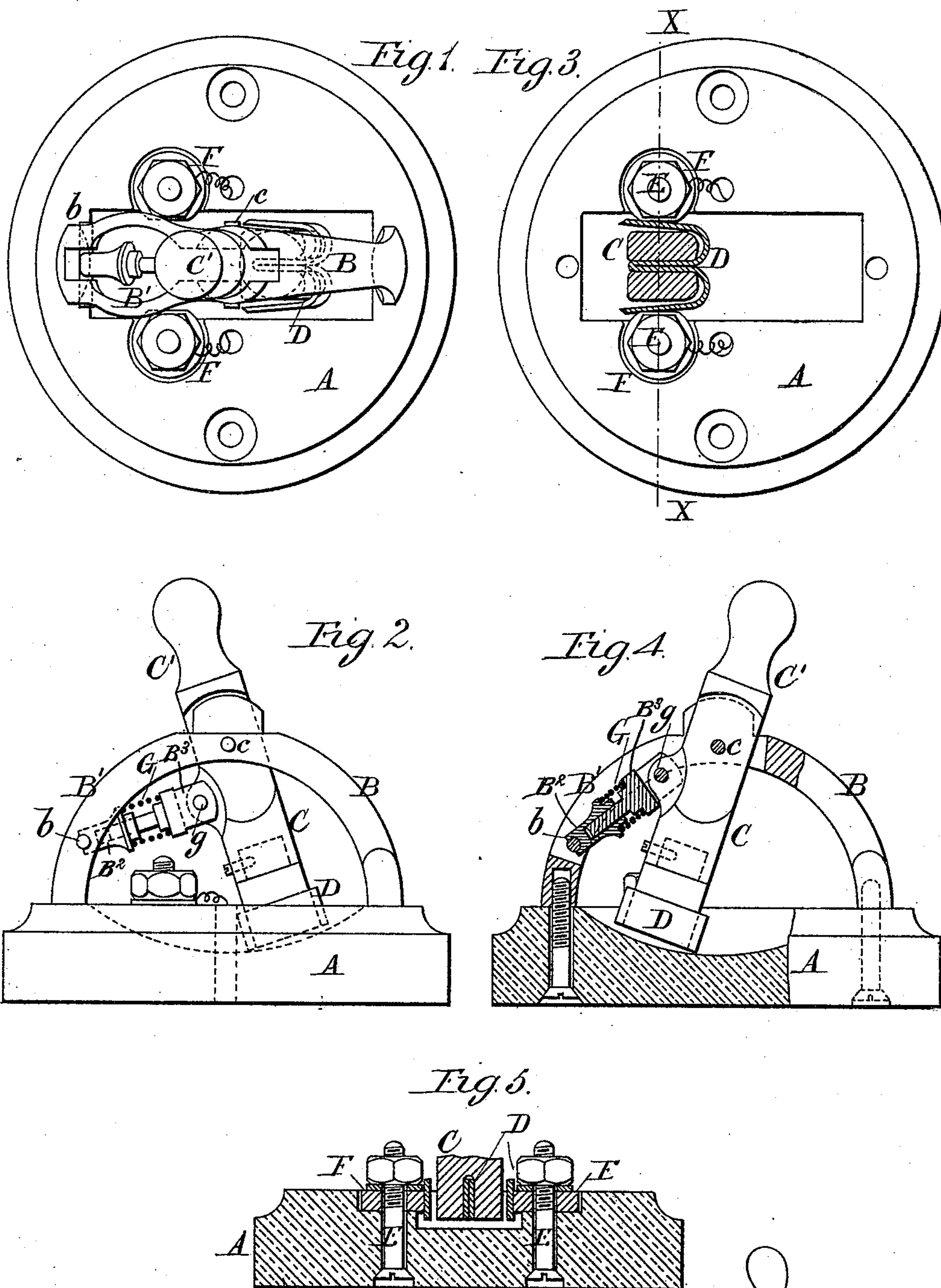


(No Model.)

G. SCHULTZ.
ELECTRICAL SWITCH.

No. 441,588.

Patented Nov. 25, 1890.



Witnesses:
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UNITED STATES PATENT OFFICE.

GEORGE SCHULTZ, OF OLD CHARLTON, ENGLAND.

ELECTRICAL SWITCH.

SPECIFICATION forming part of Letters Patent No. 441,588, dated November 25, 1890.

Application filed July 29, 1890. Serial No. 360,313. (No model.)

To all whom it may concern:

Be it known that I, GEORGE SCHULTZ, a citizen of England, residing at 33 Delafield Road, Old Charlton, in the county of Kent, England, have invented a new and useful Electrical Switch, (for which application for patent has been made in Great Britain, which patent, when granted, will bear date April 23, 1890, No. 6,156,) of which the following is a specification.

My invention relates to a switch for opening or closing an electrical circuit, particularly applicable when the current is of high tension, as there is considerable distance between the contacts.

Figure 1 of the accompanying drawings is a plan of a switch according to my invention. Fig. 2 is a side view showing the position of the contact-lever when the circuit is open. Fig. 3 is a plan of the base, showing the contact-piece in section, and Fig. 4 is a transverse section showing the lever in position for closing the circuit. Fig. 5 is a transverse section of the base on the line *xx* of Fig. 3.

On a recessed base A, of insulating incombustible material—such, for instance, as porcelain—I fix a metal arch B, one side of which has a slotted opening B'. In the crown of the arch B, I pivot at *c* a lever C, to the top C' of which the fingers can be applied so as to move the lever to either of the two positions shown in Fig. 2 or Fig. 4. To the lower end of the lever C, but insulated from it, is fixed a spring conducting-piece consisting of a strip of copper D, bent as shown in Fig. 3, inserted in a piece of insulating material, with its two sidelimbs standing free on each side of the insulating material. Through the base A are passed two screws E, holding washers F, having their sides presented toward each other flattened. On the screws E are also fitted nuts, between which and the washers F are clamped the conducting-wires of the circuit to which the switch is applied. A helical spring G is placed under compression between the shoulders of two loosely-connected sections or pieces B² B³. One of these is pivoted to the arch B at *b*, and the other is pivoted to the lever C at *g*, and has a pin part sliding in a hole of the former piece. The pivots *b* and *g* are so related to the pivot *c* that when the lever C is in the position shown in Fig. 4

these three centers are nearly in one straight line, so that the spring G exerts no strain to push the lever C away when its conducting-piece D is wedged between the washers F, completing the circuit from the one conductor to the other; but when the lever C is moved, so as to withdraw D from between the washers F, then the spring G forces the lever C rapidly away to the position shown in Fig. 2 and retains it there, the circuit between the conductors being thus held open.

Having thus described the nature of my invention and the best means I know for carrying the same into practical effect, I claim—

1. In an electrical switch, the combination of an insulating incombustible base having two separated contacts, an arched frame secured to the base, a lever pivoted at its upper portion to the arched frame and having at its lower end a yielding insulated contact-piece to spring in between the two contacts, and a spring having connections with the lever and the arched frame to which said lever is pivoted, said spring exerting no strain on the lever when its contact-piece is sprung between the two contacts on the base, but exerting strain on the lever when the latter is moved to withdraw its contact-piece from between the contacts on the base, substantially as described.

2. In an electrical switch, the combination of the base having two separated contacts, an arched frame secured to the base, a lever pivoted at its upper portion to the arched frame and having an insulated contact-piece at its lower end, and two movable sections or pieces connected by a spring, one pivoted to the lever and the other pivoted to the arched frame, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 14th day of July, A. D. 1890.

GEORGE SCHULTZ.

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