(No Model.)

H. O. STILLWELL & J. G. BROMAN.

CEILING BOARD.

No. 539,832. Patented May 28, 1895.

Fig. 1.

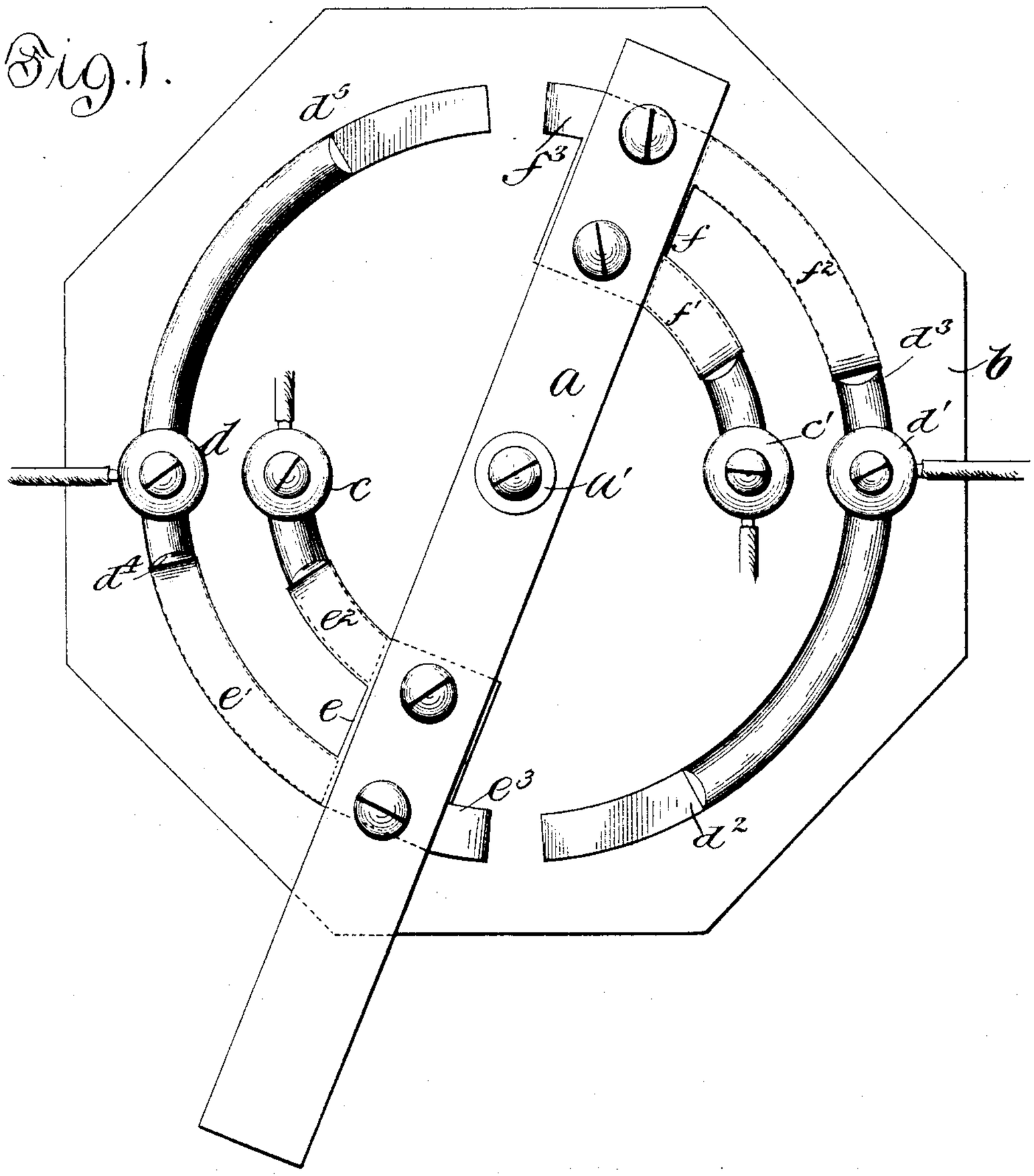
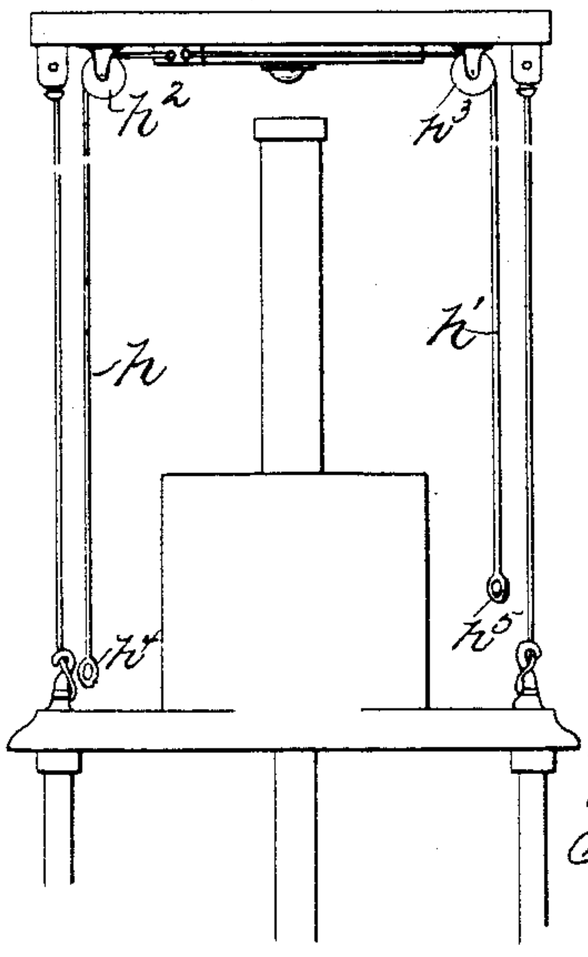


Fig. 2.



Witnesses:
George L. Cragg
George S. Bull

Inventors
Harry O. Stillwell
John G. Broman.
By Bartow & Brown
Attorneys.

UNITED STATES PATENT OFFICE.

HARRY O. STILLWELL AND JOHN G. BROMAN, OF CHICAGO, ILLINOIS.

CEILING-BOARD.

SPECIFICATION forming part of Letters Patent No. 539,832, dated May 28, 1895.

Application filed July 10, 1894. Serial No. 517,104. (No model.)

To all whom it may concern:

Be it known that we, HARRY O. STILLWELL and JOHN G. BROMAN, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Ceiling-Boards, (Case No. 1,) of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

Our invention relates to a ceiling board for arc lamps, and its object is the provision of a ceiling board that shall be durable and cheap of construction.

Our invention, in its preferred form, comprises two binding posts connected with the opposite sides of the mains, each of said binding posts being provided with two terminal contacts disposed respectively opposite the terminal contacts of the other binding post, the switch lever being adapted in one position to close together the opposed terminals to afford two paths for the current between the binding posts, the switch lever being adapted in its second position to connect the lamp terminals, respectively, with the binding posts to close circuit through the lamp, the switch lever in its movement being adapted to close together the opposed terminals of the binding posts before opening the circuit through the lamp.

Our invention consists, further, in such other features as will be hereinafter set forth.

We will describe our invention in connection with the accompanying drawings, in which—

Figure 1 is a plan view of the switch of our invention. Fig. 2 is a view illustrating the lamp suspended from a ceiling-board carrying the switch of our invention.

Like letters refer to like parts in both figures.

The switch lever a is pivoted at a' upon a base board b, and, in one position is adapted to make contact with the terminals c c' and with the terminals of binding posts d d'. The terminals c c' are connected in circuit with the lamp, while the binding posts d d' are connected with the feeding mains. The binding post d' is provided with two contact terminals d^2 d^3, while terminal d is provided with two contact terminals d^4 d^5, the contact terminals being respectively opposed. Upon switch lever a are provided plates e and f, the plate e being provided with extensions e' e^2 adapted, when the lever a is in the position shown, to connect the terminals d^4 and c, while plate f is provided with extensions f' f^2 adapted to connect together terminals c' and d^3, the lamp being thus included in circuit. When the lever a occupies its second position, extension e^3 upon plate e makes contact with terminal d^2, and extension e' with terminals d^4, while extension e^2 rests out of contact with terminal c. Likewise extensions f^2 and f^3 of plate f connect terminals d^3 and d^5, while extension f' rests out of contact with terminal c', the lamp being thus cut out and two paths afforded between the binding posts for the current. As lever a is moved to cut out the lamp, the terminals of the binding posts are closed together before contact with terminals c and c' is broken, thus short-circuiting before cutting out the lamp. Likewise, in cutting in the lamp, contact is made with terminals c c' before contact with terminals d^2 and d^5 is broken. Two paths for the current between the binding posts being thus afforded the spark when cutting in the lamp is greatly reduced and rendered indestructive to the terminals.

In Fig. 2 is illustrated means for moving the contact arm without the necessity of grasping the contact arm by the hand, or moving it by means of a pole, ropes h h' being provided secured by their ends to arm a and passing respectively over pulleys h^2 h^3, handles h^4 h^5 being provided upon their ends and situated near the lamp so that they may be readily grasped to move the contact arm into one or the other of its two positions.

It is evident that the structural details of our invention may be varied and we do not, therefore, desire to limit ourselves to the precise details shown and described; but

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination with a binding post connected with one side of the mains and provided with two contact terminals, of a second binding post connected with the opposite side of the mains and provided with two contact terminals arranged respectively opposite the contact terminals of the first binding post,

a switch lever adapted in one position to close together the opposed terminals to afford two paths for the current from one binding post to the other, a pair of contact terminals connected respectively with the opposite sides of the lamp, said switch lever being adapted in its second position to connect said lamp terminals one with each of said binding posts, said switch lever in its movement being adapted to close together the opposed terminals of said binding posts before opening the circuit through the lamp, substantially as described.

In witness whereof we hereunto subscribe our names this 30th day of June, A. D. 1894.

HARRY O. STILLWELL.
JOHN G. BROMAN.

Witnesses:
ELLA EDLER,
GEORGE L. CRAGG.