(No Model.)

# G. E. LINTON.

## ELECTRIC SWITCH.

No. 523,724. Patented July 31, 1894.

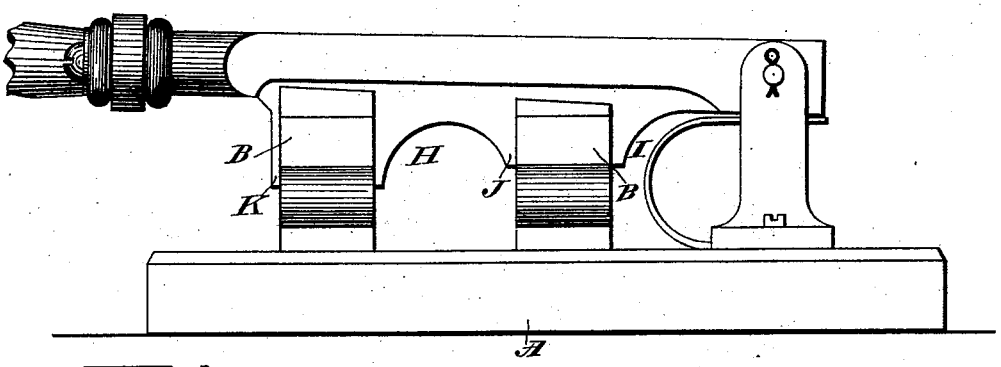
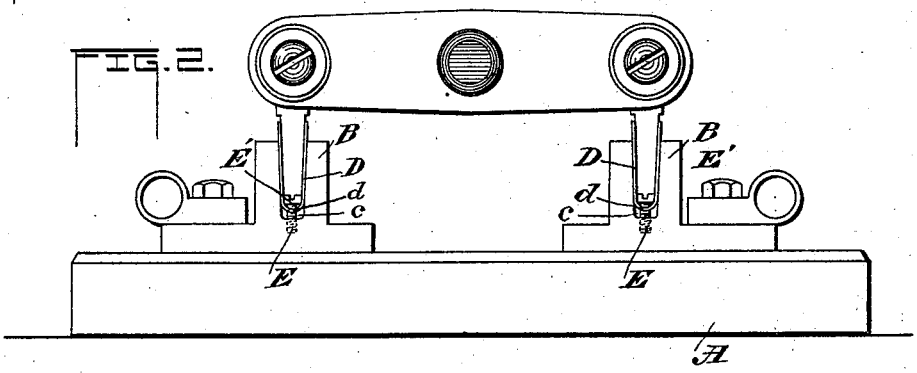



FIG. 1.

FIG. 2.



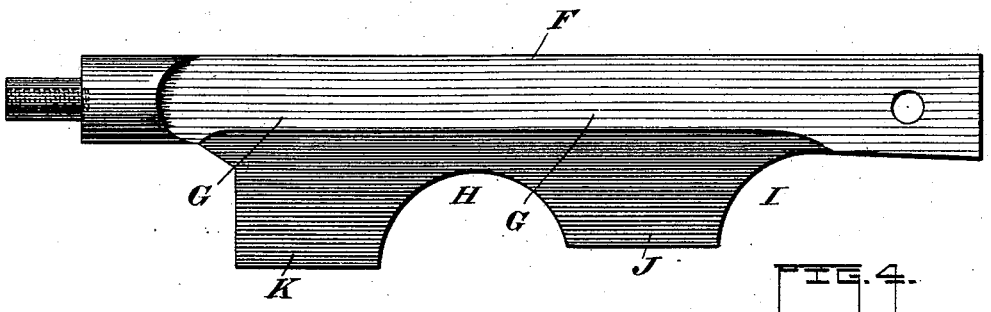




FIG. 4.

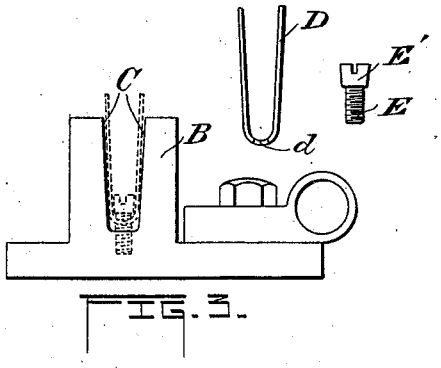



FIG. 3.

Witnesses
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# UNITED STATES PATENT OFFICE.

GEORGE E. LINTON, OF WORCESTER, MASSACHUSETTS.

## ELECTRIC SWITCH.

SPECIFICATION forming part of Letters Patent No. 523,724, dated July 31, 1894.

Application filed March 22, 1894. Serial No. 504,679. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE E. LINTON, a citizen of the United States of America, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Electric Switches, of which the following is a specification.

My invention relates to an electrical switch, and is an improvement on United States Patent No. 500,918, granted to me July 4, 1893.

An object of my invention is to provide improved means of contact of the lever blade with inclined walls of binding posts of the switch board, when thrown in operative position, to control electric currents.

My improvements refer particularly to an adjustable spring on binding posts which contacts with the lever blade when the blade is thrown in a horizontal or operative position, and to the shape and construction of the lever blade which insure a more certain contacting surface than has been found in lever blades heretofore used.

For a full and clear understanding of my invention reference is to be had to the accompanying drawings wherein corresponding letters indicate like parts in the several views, and in which—

Figure 1, is a view in side elevation of my improved switch. Fig. 2, is an end view of the improved lever, contact spring, and the adjacent inclined walls in which the spring is secured. Fig. 3, represents in side elevation details of a U-shaped spring, a tapering headed screw and the adjacent walls between which the spring is secured by screws. Fig. 4, is a view in side elevation of the improved lever blade.

In the drawings, A, refers to the switch board, made of wood or other suitable non-conducting material.

B, are binding posts attached to the switch board and to wires in any well known manner. The binding posts are near together and have inclined walls C, tapering toward each other from top to bottom and ending in grooves *c*, at the bottom, as shown in Fig. 2.

D, is a U-shaped spring of copper, bronze or other suitable material, provided with apertures *d*, in its middle portion near the sides thereof through which screws E, having tapering heads E′, are inserted to secure and adjust it between the inclined walls of the binding posts, threaded holes for the screws being provided in the bottom of the groove *c*, between the walls of the binding posts for that purpose, as shown.

The spring D, contacts with and is held against the walls of the binding posts when the screws E, are not screwed tightly down in the groove *c*, owing to the shape of the groove and the heads of the screws. When the tension or elasticity of the springs D, becomes weak, and the springs do not contact properly with the lever blade, they are forced farther down between the walls into grooves *c*, by means of tightening screws E, thus remedying the defect by bringing the lower part of the springs in closer contact with the inclined head of the screws E′, as will readily appear. Should the springs become fused, they may readily be removed and others substituted.

F, is an improved switch lever provided with a tapering milled surface blade G, broader at the top, and having cut away portions H, and I, near its middle portion and inner end for convenience in use.

The milled surface of the portions J, and K, of the blade insures a more certain and better surface for contact with the U-shaped springs D, in a line and directly under them when the blade is thrown into a horizontal position.

Having thus described my invention, what I claim is—

In an electric switch, the combination of a switch board, binding posts having tapering walls ending in a groove, U shaped springs provided with apertures in their middle portions, threaded screw holes in the bottom of the recesses between the walls of the binding posts, tapering headed screws to secure and adjust the springs between said walls, and a tapering milled surface lever blade pivoted at one end to the switch board, and having cut away portions at the other end, and blade portions to contact with the U-shaped springs on the binding posts, substantially as described and set forth.

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

GEORGE E. LINTON.

Witnesses:
WM. P. MCPHERSON,
M. E. BRADLEY.