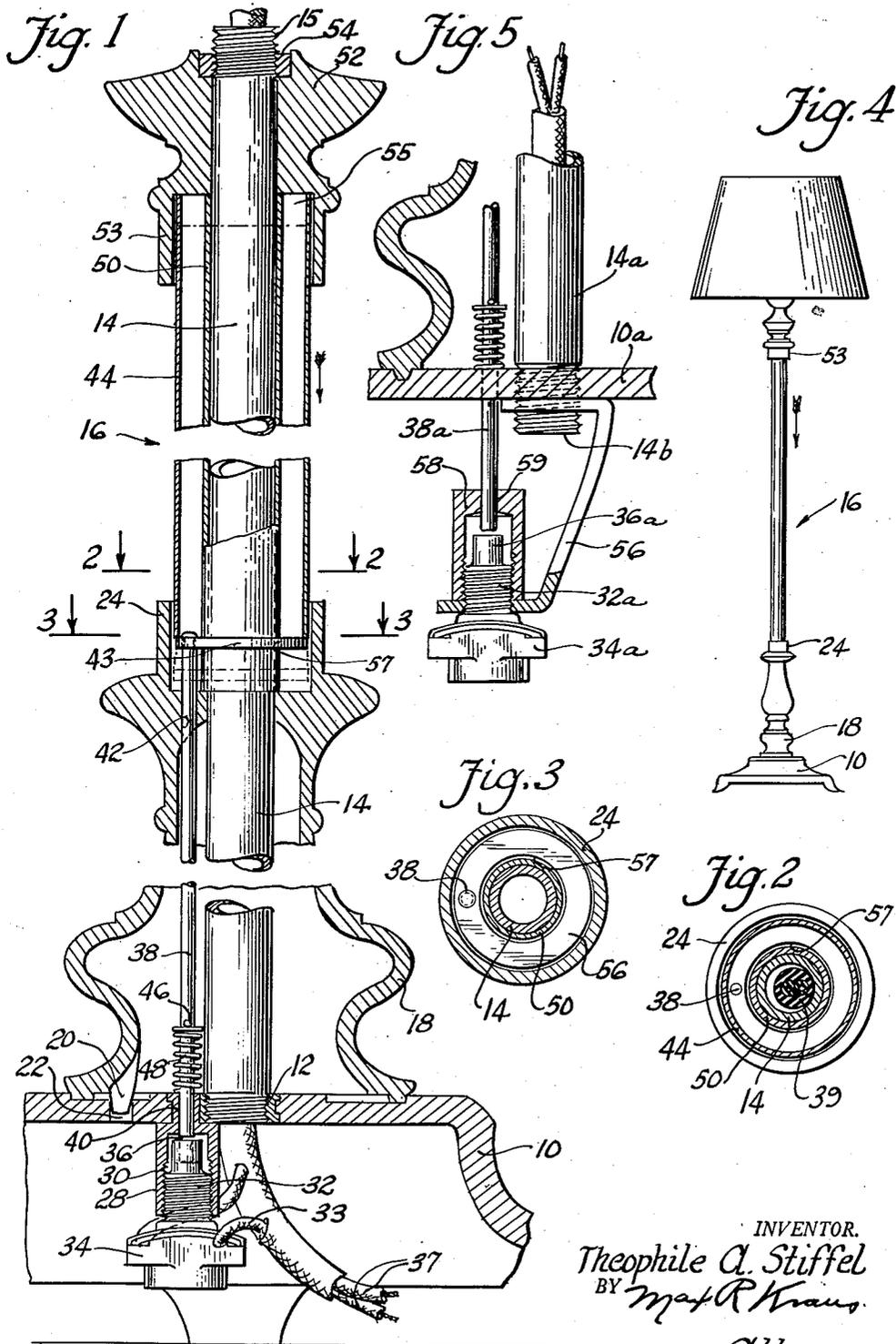
Jan. 25, 1949.

T. A. STIFFEL

2,459,898

MEANS FOR ACTUATING ELECTRICAL SWITCHES

Filed April 14, 1948



INVENTOR.  
*Theophile A. Stiffel*  
BY *Max R. Kraus*  
Attorney

# UNITED STATES PATENT OFFICE

2,459,898

## MEANS FOR ACTUATING ELECTRICAL SWITCHES

Theophile A. Stiffel, Chicago, Ill.

Application April 14, 1948, Serial No. 21,007

7 Claims. (Cl. 240—123)

1

This invention relates to means for actuating electrical switches and has particular application to floor lamps, table lamps, electric fans and other electrical operating devices supported on standards and the like.

One of the objects of this invention is to provide an improved means for manually operating an electric switch by remote control.

While this invention has application to any number of electrically operated devices, one of its specific applications is in its use with electrical floor lamps, as shown in the appended drawings. The disadvantages inherent in operating the switches on standard lamps are readily apparent. The switch is either located at the top or bottom of the lamp and the switch button or chain must be engaged directly by the fingers or hands in turning it on and off. This necessitates the fumbling around and searching for the switch button or chain if the room is dark and also the getting up or elevating the hand above the person's head in turning off the switch if seated, all of which is an inconvenience to the person. With my invention this is eliminated as the switch may be remotely operated by a slight manipulation of the lamp standard, thus providing a large surface area which can be grasped by the hand and in any position.

The construction of my invention is simple, has few parts, is inexpensive and economical to construct, and is sturdy in construction. Other objects will become apparent as this description progresses.

In the drawings the invention is shown specifically applied to an electric floor lamp, although it will be understood that it may be similarly used in table lamps, electric fans and other devices wherein a switch is actuated.

In the drawings:

Fig. 1 is a cross sectional view showing the lamp standard and base with my invention;

Fig. 2 is a cross sectional view taken on line 2—2 of Fig. 1;

Fig. 3 is a cross sectional view taken on line 3—3 of Fig. 1;

Fig. 4 is a side elevational view of the lamp with my invention, and

Fig. 5 is a cross sectional view of a modified form of accessory construction of my invention.

The lamp comprises a hollow base 10 into which is threaded as at 12 a pipe 14 which forms the support for the lamp standard, generally designated by the numeral 16. Secured on the base is a hollow bottom ornamental column 18 which encloses the lower portion of the pipe as well as the plunger, presently to be described. The column 18 has a lug 20 which engages an opening 22 in the base to locate the column during assembly of the lamp and to prevent rotation thereof. The column 18 has an integrally formed collar

2

24 extending upwardly of the column and which forms a well or sleeve space 26.

Secured in the base adjacent the pipe is an open bottom shell or cap 28 internally threaded as at 30 to receive the threaded neck 32 of the conventional push button switch 34 and to secure the switch in position. The depressible switch button 36 extends upwardly of the neck and is adapted to be engaged by a plunger 38, the lower end of which is supported in the reduced neck 40 of the shell. The upper portion of the plunger extends through an opening 42 in the top of the column and is secured by means of a disc 43 to a slidable sleeve 44, presently to be described.

The plunger 38 has a transverse pin 46 and a coil spring 48 surrounds the plunger and is interposed between the top of the shell and the pin to normally urge and maintain the plunger and sleeve upwardly in its elevated position, as shown in Fig. 1.

Snugly surrounding the major length of the pipe 14 is a supporting column or spacing tube 50, the lower end of which rests inside the well 26 and on top of the column 18.

The upper ornamental column 52 is positioned on the pipe and engages the top of the spacing tube 50. The column has fixed thereto an internally threaded washer 54 which engages the threaded end 15 of the pipe 14. The column 52 has an integrally formed collar 53 which defines a sleeve space 55 within which is contained the upper end of the spacing tube 50, as well as the slidable sleeve 44. Rotating of the column 52 will take up any slack or looseness between the tube 14, spacing tube 50 and the upper and lower columns 52 and 18 respectively as is well understood, but will not effect the movement of the slidable sleeve 44.

Surrounding the major length of the pipe 14 and spacing tube 50 is the slidable sleeve 44, previously referred to, which is spaced from the tube 50 and vertically movable with respect thereto. The sliding sleeve 44 is slightly shorter than the length of the spacing tube 50 to permit for a slight vertical movement within the sleeve spaces 26 and 55. Permanently secured to the lower end of the sliding sleeve is the disc 43 which has an opening 57. The disc surrounds the spacing tube 50 and is slidable on same simultaneously with the sliding sleeve 44. The disc 43 is fixedly secured to the upper end of the plunger 38 and vertically movable therewith.

The conventional lamp brackets or arms forming the top portion of the conventional lamp are not shown in the drawings but are secured on the threaded end 15 of the pipe 14 as is well understood in the art.

The push button switch 34 is of conventional construction and the push button 36 alternately opens and closes the circuit when successively

3

depressed. The conducting wires 33 from the switch are connected to wires 37 leading to the electrical outlet, as well as to wires 39 passing up through the inside of the pipe 14 and connected to the conventional sockets in the upper part of the lamp, as is well understood.

When it is desired to operate the switch, the sliding sleeve 44 may be grasped anywhere along its length and pushed down slightly to that shown in dotted lines in Fig. 1. The plunger 38 will be simultaneously depressed against the tension of the spring 48 to depress the push button 36 of the switch. When the push button is depressed the circuit will be closed and the lights illuminated. The spring 48 will urge the sleeve 44 back to its raised position, as shown in full lines in Fig. 1, when the hand is removed from the sleeve. When the sleeve is next manually slid downwardly, the push button will operate to open the circuit in the lamp, and so on.

In Fig. 5 is shown a modified form of construction permitting attachment as an accessory to lamps already assembled. The pipe 14a (corresponding to pipe 14 in Fig. 1) has a threaded end 14b extending below the top of the hollow base 10. Threadedly secured to the threaded end 14b is a bracket 56 which supports the push button switch 34a. The threaded neck 32a of the switch is screwed into the bracket and supported thereby. A shell or cap 58 is secured to the neck of the switch and the shell has an opening 59 through which the plunger 38a extends to engage the depressible button 36a of the switch. The plunger is operated precisely as that described in connection with the construction of Fig. 1.

The lamp as constructed with my invention is firmly secured and held together as effectively as the best lamps now constructed in the art, and the introduction of my invention to such lamps does not weaken or in any way impair the sturdiness of the lamp.

It will be understood that various changes and modifications can be made with respect to the above without departing from the spirit and scope of my invention.

What I desire to secure by Letters Patent is:

1. In a lamp including a base and a stationary vertical support secured thereto, a switch secured to said lamp exteriorly of said vertical support, collars secured at the upper and lower portions of said support, a vertically slidable sleeve surrounding said support and vertically movable with respect to and independently of said base with the opposite ends of the sleeve slidably confined within said collars, and so constructed and arranged that when moved vertically it will operate said switch.

2. In a lamp including a base and a stationary vertical support secured thereto, a switch secured to said lamp exteriorly of said vertical support, collars secured at the upper and lower portions of said support, a vertically slidable sleeve surrounding said support and vertically movable with respect to and independently of said base with the opposite ends of the sleeve slidably confined within said collars, and so constructed and arranged that when moved vertically it will operate said switch, and means for automatically returning said sleeve to its initial position.

3. In a lamp including a base and a stationary vertical support secured thereto, a switch secured to said lamp, a vertically slidable sleeve surrounding said support and vertically mov-

4

able with respect to and independently of said base and of a length substantially that of the vertical support, collars secured at the upper and lower portions of the support to receive and confine the opposite ends of the slidable sleeve, means for normally maintaining the sleeve in a raised position, said sleeve will when manually depressed actuate said switch and when released said means will return said sleeve to its raised position.

4. In a lamp including a base and a stationary vertical support secured thereto, a switch supported by said base, sleeve receiving collars secured at the upper and lower portions of said support, a vertically slidable sleeve surrounding said support and vertically movable with respect to and independently of said base with the opposite ends of the sleeve slidably confined within said collars, spring means positioned below said sleeve for normally maintaining the sleeve in a raised position, said sleeve will when manually depressed actuate said switch and when released said spring means will return the sleeve to its initial raised position.

5. In a lamp including a base and a stationary vertical support secured thereto, a switch supported by said base, a vertically slidable sleeve surrounding said support and vertically movable with respect to and independently of said base, sleeve receiving means secured to the upper and lower portions of the support for slidably receiving the opposite ends of the sleeve, spring means for normally maintaining the sleeve in a raised position, said sleeve will when manually depressed actuate said switch and when released said spring means will return the sleeve to its initial raised position.

6. In a lamp including a base and a stationary vertical support secured thereto, a switch secured to said lamp exteriorly of said vertical support, a vertically slidable sleeve of substantially the length of the vertical support surrounding said support and vertically movable with respect to and independently of said base, and so constructed and arranged that when depressed it will operate said switch, and spring means for automatically returning said sleeve to its initial raised position.

7. In a lamp including a base and a stationary vertical support secured to said base, a switch secured in said base, a vertically slidable sleeve surrounding said support and vertically movable with respect to and independently of said base and of a length substantially that of the vertical support to be manually engaged anywhere along its length, means for normally maintaining the sleeve in a raised position, said sleeve will when manually depressed actuate said base switch and when released said means will return said sleeve to its raised position.

THEOPHILE A. STIFFEL

#### REFERENCES CITED

The following references are of record in the file of this patent:

#### UNITED STATES PATENTS

Number	Name	Date
1,518,530	Lipper	Dec. 9, 1924
2,102,224	Ruppel	Dec. 14, 1937

#### FOREIGN PATENTS

Number	Country	Date
315,478	Germany	Nov. 6, 1919